



**Environmental  
Law Centre**

# **Grasslands Considered:**

**Regulatory Consideration and Protection  
of Alberta's Native Grasslands**

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## **The Environmental Law Centre (Alberta) Society**

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## 1. Introduction

The *Alberta Public Lands Glossary of Terms* defines native grasslands as:

A landscape unit where the vegetation is dominated by grasses, grass like plants, and/or forbs ( $\geq 50\%$ ). For example, if an air photo review of a unit with 45% scattered woody species canopy cover and 55% grass species canopy cover, it would still be defined as a grassland. For grasslands to be defined as "native", they must be comprised of greater than 30% foliar cover of native grassland species.<sup>1</sup>

This definition appears in many of the Government of Alberta's policy documents and is referenced by provincial decision-makers. It is also the definition that the ELC adopts in our work.

Many of Alberta's policy documents recognize that native grasslands are important ecosystems to be considered in decision-making. A common theme running through these policy documents is that impacts on native grasslands should be avoided and, where avoidance is not possible, steps should be taken to mitigate impacts. In this report, the ELC evaluates decisions made by Alberta's regulatory decision-makers – the Land and Property Rights Tribunal (LPRT), the Alberta Energy Regulator (AER), the Alberta Utilities Commission (AUC), and the Natural Resources Conservation Board (NRCB), as well as the federal decision-maker, the Canada Energy Regulator (CER) - to determine if stated policy goals with respect to native grasslands are being met.

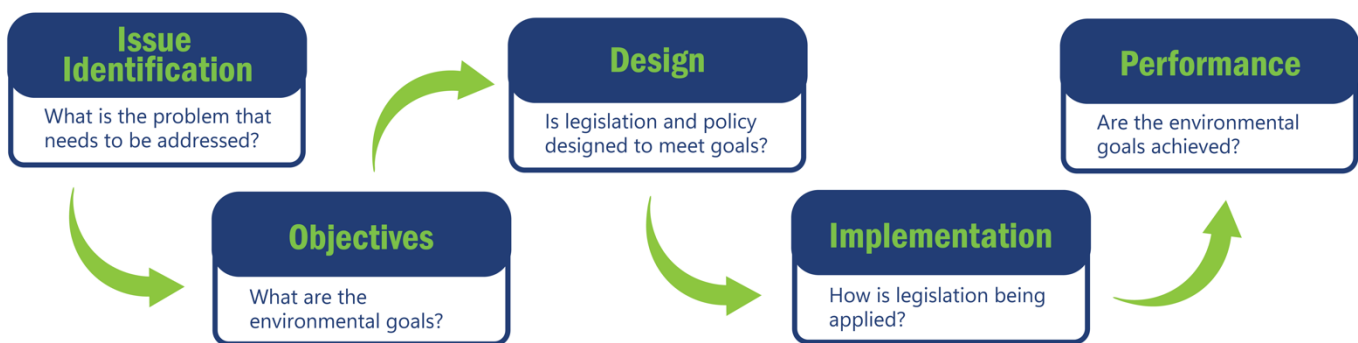
While Alberta's policy generally aims to avoid or mitigate impacts on grasslands, in practice, regulatory decisions may either support or undermine the conservation and protection of native grasslands. Legislation, as well as supporting policies and guidelines, may be reflected in regulatory decisions which accept, reject or amend proposed activities. Authorizations issued for activities may also reflect policy goals by incorporating enforceable conditions which support grasslands conservation (at the same time, allowing the activity may undermine grasslands conservation).

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<sup>1</sup> Forestry and Parks, *Alberta public lands glossary of terms* (Edmonton: 2023, Government of Alberta) at 10.

This report provides an evaluation of the decisions of Alberta's regulatory decision-makers to determine if, and to what extent, grasslands conservation and protection considerations play a role and whether grassland-relevant recommendations or conditions are made as part of those decisions. This evaluation is conducted using the ELC's newly developed regulatory evaluation framework, which can be applied through the lens of a variety of Valued Ecological Components (VECs). The evaluation framework consists of five pillars of law and policy evaluation: issue identification, objectives, design, implementation and performance.

**Figure 1: The ELC's regulatory evaluation framework illustrated**



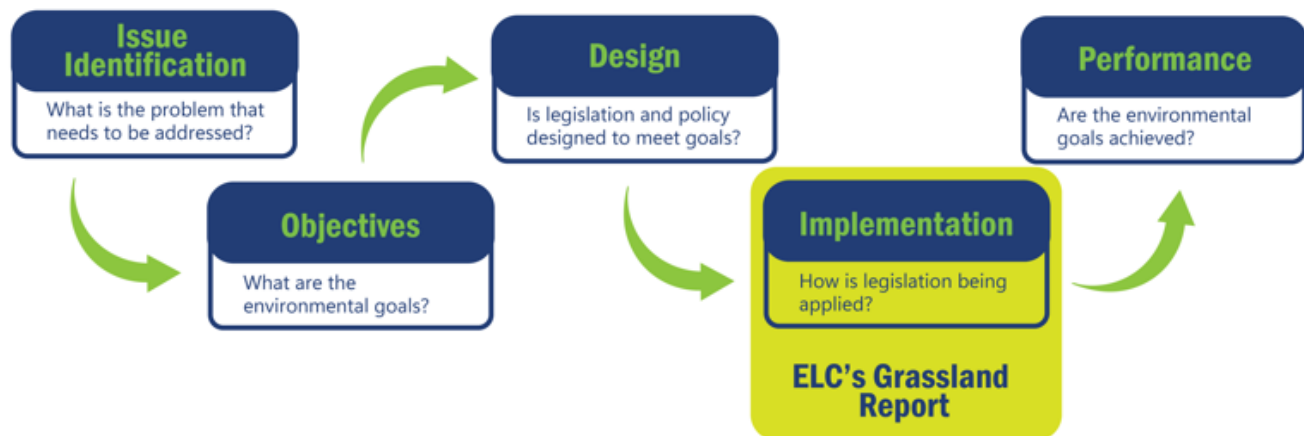
Looking at the frameworks established by law and policy, it may become apparent that certain environmental objectives and goals have been set. However, it is important to look beyond the frameworks established in law and policy to determine if those environmental objectives and goals are being effectively implemented. This includes looking at regulatory decision-making to evaluate the administration of law and policy with respect to stated environmental objectives and goals. If environmental objectives and goals are not being met in decision-making, then reform to law and policy, as well as regulatory processes, are necessary.

In this project, we look at decision-making under the *Public Lands Act* and the *Municipal Government Act* (via decisions of the Alberta Land and Property Rights Tribunal). Decisions made under these pieces of legislation enable the siting of development on public lands via dispositions made under the *Public Lands Act* and on private lands via municipal development permits under the *Municipal Government Act*. The decisions around public land dispositions and municipal development permits do not necessarily authorize activities *per se* (because statutory authorization for an activity may be required under other legislation) but nevertheless impact upon grasslands by allowing activities to be sited as per the disposition or development permit. It should be noted that a statutory authorization

issued by the Alberta Energy Regulator (AER), the Alberta Utilities Commission (AUC), or the Natural Resources Conservation Board (NRCB) has priority over any planning or permitting decision made by a municipality.<sup>2</sup>

Statutory authorizations are typically required to allow activities to take place (such as oil and gas operations, energy generation activities, and so on). As such, to evaluate regulatory decision-making *vis a vis* native grasslands, it is necessary to consider the decisions to issue (or not issue) statutory authorizations made by the AER, the AUC, the NRCB, and the Canada Energy Regulator (CER). In this project, decisions were reviewed to determine the extent to which grassland impacts are considered, how they are assessed, how trade-offs are articulated, and whether relevant conditions are imposed on statutory authorizations. Relevant conditions could include things such as siting activities to avoid grasslands, operational methods to reduce or mitigate impacts, monitoring and reporting obligations, and so on. It is important to note that the scope of this particular project does not include looking at whether or not conditions on statutory authorizations have actually been fulfilled, nor does it include looking at whether or not these conditions effectively protect and conserve native grasslands.

**Figure 1: The grasslands project and its place within the ELC's regulatory evaluation framework**



Often evaluation of regulatory decision-making is conducted by interviewing decision-makers, regulatees and other relevant parties to assess the degree to which principles are understood and applied in decision-making.<sup>3</sup> However, our approach in this report is

<sup>2</sup> *Municipal Government Act*, R.S.A. 2000, C. M-26 (MGA) at s. 619.

<sup>3</sup> See for example, David W. Poulton and Justina C. Ray, *Knowledge, Perception and Application of the Mitigation Hierarchy Among Officials in Canadian Federal Regulatory and Resource Management Agencies* (Ottawa: 2023, Wildlife Conservation Society Canada and Impact Assessment Agency of Canada).



analysis of decisions made by regulatory bodies to evaluate the extent to which grassland conservation and protection principles set out in policy and guidance documents are considered and integrated into the regulatory decision-making processes of Alberta's regulators.

## 2. Provincial Grassland Law and Policy Overview

While this report is focused on the evaluation of regulatory decision-making as it pertains to grasslands conservation and regulation (as opposed to an evaluation of the regulatory framework itself), it is essential to understand the land-use and regulatory framework in which such regulatory decisions are made. The regulatory framework operates somewhat differently depending upon whether the lands in question are public lands (a.k.a Crown lands) or private lands. The government has extensive control over the management and permitted uses of public lands (as both owner and regulator). While there is less government control on private lands, there is still a range of legislation – municipal, provincial and federal – that directly impacts the use of private lands by its owners.

When looking at legislative and policy design, legislation can broadly be classified as being concerned with decision-making around land management (including protection of certain lands) or with decision-making around activity regulation. In Alberta, land management focused legislation includes the *Alberta Land Stewardship Act*, the *Public Lands Act* and the *Municipal Government Act*. There is also a variety of parks legislation focused on land protection. Land-use decisions made under land management legislation may allow conversion of native grasslands to other uses, restrict activities on native grasslands to sustainable and compatible uses such as intermediate levels of livestock grazing, or expressly conserve and protect grasslands (e.g. heritage rangelands, conservation easements).

Activity regulation legislation is focused on regulating activities, often on a sectorial basis, and may provide mechanisms to reduce environmental impacts of those activities. In some instances, such legislation may undermine steps taken to conserve and restore native grasslands (e.g. allowing oil and gas operations on heritage rangelands). In other instances, this type of legislation may operate to prevent degradation of existing native grasslands or to restore degraded native grasslands (e.g. reclamation requirements under the *Environmental Protection and Enhancement Act*).

A brief overview of Alberta legislation that may impact upon grasslands protection and conservation follows. In accordance with the ELC's regulatory evaluation framework, legislation is classified as either land management or activity regulation legislation.

## 2.1 Land Management Legislation

- *Alberta Land Stewardship Act (ALSA)* which enables regional planning within the province and the use of land stewardship instruments such as conservation easements.<sup>4</sup>
- *Public Lands Act (PLA)* which regulates administration and management of provincial public lands. It does not apply to private lands.
- *Municipal Government Act (MGA)* which, among things, regulates municipal land use planning and development. The relevant provisions are found in Parts 17, 17.1 and 17.2.
- Provincial parks legislation - the *Wilderness Areas, Ecological Reserves, Natural Areas and Heritage Rangelands Act (WAA)* and the *Provincial Parks Act (PPA)* - which creates a variety of provincial "protected" areas including heritage rangelands.<sup>5</sup>
- Historical resources in Alberta are addressed by the *Historical Resources Act*.<sup>6</sup> The *Historic Resources Act* enables the establishment of provincial and municipal historic resources and areas which can include natural sites of value for their cultural, natural, or scientific interest.
- The *Weed Control Act* requires control of noxious weeds and removal of prohibited noxious weeds on land that a person owns or occupies.<sup>7</sup>
- The *Soil Conservation Act* requires that every landowner take measures to prevent or stop soil loss or deterioration.<sup>8</sup>
- The *Forest and Prairie Protection Act* is meant to protect Alberta's forest and prairies from fire.<sup>9</sup> It applies to all lands in Alberta (except those within an urban

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<sup>4</sup> *Alberta Land Stewardship Act*, S.A. 2009, ch. A-26.8 (ALSA).

<sup>5</sup> *Wilderness Areas, Ecological Reserves, Natural Areas and Heritage Rangelands Act*, R.S.A. 2000, ch. W-9 (WAA) and *Provincial Parks Act*, R.S.A. 2000, ch. P-35 (PPA).

<sup>6</sup> *Historical Resources Act*, R.S.A. 2000, ch. H-9 and *Hunting, Fishing and Trapping Heritage Act*, S.A. 2008, ch. H-15.5.

<sup>7</sup> *Weed Control Act*, S.A. 2008, ch. W-5.1.

<sup>8</sup> *Soil Conservation Act*, R.S.A. 2000, ch. S-15.

<sup>9</sup> *Forest and Prairie Protection Act*, R.S.A. 20000, ch. F-19.

municipality and federal lands without a fire control agreement), establishes a fire season and enables cost recovery and fire control orders.

## 2.2 Activity Regulation Legislation

- There are numerous pieces of natural resource development legislation addressing extractive activities such as oil and gas, mining and forestry. This legislation is typically sector-based and some examples are the *Responsible Energy Development Act*, the *Oil and Gas Conservation Act*, the *Coal Conservation Act*, and the *Forests Act*.<sup>10</sup>
- The *Wildlife Act*, which primarily deals with regulation of hunting and management of wildlife. It also contains some provisions for the designation and protection of endangered species and their habitat (i.e. habitat conservation areas and migratory bird lure sites).<sup>11</sup>
- Agricultural operations are governed by the *Agricultural Operations Practices Act* (AOPA) and the *Irrigation Districts Act* (IDA).<sup>12</sup> The AOPA protects generally accepted agricultural practices from nuisance claims (i.e., right to farm legislation) and regulates intensive livestock operations. The IDA establishes and regulates irrigation districts in order to manage and ensure delivery of water in Alberta's 13 irrigation districts. Because irrigation enables the expansion of cultivation activities, it can have significant impacts on the conversion of native grasslands.
- Environmental matters are primarily addressed by the *Environmental Protection and Enhancement Act* (EPEA) and the *Water Act* (WA).<sup>13</sup> The EPEA establishes a system of approvals, registrations, and notices for activities (as listed in the EPEA's Schedule of Activities); establishes the provincial environmental assessment process; and prohibits the release of substances that may cause a significant adverse effect or in contravention of an approval, code of practice or regulation. The WA sets out the licensing and priority regime for the allocation of water, its diversion, and its use throughout the province. The WA also sets out a system of statutory authorizations for land-based and other activities that may impact water.

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<sup>10</sup> *Responsible Energy Development Act*, S.A. 2012, c. R-17.3; *Oil and Gas Conservation Act*, R.S.A. 2000, c. O-6; *Coal Conservation Act*, R.S.A. 2000, c. C-17; and *Forests Act*, R.S.A. 2000, c. F-22.

<sup>11</sup> *Wildlife Act*, R.S.A. 2000, ch. W-10. See also Shaun Fluker & Jocelyn Stacey, "The Basics of Species at Risk Legislation in Alberta" (2012) 50:1 AB L Rev 95 at 97.

<sup>12</sup> *Agricultural Operations Practices Act*, R.S.A. 2000, ch. A-7 (AOPA) and *Irrigation Districts Act*, R.S.A. 2000, c. I-11 (IDA).

<sup>13</sup> *Environmental Protection and Enhancement Act*, R.S.A. 2000, ch. E-12 (EPEA) and *Water Act*, R.S.A. 2000, ch. W-3 (WA).

It is noted that grasslands protection and conservation in Alberta may also be impacted by federal legislation such as the federal *Species at Risk Act* (SARA) which is focused on the prevention of extirpation and extinction of species, the recovery of species at risk, and management of species of special concern,<sup>14</sup> and the *Migratory Birds Convention Act, 1994* (MBCA) which enables the establishment of sanctuaries in habitat areas important to migratory birds.<sup>15</sup> There is also relevant federal activity regulation legislation, such as the *Canada Energy Regulator Act*, which may allow activities that impact on native grasslands.<sup>16</sup>

### 2.3 Grassland Policy and Guideline Documents

In addition to legislative requirements, the provincial government has published numerous policy and guidance documents that impact grasslands. Some of these documents are specific to certain sectors including grazing,<sup>17</sup> oil and gas,<sup>18</sup> and renewable energy operations.<sup>19</sup>

However, many of the policy and guidance documents are cross-sectorial, addressing a range of subject matters including grassland assessment and classification,<sup>20</sup> minimizing

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<sup>14</sup> *Species at Risk Act*, S.C. 2002, c. 29 (SARA).

<sup>15</sup> *Migratory Birds Convention Act, 1994*, S.C. 1994, c. 22 (MBCA).

<sup>16</sup> *Canada Energy Regulator Act*, SC 2019, c. 28, s. 10.

<sup>17</sup> Forestry, Parks and Tourism, *Operating standards for Alberta's Crown land grazing dispositions* (Edmonton: 2023, Government of Alberta).

<sup>18</sup> AER, *Manual 007: Principles for Minimizing Surface Disturbance in Native Prairie and Parkland Areas*; and 2010 *Reclamation Criteria for Wellsites and Associated Facilities for Native Grasslands* (2014).

<sup>19</sup> Environment and Parks, *Wildlife Directive for Alberta Wind Energy Projects* (Edmonton: 2018, Government of Alberta) and Environment and Parks, *Wildlife Directive for Alberta Solar Energy Projects* (Edmonton: 2017: Government of Alberta).

<sup>20</sup> P. Desserud, A. Easton and J. Lancaster, *Conservation Assessments in Native Grasslands: Strategic Siting and Pre-Disturbance Site Assessment Methodology for Industrial Activities in Native Grasslands* (Edmonton: 2018, Government of Alberta); and B.W. Adams et al., *Rangeland Health Assessment for Grassland, Forest & Tame Pasture* (Edmonton: 2016, Government of Alberta); and the Range Plant Community Guides for dry mixedgrass, foothills fescue, mixedgrass and northern fescue).

surface disturbance by industrial activities,<sup>21</sup> restoration and recovery activities,<sup>22</sup> and conservation and wildlife issues.<sup>23</sup> The overarching theme of these policy and guidance documents is that disturbance of native grasslands should be avoided and when native grasslands are not avoided, efforts should be made to minimize disturbance and mitigate negative impacts.

The majority of guidelines and policies are generated by Alberta Environment and Protected Areas (AEPA) and are administered by relevant regulators in the course of decision-making. These policies and guidelines may be implemented through authorization decisions such as rejection or amendment of a proposed project on the grounds that impacts on grasslands are not adequately mitigated. As well, policies and guideline may be incorporated into regulations by reference or into statutory authorizations as enforceable conditions.

## 2.4 Regional Planning binds Alberta's Regulatory Decision-Makers

When evaluating regulatory decision-making in Alberta and its impacts on grasslands protection and conservation, it is important to keep in mind the regional planning that can occur under the *Alberta Land Stewardship Act (ALSA)*. For the purposes of regional planning under ALSA, the province is divided into 7 land-use planning regions based around major watersheds. Once a regional plan is completed, all public and private land in that region is subject to the regional plan. As part of the regional plan implementation, environmental management frameworks are developed and sub-regional plans may also be developed to address local or issue-specific matters.

A regional plan consists of three parts: the strategic plan, the implementation plan and the regulatory details. The strategic plan provides the vision and desired outcomes for the region and the implementation plan includes regional objectives, strategies and actions to

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<sup>21</sup> Lands Division, Rangeland Management Branch, *IL 2010-02 Foothills Fescue Grassland Principles for Minimizing Surface Disturbance; Industrial Activity in Foothills Fescue Grasslands – Guidelines for Minimizing Surface Disturbance* (Edmonton: 2010, Government of Alberta); Environment and Parks, *Industrial Activity in the Central Parkland and Northern Fescue Native Grasslands: Strategies for Minimizing Surface Disturbance* (Edmonton: 2016, Government of Alberta); and Environment and Parks, *Principles for Minimizing Surface Disturbance in Native Grassland: Principles, Guidelines and Tools for all Industrial Activity in Native Grasslands in the Prairies and Parkland Landscapes of Alberta* (Edmonton: 2016, Government of Alberta).

<sup>22</sup> Agriculture, Food and Rural Development, *Native Plant Revegetation Guidelines for Alberta* (Edmonton: 2001, Government of Alberta).

<sup>23</sup> Environment and Parks, *Grassland Conservation, Tools Project: Summary Report* (Edmonton: 2018, Government of Alberta); and Sustainable Resource Development, *Recommended Land Use Guidelines for Protection of Selected Wildlife Species and Habitat within Grassland and Parkland Natural Regions of Alberta* (Edmonton: 2011, Government of Alberta).

be undertaken to achieve the regional vision and outcomes. The regulatory details enable achievement of the strategic direction, strategies and actions.

The regulatory details are legally binding (whereas the strategic and implementation plans are just statements of policy to guide decision-makers). The regulatory details of a regional plan under ALSA could impose specific restrictions and requirements relevant to grasslands in the region. In addition, restrictions on private land could be imposed under a regional plan by expressly declaring a conservation directive<sup>24</sup> to “permanently protect, conserve, manage and enhance environmental, natural scenic, esthetic or agricultural values”.<sup>25</sup> To date, no conservation directives have been made.

Native grasslands are found in the Red Deer Region, the North Saskatchewan Region, and the South Saskatchewan Region.<sup>26</sup> However, although ALSA has been in force since 2009, only 2 regional plans are complete: the Lower Athabasca Region (LARP) and the South Saskatchewan Region (SSRP).<sup>27</sup> As a result, the SSRP is the only completed regional plan that addresses matters relevant to native grasslands.

The SSRP’s implementation plan indicates that “maintaining intact native grasslands and habitat will be a high priority and the overarching management intent is to create an interconnected network of conservation areas on Crown land and conservation efforts on private land to sustain and improve overall habitat connectivity for grasslands species”.<sup>28</sup> Action items identified in the implementation plan portion of the SSRP include the implementation of the Livingstone-Porcupine Hills Land Footprint Management Plan, and the establishment of the Pekisko Special Management Area and the completion of a management plan for the Pekisko. The Regulatory Details, which are legally binding and enforceable, set out use restrictions for the Pekisko Heritage Rangeland.<sup>29</sup> Although much of the SSRP is not strictly legally binding, the policy statements therein guide all provincial decision-makers to ensure their decisions are consistent with the SSRP.

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<sup>24</sup> ALSA, Part 3, Division 3.

<sup>25</sup> *Ibid.*, s. 37.

<sup>26</sup> Jason Weiler, *Conserving the Grasslands of Southern Alberta: Three Candidate Areas for Protection* (Calgary: Canadian Parks and Wilderness Society, 2010).

<sup>27</sup> Lower Athabasca Regional Plan, 2012-2022 (Edmonton: 2012, Government of Alberta) (LARP) and South Saskatchewan Regional Plan, 2014-2024, Amended May 2018 (Edmonton: 2018, Government of Alberta) (SSRP).

<sup>28</sup> SSRP at 58.

<sup>29</sup> SSRP at Regulatory Details, s. 24. For management intent regarding the Pekisko Heritage Rangeland, see SSRP at Implementation Plan.



Given that much of the regional planning under ALSA remains incomplete, it is important to acknowledge the existence of numerous Integrated Resource Plans (IRPs) which remain in effect.<sup>30</sup> The IRPs are place-based plans, many dating back to the 1980s, which set out provincial resource management policy for public lands and resources in the area. These provide guidance for decision-makers, industry and the public within the IRP area. The two existing regional plans—the LARP and SSRP—indicate that IRPs addressing areas within the planning region are to be reviewed for integration into the regional or sub-regional plans. Presumably, the same approach will be adopted in other ALSA regions.

## 2.5 Municipalities are important land-use decision-makers

While it is outside of the scope of this project to assess land use decision-making by individual municipalities, it is acknowledged that municipalities have a significant role making decisions that may impact native grasslands conservation and protection on private lands, as well as conversion of native grasslands. Municipal authority is set out in the MGA and Parts 17, 17.1 and 17.2 specifically address land-use planning and decision-making by municipalities.

All municipalities are required to prepare Municipal Development Plans (MDPs) which, among other things, must contain policies respecting the protection of agricultural operations and address future land use within the municipality.<sup>31</sup> In addition, every municipality must prepare a Land Use Bylaw (LUB) which regulates and controls the development of land and buildings within the municipality including through the establishment of municipal zoning.<sup>32</sup> There are other plans, both statutory and non-statutory, that may be adopted by a municipality. It is possible that a municipality could design its municipal plans – including its MDP and LUB – to require conservation of native grasslands. Whether or not that is actually done by a particular municipality is a question to be answered by looking to its municipal plans.

Regardless, it should be acknowledged that it is relatively easy to change municipal plans. As well, it is important to note that municipal plans may be overridden by statutory authorizations issued by Alberta's regulatory bodies (the AER, AUC and NRCB).<sup>33</sup> As a result,

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<sup>30</sup> Alberta Municipal Affairs, *Land Use Policies* (Edmonton: 1996, Government of Alberta). For a list of Integrated Resource Plans, see Government of Alberta website, online: <https://www.alberta.ca/integrated-resource-plans>.

<sup>31</sup> MGA at s. 632.

<sup>32</sup> MGA at s. 640.

<sup>33</sup> MGA at s. 619.

municipal planning around native grasslands conservation may be undermined without some provincial imperative requiring native grasslands conservation.

### 3. Evaluation of Regulatory Decisions, An Overview

Looking at the law and policy framework relevant to native grasslands, there is recognition (primarily in policy) that native grasslands are important ecosystems that ought to be conserved and protected. The guiding principle is that activities on native grasslands should be avoided. When avoidance is not possible, then efforts should be taken to minimize disturbance and mitigate any impacts. This approach affords significant discretion to regulators. Should a proposed activity be denied or significantly altered to avoid disturbance? When is disturbance unavoidable? How much unavoidable disturbance is acceptable? What needs to be done to mitigate?

To evaluate how the regulators use their discretion to implement the provincial native grassland goals and objectives, the ELC reviewed and evaluated their decisions. In addition to looking at the regulators' decisions, the ELC reviewed the decisions made by the Alberta Environmental Appeals Board and by the courts in the event there were cases that provided illumination on regulator decision-making. However, given the limited grounds for appeal and the deference granted to regulators, no significant discussion around native grassland considerations was found at the appeal level.

This report contains two sections outlining the ELC's evaluation of regulatory decision-making. The first section looks at decision-making under Land Management Legislation - the *Public Lands Act* (PLA), the *Surface Rights Act* (SRA) and the *Municipal Government Act* (MGA)- all pieces of legislation with implications for land management. The relevant regulators are Alberta Forestry and Parks and the Alberta Land and Property Rights Tribunal (LPRT). As mentioned above, municipalities are also key decision-makers under the MGA; however, it was not within the scope of this project to review planning and permitting decisions made by individual municipalities.

The next section looks at decision-making under various pieces of Activity Regulation Legislation by the AER, the AUC, the NRCB and the CER. Legislation grants each of these regulators is granted jurisdiction to regulate particular extractive industries. Several pieces of legislation, along with guidelines and policies, are administered and implemented by these regulatory bodies.

## 4. Evaluation of Regulatory Decisions, Land Management Legislation

This section of the report looks at decision-making under Land Management Legislation, namely the *Public Lands Act* (PLA), the *Surface Rights Act* (SRA) and the *Municipal Government Act* (MGA). In particular, this section looks at decisions made by Alberta Forestry and Parks and the Alberta Land and Property Rights Tribunal (LRPT).

### 4.1 Public Land Decision-Making by Alberta Forestry and Parks

Public land use decisions include broad management decisions such as designating protected areas and public land use zones (PLUZs), and making Crown Land Reservations. They also include decisions around issuance of dispositions under the PLA which control rights of access, surface rights and subsurface rights on public lands. Alberta Forestry and Parks is the government department primarily responsible for the administration and management of provincial public lands via public land dispositions. The AER also has authority to make decisions around public land dispositions insofar as they relate to oil, oil sands, natural gas, coal and other mineral mines, and geothermal resources.

Although numerous important land-use decisions on public lands are made by the government, written decisions are not issued rather evidence of decisions being made is found in the issuance of dispositions,<sup>34</sup> protected areas being established, Crown Land Reservations being placed on public land, and so forth. It is important, then, to look at the PLA and the *Public Lands Administration Regulation* (PLAR) to understand land-use decision-making on public lands.<sup>35</sup>

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<sup>34</sup> Disposition mapping data (tied to the Alberta Township System) is available via Altalis, online: <https://www.altalis.com/map?gid=106>.

<sup>35</sup> *Public Lands Administration Regulation*, Alta. Reg. 187/2011 (PLAR).

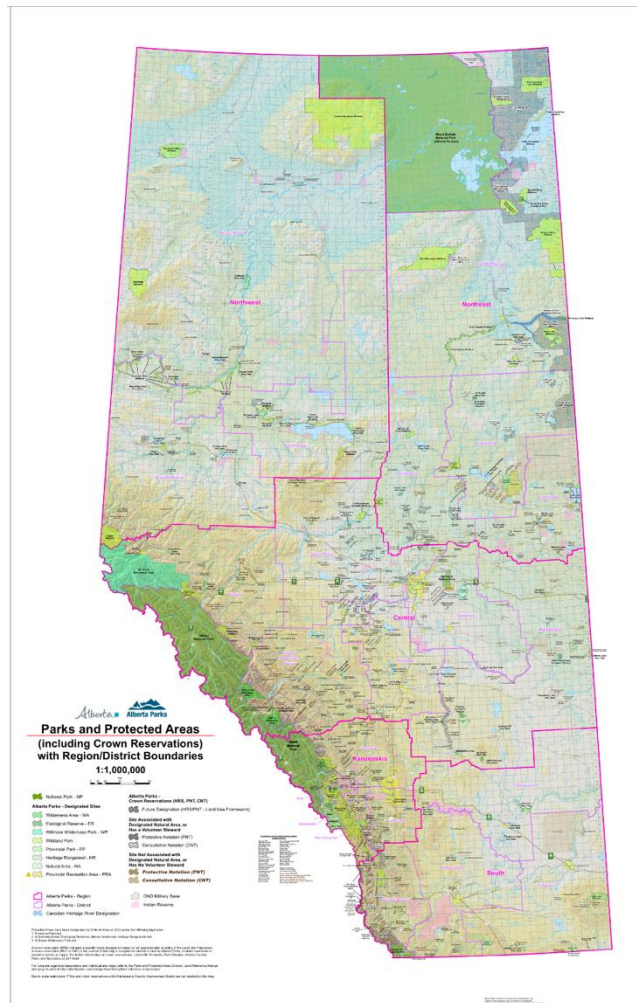


Figure 3: Government of Alberta Map showing Parks and Protected Areas including Crown Reservations, available online: <https://www.albertaparks.ca/media/6492835/alberta-parks-protected-areas-provincial-map.pdf>

Under the PLAR, certain areas of the province may be declared to Public Land Use Zones (PLUZs).<sup>36</sup> PLUZs are intended to “both facilitate and regulate recreational activity, first specifying a range of available recreational opportunities, then identifying any limitations on them.”<sup>37</sup> Unless otherwise specified for an individual PLUZ, a variety of activities are prohibited within a PLUZ: use of off-highway vehicles (OHVs) or snow vehicles; camping,

<sup>36</sup> PLAR at s. 178 and Schedule 4.

<sup>37</sup> Guy Greenaway, *PLUZ's and PNT's: Opportunities and Limitations for Nature Conservation* (Calgary: Miistakis Institute, 2019) [Greenaway].

horse use and OHVs use within 100m of a lakeshore; landing helicopters on a lake or within 200m of the shore; motor boats; and camping or having a fire within 1km of a designated recreation area.<sup>38</sup> Essentially, PLUZs place limitations on the use of public lands that would otherwise be considered vacant public lands subject to few use restrictions.

As well, under section 18(c) of the PLA, the Minister may attach Crown Land Reservations (CLRs) to public lands for management and decision-making purposes. The use of CLRs replaces land use reservations and notations previously used to help manage public lands in Alberta.<sup>39</sup> A CLR outlines the rules, restrictions, and regulatory processes applicable to a particular piece of public land and may be used to reflect the management intent set out in a regional plan, integrated resource plan, or other policy documents. A CLR is required to identify its purposes and reasons, as well as the management intent, actions (specific requirement to achieve the management intent), and sectors of land users to which the specified actions apply.

The government issued a procedures guide in 2023 which sets out a variety of acceptable purposes and reasons which are to be identified in a CLR.<sup>40</sup> Purposes relevant to native grasslands conservation and protection include land management, land use plans, park or protected areas, range management, and unique site features. There are a variety of reason subcategories that may relate to grasslands including fish and wildlife resources, land management, land use plans, park or protected area, range management, and unique site features. The land management subcategory specifically includes grassland conservation as a reason for a CLR, in particular to identify "areas of native grasslands within the province that require protection for conservation objectives".<sup>41</sup>

It should be noted that there is a process to appeal certain public land decisions to the Alberta Public Lands Appeal Board (PLAB).<sup>42</sup> However, a review of decisions made by the PLAB did not reveal any significant discussion of native grasslands matters and so the PLAB is not discussed in detail in this report.

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<sup>38</sup> PLAR at ss. 181-186.

<sup>39</sup> Ministry of Forestry, Parks and Tourism, *Land Use Reservations Program Procedures Guide* (Edmonton: 2023, Government of Alberta) [CLR Guide] at 7. See also Gerry Haeckel and Nikki Zwaga (Environment and Parks), *Land Use Reservation Program Directive* (Edmonton: 2022, Government of Alberta).

<sup>40</sup> CLR Guide, *ibid.*

<sup>41</sup> *Ibid.* at 26.

<sup>42</sup> PLA at Part 7 and PLAR at Part 10.

#### 4.1.1 Integration of grassland considerations in public land dispositions

A disposition of public land allows a person to obtain an interest in Crown land. Dispositions include grazing dispositions (leases, licences, permits, and head tax permits), mineral surface leases, surface material dispositions and licences of occupation. Where dispositions are issued by the AER or by Alberta Forestry and Parks, the *Master Schedule of Standards and Conditions* (MSSC) identifies conditions that apply to formal disposition applications approved under the PLA.<sup>43</sup>

The key mechanisms used to integrate grassland considerations into public land dispositions are the CLR system and the MSSC system. The document entitled *Pre-application requirements for formal dispositions*<sup>44</sup> explains the operation of both CLRs and the MSSC - as well as alignment to land use planning and considerations for resources such as water bodies and species at risk – when applying for a public land disposition. This document applies only to disposition applications made for authorizations granted under the PLA and the *Mines and Minerals Act* (i.e. applications considered by the Ministry of Forests and Parks and by the AER).

Applicants are encouraged to identify CLRs early in their planning process in order to select an appropriate location for their proposed activity (this can be done with a land use reservations report). The proponent must follow any actions related to the applicable sector specified in the CLR. A CLR may require specific actions to be taken including:<sup>45</sup>

- As per approved plan, which requires review of plan and ensuring activity aligns with the plan.
- As per established conditions which means crown land activities will adhere to the MSSC, so the applicant must plan their activity accordingly.
- No surface disposition which means applicants from identified sectors would be prohibited from making an application (and if they do so, the application will be rejected or refused).
- Site assessment which triggers identification of sectors required to complete a site assessment.

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<sup>43</sup> *Master Schedule of Standards and Conditions* (Edmonton: Government of Alberta, 2024) [MSSC]; online: <https://open.alberta.ca/publications/master-schedule-of-standards-and-conditions>.

<sup>44</sup> Forestry and Parks, *Pre-application requirements for formal dispositions* (Edmonton: 2024, Government of Alberta).

<sup>45</sup> *Ibid.* at 14 to 15.



A CLR may include other required actions such as requiring clearance, notification or referral to the reservation holder. The reservation holder is required to review the proposed activity and if there are "valid concerns regarding impacts of the proposed activity on the reservation",<sup>46</sup> then the proponent must work with the reservation holder to address those concerns. If a resolution cannot be reached, the proponent may choose to either not submit their application or to submit their application along with mitigation efforts and concerns to be assessed by the regulatory agency. At the time of application, the regulatory agency will identify any relevant CLRs and require all actions specified to be addressed before the application proceeds (hence, the recommendation for a proponent to identify and address CLRs prior to application).

The MSSC identifies conditions that apply to activities that fall under the PLA, the *Parks Act*, the *Mines and Minerals Act*, and the *Geophysical Regulations*.<sup>47</sup> Regulatory bodies reference the MSSC "when reviewing applications and selecting conditions when a decision is made to issue approvals, authorizations, or formal dispositions".<sup>48</sup> Standard and condition selection is determined by disposition type, purpose/activity type, risk ranking (if applicable), and supporting spatial layers (if applicable). Spatial layers in the MSSC related to grasslands are:

- grassland and parkland natural region;
- rough fescue;
- chinook grasslands;
- mixed grass subregion;
- foothills parkland grasslands;
- dry mixed grass;
- central parklands;
- northern fescue; and
- provincial grazing reserve.

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<sup>46</sup> *Ibid.* at 15.

<sup>47</sup> *Ibid.*

<sup>48</sup> *Ibid.* at 11.

In addition, there is a spatial layer for endangered and threatened plant ranges and for a variety of animal species of concern (including Burrowing Owl and Sage Grouse) which may include grassland habitats.

The MSSC outlines approval standards and conditions which become incorporated into public land dispositions, authorizations and approvals. Approval standards must be followed unless a proponent successfully submitted a non-standard application (the proponent must provide justification as to why the approval standard cannot be followed, and alternate mitigation to address the intent of the approval standard or justification as to why mitigation is not possible). Conditions are not negotiable and must be adhered to. The most relevant category of MSSC conditions and standards is the grassland and parkland natural region (i.e. MSSC 2050 to 2071). These conditions and standards include things such as:

- no conducting activities with areas identified by the rough fescue reservation layer unless the activities are located completely within existing disturbances; the activities are adjacent to an entered disposition including but limited to access, pipeline and transportation corridors; or the activities are adjacent to existing disturbances including but not limited to existing access trains or non-native vegetation;
- time restrictions for conducting activities on fescue grasslands, within 100m of active nest sites of certain species, or without completing a grassland bird survey (these 3 are separate conditions with differing time restrictions);
- requirements on a disposition holder to submit a written request for assisted natural recovery to the relevant regulatory body (where native grasslands cannot recover naturally and so require assisted natural recovery which uses short-term additions of materials to assist in re-establishment of vegetation present on the site and surrounding areas);<sup>49</sup>
- construct wellsite facilities using minimal disturbance construction practices other than for the immediate area of well centre required for downhole drilling operations and wellhead placement;
- construction using minimal disturbance construction practices except for on an area smaller than specified in the condition;
- no conducting activities on loamy soil in the Central Parkland and Northern Fescue layer unless using existing disturbances, or locating activities adjacent to existing occupied dispositions and non-native vegetation areas;

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<sup>49</sup> Assisted natural recovery is defined in various Government of Alberta recovery strategy documents. See for example, M. Neville, J. Lancaster, B. Adams and P. Desserud, *Recovery Strategies for Industrial Development in Native Prairie for the Mixedgrass Natural Subregion of Alberta* (Edmonton: 2014, Government of Alberta).

- disposition holder must not crimp straw on native grassland (subject to limited exceptions related to source of straw and weed analysis);
- a conservation assessment is required in the Central Parkland and Northern Fescue layer;
- must only use above-ground sumps on native grasslands identified by the Native Grassland and Parkland layer (only for mineral surface leases);
- certain road classes cannot be developed on native grassland until a well is proven and producing; and
- road development on native grasslands must be done only with two track gravelling that meet certain requirements.

It should be noted that the above standards and conditions may apply only to certain types of dispositions, such as mineral surface leases or licences of occupation. In addition, the above may only apply to certain natural regions, such as rough fescue, mixed grass and so on. In many cases, the above are applied as standards which may be modified through a non-standard disposition application. It should be noted that aside from this category of MSSC standards and conditions (i.e. grassland and parkland natural region), some others are relevant such as a prohibition against moving native grasses and forbs in sage grouse ranges (MSSC 1632) and requirements relating to integrated use on agriculture and grazing lands (MSSC 1502 and 1503).

In addition to the approval standards and conditions set out in the MSCC, Appendix A of the *Pre-application requirements for formal dispositions*<sup>50</sup> sets out desired outcomes and best management practices associated with the various categories of standards and conditions. These categories include land management, vegetation, integrated use on agriculture and grazing lands, rangeland management, a variety of species at risk, and grassland and parkland natural region. Within each category, a variety of desired outcomes are identified, along with best management practices. The outcomes and best management practices most relevant to grasslands are found in the grassland and parkland natural region category.<sup>51</sup>

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<sup>50</sup> *Pre-application for formal dispositions, supra.* note 44.

<sup>51</sup> *Ibid.* at 37

From: Forestry and Parks, *Pre-application for formal dispositions* (Edmonton: 2024, Government of Alberta) at 37.

<b>Grassland and Parkland Natural Region</b>	<ol style="list-style-type: none"> <li>1. Maintain and promote native vegetation (grass, forbs and shrub species) throughout the Grassland and Parkland Natural Region.</li> <li>2. Maintain natural terrain features and viewscales (including badlands coulees*, upland prairies and river valleys).</li> <li>3. Ensure that no invasive, undesirable, plant or weed species are introduced.</li> <li>4. Ensure the current biodiversity is maintained and all ecological functions are not impeded; this includes: soils, vegetation, water, wildlife and Species at Risk.</li> <li>5. Minimize fragmentation of intact native grasslands*.</li> <li>6. Maintain Fescue Grasslands* in recognition of their special sensitivity to disturbance.</li> <li>7. Minimize disturbance of Fescue Grasslands*."</li> </ol>	<ol style="list-style-type: none"> <li>1. Industry should avoid disturbing native grasslands*. Industrial activities* should not cause significant disturbance to the structural and functional integrity of native prairie and parkland ecosystems. Existing access or non-native cover areas should be used. Long-term monitoring of the re-vegetated areas should be conducted until the native species* community has been restored.</li> <li>2. Specialized equipment (for example, prairie protector blades) should be used to minimize scalping during topsoil* replacement, particularly when topsoil* has been stored on native grasslands*.</li> <li>3. Cottonwood forests (balsam poplar, plains cottonwood and narrowleaf cottonwood) should be protected from removal or damage in river valleys and on floodplains.</li> <li>4. Use existing disturbances* (wellsites or access roads) or non-native cover areas."</li> </ol>
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The desired outcomes and best management practices are meant to provide additional context in terms of planning and operational expectations. In particular, if a non-standard application is being made, the proponent must address the relevant desired outcomes, ensuring that they can still be achieved as identified in the proponent’s proposed mitigation (failure to do so may result in the refusal of the application). The best management practices should be followed in planning and siting of the proposed activity, following the best management practices increases the chances of a successful application.

4.1.2 Evaluation of decision-making using the ELC’s Regulatory Evaluation Framework

Decision Points	
Regulatory need	land management decisions (protected areas, PLUZs, CLRs) triggered by grasslands concerns; dispositions triggered by proponent request
Activity assessment	Decision to approve activity usually made by other decision-maker but activity type and location may trigger conditions and standards under MSSC. Makes decision to issue dispositions (which allows access and use of public lands). Grazing leases issued by this decision-maker.
Activity approval	not approving activity per se (although disposition enables)
Post-approval	-
Post-closure	EPEA reclamation standards, if applicable

<b>Exercise of discretion/ administrative function</b>	
Consideration of native grasslands, assessment and articulation of trade-offs	heavy reliance on MSCC to set standards and conditions for dispositions within identified grasslands
Incorporation of native grasslands-relevant conditions	dispositions are granted subject to standards and conditions as per the MSSC; non-standard disposition application are allowed in which case there may be variance from MSSC requirements
Compliance response (policy, variability)	-
<b>Procedural Fairness</b>	
Participation and participant funding	lack of decision reports (much of the decision-making happens without significant level of public participation)
Access to information	GIS layer of dispositions and natural regions is publicly available but require GIS expertise which may hamper accessibility

## 4.2 Land and Property Rights Tribunal

The Land and Property Rights Tribunal (LPRT)<sup>52</sup> makes decisions under several pieces of legislation: the *Expropriation Act*, the MGA, the *Surface Rights Act (SRA)*, and the *New Home Buyers Protection Act*.<sup>53</sup> For our purposes, the SRA and MGA are the most relevant because these pieces of legislation address matters related to right of entry orders and to municipal land use planning and development, respectively. These types of decisions have the potential to impact native grasslands located on private lands.

The SRA addresses matters related to access on private lands for the purposes of oil and gas activities, power transmission and telephone line operations. Typically, where an operator seeks access to private lands, they negotiate with the landowner to arrange compensation

<sup>52</sup> *Land and Property Rights Tribunal Act*, SA 2020, c. L-2.3. The Alberta Land Compensation Board, the Alberta Municipal Government Board, the Alberta Surface Rights Board, and the Alberta New Home Buyer Protection Board were merged into the LPRT in 2021.

<sup>53</sup> *Expropriation Act*, RSA 2000, c. E-13; *Surface Rights Act*, RSA 2000, c. S-24 (SRA); and *New Home Buyers Protection Act*, SA 2012, c. N-3.2.

and other terms in exchange for access (called a surface lease). In some cases, an agreement cannot be reached and the SRA enables the LPRT (previously, the Surface Rights Board) to grant right of entry orders which allow operators onto the surface of any land (except Metis Settlement lands) for the purposes of mining, drilling, pipeline, and power transmission or telephone line operations. The LPRT may also set the level of compensation payable to the landowner under a surface lease or under a right of entry order. An LPRT order may result in allowing access to private lands which are covered by native grasslands.

Private lands are probably most impacted by land use planning and decision-making at the municipal level which is governed by Part 17 of the MGA. Numerous provisions within the MGA addressing land use planning and decision-making on a single municipality basis and on an inter-municipal basis. For instance, all municipalities are required to prepare municipal development plans (MDPs) which, among other things, must address future land use within the municipality.<sup>54</sup> All municipalities must also prepare a Land Use Bylaw (LUB) to regulate and control the development of land and buildings within a municipality.<sup>55</sup> In addition, there are other forms of statutory and non-statutory plans—such as area structure plans and area redevelopment plans, that may be adopted by a municipality. Municipal planning must be done in accordance with any applicable ALSA regional plans.<sup>56</sup> In addition, every statutory plan, LUB and action taken under Part 17 of the MGA must be consistent with the provincial *Land Use Policies*.<sup>57</sup> The LPRT hears a variety of matters related to municipal planning and development under the MGA:

- contested annexation recommendations;
- intermunicipal disputes;
- section 619 disputes (this provision grants priority to provincial statutory authorizations over municipal plans and land use bylaws); and
- subdivision and development appeals.

It is possible, although not required, that municipal plans and land use bylaws address matters of native grassland protection and conservation. As well, development decisions may involve lands that contain native grasslands. Thus, the decisions of the LRPT may also impact upon native grassland protection and conservation on private lands. It should be noted that decisions made by the AER, AUC or NRCB have priority over land use planning or permitting decisions by a municipality or decisions made by the LRPT.<sup>58</sup>

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<sup>54</sup> MGA at s. 632.

<sup>55</sup> MGA at ss. 639 to 646.

<sup>56</sup> MGA at s. 618.3

<sup>57</sup> Alberta Municipal Affairs, *Land Use Policies* (Edmonton: 1996, Government of Alberta).

<sup>58</sup> MGA at s. 619.



#### 4.2.1 Research Methodology

The website for the LPRT is divided into sections depending upon the type of decision-making (surface rights, land use planning, and so forth). The surface rights page (<https://www.alberta.ca/surface-rights-board-decisions>) indicates that LPRT decisions are available through CanLii's database of LPRT decisions (<https://www.canlii.org/en/ab/ablprt/>). The land use planning page (<https://www.alberta.ca/land-use-planning-order-decision-search>) indicates that decisions can be searched through the Tribunal Order search ([municipalaffairs.alberta.ca/abc\\_MGB\\_board\\_order\\_search](https://municipalaffairs.alberta.ca/abc_MGB_board_order_search)). Both the CanLii database and the Tribunal Order search database were searched using the term "grasslands". Each decision report found by this search was reviewed.

#### 4.2.2 Decision-making trends and regulator commentary with respect to native grasslands

The decisions of the LPRT will be reviewed in two sections: the SRA and the MGA. The LPRT plays somewhat different roles under these pieces of legislation. Under the SRA, the LPRT is hearing and deciding the matter at first instance (right of entry orders or compensation matters). Under the MGA, the LPRT holds hearings to resolve land use planning disputes involving municipalities such as appeals from subdivision and development decisions or appeals from municipal decisions that deny applications to amend municipal planning to align with provincial authorizations (such as an AER, AUC or NRCB statutory authorization).

##### 4.2.2.1 Surface Rights Act

Although decisions made by the LPRT under the SRA often mention grasslands, their presence generally seems to have little bearing on its decision-making. Two trends emerge:

- right of entry orders are typically issued even if this means disturbing grasslands (although there may be conditions to minimize and mitigate damage); and
- when addressing matters of compensation, grasslands are less valuable than cultivated lands.

An example of the first trend is seen in *Montana Alberta Tie Ltd.*<sup>59</sup> In this case, a right of entry order was sought for an international power line and an objection was filed by the

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<sup>59</sup> *Montana Alberta Tie Ltd. v KERCP Farms Incorporated, Pat Walsh, AltaLink Management Ltd. and Bonavista Petroleum Ltd.*, 2011 CanLii 100681.

landowner, who requested that the proposed route for the transmission line be moved to along the fenced line and that steps be taken to protect the native grassland covered by the right of way. The Surface Rights Board (SRB), a predecessor to the LPRT, allowed the right of way subject to several conditions. The conditions did not expressly mention native grasslands but did include things like weed control requirements and conducting operations in a manner to minimize ground disturbance. The SRB also noted that any claims for damage – including adverse effects on grasslands - should be addressed as a compensation claim under section 23 of the SRA. The SRB did not consider such concerns relevant to a right of way application. In the ELC's view, this is an unfortunate approach as it would be more effective to take steps to avoid damage to native grasslands at the outset (i.e. deny access across native grasslands and/or set mitigative conditions) rather than seeking compensation once damage has occurred.

When determining compensation for loss of use due to oil and gas operations, the LPRT places less value on native grasslands as compared to cultivated lands. For example, in *Roy Barrie and Netta Barritt*, land expropriated for a drainage ditch was given a lower estimate if the highest and best use was native grassland for summer livestock grazing.<sup>60</sup> In another case, *Penn West Petroleum v Schonhofer*, it was argued that land which was used for well sites should be valued higher as it "had been seeded back to Russian Wild Rye grass, a superior feed value over the native grasses... lands will have a carrying capacity four times greater than the native grasses".<sup>61</sup> Similarly, in *Nal Resources Limited v Riverbend Ranch Inc*, it was noted in determining compensation for native prairie lost to wellsites was lower for native prairie.<sup>62</sup> Not only do such decisions enable the loss of grasslands for industrial uses, they also encourage the reclamation of lands back to a cultivated state rather than restoration of native grasslands (or conversion of native grasslands to cultivated lands in order to obtain a higher lease price at the outset). Not to mention the value of ecological goods and services provided by native grasslands which is being undervalued.

#### 4.2.2.2 Municipal Government Act

Grassland concerns have been mentioned in a few LPRT decisions addressing section 619 under the MGA which grants priority of statutory authorizations issued by the AER, the AUC and the NRCB over municipal planning decisions. In these particular LPRT decisions, the municipalities either sought or had placed additional operational requirements on wind power projects already approved by the AUC in an effort to protect native grasslands.

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<sup>60</sup> *Roy Barritt and Netta Barritt v Alberta (Environmental Protection)*, 2004 CanLii 72134.

<sup>61</sup> *Penn West Petroleum Ltd v Schonhofer*, 2005 ABSRB 121 at 4.

<sup>62</sup> *Nal Resources Limited v Riverbend Ranch Inc.*, 2005 CanLii 78475.

For example, in the *Buffalo Atlee 1 Wind LP* decision, the development authority decided to not issue development permits because municipal setback requirements were not met.<sup>63</sup> The project proponent appealed because the AUC had granted a statutory authorization which, by operation of section 619 MGA, meant the development authority had to issue a development permit. The development authority requested that if the LPRT were to require issuance of the development permits, that they be made conditional. Requested conditions included:

The restoration of grassland vegetative cover being completed utilizing species which provide assurance the site will achieve a community similar to the offsite control... and [s]eed mixes used must be free of noxious weeds<sup>64</sup>

The LPRT did decide to issue the development permits and agreed to impose the requested conditions. Unfortunately, the LPRT did not provide any discussion or commentary around its decision to require the conditions requested by the municipality.

In two similar cases - *Jenner 2 and Jenner 3*, and *Jenner 1* - the development authority attached conditions to its development permits for wind projects approved by the AUC:

restoration of grassland vegetative cover being completed utilizing species which provide assurance the site will achieve a community similar to the offsite control... and for use of [s]eed mixes free of noxious weeds

These conditions were in addition to those already attached to the AUC statutory authorizations.<sup>65</sup> The LPRT provided no commentary around these additional conditions (as they were not part of the appeal grounds) and they were left to stand.

It should be noted that decisions of the LPRT made with respect to the MGA represent only a small subset of decisions made under the MGA that can impact on native grasslands. All municipalities have authority to make land use planning and development decisions under the MGA, and each of these decisions made by each municipality may directly impact a particular grassland or otherwise drive conversion of grasslands (for instance, by allowing

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<sup>63</sup> *Buffalo Atlee 1 Wind LP v Special Areas No.2.*, 2021 ABLPRT 764. See also the AUC decision for this project ENGIE Development Canada GP Inc., Buffalo Trail Wind Power Project (February 8, 2023).

<sup>64</sup> *Ibid.* at para. 19.

<sup>65</sup> *Jenner 2 and Jenner 3 Limited Partnership v Special Area No. 2*, 2022 ABLPRT 525; and *Jenner 1 Limited Partnership v Special Area No. 2*, 2022 ABLPRT 861. Also see AUC decisions: *Jenner 2 GP Inc. and Jenner 3 GP Inc.*, *Jenner 2 and Jenner 3 Wind Power Projects* (November 26, 2021) and *Jenner Wind 1 GP Inc.*, *Jenner Wind Power Project Amendment and Time Extension* (July 7, 2021).

urban sprawl onto cultivated lands which drives cultivation onto grasslands). There are no existing provincial policies to guide municipalities as to how to make land use and development in a manner that protects and conserves native grasslands.

4.2.3 Integration of grassland considerations in statutory authorizations

A review of the LPRT decisions found 32 decisions that mentioned or discussed grasslands, the majority of which were addressing compensation for access (and just happened to involve grasslands). Although in most cases the LPRT seems to make decisions with little regard to issues of native grassland conservation and protection, in four cases, the LPRT either attached conditions or left conditions on statutory authorizations that are meant to address concerns around native grassland disturbance. In all of these four cases, the LPRT was addressing a matter under the MGA. It seems that the LPRT considers itself to have the authority to impose such conditions related to grasslands but, unfortunately, not one it often feels compelled to use.

4.2.4 Evaluation of decision-making using the ELC's Regulatory Evaluation Framework

Decision Points	
Regulatory need	activity trigger for SRA (seeking access to conduct activity); appellant concern trigger for MGA
Activity assessment	matter of access for SRA; matter of appeal for MGA; activity concerns addressed primarily in other regulatory processes (AER or AUC)
Activity approval	-
Post-approval	-
Post-closure	-
<b>Exercise of discretion/ administrative function</b>	
Consideration of native grasslands, assessment and articulation of trade-offs	mentions grasslands but next to no discussion of assessment of grasslands and no articulation of trade-offs
Incorporation of native grassland relevant conditions	yes

Compliance response (policy, variability)	Decisions made by the LPRT relate to either SRA or MGA (for our purposes) which means compliance activities would be conducted by another decision-maker. In the case of SRA, then look to AER as it enforces its statutory authorizations. In the case of MGA, then municipality would be enforcing bylaws or development permits.
<b>Procedural Fairness</b>	
Participation and participant funding	not general public (SRB: landowner and project proponent; MGA: municipality and project proponent)
Access to information	decisions publicly available

## 5. Evaluation of Regulatory Decisions, Activity Regulation Legislation

This section looks at decision-making under various pieces of Activity Regulation Legislation by the Alberta Energy Regulator (AER), the Alberta Utilities Commission (AUC), the Natural Resources Conservation Board (NRCB) and the Canada Energy Regulator (CER). These regulators are responsible for much of the industrial activity within the province including oil and gas operations, power plants and electrical transmission lines, intensive livestock operations, large natural resource projects (such as water management projects and recreation projects), and interprovincial pipelines.

### 5.1 Alberta Energy Regulator

The AER makes decisions pertaining to the exploration and extraction of oil, oil sands, natural gas, rock-hosted minerals, brine-hosted minerals, and geothermal resources in Alberta.<sup>66</sup> This includes making decisions around water, public lands, and the environment associated with these resource activities. Decisions made by the AER with respect to public lands are subject to the PLA and the MSSC (discussed above) with the MSSC specifically identifying those decisions made by the AER.

#### 5.1.1 Research Methodology

<sup>66</sup> REDA and *Mineral Resource Development Act*, SA 2021, c. M-16.8.

Initial attempts to conduct keywords searches on the general website search tool (using the term "grassland") yielded no results. Attempts to use keyword searches of the decisions page at <https://www.aer.ca/regulating-development/project-application/decisions> (using "grassland", "native", "prairie" and "habitat" as search terms) were also unsuccessful in retrieving relevant decisions, as were similar keyword searches on the AER's publication of decisions page (<https://webapps.aer.ca/pod>) and the AER's condition management for AER hearing decisions page (<https://www.aer.ca/regulating-development/project-application/decisions/condition-management-action-plans>). Ultimately, the ELC was required to go through each decision on the AER's decisions page (<https://www.aer.ca/regulating-development/project-application/decisions>) to determine if there were references to grasslands in the body of the decision. Using this method, decisions dating back to 1996 were reviewed. Overall, the ELC found that there was a lack of quick accessibility to the AER's decision-making when focused on a particular topic.

In addition, most of AER's statutory authorizations are issued via the routine application process which means no decision reports are issued. Information about AER dispositions, pipeline infrastructure, grasslands and so forth can be found via the Altalis website (<https://www.altalis.com/>) and the Government of Alberta's GeoDiscover Alberta website (<https://geodiscover.alberta.ca/geoportal/#homePanel>). This information is searchable using a legal land description but other approaches to searching and gathering the data may require the assistance of a GIS specialist which can limit accessibility of the data. For the purposes of this project, the AER provided assistance in obtaining information around public land dispositions issued on native grasslands.

The following section provides information obtained from the decision-making survey. It provides an overall summary of decisions made by the AER with relevance to grassland conservation and protection. This includes identification of trends, typical considerations made by the AER, and common conditions made around grasslands. Highlights and summaries of particularly relevant or illuminating decisions are also provided.

#### 5.1.2 Decision-making trends and regulator commentary with respect to native grasslands

When reviewing the AER's decision-making with respect to native grasslands considerations, two things must be kept in mind. Firstly, the vast majority of AER decisions are made on a routine basis which means statutory authorizations are issued without decision reports (effectively, routine applications are an automated decision-making process). In the event a particular application is contested in some way (for example, an outstanding landowner issue), then a hearing may be triggered and a decision report will be issued by the AER. Decision reports represent only a small portion of the AER's decision-making around the issuance of statutory authorizations.

Secondly, the approach to conditioning statutory authorizations is different for public and private lands. On public lands, the AER relies upon the conditions and standards as set out in the MSSC when it issues relevant public land dispositions. Information provided by the AER indicates that 33,960 dispositions under the PLA have been issued on public lands identified as grassland natural sub-regions (dry mixedgrass, mixedgrass, northern fescue, or foothills fescue). Keep in mind that each of these dispositions does not necessarily represent a single activity because one activity may require more than one public land dispositions. For example, a single oil or gas wellsite may require a mineral surface lease for the wellsite and a license of occupation for an access road. The type of disposition issued and the type of grassland will dictate which MSSC standards and conditions apply. As well, the presence of certain grassland species – burrowing owl, sharp-tailed grouse, sensitive raptors, and snakes – may trigger standards and conditions found in the MSSC. It should be noted that the standards and conditions required by the MSSC have changed over time, as such to confirm which particular standards and conditions apply, reference must be made to an individual disposition (a review of a subset of the dispositions identified by the AER was reviewed and it was found relevant MSSC standards and conditions were appended to individual disposition document). These conditions include things like locating activities on existing disturbed lands, using minimal disturbance techniques and restricted timelines for activities (see pages 23 to 25 of this report for more detail on MSSC standards and conditions).

On private lands, however, the AER seems to primarily rely upon agreements between the surface owner and the operator to address surface concerns such as native grassland disturbance. Private surface agreements entered into after November 30, 2013 may be registered in the AER's Private Surface Agreements Registry (but do not have to be) and requests for orders to comply with these agreements may be sought by the landowner.<sup>67</sup> Although these agreements can be accessed via requests to the AER, we did not undertake a review of this registry in the course of this project. The exception to relying solely on operator-landowner agreements for private lands would be a hearing being triggered and the AER considering issues raised in the course of that hearing.<sup>68</sup> In these cases, the AER has shown willingness to attach conditions addressing native grassland conservation and protection. But the AER has not gone so far as to deny applications to avoid disturbance of native grasslands.

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<sup>67</sup> REDA at Part 3 and *Enforcement of Private Surface Agreement Rules*, AR 204/2013.

<sup>68</sup> See for example - *EUB Decision 2005-017* and *ERCB Decision 2009-023* – where commitments to mitigate impacts to native grasslands on private land were deemed sufficient and no conditions were imposed.



Our review of written decisions by the AER or its predecessors demonstrated that there has been consideration of native grasslands in decision-making. For example, one of the AER's predecessors, the Energy Resources Conservation Board (ERCB), provided commentary on native grasslands in *ERCB Decision 2010-022* which considered applications for 11 well licences, a multiwell gas battery licence, and 2 pipeline licenses by Petro-Canada.<sup>69</sup> Objections were raised by several people and organizations raising numerous concerns including impacts on fescue grasses due to the pipeline route crossing native grasslands. The ERCB did grant a statutory authorization subject to several conditions and noting the many commitments made by Petro-Canada.

In its decision, the ERCB stated that:

the best mitigation measure to reduce impacts to native grasslands is avoidance... If avoidance is not possible, then the Board is of the view that serious steps must be taken to minimize disturbances as much as possible<sup>70</sup>

The ERCB also stated that it "recognizes the challenges and risks specific to and inherent in reclaiming rough fescue" and that it is aware that the use of fescue plugs for reclamation is unproven.<sup>71</sup> The ERCB found that although activities would be occurring on native grasslands, it was satisfied conditions and commitments would address the adverse impacts. There was no requirement to avoid operations on native grasslands despite the ERCB recognizing the importance of avoidance and difficulties in reclamation of fescue grasslands.

Native grasslands concerns were also raised in a series of decisions associated with shallow gas development on the Canadian Forces Base in the Suffield National Wildlife Area (Suffield NWA). The project would involve up to 1275 shallow gas wells, pipelines, access trails and other infrastructure.

The first decision was made jointly by the ERCB and the Canadian Environmental Assessment Agency (together, the JRP) and was primarily focused on impacts to the native grasslands and wildlife.<sup>72</sup> At the time, the Suffield NWA had almost 500 square kilometres of native grasslands including one of the few large blocks of dry mixed-grass prairie in

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<sup>69</sup> Petro-Canada, Application for Eleven Well Licences, One Multiwell Gas Battery Licence, and Two Pipeline Licences, Sullivan Field (June 8, 2010) ERCB Decision 2010-022.

<sup>70</sup> *Ibid.* at 66.

<sup>71</sup> *Ibid.* at 66.

<sup>72</sup> Report of the Joint Review Panel, EnCana Shallow Gas Infill Development Project, Canadian Forces Base Suffield National Wildlife Area, Alberta (January 27, 2009) ERCB and CEAA ["Suffield JRP Report"].

Canada and about 30% of all protected grasslands in Alberta. Ultimately, the JRP recommended that the project be allowed to go ahead (except for 3 well applications which were later approved)<sup>73</sup> subject to certain conditions including:<sup>74</sup>

- the management plan to protect important environmental attributes should provide an overview of goals and objectives for the protection and restoration of native prairie grasslands;
- the management plan should include a plan to control invasive weed species as the JRP considers "the presence of invasive plant species to be an ongoing problem that affects the integrity of native prairie grasslands";<sup>75</sup>
- the Department of National Defense (i.e. landowner) should form an advisory committee to recommend best management for non-native invasive species and fragmentation effects in the native prairie grassland as this will offset some of the adverse cumulative impact on native prairie grassland;
- the reclamation goal should be native prairie grassland (this is more rigorous than the usual standard of equivalent land capability); and
- reclamation should occur as soon as possible after well abandonment and seeding of rights-of-way immediately after pipeline construction is complete.

In a subsequent decision by the ERCB alone, the three well applications initially denied by the JRP were approved with no conditions.<sup>76</sup> These three wells were in addition to 36 wells already located in the application area within the Suffield NWA. While the Department of National Defence (DND) raised concerns with the destruction of native prairie and its resultant impact on habitat for vegetation, the ERCB stated:

The Board finds that even when factors such as indirect disturbance, edge effects, and future environmental effects of other land users (e.g. military training) are accounted for, the likelihood of risk posed to the native prairie ecosystem in Sections 3 and 10 is minimal because the incremental increase in disturbance caused by the three wells is so small. Having regard to the foregoing, the Board finds that the three proposed wells will have a low impact on native prairie grassland ecosystems. The Board considers that the impacts associated with the three wells and access routes

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<sup>73</sup> Encana Corporation, Applications for Three Well Licences, Suffield Field (August 25, 2009) *ERCB Decision 2009-051*.

<sup>74</sup> The 3 vertical gas wells were approved with no conditions in Encana Corporation, Applications for Three Well Licences, Suffield Field (August 25, 2009) *ERCB Decision 2009-051*. In the JRP decision, these 3 well applications were not approved because the applications lacked up to date pre-disturbance assessments for the site.

<sup>75</sup> Suffield JRP Report, *supra*. note 72 at viii.

<sup>76</sup> Encana Corporation, Applications for Three Well Licences, Suffield Field (August 25, 2009) *ERCB Decision 2009-051*.

will be effectively mitigated by the best practices proposed by EnCana in its application and [Environmental Protection Plan].<sup>77</sup>

While the ERCB did not impose conditions on the approval, it did state that it expects EnCana to “strictly adhere to the single access routes proposed and to monitoring their use for compliance” to reduce vegetation damage, and soil rutting and erosion, and to “undertake timely site reclamation for access locations where soil or vegetation damage has occurred”.<sup>78</sup> In light of the evidence, the ERCB found the impact of 3 additional wells to be minimal and would be mitigated by EnCana fulfilling its commitments.

Once again, in a later application, the ERCB approved 47 more gas wells in the Suffield NWA without conditions despite the DND’s concerns around cumulative environmental effects which would decrease range health, decrease native species abundance and diversity due to habitat loss, and increase fragmentation.<sup>79</sup>

Another decision is the Grassy Mountain Coal Project wherein a joint panel of the AER and the Canadian Environmental Assessment Agency (together, the JRP) provided some commentary around native grasslands.<sup>80</sup> Ultimately, the project was denied due to significant adverse effects which would not be adequately mitigated including impacts on fescue-dominated grasslands (some of which were subject to a protective notation, now called a CLR). In its decision, the JRP stated:

...project effects on rough fescue-dominated grasslands will be high in magnitude, local in extent, persistent and irreversible. The high magnitude considers the limited distribution and 51 per cent loss of fescue grasslands predicted for the LSA [ed: local study area]. We consider the ecological and social context to be negative due to the limited area of rough fescue grasslands available in the LSA, the emphasis in the SSRP on keeping native grasslands intact, and the provincial protective notations in place for these grasslands under the PLA. We find that the effects are significant and likely.<sup>81</sup>

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<sup>77</sup> *Ibid.* at 31 to 32.

<sup>78</sup> *Ibid.* at 31.

<sup>79</sup> Cenovus Energy Inc., Applications for 47 Well Licences, Suffield Field (June 28, 2011) 2011 ABERCB 020.

<sup>80</sup> Report of the Joint Review Panel, Benga Mining Limited, Grassy Mountain Coal Project, Crowsnest Pass (June 7, 2021) 2021 ABAER 010, CEAA Reference No. 010.

<sup>81</sup> *Ibid.* at 325 to 326.

Speaking more generally about rangeland resources, both native grasslands and rough fescue, the JRP stated :

Without quantitative information, we are unable to accurately characterize the cumulative effects on rangeland resources. However, we find that participant submissions, and the importance placed on native grasslands in the SSRP, make it clear that past activities resulted in a reduction in native grasslands in Southern Alberta. Given our finding that project effects on rough fescue dominated grasslands will be adverse and irreversible, we find that the project, in combination with other past and present project and activities, would contribute to a cumulative effect on rangeland resources. However, we cannot characterize the significance of the cumulative effect.<sup>82</sup>

The JRP also expressed concern that the applicant failed to address the effect of the project on proliferation of weeds, noxious weeds and invasive species in its application documents.

#### 5.1.3 Integration of grassland considerations in statutory authorizations

Looking at the public land disposition data provided by the AER, it is evident that there is heavy reliance on the MSCC for setting conditions and standards associated with dispositions on public lands. It is unclear that steps are taken to address native grasslands on private lands except in the atypical case of a hearing being triggered. Rather, for routine applications on private lands, the AER seems to leave issues associated with native grasslands in the hands of the parties (i.e. the operator and the landowner).

Looking through its decision reports, the AER seems unlikely to disallow activities due to the presence of native grasslands. However, the AER has demonstrated a willingness to impose conditions onto statutory authorizations to address native grassland concerns and have imposed conditions such as:

- requiring conduct of operations on dry or frozen conditions to minimize impacts to soil;
- requirements to clean equipment to avoid spread of weeds;
- directing avoidance grasslands where possible (for using equipment or creating a right-of-way);
- where grasslands are being cleared, directing specific methodologies to reduce impacts (such as protective matting; using fescue plugs, transplants and seeds;
- topsoil preparation);
- setting timelines for commencing reclamation; and

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<sup>82</sup> *Ibid.* at 342.

- requiring management plans.

While the AER has often imposed conditions on its statutory authorizations, in many cases the AER is satisfied with commitments made by the applicant which, according to the AER, renders conditions unnecessary. The ERCB commented on the significance of conditions versus commitments in *ERCB Decision 2008-089*:<sup>83</sup>

The Board notes throughout the decision report that Quicksilver has undertaken to conduct certain activities in connection with its operations that are not strictly required by the ERCB's regulations or guidelines. These undertakings are described as commitments and are summarized below. It is the Board's view that when a company makes commitments of this nature, it has satisfied itself that these activities will benefit both the product and the public, and the Board takes these commitments into account when arriving at its decision. The Board expects the applicant, having made the commitments, to fully carry out the undertaking or to advise the ERCB if, for whatever reasons, it cannot fulfill a commitment. The ERCB would then assess whether the circumstances regarding the failed commitment warrant a review of the original approval.

The Board also notes that the affected parties also have the right to request a review of the original approval if commitments made by the applicant remain unfulfilled. Conditions generally are requirements in addition to or otherwise expanding upon existing regulations and guidelines. An applicant must comply with conditions or it is in breach of its approval and subject to enforcement action by the ERCB. Enforcement of an approval includes enforcement of the conditions attached to that licence. Sanctions imposed for the breach of such conditions may include the suspension of the approval, resulting in the shut-in of a facility.

In other words, the AER expects commitments to be fulfilled and if they are not, this *may* lead to a reconsideration of the statutory authorization. Presumably, authority to do this arises from the *Responsible Energy Development Act* provisions which allow the AER to, in its sole discretion, reconsider its decisions and to confirm, vary, suspend or revoke that decision.<sup>84</sup> Conditions, on the other hand, *must* be fulfilled and failure to meet conditions may lead to suspension of the statutory authorization or other enforcement options such as administrative penalties, orders or prosecutions. It is clear that conditions imposed on

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<sup>83</sup> Quicksilver Resources Canada Inc., Applications for CBM Well and Pipeline Licenses Ghost Pine Field (September 30, 2008) *ERCB Decision 2008-089* at 29.

<sup>84</sup> REDA at ss. 42 to 44.

statutory authorizations are enforceable by the AER; however, the enforceability of commitments is less clear making conditions a superior choice.

5.1.4 Evaluation of decision-making using the ELC's Regulatory Evaluation Framework

Decision Points	
Regulatory need	triggered by application to undertake resource extraction activity regulated by the AER; if on public lands, the AER also decides on public land dispositions and <i>Water Act</i> matters; on private lands, surface matters including access are dealt by private agreement or <i>Surface Rights Act</i>
Activity assessment	if routine application (i.e. no outstanding objections), then the process is automated; if non-routine, activity will be assessed during hearing
Activity approval	statutory authorizations and dispositions on public land subject to MSSC conditions and standards (based on activity and location); statutory authorization on private lands subject to agreements between landowner and operator, may be conditions imposed during hearing (if one is held)
Post-approval	operational requirements under applicable legislation and AER rules; may be additional operational or monitoring commitments or approvals; subject to field audits; compliance dashboard available at <a href="https://www1.aer.ca/ComplianceDashboard/index.html">https://www1.aer.ca/ComplianceDashboard/index.html</a> ; AER Manual 13: <i>Compliance and Enforcement Program</i>
Post-closure	EPEA requirements require reclamation of land to equivalent capacity (there are also requirements for subsurface remediation)
<b>Exercise of discretion/ administrative function</b>	
Consideration of native grasslands, assessment and articulation of trade-offs	heavy reliance on MSSC for applications on public lands; reliance on parties to address native grasslands on private lands; express consideration if raised as an issue by the directly affected party that triggers hearing
Incorporation of native grasslands relevant conditions	Yes, but will often rely on commitments which lack same level of enforceability as conditions

Compliance response (policy, variability)	breach of conditions may trigger suspension of statutory authorization or other regulatory action; breach of commitments may lead to review of statutory authorization
<b>Procedural Fairness</b>	
Participation and participant funding	directly affected parties granted standing during hearing; other parties may be granted limited participation rights; participant cost orders are possible
Access to information	decisions publicly available; data is available but may require GIS expertise

## 5.2 Alberta Utilities Commission

The AUC regulates natural gas, electric and water utilities, as well as renewable power generation.<sup>85</sup>

### 5.2.1 Research Methodology

In order to capture decisions related to grasslands, a general website search (<https://www.auc.ab.ca>) using the term "grasslands" was conducted. This search brought up results related to regulatory documents but not any decision reports. As well, a search of the recent decisions page ([https://www.auc.ab.ca/regulatory\\_documents/decisions/](https://www.auc.ab.ca/regulatory_documents/decisions/)) and recent updates page ([https://www.auc.ab.ca/regulatory\\_documents/recent-updates/](https://www.auc.ab.ca/regulatory_documents/recent-updates/)) using the term "grasslands" was conducted. This did not result in any relevant hits. A search of the eFiling System ([https://www.auc.ab.ca/regulatory\\_documents/recent-updates/](https://www.auc.ab.ca/regulatory_documents/recent-updates/)) using the term "grasslands" brought up almost 5,800 hits but when the search was refined to decision documents, there were no relevant hits. At this point, searches were again conducted on the recent updates page using document types: decision report and disposition letter and division: facilities as filters, then each of these documents was individually searched using keywords "grasslands", "grass" and "native". The same process was used using documents: all and division: law and regulatory policy as filters. Finally, on the facility decision index page (<https://www.auc.ab.ca/facility-decision-index/>), a search through landmark decisions, power plant decisions, and transmission facility decisions for "environment" was conducted. For every decision generated by these searches, the decision documents were scanned for references to "grasslands"

<sup>85</sup> *Alberta Utilities Commission Act*, S.A. 2007, c. A-37.2.



The following section provides information obtained from the decision-making survey. It provides an overall summary of decisions made by the AUC with relevance to grassland conservation and protection. This includes identification of trends, typical considerations made by the AUC, and common conditions made around grasslands. As well, highlights and summaries of particularly relevant or illuminating decisions are provided.

#### 5.2.2 Decision-making trends and regulator commentary with respect to native grasslands

Grassland considerations commonly arise in relation to renewable facility applications (i.e. wind and solar power plants). Looking at the progression of cases over the last ten years, there is a trend of grasslands considerations playing an increasingly important role in facility application decisions. In 2014, statutory authorizations were issued for wind power plants despite some infrastructure being located directly on native grasslands. By 2024, some applications have been wholly or partly denied because native grasslands would be disturbed by the proposed project.

The decisions in the *Bull Creek Wind Project* (2014) and in *Rainier Solar Farm* (2024) help to illustrate this trend in AUC decision-making. The *Bull Creek Wind Project* decision considered an application for a 115 MW wind power plant, collector system and substation.<sup>86</sup> Approximately 538 hectares of the identified project area was native pasture (which included plains rough fescue) and 14.7 hectares of the project footprint was actually located on native pasture. According to the proponent, land use setbacks and constraints meant that project components had to be sited on native grasslands: it was unavoidable. The AUC approved the project with no grassland-specific conditions (although there were conditions around birds and bats and a requirement for an environmental protection plan).

In contrast, the AUC denied the *Rainier Solar Farm* which was proposed to be sited mostly on native grasslands.<sup>87</sup> The AUC stated that the "central issue for this proceeding is the impact of project infrastructure on native grassland within the project area and considerations set out in AEPA's *Wildlife Directive for Alberta Solar Energy Projects*".<sup>88</sup> The AUC found that the proposal had unmitigable negative effects on the environment and on wildlife and was therefore not in the public interest. The AUC stated that it "considers that avoidance of native grasslands in accordance with the Wildlife Directive Standard 100.1.1 is

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<sup>86</sup> 1646658 Alberta Inc., *Bull Creek Wind Project* (February 20, 2014), errata to decision 2014-040 (March 10, 2014).

<sup>87</sup> Kinbrook Solar, GP Inc. and Solar Krafte Utilities Inc., *Rainier Solar Farm* (March 22, 2024).

<sup>88</sup> *Ibid.* at para. 19.

the most effective way to reduce the risk to sensitive wildlife that depend on native habitats".<sup>89</sup>

The AUC's process and decision-making around renewable energy projects cannot be fully considered without regard to the role of Alberta Environment and Protected Area (AEPA)'s renewable energy referral reports. In one decision, the AUC described the referral report as a "single step in a long, collaborative process that is guided by [AEPA]" where the proponent and AEP work together to determine necessary surveys and mitigations.<sup>90</sup> The AUC also noted that the AEPA maintains an ongoing oversight role for projects after their approval. The role of the AEPA's referral reports is also discussed in the *Buffalo Trail Wind Power Project* decision.<sup>91</sup> According to the AUC, the AEPA assesses the proposed renewable project taking into account the AEPA's guidelines and standards (including the *Wildlife Directive*) to provide a renewable energy referral report. The AUC then takes the referral report into account during its own proceeding, as well as, evidence provided by the applicant and any intervenors, to determine the public interest.

In the *Sharp Hills Wind Project* decision report, the AUC commented on the relationship between regulatory standards and the determination of public interest:

The determination of whether a project is in the public interest requires the Board to assess and balance the negative and beneficial impacts of the specific project before it. Benefits to the public as well as the negative impacts to the public must be acknowledged in this analysis. The existence of regulatory standards and guidelines and a proponent's adherence to these standards are important elements in deciding whether potential adverse impacts are acceptable. [...]

In the Board's view, the public interest will be largely met if applications are shown to be in compliance with existing public health, environmental, and other regulatory standards in addition to the public benefits outweighing negative impacts.<sup>92</sup>

In this particular case, while the project was primarily sited on cultivated lands, 27 hectares of native grassland (including some northern fescue) would be disturbed. The AUC noted that the evidence was the restoration of northern fescue is difficult and slow with poor

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<sup>89</sup> *Ibid.* at para. 41.

<sup>90</sup> EDP Renewables SH Project GP Ltd., *Sharp Hills Wind Project* (September 21, 2018) at 26.

<sup>91</sup> ENGIE Development Canada GP Inc., *Buffalo Trail Wind Power Project* (February 8, 2023).

<sup>92</sup> *Supra* note 90 at 26.

outcomes. Ultimately, the AUC did approve the project but attached several conditions including requirements to:

- implement a native grassland conservation offset equal to or greater than the amount of grassland temporarily or permanently disturbed through construction and operations within one year of commencing operations,
- implement environmental protection measures as identified in the referral report, and
- seek to reduce the impacts to native grasslands associated with a specific turbine and its infrastructure; where avoidance not possible to offset by conserving native grasslands elsewhere.

Similar compensation for impacts on native grasslands were imposed as a condition in *Sunnynook Solar + Energy Storage Project*.<sup>93</sup> The project was anticipated to impact 30 areas of fragmented native habitat by installation of fences, collector lines, access roads and 428 solar panels. As such, the AUC imposed a condition to re-seed approximately three quarter section of non-native grasslands within the project area to native grassland as compensation.

Further insight into the AUC decision-making process as it concerns native grasslands was provided in the *Brooks Solar Farm Project Amendment Application* decision report.<sup>94</sup> In this case, the applicant sought to revise the layout of the project area to reflect new technology, and to transfer its statutory authorizations. The AUC determined that the nature of the amendments required a new hearing. In addition, on its own motion, the AUC initiated a review of the original decision to issue the statutory authorization with respect to a specific portion of the project area. The basis for this review was that there was new evidence demonstrating that the north half of section 18 was actually native grassland.

The AUC made several comments about solar energy projects and native grasslands in the *Brooks Solar Farm Project Amendment Application* decision. Firstly, the AUC stated that the full impact of a solar project on native grasslands must be considered. Impacts are not limited to the surface area of land permanently and physically disturbed and the land beneath the solar panels; fencing and other above ground infrastructure must be considered as well because it changes species assemblages and limits ability of some wildlife to breed, forage or shelter. Secondly, the AUC noted that native grassland is still native grassland even if it is in poor health or is subject to existing impacts or historical uses

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<sup>93</sup> Sunnynook Solar Energy Inc., *Sunnynook Solar + Energy Storage Project* (June 2, 2023).

<sup>94</sup> Solar Krafte Utilities Inc. and Beargrass Solar Inc., *Brooks Solar Farm Project Amendment, Time Extension and Approval and Permit and License Transfer* (November 6, 2023).

(in other decisions, the AUC has expressly defined native grasslands to be grasslands with a minimum of 30% native forbs and grasses<sup>95</sup>). Thirdly, the AUC stated that:

Avoidance of siting project infrastructure in areas of native grassland is the most critical factor in preventing significant negative effects on wildlife.<sup>96</sup>

The AUC found that a commitment to reseed upon facility closure is not able to mitigate impacts during construction and operations. While the native grassland may have potential to biologically function, it would be less functional in an essential way and not functional for sensitive species. Fourthly, the AUC enumerated possible impacts of solar development on native grassland:

- direct loss or alteration of native plant species from construction or operations;
- indirect loss or alteration of native plant species from invasive species and micro-climatic changes under solar panels; and
- changes to plant species composition and community structure.

The AUC also noted several impacts on wildlife that depend on native grasslands as habitat. Finally, in response to the landowners' argument that the AUC did not give sufficient weight to its rights to do what it wants with its land, including native grasslands, the AUC acknowledged the economic benefits to the landowner but weighing negative environmental impacts with social, economic and other effects, the project is not in the public interest. The only acceptable way to reduce risk is to avoid the north half of section 18. As such, the statutory authorization transfer was allowed, noting that conditions previously imposed still apply and that the new operator is expected to meet commitments made by the previous operator. The new layout was approved with the exception that there was to be no construction on the north half of section 18 because it was native grassland.

It also interesting to note that there are instances where a project applicant has modified the proposed project from the time of initial application in order to avoid native grasslands. One example is the *Vauxhill Solar Farm* project.<sup>97</sup> In this case, the original application was for a 150MW solar farm but was reduced to a 60MW project to reduce overall impacts including avoidance of all native grasslands. The AUC concluded that the project impacts to native grasslands had been sufficiently reduced by altering the project layout to entirely avoid native grasslands.

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<sup>95</sup> ENGIE Development Canada GP Inc., Buffalo Trail Wind Power Project (February 8, 2023).

<sup>96</sup> *Ibid.* at 12.

<sup>97</sup> Solar Krafte Utilities Inc., Vauxhill Solar Farm (December 16, 2022).

### 5.2.3 Integration of grassland consideration in statutory authorizations

In some cases (mostly older ones), the AUC has indicated it is satisfied that a proponent has made commitments and, as such, did not impose conditions as part of the statutory authorization. In the event the AUC has been satisfied with only commitments and has not imposed conditions, it should be noted that the AUC has indicated that it expects conditions to be met. If a condition is not met, then an intervenor may seek a review pursuant to Rule 016.<sup>98</sup>

An increasing willingness to impose conditions onto statutory authorizations - rather than a reliance on proponent commitments - has developed over the last ten years. A commonly imposed condition is that post-construction monitoring surveys in accordance with section 3(3) of AUC's Rule 033 be conducted and reports submitted. Because native grassland considerations are often associated with concerns around habitat-dependant wildlife, mortality monitoring and reporting is also a common condition. The AUC has also imposed conditions which require compensation for disturbed grasslands (such as re-seeding pasture to native grassland conditions or conserving existing native grasslands elsewhere). It is not within the scope of this particular project to assess whether conditions imposed on statutory authorizations have actually been met. However, it is noted that the AUC maintains an E-filing System which may be searched by proceeding number to obtain related documents including decision reports, reporting documents, and compliance filings.

Finally, the AUC has demonstrated a willingness to require significant changes to a proposed project – such as moving or eliminating planned wind turbines – due to native grassland impacts. In some instances, the AUC has simply denied applications with significant impacts on native grasslands.

### 5.2.4 Evaluation of decision-making using the ELC's Regulatory Evaluation Framework

Decision Points	
Regulatory need	Triggered by application for a power plant (new or amendment)
Activity assessment	Facility applications are considered via public hearings (unless there are not any outstanding objections); AEPA's renewable energy referral report is a key consideration and influences statutory authorization conditions

<sup>98</sup> Alberta PowerLine General Partner Ltd., Fort McMurray West 500Kilovolt Transmission Project (February 10, 2017) at 181.

Activity approval	Projects may be denied in whole or part due to impacts on native grasslands; conditions may be imposed although commitments may be deemed sufficient
Post-approval	Operational requirements under applicable legislation and AUC rules; may be conditions for monitoring and reporting; AEPA oversees operations
Post-closure	EPEA reclamation requirements apply
<b>Exercise of discretion/ administrative function</b>	
Consideration of native grasslands, assessment and articulation of trade-offs	native grasslands are considered and assessed in decision reports; trade-offs articulated
Incorporation of native grassland relevant conditions	yes
Compliance response (policy, variability)	AUC has authority for both investigation and enforcement of its rules and decisions (including conditions on statutory authorizations); AUC Rule 013, Criteria Relating to the Imposition of Administrative Penalties
<b>Procedural Fairness</b>	
Participation and participant funding	Directly affected granted standing, others may have limited participation rights; participant costs may be covered (must be granted standing)
Access to information	Decisions online

### 5.3 Natural Resources Conservation Board

The NRCB reviews and makes decisions around major natural resource projects, as well as confined feeding operations (CFOs).<sup>99</sup> Natural resource projects are those involving forestry, water management, and recreation activities.

<sup>99</sup> *Natural Resources Conservation Board Act*, R.S.A. 2000, c. N-3.

### 5.3.1. Research Methodology

Searches of the entire website (<https://www.nrcb.ca>) and the documents page (<https://www.nrcb.ca/documents>) were done using the term "grassland" with no results. Similarly, a search for "fescue" and "prairie" resulted in no relevant results. As such, each decision using the Board Reviews – CFO and the Board Reviews – Natural Resource Projects filters on the Documents Page was scanned for the terms "grassland", "native" and "prairie" to find relevant decisions.

Approvals for CFO approvals are available on the NRCB website (<https://www.nrcb.ca/confined-feeding-operations/cfo-search>). At the time of this report, there were 650 approvals identified by this website and organized by location, there is no capacity to undertake a keyword search. While not all 650 approvals were reviewed, a subset of decisions was reviewed to identify trends in approval conditions.

### 5.3.2 Decision-making trends and regulator commentary with respect to native grasslands

Impacts on native grasslands have been raised as concerns in the context of several different water management projects ranging from the 1990s to as recently as 2021. The *Pine Coulee Water Management Project* was considered under both the NRCB process and the federal Environmental Assessment Review Process (EARP), together with the JRP. The project consisted of a diversion weir, a canal, a reservoir and a dam located in the fescue grass ecoregion and close to the mixed grass ecoregion.<sup>100</sup> The project would inundate grasslands and could indirectly affect nearby grasslands by increasing the likelihood of expanded irrigation and recreational development.

Based on the evidence, the JRP determined that much of the vegetation within the Pine Coulee was not typical of fescue grasslands due to cattle grazing, cultivation, and the presence of alkaline soils. Nevertheless, the proponent - Alberta Public Works, Supply and Services (APWSS) - committed to undertake a habitat compensation plan to mitigate the loss of native grasslands which would involve managing lands near the coulee to increase their value to wildlife and to ensure all plants that would normally be found in fescue grassland would be represented, and rehabilitating grazed lands to approximate the condition of native grassland to compensate for lost grasslands. Ultimately, the JRP approved the project with a condition that the proponent prepare and implement a "detailed habitat compensation plan to the satisfaction of the Fish and Wildlife Division

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<sup>100</sup> Report of the NRCB/EARP Joint Review Panel, Application #9401 – Alberta Public Works, Supply and Service (February 1995) Pine Coulee Water Management Project, Willow Creek Basin, Southwest of Stavely, Alberta.



based on an objective of no-net-loss of grassland habitat capability".<sup>101</sup> Although this condition was imposed, based on comments in the *Little Bow Project/Highwood Diversion Plan* decision (discussed in the next paragraph), its effectiveness seems questionable.

The APWSS later sought approval for another water management project in the *Little Bow Project/Highwood Diversion Plan* (the proposal was considered by a JRP under the NRCB process and the federal environmental assessment process).<sup>102</sup> This project would inundate continuous native mixed-grass grasslands. The JRP stated that would be a "significant adverse environmental effect because so little of this native ecoregion remains".<sup>103</sup> Further, the JRP states:

The Panel concludes the loss of grassland and habitat provided by that grassland is a significant adverse environmental effect associated with the project. It is not possible to replace the grassland and habitat this project could destroy. To compensate for the loss, APWSS is proposing a grassland habitat compensation program. Areas of native grassland in the vicinity of the project would be conserved and enhanced. The management objective would be to restore native vegetation and cover.

It is noted that the proposal for a habitat compensation program is similar to that proposed by APWSS on the Pine Coulee Project discussed above. The JRP heard some evidence at the hearing that progress on that effort was less than hoped for. As such, the JRP raised some concern about whether or not the Applicant's plans for habitat compensation are realistic.

Environment Canada urged the proponent to ensure that the grassland compensation area mirrors as much as possible not only the biological, but the topological features of the area to be lost. This would enhance the chances that a comparable variety of vegetation communities would be included. Environment Canada also recommended that the grassland areas be contiguous with the wetland development at Clear Lake, since some species use both wetland and upland habitats.<sup>104</sup>

Despite the recognition of the significant adverse environmental effects due to loss of native grasslands and the poor performance of a similar compensation plan (by the same

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<sup>101</sup> *Ibid.* at D-4, Condition 14.

<sup>102</sup> Report of the NRCB/CEAA Joint Review Panel, Application #9601 – Alberta Public Works, Supply and Services, Little Bow Project/Highwood Diversion Plan, Application to Construct a Water Management Plan to Convey and Store Water Diverted from the Highwood River (May 1998).

<sup>103</sup> *Ibid.* at 5-47.

<sup>104</sup> *Ibid.* at 5-47.

proponent no less), the JRP approved the proposed water management project. One condition was a requirement to report on progress toward a habitat compensation plan within one year of the decision date.

Finally, and far more recently in 2021, the NRCB considered the proposed *Springbank Off-Stream Reservoir Project*.<sup>105</sup> This is a project to divert water from the Elbow River during flooding events to an off-stream reservoir located in a natural topographic depression, along with a clay-cored earth dam and diversion structure and channel. The proponent argued that it could not completely avoid disturbing intact native grassland. Intervenors argued this made the project inconsistent with the SSRP which prioritizes maintenance of intact native grasslands. In response, the NRCB stated:

However, the Board believes that it is important to read and interpret the SSRP as a whole and, as directed under the Natural Resources Conservation Board Act, the Board must ensure that applications are consistent with regional plans under the Alberta Land Stewardship Act (ALSA). The Board notes that the following sections of the SSRP are relevant to the Project and the Board's consideration:

Section 4 Implementation Plan: "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."

Strategy 4.12: "Support flood management planning and preparedness including ... flood hazard mapping in communities that are at risk of flooding" and "municipal flood hazard mitigation plans to mitigate the threat from flooding to communities in the region."

Strategy 8.23: "Municipalities are expected to ... utilize or incorporate measures which minimize or mitigate possible negative impacts on important water resources or risks to health, public safety and loss to property damage due to hazards associated with water, such as flooding [emphasis added], erosion and subsidence due to bank stability issues, etc., within the scope of their jurisdiction."

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<sup>105</sup> Decision NR 2021-01, NRCB Application No. 1701, Alberta Transportation, Springbank Off-Stream Reservoir Project in Springbank, Alberta (June 22, 2021).

The Board finds that the Project is an appropriate use of land to mitigate future floods, but, as identified by the SCLG and the SNN, creates conflicting land uses between the avoidance of disturbing native grassland and the need for flood mitigation. The Board understands that maintaining intact native grasslands is considered a high priority in the SSRP, though this provision is not considered mandatory. Furthermore, the Board highlights that approximately 2640 ha of the total 4860 ha of the land use area has already been modified by human uses. As a mitigation measure, AT has committed to reclaiming any area of native grassland that is disturbed. The Board believes this is a good compromise that will allow for both native grasses and the significant public benefit of the proposed flood mitigation Project. The Board has reviewed the Project in the context of consistency with the objectives of the South Saskatchewan Regional Plan, and finds that the Project is consistent with the SSRP long-term vision for the region to balance economic, environmental, and social goals.<sup>106</sup>

Ultimately, the NRCB approved the project subject to several conditions, none of which related to native grasslands. However, the NRCB did note that the proponent made commitments that the NRCB believes will mitigate any material environmental effects.

### 5.3.3 Integration of grassland considerations in statutory authorizations

Looking through CFO approvals, a fairly standard condition is a requirement to not spread manure on grasslands (does not specify native grasslands). Conditions of this nature are imposed by the NRCB's approval officer at the time of the application for reasons noted in a decision summary, presumably in an effort to protect grasslands from contamination and damage. In *Tateson Ranching Ltd.*, the NRCB considered a request for review of the conditions attached to a CFO approval.<sup>107</sup> Specifically, the approval-holder was opposed to a condition requiring all manure to be applied to cultivated land and incorporated within 48 hours. In refusing the request for review, the NRCB noted that this condition was made because the CFO was located in an environmentally sensitive area including native grasslands. The NRCB found that this condition was appropriate as it was meant to "prevent influx of nutrients into the lake through manure contaminated runoff, or onto the surrounding native grasslands through wind erosion and subsequent deposition of soils".<sup>108</sup>

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<sup>106</sup> *Ibid.* at 62.

<sup>107</sup> Board Request for Review Decision, RFR 2022-13/LA1057, In Consideration of a Request for Board Review filed under the *Agricultural Operation Practices Act*, *Tateson Ranching Ltd.* (November 1, 2022).

<sup>108</sup> *Ibid.* at 6.

In its role in reviewing large natural resource projects, the NRCB is aware that such projects may impact native grasslands. The NRCB seems to accept that loss of native grasslands is unavoidable and demonstrates no inclination to deny projects that will lead to destruction of native grasslands. However, the NRCB has at times attached conditions to its statutory authorizations to protect and conserve grasslands, including requirements to compensate for lost grassland habitat. The NRCB is also comfortable accepting commitments made by project proponents as sufficient to address grassland or other environmental concerns (and thereby not requiring conditions).

5.3.4 Evaluation of decision-making using the ELC’s Regulatory Evaluation Framework

Decision Points	
Regulatory need	triggered by application for CFO approvals or natural resource project approvals
Activity assessment	CFOs considered by approval officer (no hearing) but conditions may be challenged and then assessed by NRCB panel; natural resource projects considered by NRCB in hearing process
Activity approval	CFO approvals subject to conditions, commonly including requirement to not spread manure on grasslands  Natural resource projects subject to conditions – proponent commitments may also be noted
Post-approval	Natural Resource Projects: NRCB determines public interest and can attach conditions, necessary statutory authorizations issued in accordance with the NRCB approval under other legislation such as <i>Water Act</i> , <i>EPEA</i> etc.
Post-closure	<i>Standards and Administration Regulation</i> requires removal of all manure within one year from the time a manure or storage ceases to be used (although this timeframe may be amended by NRCB order); Guideline Agdex 096-90, <i>Closure of Manure Storage Facilities and Manure Collection Areas</i> (2024) is a technical guideline for CFO closure requirements  Natural Resource Projects: NRCB determines public interest and can attach conditions, necessary statutory authorizations are issued and enforced under other legislation, as are closure requirements (must be done in accordance with applicable NRCB approval conditions)

Exercise of discretion/ administrative function	
Consideration of grasslands, assessment and articulation of trade-offs	Approval officers consider grasslands (decision summary, technical document and decision letter) for CFO applications  NRCB hearings consider grasslands and assess potential impacts
Incorporation of native grassland relevant conditions	Yes
Compliance response (policy, variability)	CFOs: NRCB may issue enforcement orders, emergency orders and compliance directives for CFOs, as well as, conduct facility inspections and track water conditions; maintain a compliant reporting process  Natural Resource Projects: necessary statutory authorizations issued in accordance with the NRCB approval and are enforced under other legislation such as <i>Water Act</i> , <i>EPEA</i> etc.
Procedural Fairness	
Participation and participant funding	CFO applications may provide opportunity to municipality and directed affected parties – issues raised considered by the approval officer  NRCB hearing have opportunity for public participation and funding
Access to information	CFO approvals available NRCB decisions available

## 5.4 Canada Energy Regulator

The Canada Energy Regulator (CER) regulates oil and gas pipelines and electrical power lines that cross national, provincial or territorial borders.<sup>109</sup> Many of these types of projects are also subject to assessment under the federal *Impact Assessment Act*, in which case the CER and Impact Assessment Agency of Canada (IAAC) conduct a single process through a review panel.<sup>110</sup> It should be noted that the project is reviewed and assessed by the CER or the review panel, as the case may be, but it only makes recommendations to the federal Cabinet

<sup>109</sup> *Canada Energy Regulator Act*, SC 2019, c. 28, s.10.

<sup>110</sup> *Impact Assessment Act*, SC 2019, c. 28, s.1.

which makes the final decision (it can deny the project, approve the project and accept the recommendations, or approve the project and modify the recommendations).

#### 5.4.1 Research Methodology

The CER maintains the BERDI database (<https://apps2.cer-rec.gc.ca/berdi/>) which provides environmental and socio-economic filters to find data about major pipeline projects since 2003. In order to find relevant decisions, the search was filtered to projects that included a portion in Alberta. Final CER/NEB reports related to the resulting list of projects were located by searching CER's REGDOCS database for each project.

#### 5.4.2 Decision-making trends and regulator commentary with respect to native grasslands

The CER, as well as its predecessor the National Energy Board (NEB), has expressly recognized that native grasslands are rare and vulnerable landscapes. For instance, in its *Keystone* decision, the NEB noted that:

Fescue prairie is extremely vulnerable to disturbance and invasion by non-native species and is difficult to reclaim, particularly if it is subject to heavy or spring grazing. In addition, shifts in vegetation types are likely to occur in plains rough fescue communities. The Northern Fescue Grasslands are among the most threatened biogeographic regions on the Canadian plains ...only five percent or less of its original area remains.<sup>111</sup>

The CER has also noted the difficulty to reclaim native grasslands. For example, in *Alberta Clipper*, the NEB stated that "[n]ative prairie can present unique reclamation challenges due to its vulnerability to disturbance and invasion by non-native species."<sup>112</sup>

As well, the NEB has expressed insight into the causes of decline of native grasslands. In *Keystone XL*, the NEB noted that:

Native vegetation along the Project route and in the RAA has already been altered due to past agricultural, industrial and residential development activities. The greatest change is likely cultivation and conversion of native range into pastures, resulting in loss of native prairie at a landscape level. In addition, other oil and gas

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<sup>111</sup> *TransCanada Keystone Pipeline GP Ltd* (September 2007), Reasons for Decision OH-1-2007 [*Keystone*] at 97.

<sup>112</sup> *Alberta Clipper Expansion Project NEB Environmental Screening Report*, CEEA Registry Number 06-01-23153 [*Alberta Clipper*] at 29

developments, including drilling and pipeline projects in the area, also disturb native prairie, parkland habitat and species that inhabit these habitats.<sup>113</sup>

The ELC's review found 7 decisions where native grassland is explicitly considered and 4 decisions where native grassland is mentioned to be present but not explicitly considered by the CER.<sup>114</sup> Impacts on native grassland have not served as a reason for the CER to refuse a project in any of these decisions.

However, the CER has imposed conditions on its approvals to address impacts on grassland (and vegetation more generally) including "standard mitigation" which is defined in *Keystone* as:

[A] specification or practice that has been developed by industry, or prescribed by a government agency, that has been previously employed successfully, and meets the expectations of the NEB.<sup>115</sup>

Examples of mitigation measures considered standard in some decisions include:

- Full trench and work lane stripping of right of way to avoid rutting and pulverization of the topsoil and reducing stripping to blade width in some areas.
- Seeding with a native seed mix.
- Avoiding using highly invasive species on adjacent lands.
- Reducing the total disturbance and returning the right of way to as near preconstruction conditions as feasible in a practical time frame.<sup>116</sup>

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<sup>113</sup> *TransCanada Keystone Pipeline GP Ltd Section 52 Application dated 27 February 2009 for the Keystone XL Pipeline Project* (March 2010), OH-1-2009 [*Keystone XL*] at 141.

<sup>114</sup> Decisions where grasslands are mentioned to be present but not explicitly considered outside of general vegetation impacts: Cushing, Line 3, 2021 NGTL System Expansion, NEBC Connector 2023. Decisions where grasslands are explicitly considered: *Keystone*, *Alberta Clipper*, *Southern Lights*, *Keystone XL*, *Trans Mountain*, *West Path Delivery 2022*, *West Path Delivery 2023*. See Appendix E of this Report.

<sup>115</sup> *Keystone*, *supra*. note 111 at 96.

<sup>116</sup> See *Enbridge Southern Lights GP on behalf of Enbridge Southern Lights LP and Enbridge Pipelines Inc Application dated 9 March 2007 for the Souther Lights Project Consisting of the: 1. Diluent Pipeline Project; and 2. Capacity Replacement Project* (February 2008), Reasons for Decision OH-3-2007 [*Southern Lights*] at 143.



Other conditions applied by the CER have included updated environmental protection plans to reflect commitments made during hearings,<sup>117</sup> grasslands-specific plans,<sup>118</sup> measures to reduce weed impacts,<sup>119</sup> and post-construction monitoring. Notably, the CER's predecessor (the NEB) required a Preliminary Grasslands Offset Plan for grasslands that have not achieved reclamation success after ten years of monitoring in its *Trans Mountain* decision.<sup>120</sup>

The CER has placed emphasis on adaptive management in the restoration of grasslands. Specifically, the decisions reviewed always include a monitoring condition. In *Keystone*, *Alberta Clipper*, and *Southern Lights*, the earliest 3 of the 11 decisions reviewed where grasslands are mentioned, the proponents suggested a two-year post-construction monitoring period, but the board imposed a five-year period. In *Alberta Clipper*, the Board stated:

Based on the Board's experience, it is of the view that two years is often not adequate to assess mitigation for a variety of environmental elements including but not limited to ... native prairie and plant species of special concern along the Pipeline.<sup>121</sup>

Nine decisions include a five-year monitoring condition post construction.<sup>122</sup> The balance include a ten-year monitoring condition, acknowledging the time frames necessary to assess successful restoration.<sup>123</sup> The decisions can be said to trend towards longer regulatory oversight for grasslands where grasslands are explicitly considered.

Adaptive management with CER oversight is emphasized by the CER in grasslands decision-making. For example, the NEB in *Alberta Clipper* states that:

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<sup>117</sup> See *TransCanada Keystone Pipeline GP Ltd Application dated 23 November 2007 pursuant to sections 58 and 21 of the National Energy Board Act for the Keystone Cushing Expansion Project* (July 2008), Reasons for Decision OH-1-2008 [*Cushing*] at 58.

<sup>118</sup> See *Keystone*, *supra*. note 111 at 98.

<sup>119</sup> See *Keystone XL*, *supra*. note 114 at 135.

<sup>120</sup> *Trans Mountain Pipeline ULC Application for the Trans Mountain Expansion Project National Energy Board reconsideration of aspects of its OH-001-2014 Report as directed by Order in Council P.C> 2018-1177* (February 2019), MH-052-2018 [*Trans Mountain*] at 564.

<sup>121</sup> *Alberta Clipper* *supra*. note 112 at 26.

<sup>122</sup> See Appendix E of this Report.

<sup>123</sup> *Trans Mountain Expansion Project, West Path Delivery 2023* at PDF 229

The Board notes that, following the five-year monitoring period, it would continue to discuss any outstanding issues with Enbridge as part of its operational oversight of the Pipeline.<sup>124</sup>

Similarly, in Trans Mountain, the NEB emphasized the need to evaluate reclamation success and determine the need for ongoing monitoring and corrective actions regarding grasslands in BC when setting monitoring conditions.<sup>125</sup>

5.4.4 Evaluation of decision-making using the ELC's Regulatory Evaluation Framework

<b>Decision Points</b>	
Regulatory need	Triggered by application for project approval (pipelines, electrical power lines)
Activity assessment	may be a joint assessment when project designated under the <i>Impact Assessment Act</i>
Activity approval	Statutory authorization issued with conditions typically attached
Post-approval	may be requirements for post-construction monitoring reports; operational requirements (set out in conditions, legislation and CER rules and guides) are monitored by CER
Post-closure	operator applies to abandon pipeline, subsequent order may be issued subject to conditions – continued regulation by CER and responsibility by operator
<b>Exercise of discretion/ administrative function</b>	
Consideration of native grasslands, assessment and articulation of trade-offs	yes
Incorporation of native grassland relevant conditions	yes
Compliance response (policy, variability)	Investigation and enforcement powers under legislation; maintain a condition compliance database at <a href="https://www.cer-rec.gc.ca/en/safety-environment/compliance-enforcement/compliance-with-conditions/index.html">https://www.cer-rec.gc.ca/en/safety-environment/compliance-enforcement/compliance-with-conditions/index.html</a> ; conduct

<sup>124</sup> *Alberta Clipper*, *supra*. note 112 at 26.

<sup>125</sup> *Trans Mountain*, *supra*. note 120 at 245.

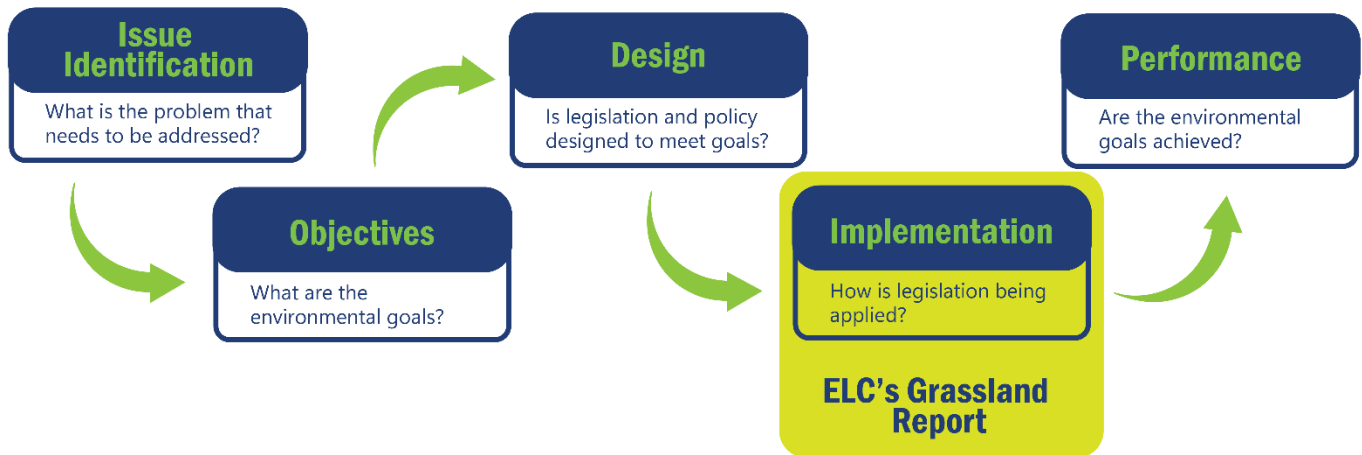
	audits, reports available at <a href="https://www.cer-rec.gc.ca/en/safety-environment/compliance-enforcement/audits/index.html">https://www.cer-rec.gc.ca/en/safety-environment/compliance-enforcement/audits/index.html</a>
<b>Procedural Fairness</b>	
Participation and participant funding	<p>May participate as an intervenor (with CER approval, if your interests are impacted or will provide relevant information that cannot be provided by only filing a letter of comment)</p> <p>May participate as a commenter (must register and submit views in writing)</p> <p>Participant Funding Program (not available for detailed route hearings)</p>
Access to information	Decisions available online through REGDOCS portal

## 6. Conclusions

Looking at Alberta's law and policy framework as it applies to native grasslands, a clear theme emerges that disruption of native grasslands should be avoided and, if avoidance is not possible, steps should be taken to minimize and mitigate impacts. Because there is no legislated requirement or clear policy directive to always avoid disruption of native grasslands, there is significant regulatory discretion around the extent of acceptable avoidance and disruption of native grasslands. Should a proposed activity be denied or significantly altered to avoid disturbance? When and why is disturbance considered unavoidable? How much unavoidable disturbance is acceptable? What needs to be done to minimize and mitigate impacts?

This project looked at how Alberta's regulators exercise this discretion in making land-use decisions and regulating activities that may impact native grasslands. To evaluate how the regulators use their discretion to implement the provincial native grassland goals and objectives, the ELC reviewed and evaluated their decisions using the ELC's regulatory evaluation framework.

**Figure 1: The grasslands project and its place within the ELC's regulatory evaluation framework,**



Looking at the decisions made by Alberta's regulators, it is apparent that they are aware native grasslands require special consideration. However, beyond that there is variance in how that consideration plays into decisions. It was not always clear that existing policy and guidance documents were extensively considered by Alberta's regulators. The AUC did make frequent referral to the *Wildlife Directive for Alberta Solar Energy Projects* and *Wildlife Directive for Alberta Wind Power Projects* which recommends avoiding new disturbance of native grasslands. As well, the NRCB expressly discussed the policy statements in the SSRP around native grasslands in at least one decision. It is also noted that the MSSC, the standards and conditions of which form part of PLA dispositions issued by Alberta Forestry and Parks and by the AER, references several grassland policy and guidance documents.

Regulator	Exercise of discretion to implement native grassland goals and objectives
Alberta Forestry and Parks	heavy reliance on MSCC to set standards and guidance for dispositions within identified grasslands; lack of decision reports (much of the decision-making happens without a significant level of public participation)
Alberta Land and Property Rights Tribunal	grasslands can be a consideration in right of entry order applications under the SRA and in municipal planning under the MGA; if flagged as an issue, may lead to conditioning but is unlikely to not allow access or to significantly alter municipal planning (also municipal planning can be overridden by provincial regulators due to operation of section 619 MGA)

Alberta Energy Regulator	heavy reliance on MSCC for associated dispositions on public lands; lack of decision reports (much of decision-making is routine without hearings, just issuance of statutory authorizations); conditions to protect grasslands may be imposed but oftentimes commitments are considered sufficient (which raises questions of enforceability); unlikely to disallow activities due to presence of native grasslands
Alberta Utilities Commission	grassland concerns often raised in the context of wind and solar power projects; initially, there was an inclination to allow disturbance subject to commitments or conditions designed to minimize and mitigate damage; more recently, parts of projects or entire projects have been denied on the basis of impacts to native grasslands
Natural Resources Conservation Board	grasslands considerations seem to be somewhat addressed in CFO approvals with a standard condition being to not spread manure on grasslands; natural resource project decisions may consider grassland issues and result in commitments or conditions to minimize and mitigate damage however seems to be no inclination to deny projects on the basis of destruction of native grasslands
Canada Energy Regulator	minimize and mitigate damage; however, there seems to be no inclination to deny projects on the basis of destruction of native grasslands

A key issue with respect to native grasslands conservation and protection in Alberta is a lack of specificity in native grassland goals and objectives for the province. There is no clear, overarching goal (such as no-net-loss of native grasslands). Although there are a few native grassland areas set aside as heritage rangelands to be actively managed as native grassland ecosystems, there is limited express protection of native grasslands in Alberta. Regulators are given much discretion around the acceptable level of disturbance to native grasslands, as well as the steps required to minimize and mitigate damage. Clear measurable goals, thresholds and limits around native grassland protection and conservation would provide better guidance to regulators' exercise of discretion.

It is important to note that, in the course of this project, the ELC looked at one aspect of implementation: decision-making around issuance of statutory authorizations. The ELC considered how native grasslands were considered, what policies impacted on decision-making, and whether or not statutory authorization conditioning was used to address concerns around native grasslands.

However, there are other aspects of law and policy implementation that are important to consider and are identified as key areas for future research. Firstly, this project found that

conditions were often incorporated into statutory authorizations (or commitments made by a project proponent supported approving an application). But further work is needed to assess how these conditions and commitments are monitored and to determine the level of compliance.

Secondly, post-closure processes are ripe for further research as these raise issues with timing, effectiveness, thoroughness (especially where closure requirements are self-reported and not subject to inspection), and insolvency issues.

Finally, there is a need for "ground-truthing" to determine whether conditions imposed and post-closure processes actually work to conserve and protect native grasslands. In other words, are the laws and policies working in the way we think they are?

## Appendix A: Land and Property Rights Tribunal (LPRT) Decision Summaries

<b>Decision Name</b>	<b>Application Summary</b>	<b>Grassland Issues/Commentary</b>	<b>Granted (Y/N/N* grassland reasons)</b>	<b>Grassland Commitments (Y/N)</b>	<b>Grassland Conditions (Y/N)</b>
Midlake Oil & Gas Limited v. Goodbrand Enterprises Ltd. 2018 ABSRB 462 (CanLii)	Review under <i>Surface Rights Act</i> for compensation payable	Lease sites cropped by landowner, previously uncultivated grasslands	Set compensation	N/A	N/A
Armstrong v Houston Oil & Gas Ltd., 2023 ABLPRT 903727 (CanLii)	Seeking recovery of unpaid compensation under s. 36 of the <i>Surface Rights Act</i>	access road and well on native grassland of a Crown Grazing Lease , weeds along fenceline  ABLPRT notes that weeds are very hard to control on native grassland  Orphan Well Association will not spray until final reclamation of site	Issued a direction to pay	N/A	N/A
Encana Corporation v Christian's Seitz	<i>Surface Rights Act</i> application for rental increases on surface leases	describes lands as "improved flood irrigated grassland" grazed by cattle (page 3)	Set compensation	N/A	N/A



and Martha Seitz (2003) CanLii 71269 (AB SRB)					
Armstrong v Houston Oil & Gas Ltd. 2023 ABLPRT 395 (CanLii)	Seeking recovery of unpaid compensation under s. 36 of <i>Surface Rights Act</i> [LPRT initiated review of prior s. 36 dismissal due to new evidence]	leased area has access road and well site on the native grassland of a grazing lease  OWA says will not spray for weeds until final reclamation of the sites has begun	Issued direction to pay	N/A	N/A
Armstrong v Houston Oil & Gas Ltd. 2023 ABLPRT 438 (CanLii)	Seeking recovery of unpaid compensation under s. 36 of <i>Surface Rights Act</i> [LPRT initiated review of prior s. 36 dismissal due to new evidence]	leased area has access road and well site on the native grassland of a grazing lease  OWA says will not spray for weeds until final reclamation of the sites has begun  LPRT states that weeds "are very difficult to control on native grassland" (para 3)	Issued direction to pay	N/A	N/A
Christianson v West Ridge Resources Ltd.,	Seeking recovery of unpaid compensation under s. 36 of <i>Surface Rights Act</i>	access road and wellsite are "rough" and that "the native grasslands were never reseeded" (page 3)	Denied, no direction to pay	N/A	N/A

<p>2014 ABSRB 785 (CanLii)</p>		<p>SRB finds that not sufficient information to assess what, if any, loss of use, adverse effect, nuisance or inconvenience occurred from these conditions</p>			
<p>Montana Alberta Tie Ltd. v KERCP Farms Incorporated, Pat Walsh, AltaLink Mangement Ltd. And Bonavista Petroleum Ltd. 2011 CanLii 100681</p>	<p>Amended schedule 1 application for a right of entry order for an international power line</p>	<p>part of right of entry area will cover native grassland</p> <p>KERCP requests move to existing fenced line, operational steps to minimize impact and spread of weeds, approved seed mixes and setback from coulee</p> <p>SRB notes that NEB and AUC statutory authorizations are granted, SRB will not address routing because that it role of NEB/AUC (will not readjudicate matters NEB/AUC could have dealt with)</p> <p>SRB will not address compensation issues in a right of entry hearing as not relevant, can</p>	<p>Y</p>	<p>N</p>	<p>Y</p> <p>weed control, minimize and repair surface damage</p>

		be dealt with later in section 23 <i>Surface Rights Act</i> application			
Montana Alberta Tie Ltd. v. KERCP Farms Incorporated, 2014 ABSRB 474	Review for compensation for right of entry for a power transmission line Surface Rights Board	Discussion around value of land including argument that value as a hobby farm is greater than agricultural value as native grassland	Set compensation	N/A	N/A
Airdrie (City) v 803969 Alberta Ltd., 2020 ABQB 114 (CanLii)	Judicial Review application under section 470 MGA (from decision of City of Airdrie Local Assessment Review Board)	Issue of assessment of land which consists of native pasture  City assessed as residential because not being actively grazed – Review Board assessed as agricultural	City's decision reasonable under Vavilov principles	N/A	N/A
Roy Barritt and Netta Barritt v Alberta (Environmental Protection), 2004 CanLII 72134	Review for compensation payable for land expropriated to build a drainage ditch	Native grassland is mentioned in the analysis of the value of the plaintiffs land. A lower estimate was given if the highest and best use was native grassland for summer livestock grazing.	Set compensation	N/A	N/A
Encana Corp v Deeg 2004 CanLII 72161	Review for compensation payable for land taken for a pipeline	The land for which compensation is sought includes native grasslands. This fact is mentioned but not discussed.	Set compensation	N/A	N/A

<p>Penn West Petroleum Ltd v Schonhofer, 2005 ABSRB 121</p>	<p>Review for compensation payable for land used for well sites</p>	<p>"The subject quarter is gently rolling land, consisting of native grasslands ... [Reseeded] lands will have a carrying capacity four times greater than the native grasses." (pages 3-4)</p> <p>reseeded lands more valuable than native grasses</p>	<p>Set compensation</p>	<p>N/A</p>	<p>N/A</p>
<p>Nal Resources Limited v Riverbend Ranch Inc, 2005 CanLII 78475</p>	<p>Review for compensation payable for land used for well sites</p>	<p>current land use for all the locations is "Native Prairie" subject to Crown Grazing Leases (page 8)</p> <p>"...the subject lands are located in the brown soils zone and are comprised of native grassland. All sites are accessed by minimally constructed roads. Minimum disturbance procedures were employed in all phases of drilling and construction. This included no stripping of topsoil and the employment of lightweight machinery" (page 5).</p>	<p>Set compensation</p>	<p>N/A</p>	<p>N/A</p>

		<p>higher compensation rates arise from the taking of cultivated land</p> <p>"As for loss of use, the Board relies on its expertise and considers extrinsic evidence, such as agrological studies cited in previous Board decisions, to conclude that actual losses incurred through the removal of several acres of native prairie from production are at best, in the range of \$30.00 to \$40.00 per acre." (page 14)</p>			
<p>EOG Resources Canada Inc v Rosenau Land &amp; Cattle Limited, 2006 ABSRB 173</p>	<p>Review for compensation payable for land used for natural gas well sites</p>	<p>"Land is prairie grassland used for pasturing cattle." (page 3)</p>	<p>Set compensation</p>	<p>N/A</p>	<p>N/A</p>
<p>Petro-Canada v Wild Dog Enterprises Ltd, 2009 CanLII 90739</p>	<p>Review for compensation payable for a surface lease</p>	<p>"There was a seven-and-a-half acre parcel carved out of the quarter section. The balance of the quarter has perimeter fencing and approximately sixty acres of native pasture is leased to the</p>	<p>Set compensation</p>	<p>N/A</p>	<p>N/A</p>

		<p>neighbour for \$650.00 annually." (page 4)</p> <p>"The land is designated grassland/recreational" (page 5).</p>			
<p>Legacy Petroleum Ltd v Majestic Ranches Ltd, 2011 CanLII 95518</p>	<p>Review for compensation payable for a well site under the care of the Orphan Well Association</p>	<p>"The Lessor asserted that the subject lease is on native pasture on Special Area No. 2 land in southeast Alberta" (page 2)</p> <p>"The Lessor ... asserted that traffic on the access roads tends to bring in weed seeds and seeds of non-native species, particularly crested wheat grass which spreads quickly and overtakes the native species of the pasture, and that the overtaking of that grass decreases the productivity of the land." (page 3)</p> <p>"The Lessor went on to say that because the well site was constructed prior to 1994, the requirement for average soil depth coverage on the lease will</p>	<p>Set compensation</p>	<p>N/A</p>	<p>N/A</p>

		be only 60 percent of that on surrounding land, implying a permanent loss of productivity of the soil and the possibility that native vegetation growth may take a long time to recover to an adequate state." (page 3)			
Waldron Energy Corp v Campbell, 2014 ABSRB 486	Review for rate of compensation payable for lands used for wellsites and roads	<p>The applicant (party seeking compensation) distinguish between cultivated or pasture: "Pasture is normally considered to be either native grasses or grass land which had not been cultivated and re-seeded within the past 20 years." (page 11)</p> <p>The "Panel also concludes that the differentiation between cultivated and pasture lands is relatively unimportant in this case" because not a clear and unalterable distinction in the land-use categories (page 12).</p>	Set compensation	N/A	N/A
Maine Haven Ranching Co. Ltd v Mountain	Subdivision authority refused to allow subdivision of land because it fragments	Some of the property in question contains "open grassland pasture"	Y	N	N



**Grasslands Considered:**

Regulatory Consideration and Protection of Alberta's Native Grasslands

View County (Subdivision Authority), 2019 ABMGB 32	agricultural land and is not compliant with parcel size requirements set in land use bylaw  Landowner appealed to Municipal Government Board				
Goodland Energy Ltd v Drylander Ranch Ltd, 2019 ABSRB 367	Review of compensation payable for wellsites managed by Orphan Well Association	Part of the wellsite and access road on hay/grassland	Set compensation	N/A	N/A
Verity Energy Ltd v Armstrong, 2019 ABSRB 448	Review of compensation payable for wellhead and above-ground pipe managed by Orphan Well Association	some of the land is subject to a grazing lease and is native grassland pasture (para 3)	Set compensation	N/A	N/A
Canadian Natural Resources Limited v Horkoff, 2019 ABSRB 460	Review of compensation payable for a wellsite and access road	Facilities located on pasture land used for cattle grazing and hay production (para 5)	Set compensation	N/A	N/A
Alger v Foothills County (Subdivision	Appeal to Municipal Government Board from decision of subdivision	Lands in question are agricultural and contain some native	N	N/A	N/A

Authority), 2020 ABMGB 3	authority to refuse subdivision	grasslands but no discussion of grassland specifically			
Bonterra Energy Corp v Rosell, 2020 ABSRB 486	<i>Surface Rights Act</i> , section 29 request for reconsideration of a compensation decision	Land was described as being pasture/grassland, and later cultivated	N	N/A	N/A
Buffalo Atlee 1 Wind LP v Special Areas No. 2, 2021 ABLPRT 764	Appeals from development authority's decisions to deny development permits (due to not meeting setback requirements) – development permits for wind power plants approved by AUC	If its decisions were to be reversed (i.e. development permits issued), the development authority requested conditions including: "[t]he restoration of grassland vegetative cover being completed utilizing species which provide assurance the site will achieve a community similar to the offsite control" and "[s]eed mixes used must free of noxious weeds" (para 19).	Y	N	Y  Seed mixes free of weeds, restoration of grassland vegetative cover
Fitzpatrick v Starland County, 2021 ABLPRT 789	Appeal from development authority's decision to issue a conditional development permit – development permit for wind power plant approved by AUC	AUC approval included condition that "BER Hand Hills Wind GP Inc. shall further delineate and minimize disturbance of native grassland during construction and operation of the project. Where disturbed, BER Hand Hills Wind GP Inc. shall promptly reclaim	Y  Added additional conditions, no change to grassland conditions	N	Y

		<p>native grasslands and restore associated wildlife habitat to a state equivalent to pre-disturbance conditions as much and as quickly as possible." (para 11).</p> <p>The municipality included the following as a condition of its development permit approval "The applicant shall incorporate the use of temporary matting or other approved methods to protect the natural grasslands or natural vegetation where minimal disturbance is necessary." (para 21).</p> <p>Appellant sought to modify development permits to add more conditions (not related to grasslands)</p>			
Robinson v Foothills County, 2021 ABLPRT 884	Appeal of subdivision authority's refusal of subdivision application	Lands in question described as "low flat grassland with a steep escarpment... and an environmental reserve easement	N	N/A	N/A

		(ERE) has been registered in this area covering a portion of the creek and adjacent riparian lands south of the creek." (page 8)			
Jenner 2 and Jenner 3 Limited Partnership v Special Area No. 2, 2022 ABLPRT 525	Appeal from a decision of Development Authority (DA) which issued condition development permits relating to wind farm projects approved by AUC	Appellant challenged conditions which set setback requirements  The development authority also placed conditions relevant to grasslands: "[t]he restoration of grassland vegetative cover being completed utilizing species which provide assurance the site will achieve a community similar to the offsite control" and "[w]eed mixes used must be free of noxious weeds." (page 5)	Y  disputed setback conditions removed but grassland conditions allowed to stand	N	Y
Jenner 1 Limited Partnership v Special Area No. 2, 2022 ABLPRT 861	Appeal from decision of Development Authority to refuse amendment of development permit for wind power project approved by AUC	Appellant seeks to remove conditions which set setback requirements  The development authority also placed the following conditions on its approvals "[t]he restoration of grassland vegetative cover being completed utilizing species	Y  disputed setback conditions were removed but grassland conditions	N	Y

		which provide assurance the site will achieve a community similar to the offsite control" and "[w]eed mixes used must be free of noxious weeds." (page 5)	were allowed to stand		
Deitz v Houston Oil & Gas Ltd, 2022 ABLPRT 841	Section 36 <i>Surface Rights Act</i> application seeking recovery of unpaid compensation	Rutted trail through grasslands where weeds have become established – no efforts by operator to control weed growth	Compensation order	N/A	N/A
Foley v Lacombe County, 2022 ABLPRT 924	Appeal of decision by Subdivision Authority to refuse subdivision application	Land in question described as including "flat, meadow like grasslands ... that are able to be cultivated and would provide a suitable building site." (para 10)	N	N/A	N/A
Northridge Farms Ltd v Lexin Resources Ltd, 2023 ABLPRT 903083	Section 36 <i>Surface Rights Act</i> application to recover unpaid compensation	Leased area has a wellsite on dry land cultivation and grassland	Direction to pay	N/A	N/A
Palin v Lexin Resources Ltd, 2023 ABLPRT 903254	Section 36 <i>Surface Rights Act</i> application to recover unpaid compensation	Leased area has a wellsite on dry land cultivation and grassland	Direction to pay	N/A	N/A

## Appendix B: Alberta Energy Regulator (AER) Decision Summaries

<b>Decision Name</b>	<b>Application Summary</b>	<b>Grassland Issues/Commentary</b>	<b>Granted (Y/N/N* grassland reasons)</b>	<b>Grassland Commitments (Y/N)</b>	<b>Grassland Conditions (Y/N)</b>
Petro-Canada Applications for Eleven Well Licences, One Multiwell Gas Battery Licence, and Two Pipeline Licences Sullivan Field, (June 8, 2010) ERCB Decision 2010-022	Applications for licenses to drill 11 sour gas wells, 1 multiwell gas battery and 2 pipelines	<p>Several objections raised due to environmental concerns including impacts on fescue grasses</p> <p>In response to concerns around vegetation sampling, the ERCB notes there are no specific requirements related to energy development projects that don't require an environmental assessment and that "management of biological diversity is the responsibility of [now EPA]" (page 65)</p> <p>ERCB notes that [now EPA] has already issued the necessary land dispositions and "is</p>	Y	<p>Y</p> <p>Rare plants, weed control</p>	<p>Y</p> <p>Construction requirements, biologist on site, initiate remediation immediately after abandonment of the line</p>

		confident that the presence of rare plants and proposed mitigations were considered by [now EPA] prior to issuing that disposition" (page 65)			
Cardinal River Coals Ltd. TransAlta Utilities Corporation Cheviot Coal Project (June 1997), EUB Decision 97-08  *this is a JRP decision of the EUB and Canadian Environmental Assessment Agency/Department of	Coal mine, coal processing plant, transmission line and substation (to power mine)	Some of the project area includes grassland meadow types  Panel found impacts to soil, landscapes, general terrain and neotropical breeding birds will be significant but justifiable – impacts to native vegetation can be mitigated EXCEPT that in certain sections (upper Prospect Creek drainage) the economic value of the coal is not sufficient to justify the loss of large numbers of rare alpine plant species, potential impacts to wildlife or risks to ecological integrity of the Cardinal Divide Natural Area	Y	N	N



Fisheries and Oceans		Panel recommended increase in level of protection for wildlife in the Upper Cardinal River – identify the most effective means of doing so as amendment of existing PNTs [now CLRs] to further restrict motorized access			
Cardinal River Coals Ltd., Cheviot Coal Project Mountain Park Area, Alberta EUB Applications No. 960313 and 960314 (August 2000), Report of the EUB-CEAA Joint Review Panel	This decision supplemental to Decision 97-08 (above) and includes new information since that initial decision		Y	N	Y  Rare plant surveys
Bearspaw Petroleum Ltd. Application for Natural Gas	Application for approval of 2 pipelines (located in same right of way)	Pipelines will go across native grasslands on private lands	Y	Y  Where native grasses are	N

Pipeline (March 8, 2005), EUB Decision 2005-017				crossed by pipeline, reclamation will reseed with native grass species	
Decisions on Requests for Consideration of Standing Respecting a Well License Application by Compton Petroleum Corporation, Eastern Slopes Area (June 8, 2006), EUB Decision 2006-052	Several groups and individuals sought standing to challenge an exploratory well license in the Eastern Slopes	<p>Concerns include loss of native grasslands (including fescue)</p> <p>EUB noted that the well location is "not within an area of extensive and continuous stretches of native prairie – that is, there is extensive cultivation in the area" (page 7)</p> <p>With respect to native prairie, the EUB noted that maps show the well location to have native prairie but that a site visit showed large areas of cultivation, thus EUB recommends persons relying on maps should verify that information on maps accurately</p>	Standing denied, license to be issued in due course	N/A	N/A

		reflects actual land use and vegetation present			
EnCana Shallow Gas Infill Development Project Canadian Forces Base Suffield National Wildlife Area, Alberta (January 27, 2009), Report of the Joint Review Panel (ERCB and CEAA)	Application for a project that may include up to 1275 shallow gas wells  * see 2 subsequent well applications heard by ERCB (below)	JRP considered impacts on native grasslands and wildlife to be the main issues  The area is a National Wildlife Area with 458 km <sup>2</sup> of native grasslands and contains about 30% of all protected grasslands in Alberta, as well as one of the few large blocks of dry mixed-grass prairie in Canada  Discussion of grassland integrity including fire regime	Y  * 3 well licences denied due to incomplete assessments	N	Y  Finalize critical habitat for 3 plant species before project proceeds, modify pre-disturbance process to identify rare plants, minimal disturbance techniques, monitoring, siting on areas already infested with weeds, set particular

					reclamation requirements
EnCana Corporation Applications for Three Well Licences Suffield Field (August 25, 2009), ERCB Decision 2009-051	3 well applications within Suffield Base  * previously denied – see above	Department of National Defense (i.e. the land-manager) raised concerns with destruction of native prairie and impacts on habitat leading to reduce diversity and abundance of native vegetation  ERCB determined that 3 additional wells (there were already 36 wells);  "The Board finds that even when factors such as indirect disturbance, edge effects, and future environmental effects of other land users (e.g. military training) are accounted for, the likelihood of risk posed to the native prairie ecosystem in Sections 3 and 10 is minimal because the incremental increase in disturbance caused by the three wells is so small.	Y	Y  access routes, monitoring, reclamation	N

		<p>Having regard to the foregoing, the Board finds that the three proposed wells will have a low impact on native prairie grassland ecosystems. The Board considers that the impacts associated with the three wells and access routes will be effectively mitigate by the best practices proposed by EnCana in its application and [Environmental Protection Plan]." (pages 31 to 32)</p> <p>Further, the ERCB stated that it expects EnCana to "strictly adhere to the single access routes proposed and to monitoring their use for compliance" to reduce vegetation damage, and soil rutting and erosion... and to "undertake timely site reclamation for access locations where soil or vegetation</p>			
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		damage has occurred" (page 31)			
Cenovus Energy Inc., Applications for 47 Well Licences Suffield Field (June 28, 2011), 2011 ABERCB 020	Application for 47 gas wells in the Suffield Base (to be constructed underground in caissons)	<p>Canada raised concerns with cumulative environmental effects including decreased range health, native species abundance and diversity due to habitat loss, increased fragmentation</p> <p>ERCB found environmental risks to be minimal and that the concerns raised by Canada were general in nature, not project-specific</p> <p>ERCB stated that in terms of cumulative environmental effects, the more informative approach is to monitor potential environmental effects and evaluate relative to sustainability indicators or predetermined thresholds (these were not set by the ERCB)</p>	Y	Y  wildlife and rare plant surveys, use results to mitigate appropriately	N

<p>Vantage Point Resources Inc., Regulatory Appeal of a Reclamation Certificate (March 2, 2021), 2021 ABAER 004</p>	<p>Landowner appeal of a decision to issue a reclamation certificate</p>	<p>Landowner was concerned that land was reseeded with his preferred seed mix during reclamation AER stated that the objective of land reclamation is equivalent land capability – it does not have to be reclaimed to exact same species at the adjacent land, just be comparable – also cannot contain noxious or invasive weeds  AER concluded that although the seed mix was not approved by the landowner, it was compatible and therefore acceptable</p>	<p>Y  Reclamation certificate revoked due to failure to remove fence-posts and to properly consult</p>	<p>N/A</p>	<p>N/A</p>
<p>Benga Mining Limited Grassy Mountain Coal Project, Crowsnest Pass (June 7, 2021),</p>	<p>Application for approval to construct, operate and reclaim a new open-pit metallurgical coal mine  *decision was appealed (below)</p>	<p>58ha of grassland communities contain rough fescue within the project footprint – completely avoiding these grasslands in not possible</p>	<p>N*  Impacts on fescue grasslands were one reason (but</p>	<p>N/A</p>	<p>N/A</p>



<p>Report of the Joint Review Panel, 2021 ABAER 010 and CEEA Ref. No. 010</p>		<p>Conservation and reclamation plan does not mitigate the loss of rare plants and rare plant communities because there are no viable mitigation measures that can counter the loss of rare plants – not confident that plans to restore rough fescue grasslands would succeed as restoration is challenging and success has not been demonstrated at similar sites (i.e. Montane Region where topsoil has been stripped) – monitoring won't accomplish anything if there is no available information on the reclamation of rough fescue in the Rocky Mountain Natural Region (i.e. no examples to draw from)</p> <p>Plan is not likely to adequately mitigate effects related to loss of rough fescue grasslands</p>	<p>there were others)</p>		
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		<p>Project would result in permanent removal of rough fescue-dominated grasslands including areas subject to protective notation under the PLA – means a significant adverse effect (limited distribution, likelihood that restoration not possible)</p> <p>JRP stated:          “Without quantitative information, we are unable to accurately characterize the cumulative effects on rangeland resources. However, we find that participant submissions, and the importance placed on native grasslands in the SSRP, make it clear that past activities resulted in a reduction in native grasslands in Southern Alberta. Given our finding that project effects on rough fescue-dominated grasslands will be adverse and irreversible, we find</p>			
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		that the project, in combination with other past and present projects and activities, would contribute to a cumulative effect on rangeland resources. However, we cannot characterize the significance of the cumulative effect." (page 342)			
Benga Mining Limited v Alberta Energy Regulator, 2022 ABCA 30 (CanLii)	Application for leave to appeal JRP decision	Leave sought by Benga Mining, Piikani Nation and Stoney Nakoda Nation	N	N/A	N/A

## Appendix C: Alberta Utilities Commission (AUC) Decision Summaries

<b>Decision Name</b>	<b>Application Summary</b>	<b>Grassland Issues/Commentary</b>	<b>Granted (Y/N/N* grassland reasons)</b>	<b>Grassland Commitments (Y/N)</b>	<b>Grassland Conditions (Y/N)</b>
<p>BER Hand Hills Wind GP Inc.</p> <p>Amendment to the Hand Hills Wind Project (December 17, 2020)</p>	<p>Application to amend a previously approved (in 2012) but not yet constructed wind power project</p>	<p>Amendment would mean that rather than 6 turbines located on native grasslands (as previously permitted), there would be 3</p> <p>Intervenors raised concerns with impacts on native grasslands</p> <p>AUC states: "The Commission maintains its view that an amendment application is not an opportunity to re-visit an existing approval. However, where an applicant pursues changes to a project that require an amendment application to be filed, the Commission must assess the amended project, in its entirety, to determine how its impacts</p>	Y	N	<p>post-construction monitoring and reporting; minimize disturbance; reclaim to state equivalent to pre-disturbance</p>

		<p>compare to those of the approved project. In any electric facility project, infrastructure siting choices are made to balance a variety of competing interests. The fact that approved infrastructure is relocated in a manner that reduces or minimizes its impacts to native grassland does not exempt the relocated infrastructure from a fulsome consideration of its impacts on other components of the environment. Accordingly, the Commission has not excluded any project infrastructure from its consideration of this application.” (para.55)</p> <p>AUC also stated that although the number of turbines on native grasslands is reduced, the operator still needs to look for opportunities to further minimize impacts. This includes construction and operations on</p>			
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		areas near native grasslands where incidental impacts could be anticipated.			
Power Renewable Energy Corporation, Facility Applications; Alberta Electric System Operator, Needs Identification Document Application; and AltaLink Management Ltd., Facility Application  Jenner Wind Power Plant and Interconnection (June 16, 2017)	Application to construct and operate Jenner Wind Power Plant (122.4 MW), and interconnection  *see related applications (below)	Project area includes native grasslands, with 11.51 hectares to be disturbed	Y	Y  Construction in dry/frozen conditions; locate temporary components on cultivated lands; reclaim temporary disturbed grasslands and pursue compensation for permanently disturbed grasslands	N

**Grasslands Considered:**

Regulatory Consideration and Protection of Alberta's Native Grasslands

Jenner Wind 1 GP Inc.  Jenner Wind Power Project Amendment and Time Extension (July 7, 2021)	Amendment to Jenner Wind Power Plant to change type and reduce number of turbines	Amendment would reduce direct impacts to native grasslands by 50%	Y	N	N
Jenner 2 GP Inc. and Jenner 3 GP Inc.  Jenner 2 and Jenner 3 Wind Power Projects (November 26, 2021)	Original intent was one project to expand Jenner Wind Power Plant, later submitted as 2 projects the applications for which were put into abeyance due to unacceptable and substantial environmental risks  This application is a modified version of 2 discrete projects consisting of 13 and 20 turbines (Jenner 2 and 3, respectively)	A portion of the Jenner 2 access road is located on native grassland  A portion of the Jenner 3 underground collector lines will be installed with ploughing on native grasslands	Y	N	Y  Restricted activity period due to concerns with birds and residual effects on grasslands
Kinbrook Solar, GP Inc. and	Application to construct and operate 450 MW solar power plant	Total project area is 1,172 hectares with about 1,143 hectares being native grasslands –	N*	N/A	N/A

<p>Solar Krafte Utilities Inc.</p> <p>Rainier Solar Farm (March 22, 2024)</p>		<p>i.e. majority of the project sited on native grasslands</p> <p>AUC stated:                      "central issue for this proceeding is the impact of project infrastructure on native grassland within the project area and considerations set out in AEPA's Wildlife Directive for Alberta Solar Energy Projects" (para. 19)</p> <p>AUC "considers that avoidance of native grassland in accordance with the Wildlife Directive Standard 100.1.1 is the most effective way to reduce the risk to sensitive wildlife that depend on native habitats" (para. 41)</p>			
<p>ENGIE Development Canada GP Inc.</p>	<p>Application to construct and operate 400MW wind power plant</p>	<p>Environmental issues raised include impacts on native grasslands</p>	<p>Y</p>	<p>Y</p> <p>Mitigation efforts to</p>	<p>N</p>



<p>Buffalo Trail Wind Power Project (February 8, 2023)</p>		<p>Mitigation commitments are sufficient to address concerns around native grasslands</p> <p>AUC discussed the role of EPA and its energy referral reports in AUC decision-making</p>		<p>minimize disturbance (construction techniques, weed control, dry/frozen conditions); Reclaim ASAP with native seed mixes</p>	
<p>Alberta Electric System Operator, Needs Identification Document Application and Section 15(2) Application; and AltaLink Management Ltd., Facility Applications</p> <p>Vauxhall Area Transmission Development</p>	<p>Application for restoration and rebuild of two transmission lines supported by needs assessment application</p>	<p>Concerns with the current route of the transmission lines were raised, including impacts on native grasslands</p> <p>Mitigations were suggested by intervenors</p> <p>Project proponent said those mitigations were similar to those in its Environmental Protection Plan, and argued such mitigations should not be made conditions because that may overly restrict development and ability to complete work on urgent basis</p>	<p>Y</p>	<p>Y</p> <p>dry/frozen conditions for construction, native seed mix for reclamation</p>	<p>N</p>

(September 19, 2023)		<p>AUC found that impacts of proposed alterations not significant (not materially different than existing impacts)</p> <p>AUC also concluded that implementing mitigations as per the Environmental Protection Plan will mean there are no significant environmental impacts, therefore conditions not required</p>			
<p>Solar Krafte Utilities Inc.</p> <p>Vauxhall Solar Farm (December 16, 2022)</p>	<p>Application to construct and operate a 60MW solar power plant and associated substation</p>	<p>Environmental evaluation submitted by applicant concluded overall residual effects will not be significant - also submitted an environmental protection plan summarizing mitigation measures and monitoring activities that applicant committed to implement</p> <p>AEP renewable energy referral report ranked project as overall moderate risk to wildlife and wildlife habitat – based in part on</p>	Y	Y  implement environmental protection plan	Y  post-construction monitoring and reporting

		<p>disturbance to native grasslands (AEP report issued before project size reduced)</p> <p>Project was initially meant to be bigger but was reduced in part to avoid native grasslands – changed layout to avoid all native grasslands and AUC considered that sufficient reduction of impacts to native grasslands</p>			
<p>Buffalo Plains Wind Farm Inc. Facility Application, AltaLink Management Ltd. Facility Applications</p> <p>Buffalo Plains Wind Farm Connection Project (June 23, 2022)</p>	<p>Application for a connection project (approval for the 514.6 MW wind power plant and substation already granted)</p>	<p>Two possible routes were proposed, with one being preferred by the project proponent</p> <p>AUC concludes that the preferred route will have reduced impacts on native grasslands because there is an existing linear disturbance adjacent to the preferred route</p> <p>AUC concludes that potential environmental impacts can be sufficiently mitigated by adhering</p>	Y	<p>Y</p> <p>construction outside of grassland bird breeding season; construction on native grasslands either during dry/frozen conditions or under supervision of</p>	N

		to mitigations proposed by project proponent		an environmental monitor	
BHEC-RES Alberta G.P. Inc.  Forty Mile Wind Power Project (August 30, 2018)	Application to construct and operate a 398.475 MW wind power plant and collector station  * see related application (below)	In response to concerns around wildlife and wildlife habitat, the AUC found that: "siting of project infrastructure on cultivated lands, and not on native grasslands, will reduce the potential for adverse effects on wildlife and wildlife habitat" (page 33)  Potential adverse effects on native vegetation were significantly mitigated by avoiding siting on native grasslands	Y	N	N
RES Forty Mile Wind GP Corp.  Forty Mile Wind Power Project	Application to amend, contract and operate the Forty Mile wind power project	Amended proposal will increase native grassland impacts from 1.5 hectares to 1.7 hectares due to road upgrades – but overall project footprint smaller	Y  but some turbines are not allowed for reasons	N	N

Amendments (June 9, 2023)		AUC found that increase in grassland impacts is small and unlikely to create significant adverse impacts relative to the project as originally approved	unrelated to native grasslands		
Enerfin Energy Company of Canada Inc. and AltaLink Management Ltd.  Winnifred Wind Power Plant Connection Project (November 23, 2022)	Applications for transmission line to connect already approved wind power plant, and to upgrade substation by adding a single circuit breaker within the existing substation fenceline	Proposed transmission line follows existing linear developments and is mostly located within the County road allowance – this route crosses more native grassland than other possible routes  The AUC notes that a large portion of the affected grassland areas may ultimately be affected by the County's plans to upgrade and expand the road  Further, the AUC is satisfied with measures proposed in the proponent's environmental protection plan to mitigate impacts to native grasslands but also "emphasizes the importance	Y	Y  outlined in environmental protection plan	Y  Copy of finalized environmental protection plan to include clubroot management plan

		<p>of native grasslands and of the proper implementation of mitigation measures by Enerfin to protect this ecosystem” (page 5)</p> <p>There is no discussion of what those mitigation measures are</p>			
<p>Aira Wind Power Inc.</p> <p>Aira Solar Project and Moses Trail 1049S Substation (March 21, 2024)</p>	<p>Application to construct and operate a 450 MW solar power plant and associated substation</p>	<p>Project to be sited primarily on cultivated land within a mostly intact native grassland ecosystem</p> <p>Concerns that will fragment intact grasslands, and divert species from critical habitat and migration routes (especially pronghorn) – also concerns about spread of weeds to native grasslands</p> <p>AUC stated: “While the Commission will not require that construction be postponed until vegetation is established, it refrains from doing so based on Aira’s commitments to implement a robust weed monitoring and control program.</p>	Y	Y  weeds	Y  weed control and vegetation planning; conservation and reclamation plan to be reviewed by County

		<p>For clarity, Aira cannot rely solely on a complaint-based monitoring system and the Commission requires Aira to engage in proactive and frequent weed monitoring and control measures.” (page 18)</p> <p>AUC further stated:          “Considering the difficulties with controlling weeds in native grassland and the project’s siting relative to native grassland, the Commission expects that the owner and operator of the project will apply diligence in adhering to commitments and regulatory requirements and will also be proactive and respond efficiently to any identified issues or concerns.” (page 18)</p>			
<p>Sunnynook Solar Energy Inc.</p> <p>Sunnynook Solar + Energy</p>	<p>Application to construct and operate a 270 MW solar power plant, battery energy storage system and substation</p>	<p>Project would impact 30 acres of fragmented native grassland by installation of fences, collector lines, access roads and solar panels – grassland impacts</p>	Y	Y	<p>restore lands to native grassland as</p> <p>Must reseed 3 quarter sections to</p>

<p>Storage Project (June 2, 2023)</p>		<p>calculations included shading of solar panels (not just the pilings)</p> <p>In response to proposal to reseed 3 quarter sections to native grassland as compensation for impacts to native grasslands, the AUC states that:          "It is the expectation of the Commission that these three-quarter sections will be fully reseeded within the fence area, with the exception of waterbodies and potentially existing tree stands" (page 5)</p> <p>EPA's energy referral report rated the project as overall moderate risk to wildlife and habitat with a key stipulation for construction timing on native grasslands and the amount of infrastructure on cultivated lands</p>		<p>compensation for impacts; mitigation measures in construction activities; no construction in high value grassland habitat during breeding season</p>	<p>non-native grassland habitat to native grassland; conduct surveys to ensure success of reseeded; post-construction monitoring and reporting</p>
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<p>Solar Krafte Utilities Inc. and Beargrass Solar Inc.</p> <p>Brooks Solar Farm Project Amendment, Tiem Extension and Approval and Permit and License Transfer (November 6, 2023)</p>	<p>Application to amend, construct and operate 360 MW solar power plant and substation, as well transfer of permits</p>	<p>Project was already approved but seeking revision of project layout which necessitated a new process</p> <p>Although previously approved development on north half of 18-18-15W4, new evidence showed that area was functional native grassland even if it is in poor health</p> <p>AUC states that consideration of full impact on native grassland is not limited to areas permanently disturbed and areas under the panels, must also consider fencing and other above-ground infrastructure – as a result, the project proponent underestimated the impact on native grasslands</p> <p>AUC listed numerous potential impacts of solar development on native grasslands – these potential impacts means there is a</p>	<p>Y for majority of project</p> <p>N* on north half of 18-18-15W4</p>	<p>N</p>	<p>N</p>
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		<p>high risk of significant negative impacts to wildlife, even if the area of native grassland is impacted by historical land uses and even if some species currently using the area would continue to do so after the project is built</p> <p>The high risk to native grasslands cannot be adequately mitigated, the AUC stated:          "Avoidance of siting project infrastructure in areas of native grassland is the most critical factor in preventing significant negative effects on wildlife" (page 12)</p> <p>AUC found that a commitment to reseed both tame grassland and native grassland upon facility closure is not sufficient because, while the native grasslands may have potential to biological function, they would be less</p>			
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		<p>functional in an essential during construction and operations or not functional at all for sensitive species</p> <p>AUC concluded the only way to reduce risk to an acceptable level was avoidance of 18-18-15W4</p>			
<p>EDP Renewables SH Project GP Ltd.</p> <p>Sharp Hills Wind Project (September 21, 2018)</p>	<p>Application to construct and operate a 298.8 MW wind power plant and substation</p>	<p>The project is located on primarily cultivated land but 17.1% of the project area is native grassland which means 27 hectares of native grassland will be disturbed during construction and less than 1 hectare permanently impacted by operations. Fescue grasslands will be encountered on approximately 5 acres. It is noted that this is a reduction from the originally planned layout (83 turbines instead of the original 102). Turbine 9 is to be located on native grassland.</p> <p>EPA energy referral report ranked the project at a low to moderate</p>	Y	<p>Y</p> <p>Reclamation and Restoration Plan to contain specific success criteria for native grasslands; implement environmental protection measures identified in EPA referral report; seek to reduce impacts</p>	<p>Y</p> <p>avoid areas with ACIMS S1 or S2 ranked rare plants if possible, if not consult with EPA to mitigate; prepare comprehensive Native Grassland Post-Construction</p>

		risk to wildlife and impacts to native grasslands		associated with Turbine 9 and offset with conservation of native grassland elsewhere	Reclamation and Restoration Plan; post-construction monitoring and reporting; micro-site Turbine 9 to reduce native grassland disturbances; implement a native grassland conservation offset
1646658 Alberta Ltd.  Bull Creek Wind Project (February 20, 2014)	Application to construct and operate a 115 MW wind power plant, collector system and substation  Errata was issued to correct reference to the appropriate	Concerns raised with several impacts including those on native pasture (native pasture = native grassland according to AUC)  About 538 hectares of the project area is native pasture including rough fescue and 14.7 hectares of	Y	Y  Construction on native pasture outside critical breeding period of	N

<p>&amp; Errata to Decision 2014-040 (March 10, 2014)</p>	<p>AESRD Sign-off Letter Project Referral Report</p>	<p>the footprint for the collector system and other components is native pasture</p> <p>Project proponent argued it could not avoid native pasture due to setback requirements, avoidance of treed habitat and other constraints – the AUC agreed and stated that it: “encourages the applicant to continue to work to find ways to mitigate impacts to native prairie including those that may occur during construction” (page 112)</p>		<p>nesting birds; minimize by using existing linear disturbances; limit amount of topsoil stripping and graduation; conserve integrity of topsoil</p>	
<p>SunEEarth Alberta Solar Development Inc.  Yellow Lake Solar Project (September 26, 2017)</p>	<p>Application to construct and operate a 19MW solar power plant</p>	<p>No native prairie within the project areas but it is adjacent to some native prairie</p> <p>AUC found limited environmental impacts because project was sited on cultivated land and does not impact native prairie</p>	<p>Y</p>	<p>N</p>	<p>N</p>

<p>High River Solar GP Inc.</p> <p>High River Solar Project (April 12, 2024)</p>	<p>Application to construct and operate a solar power plant</p>	<p>Environmental impacts of the project include those on native grasslands</p> <p>The project proponent had described some of the area as "semi-native vegetation," but the AUC concluded that, more likely than not, it was native grassland and cautioned against the use of non-standard land classifications such as semi-native vegetation</p> <p>Further, the AUC stated:  "Standard 100.1.1 of the Wildlife Directive for Alberta Solar Energy Projects (the Wildlife Directive) states that "[g]enerally, solar energy project[s] should not be sited in areas of native grasslands..." and defines native grasslands as "[a]n area of prairie in which natural vegetation consist primarily of perennial grasses [and] native species composition</p>	<p>Y</p>	<p>N</p>	<p>Y</p> <p>time restrictions on construction within 100m of native grasslands</p>
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		<p>[is] greater than 30%." (page 6)</p> <p>...</p> <p>"grasslands can be considered native even with a high degree of degraded health" (page 7)</p> <p>The AUC did not consider lack of contiguousness to be a reason to relax Standard 100.1.</p> <p>AUC found that impacts on native grasslands "justifiable in this rare case due to the historical impacts of the gravel pit, the benefits of the projects, and the likelihood of future development in this area given Foothills County's planning framework and the proximity of the project to the High River municipal boundary" (page 3)</p>			
<p>Proteus Alberta Solar 1 Ltd.</p> <p>Proteus Alberta Solar Projects (June 18, 2024)</p>	<p>Applications to construct and operate three separate solar power plants – PAS1, PAS2 and PAS3 – as well as connections to the grid</p>	<p>The PAS2 project area was on native grassland but PAS1 and PAS3 were not</p> <p>The AUC denied approval of PAS2 due to its "unmitigated negative</p>	<p>N*</p> <p>Y</p> <p>PAS1 and PAS3 approved because not</p>	<p>N/A</p>	<p>N/A</p>

		<p>effects on the environment and wildlife" (page 1) – a proposed native grassland offset proposal (i.e. seed native species in cultivated areas) was not sufficient to address the impacts</p> <p>AUC provided a great deal of commentary around development on native grasslands:</p> <p>"The Commission considers that:</p> <ul style="list-style-type: none"> <li>• The Alberta Environment and Protected Areas' (AEPA) Wildlife Directive for Alberta Solar Energy Projects (the Wildlife Directive) states that appropriate site selection at the landscape level is the first and most critical factor in preventing significant negative effects on wildlife and critical wildlife habitat.</li> <li>• Approximately 24 percent of the proposed PAS2</li> </ul>	<p>on native grasslands</p>		
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		<p>project area is sited on native grassland and AEPA evaluated these impacts to be a high risk to native and critical habitats.</p> <ul style="list-style-type: none"> <li>• Grassland breeding birds, which depend on native grasslands, were observed in the project area.</li> <li>• Proteus failed to demonstrate that its proposed offset scheme would adequately mitigate the proposed impacts and justify a departure from the Wildlife Directive's avoidance standard.</li> <li>• Given the importance of site selection to avoid impacts to native and critical habitats, Proteus's proposed mitigations are not adequate to reduce the environmental impacts on wildlife and the availability of native and</li> </ul>			
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		<p>critical habitats to an acceptable level." (page 1)</p> <p>Further, the AUC stated:          "Proteus stated that "[i]f this Project were not developed, native grassland within the Project Area would be available for conversion to cultivation to generate the revenue required for the operations of BRID, as demonstrated in the other native grassland areas adjacent to the Project.</p> <p>36. The Commission understands that the standards in the Wildlife Directive are only applicable to renewable projects within Alberta and other activities may not require the same considerations for native grasslands. Despite this, the Commission cannot base its public interest determination on speculative future land use decisions. Considering the uncertainty of the future activities,</p>			
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		the Commission has ascribed little weight to this evidence." (page 7)			
WR2 Wind GP Corp. and Wild Rose 2 Wind Inc.  Wild Rose 2 Wind Power Project Amendment (July 5, 2024)	Application to amend, construct and operate a wind power plant	<p>The original project was approved subject to conditions that project infrastructure be removed from native grasslands</p> <p>This application sought amendments to satisfy the conditions and, by so doing, some of the initial concerns around native grassland impacts were addressed</p> <p>Original conditions related to environmental impacts remained in place except for those that necessitated removal of infrastructure from native grasslands</p>	<p>Y</p> <p>N</p> <p>Turbines T10 and T11 not approved due to being too close to the Little Plume Evangelical Missionary Church</p>	N	<p>Y</p> <p>Post-construction monitoring and reporting; maintain wildlife data and undertake additional mitigation required by EPA</p>

## Appendix D: Natural Resources Conservation Board (NRCB) Decision Summaries

<b>Decision Name</b>	<b>Application Summary</b>	<b>Grassland Issues/Commentary</b>	<b>Granted (Y/N/N* grassland reasons)</b>	<b>Grassland Commitments (Y/N)</b>	<b>Grassland Conditions (Y/N)</b>
<p>Board Request for Review Decision, RFR 2022-13/LA1057</p> <p>In Consideration of a Request for Board Review filed under the Agricultural Operation Practices Act</p> <p>Tateson Ranching Ltd. (November 1, 2022)</p>	<p>Request by approval-holder for review of the decision to issue a conditional CFO Approval</p>	<p>Approval-holder sought a review of 3 conditions attached to the CFO Approval including a condition that "all manure must be applied to cultivated land and incorporated within 48 hours" (page 6)</p> <p>The NRCB found this was a reasonable condition in light of environmental risk in an environmentally sensitive area (native grasslands) – the condition was to "prevent influx of nutrients into the lake through manure contaminated runoff, or onto the surrounding native grasslands through wind erosion and subsequent deposition of soils" (page 6)</p>	N	N/A	N/A

<p>In the matter of a project of United Industrial Services Ltd. To extract and process silica sand from its Peace River Silica Sand quarry (May 18, 2000)</p>	<p>Application related to construction and operation of a silica mine - the mine had previously been approved as a pilot project, in order to increase production, an EPEA environmental assessment and review by the NRCB was required</p>	<p>The decision notes that 12% of the mineral surface lease is on grassland (but not specified as native grassland), there was an issue about impacts on the Little-Seed Rice Grass plant because it is rare</p> <p>NRCB indicates it requires the proponent to avoid rare plants where possible and to otherwise mitigate impacts – it suggests a live specimen be provided to the rare plant collection at the Devonian Botanical Gardens</p>	<p>Y</p>		<p>Y</p> <p>rare plant surveys and suitable mitigation if found</p>
<p>Application #9401 – Alberta Public Works, Supply and Services</p> <p>Pine Coulee Water Management Project</p>	<p>Application for approval of a water management project consisting of a diversion wire, a canal, a reservoir, and a dam</p>	<p>Project will inundate grasslands within the coulee and could indirectly affect nearby grasslands by increasing the likelihood of expanded irrigation and recreational development</p> <p>JRP notes that the project area is within the fescue grass ecoregion but that much of the vegetation is actually not typical of fescue</p>	<p>Y</p>	<p>N</p>	<p>Y</p> <p>Prepare and implement a "detailed habitat compensation plan to the satisfaction of the Fish and Wildlife</p>

<p>Willow Creek Basin Southwest of Stavely, Alberta</p> <p>Report of the NRCB/EARP Joint Review Panel (February 1995)</p>		<p>grasslands due to cultivation, grazing and alkaline soils</p> <p>The proponent committed to undertake a habitat compensation plan to mitigate the loss of native grasslands. This includes:</p> <ul style="list-style-type: none"> <li>• lands near the coulee will "be managed to increase value to wildlife and to ensure that all plant species that would normally occur in native fescue grassland would be represented" (page 5-41)</li> <li>• grazed lands will be rehabilitated to approximate the condition of native grassland to compensate for losses caused by project (preference to be given to fescue grassland over mixed grasslands, and to sites close to Pine Coulee)</li> </ul>			<p>Division based on an objective of no-net-loss of grassland habitat capability" (page D-4, condition 14)</p>
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<p>Application #9601 – Alberta Public Works, Supply and Services</p> <p>Little Bow Project/ Highwood Diversion Plan</p> <p>Application to Construct a Water Management Plan to Convey and Store Water Diverted from the Highwood River</p> <p>Report of the NRCB/CEAA Joint Review Panel (May 1998)</p>	<p>Application for approval of a water management project consisting of a reservoir, diversion works and canals, and expansion of an existing reservoir</p>	<p>The project will inundate land with water, just over half of which is contiguous native grassland. The JRP says this is an unmitigated consequence of approving the project and “a significant adverse environmental effect because so little of this native ecoregion remains” (page 5-47) and that:</p> <p>“The Panel concludes that the loss of grassland and habitat provided by that grassland is a significant adverse environmental effect associated with the project. It is not possible to replace the grassland and habitat this project could destroy. To compensate for the loss, APWSS is proposing a grassland habitat compensation program. Areas of native grassland in the vicinity of the project would be conserved and enhanced. The management</p>	<p>Y</p>	<p>N</p>	<p>Y</p> <p>Report on progress toward habitat compensation plan</p>
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		<p>objective would be to restore native vegetation and cover.</p> <p>The proposal for a habitat compensation program is similar to one the NRCB heard from APWSS on the Pine Coulee Project. The Panel heard some evidence at the hearing that progress on that effort was less than hoped for. This raises some concern on the part of the Panel about whether the Applicant's plans for habitat compensation are realistic.</p> <p>Environment Canada urged the proponent to ensure that the grassland compensation area mirror as much as possible not only the biological, but the topological features of the area to be lost. This would enhance the chances that a comparable variety of vegetation communities would be included. Environment Canada</p>			
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		also recommended that the grassland areas be contiguous with the wetland development at Clear Lake, since some species use both wetland and upland habitats." (page 5-47)			
<p>Alberta Transportation</p> <p>Springbank Off-Stream Reservoir Project in Springbank, Alberta</p> <p>Decision NR 2021-01</p> <p>NRCB Application No. 1701 (June 22, 2021)</p>	<p>Water management project consisting of off-stream reservoir in a natural topographic depression and clay-cored dam, diversion structure and channel, and access roads</p>	<p>Project proponent asserts that it cannot completely avoid disturbing intact native grassland but that it will reclaim disturbed areas of native grassland within the project area</p> <p>NRCB discusses role of SSRP and its priority on conserving native grasslands. It notes that this SSRP priority is not mandatory, much of the project area is already disturbed, and the project proponent has committed to reclamation. NRCB concludes this is a good compromise for the significant public benefit of the proposed project.</p>	Y	Y	N

## Appendix E: Canada Energy Regulator (CER) Decision Summaries

Decision Name	Application Summary	Grassland Issues/Commentary	Granted (Y/N/N*) (grassland reasons)	Grassland Commitments (Y/N)	Grassland Conditions (Y/N)
TransCanada Keystone Pipeline GP Ltd. Reasons for Decision OH-1-2007 (2007-09-01)	Application for approval of a 1,235km pipeline from Hardisty, AB to Haskett, MB. The project involves conversion of an existing pipeline and construction of 2 new segments.	<p>The project traverses grasslands in some areas (it is mostly located in rural areas in the Alberta and Saskatchewan portions).</p> <p>NEB states: "Fescue prairie is extremely vulnerable to disturbance and invasion by non-native species and is difficult to reclaim, particularly if it is subject to heavy or spring grazing. In addition, shifts in vegetation types are likely to occur in plains rough fescue communities. The Northern Fescue Grasslands are among the most threatened biogeographic regions on the Canadian plains "...only five percent or less of its original area remains"" (pg 97).</p> <p>NEB notes that one pump station is to be located in an area which is one of the largest continuous blocks of native grassland in Canada. As well, this area is known</p>	Y	Y	Y  Must maintain an Environmental Tracking Commitments Table; Native Range Management Plan and Follow-up program required; five years post-construction monitoring

		<p>to have birds listed under SARA. The project proponent expressed preference for this site as it is an optimal location based on pump station site location criteria.</p> <p>NEB also states:          "The NEB recognizes that native range is a rare and declining ecosystem and that mitigation strategies may have limited effectiveness. Therefore, there maybe a requirement for adaptive approaches as a result of a scientifically based follow-up program. In addition, the pipeline route Keystone has proposed, along with PS9, would be located in ecologically sensitive areas." The board therefore recommended filing the followup program for Native Range Management, filing official government agency acceptance of seed mixes (pg 98).</p> <p>And later, the NEB states:          "Native vegetation in the Manitoba Plains has been heavily impacted by agriculture, and native grassland has been almost completely removed from the region. Riparian areas cover only 1-2% of the total land base on the prairies, and only very small areas of native vegetation remain, primarily as riparian areas along creeks and rivers. For the Keystone Project, there are 40 proposed water crossings in Manitoba and at some of</p>			<p>reporting, approval for seed mixes.</p>
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		<p>those crossings native vegetation remains, i.e. trees, shrubs, grasses and rare plants.</p> <p>For Manitoba, the remaining patches of native vegetation are highly vulnerable to further fragmentation. Losing even small numbers of rare plants may affect the viability of provincial or national populations. While most of the pipeline in Manitoba is adjacent to existing pipelines, there would be 20 km of new pipeline not contiguous with existing pipelines.</p> <p>Areas adjacent to watercourses are susceptible to fragmentation, as they act as corridors for vegetation propagules, as well as for insects, birds and mammals. Each one is essential for pollination, seed dispersal and herbivory, and provide critical habitat for fish and amphibian species. In addition, species diversity may be potentially altered from the introduction and spread of non-native and invasive plant species during operation of the pipeline" (pg 101).</p>			
Alberta Clipper Environmental Screening Report and Reasons for	Application for approval to construct a 1,078km pipeline	Project will alter about 220 hectares of native prairie including some fescue grasslands (ESR, pg 9).	Y	Y Reduce areas of disturbance	Y Five years post-construction

Decision OH-4-2007 (2008-02-01)	from Hardisty, AB to Gretna, MB.	<p>The Environmental Screening Report (ESR) contains significant discussion of impacts on native prairie, the NEB states:</p> <p>"Overall, the Board is satisfied with Enbridge's proposed mitigation for Project effects on native prairie and, when considered with the Board's Recommendation (3) in Section 9.7, is of the view that the Project is not likely to cause significant adverse effects on native prairie" (ESR, pg 32).</p> <p>"The Board determined in the ESR that, with the implementation of Enbridge's environmental protection procedures and mitigation measures and the Board's recommendations, the proposed Project is not likely to cause significant adverse environmental effects. In the event that the Project is approved, the Board would convert the recommendations contained in the ESR, into conditions of its approval" (Decision, pg 45).</p>		/ topsoil stripping; native seed mixes.	monitoring must include native prairie reclamation.
Southern Lights Reasons for Decision OH-3-2007 (2008-02-01)	Application for approval of a transfer and line reversal. No new pipelines or pumps but work is required within existing Line 13	<p>The project sites are mostly on cultivated land but there is some remnant of fescue grasslands (about 59 hectares).</p> <p>NEB noted that alteration/disturbance of native prairie is a potential adverse environmental effect and noted that full trench and work lane stripping would be used to avoid rutting and pulverization of the topsoil/sod,</p>	Y	Y  "The reader is referred to the Applicants' application and	Y  Five years post-construction monitoring program to (in part)

	<p>pump station and valve sites. Also application for approval of capacity replacement project which requires construction of 288km new pipeline from Cromer, MB to Gretna, MB, addition of pump facilities, and modification to existing pump stations and pipeline.</p>	<p>that in certain areas stripping width would be reduced, that a native seed mix would be used, that highly invasive species would be avoided adjacent to native prairie, and that "reclamation efforts would include reducing the total area of disturbance and returning the [right of way] to as-near pre-construction conditions as feasible within a practical time frame" (pg 143).</p>		<p>supporting documentation for details on all the mitigation proposed by the Applicants" (pg 139).  See Commentary</p>	<p>assess native prairie reclamation.</p>
<p>TransCanada Keystone Pipeline GP Ltd., Keystone Cushing Expansion</p>	<p>Application for approval of a project to increase nominal capacity of the Keystone Pipeline via adjusted and</p>	<p>The project facilities are located across Alberta, Saskatchewan and Manitoba. In Alberta, the sites are farm, ranch or grasslands areas. In Saskatchewan and Manitoba, the sites are crop lands although native vegetation was identified at the Saskatchewan sites. One pump station is moving out of native range (pg 18).</p>	<p>Y</p>	<p>Y  Avoid construction through native</p>	<p>Y  Must maintain a table that tracks all commitments</p>

Reasons for Decision OH-1-2008 (2008-07-01)	additional pumping facilities.			vegetation if possible.	made; post-construction monitoring for five years (including revegetation success).
Keystone XL NEB Reasons for Decision OH-1-2009 (2010-03-01)	Application to construct 529km of pipeline from Hardisty, AB to Monchy, SK.	<p>The pipeline passes through the Aspen Parkland, Moist Mixed Grassland and Mixed Grassland natural regions, and will impact native grasslands.</p> <p>The NEB notes that the existing Keystone Pipeline has a fescue grassland monitoring program in place.</p> <p>The NEB discusses fragmentation, loss of native vegetation, rare plants, ecological communities, invasive species, seed mixes and reclamation measures.</p>	Y	Y  See pg 135.	Y  Detailed grassland mitigation plan; weed control; five years monitoring.
Line 3 NEB Report OH-002-2015 Volumes I & II (2016-04-01)	Application to decommission existing pipeline and to replace with new pipeline (approximately 1,096km).	Pipeline route crosses native prairie in 3 provinces. In Alberta, it crosses 7 designated Environmentally Sensitive Areas which include plant species of conservation concern.	Y	Y  For example, by "maximizing the use of previously	Y  Reclamation plan for native prairie; five years monitoring.

				disturbed land or cultivated lands" (pg 144).	
Trans Mountain NEB Report OH-001-2014 (February 2019)	Increasing the capacity of the existing Trans Mountain Pipeline system by looping or twinning the existing 1,147 km system between Edmonton and Burnaby, with about 987 km of new pipeline.	The pipeline route would disturb approximately 158 ha of native grassland in interior BC.	Y	Y  See pg 243.	Y  A ten-year monitoring requirement for grasslands; updated environmental protection plans; a grasslands survey and mitigation plan within British Columbia; a grasslands reclamation evaluation



					report and offset plan.
West Path Delivery 2022 Letter Decision GH-002-2018 (2019-04-01)	Application for a pipeline (21.5km), 2 compressor station unit additions and related facilities located within Alberta.	Portions of the project will disturb rough fescue grasslands including some covered by EPA protective notations (CLRs).	Y	Y  Use of standard mitigation outlined in application and environmental protection plan.	Y  Environmental protection plans to be updated to incorporate all mitigation and monitoring commitments , five years monitoring.
2021 NGTL System Expansion CER Report GH-003-2018 (	Eight pipeline section looks and three compressor station unit additions totaling about 344 kilometres of pipeline located within Alberta.	It is noted that less than one percent of the project is on "upland grassland/shrubland" (pg 161).	Y	N  Standard mitigation accepted for impacts to vegetation.	N  Updated environmental protection plan, 5 years monitoring.

<p>West Path Delivery 2023 CER Report GH-002-2020 (2022-05-01)</p>	<p>Application to expand existing system with approximately 39km of pipeline in Alberta.</p>	<p>Portions of the new pipeline sections are located on native grassland including some rough fescue. Some of the areas are subject to a provincial Protective Notation [CLR].</p> <p>Concerns were raised around the difficulties in restoring rough fescue grasslands – Proponent’s response was that mitigate for rough fescue is best dealt with through the EPA’s CLR process – CER concluded additional monitoring of fescue reclamation was in the public interest.</p>	<p>Y</p>	<p>Y</p> <p>Reduce disturbance in native grassland to greatest extent possible; consult with EPA with respect to lands covered by CLR, commitment to engage with a senior grassland reclamation specialist and the</p>	<p>Y</p> <p>Post-construction monitoring of fescue reclamation for 10 years.</p>
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				interested intervenor.	
NEBC Connector  CER Report OH-001-2022 (2023-10-01)	Application to approve 2 parallel pipelines (215km) from Wonowon, BC to Gordondale, AB.	The majority of the proposed route parallels existing disturbance but part of it goes through dry native grassland (and grassland bird breeding habitat).  No discussion around grasslands.	Y	N  Proposed mitigation and commitments in relation to vegetation.	N  Reclamation plan, 5 years monitoring.