Alberta Wilderness Association
"Defending Wild Alberta through Awareness and Action"

September 26, 2024

Ministry of Agriculture and Irrigation
JG O'Donoghue Building
3rd Floor - 7000 113 Street
Edmonton, Alberta T6H 5T6
By Email: AGI.agriculturefirst@gov.ab.ca

RE: Renewable Energy Development on Agricultural Land

Alberta Wilderness Association (AWA) would like to express our concerns for the implementation of additional restrictions on renewable energy developments, particularly where these restrictions are not applied to other industries and sectors. Founded in 1965, AWA strives to help Albertans understand the intrinsic values that wildlife and wilderness provide, and encourage communities to participate in conservation initiatives that will ensure a legacy for future generations. With over 7,500 members and supporters in Alberta and across Canada, AWA is dedicated to conserving and protecting Alberta's wilderness.

The *Renewable energy development on agricultural land engagement* and the associated *Renewable energy development on agricultural land* webinar[1] suggests additional changes are being considered for renewable energy development. Specifically, the engagement focuses on native grasslands, irrigable lands and productive agricultural lands. While we appreciate the need to balance protection of environmentally sensitive and agriculturally important lands with development, these restrictions will be ineffective if not applied across all industries, and will serve only to hinder Alberta's economic growth and harm our energy future.

Exclusion of the regions designated "pristine viewscapes" and the associated 35-km buffers already removes roughly 23 percent of the province from development (see attached report). An estimated $33 billion in investment across 118 renewable energy projects has been lost since the moratorium, and could have produced enough to power nearly all Albertan homes.[2]

Additional restrictions on native grassland, productive agricultural land and irrigated or irrigable lands could preclude an additional 12 to 17 percent of land from renewable energy development (see attached report). With the restrictions already imposed, and accounting for parks and protected areas, renewable energy development could be barred from 36 to 39 percent of the province. Additionally, most of the new restrictions are focused largely on the prairie landscape, where sun and wind resources are most

[1] Government of Alberta. August 16, 2024. Renewable energy development on agricultural land engagement. Accessed September 17, 2024 at: https://www.alberta.ca/renewable-energy-development-on-agricultural-land-engagement

[2] Pembina Institute. 2024. Creating (Un)certainty for Renewable Projects: Review of the impact of Alberta's renewable energy moratorium one year later. Available at: https://www.pembina.org/sites/default/files/2024-08/2024-08-02_Creating_Un%29certainty.pdf

abundant. As such, imposing these restrictions is likely to drive the remaining investment into renewable energy away from Alberta.

This action goes against promises by Alberta to reach net-zero carbon emissions by 2050. Alberta is the largest emitter of carbon in Canada, accounting for 39 percent of the country's total emissions[3], with fossil fuel production and use releasing the majority of carbon dioxide emissions[4]. Opposing the energy transition not only neglects these responsibilities, it also has severe health and economic costs.

Fossil fuels are one of the greatest sources of pollution worldwide. The World Health Organization (WHO) estimated that 99 percent of the world's population breathed unhealthy air, resulting in 6.7 premature deaths annually[5]. In higher income countries, the most common type of urban pollution was nitrous oxide (NO_2), formed by burning fossil fuels at high temperatures in engines. In 2018, the WHO estimated $2.9 trillion in health and economic costs from fossil fuel air pollution.

In addition, the continued burning of fossil fuels is increasing global temperatures, leading to changing weather patterns and more extreme weather events. These changes are leading to more frequent and severe natural disasters, including flood, fire, drought, hail and wind events. There is a rising trend in the costs of weather-related disasters, with many of the costliest disasters occurring in recent years. In 2023, the Insurance Bureau of Canada reported $3.1 billion in damages, with Alberta alone exceeding $330 million[6]. The average cost of a disaster has increased 1250 percent since the 1970s, not accounting for losses in economic output[7]. Climate changes are also affecting food production, with damage from extreme weather events, degrading soils and changes in pest distribution linked to global warming all contributing to rising food costs[8]. For every dollar invested into climate change, we could save five to six dollars for damages in the future[9].

Further, the greatest threats to native grasslands and agricultural lands are not renewable energy. The largest loss of native prairie has been to agricultural conversion, with 70 percent of grasslands plowed for

[3] Environment and Climate Change Canada. 2024. Greenhouse Gas Emissions: Canadian Environmental Sustainability Indicators. Retrieved Aug. 8, 2024 from: https://www.canada.ca/content/dam/eccc/documents/pdf/cesindicators/ghg-emissions/2024/greenhouse-gas-emissions-en.pdf

[4] Environment and Climate Change Canada. 2024. National Inventory Report, 1990–2022: Greenhouse Gas Sources and Sinks in Canada. Retrieved Aug. 8, 2024 from: https://publications.gc.ca/collections/collection_2024/eccc/En81-4-1-2022-eng.pdf

[5] World Health Organization. 2024. Air quality, energy and health. Accessed September 17, 2024 at: https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[6] Insurance Bureau of Canada. 2024, January 11. Severe weather took a toll on homes, businesses and vehicles in Alberta in 2023. Accessed September 17, 2024 at: https://www.ibc.ca/news-insights/news/severe-weather-took-a-toll-on-homes-businesses-and-vehicles-in-alberta-in-2023

[7] Canadian Institute or Climate Choices. 2020. Tip Of the Iceberg: Navigating the Known and Unknown Costs of Climate Change for Canada. Available at: https://climatechoices.ca/wp-content/uploads/2020/12/Tip-of-the-Iceberg-_-CoCC_-Institute_-Full.pdf

[8] Alberta Wilderness Association. 2023. The Cost of Climate Change: Food Production. Available at: https://albertawilderness.ca/wp-content/uploads/2023/06/20230600_RL_climate-change-ag_awa_wla.pdf

[9] Canadian Climate Institute. 2022. Damage Control: Reducing the Costs of Climate Impacts in Canada. Available at: https://climateinstitute.ca/wp-content/uploads/2022/09/Damage-Control_-EN_0927.pdf

row crops. Continued loss has been primarily due cultivation[10], with reservoirs and irrigation, urban development and industrial activity, including oil and gas extraction, gravel and mineral mining, and helium exploration, also having a significant impact. For agricultural land, land loss is largely accompanied by a growth in urban spaces or rural municipalities[11], and the *AUC inquiry into the ongoing economic, orderly and efficient development of electricity generation in Alberta* report determined "the percentage of agricultural class 2 land loss is estimated to be less than 1 per cent by 2041" based on a likely modelling scenario[12]. Clearly, renewable energy is not a high threat to either native grassland or agricultural land.

These new restrictions will have little effect on protecting environmental or agricultural lands unless the same restrictions are applied across all industries, including oil and gas, mining, and infrastructure (roads, transmission lines, dams, irrigation canals) or urban expansion. They will hinder Alberta's progress on energy transition, with the consequence of damaging economic growth, increasing cost of living and harming environmental and human health.

Thank you for considering our comments. We would be happy to meet with you for discussion on renewable energy development and protection of environmental and agricultural lands in Alberta.

Sincerely,

ALBERTA WILDERNESS ASSOCIATION

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Conservation Specialist

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[10] Horsch, Caitlyn. 2023. The Canada Grassland Protocol: A Backgrounder. https://www.canadianfga.ca/uploads/source/Amber/GrasslandProtocol-CGP_Final_Web.pdf
[11] Government of Alberta. 2023. Annual Report 2022: Land use changes in Alberta. Available at: https://open.alberta.ca/dataset/cb0d63dc-d080-4c54-914d-603d0510468d/resource/fd289faa-a67e-4895-a480-0dcea4b7d4e7/download/agi-annual-report-land-use-changes-in-alberta-2022.pdf
[12] Alberta Utilities Commission. 2024. AUC inquiry into the ongoing economic, orderly and efficient development of electricity generation in Alberta: Module A Report.