

Riplinger Concerned Citizens Question Responses

March 28, 2023

1) This area has been identified as sensitive raptor habitat, species including Ferruginous Hawk, Bald Eagle, Golden Eagle, American Kestrel, Great Grey Owl, Northern Goshawk, Peregrine Falcon and Prairie Falcon. Why does the project need to be put in this type of sensitive range? Additionally, many other sensitive, of concern, and at-risk species of birds use this area for migration, breeding and winter habitat. Have migratory bird surveys been completed with specific attention to such species and their flight paths? When were these surveys completed and are more planned for this year?

Alberta Environment and Protected Areas (EPA) provides wildlife sensitivity and key range layers to identify the known or partial extent of a species range in Alberta. These ranges can assist with surveys for identification of a feature or identify where mitigation strategies may be required. The Sensitive Raptor Range incorporates the entire southern portion of the province, from the Rocky Mountains to the Saskatchewan border, and from the US border to north of Edmonton. As required by the Wildlife Directive for Alberta Wind Energy Projects, the Riplinger project completed sensitive species surveys following the Alberta Sensitive Species Inventory Guidelines (Government of Alberta, 2013) for prairie raptors and other surveys required by EPA based on the project location, project size, and potential wildlife habitat. These surveys included:

- Spring and fall bird migration surveys for songbirds, raptors and waterfowl/waterbirds following the Bird Migration Survey Protocol (Government of Alberta 2020). Three separate rounds in the spring migration period (April 7, April 27, May 11 and 12) and three separate rounds in the fall migration period (August 19, September 22 and 23, October 30 and 31). Surveys were conducted at 6 migration plots and 3 additional stopover habitat plots during each round. Surveys were conducted in 2021.
- Sharp-tailed grouse lek surveys (two rounds) to observe active grouse leks within 500 m of the Project. Surveys were conducted over two years at 59 total plots (2021; April 15, 16, 17, 26, 27 and 29, May 5, 2022; April 2, 3, 6, 7, 30 and May 1, 3, and 5).
- Raptor nest searches within 1 km of the Project. Pre-leaf out stick nest searches were conducted during sharp-tailed grouse lek surveys, and assessment of nest activity was completed over two years (2021; June 19 and 20, 2022; June 8, 9, 26 and 27).
- Grassland breeding bird surveys (two rounds) to assess early breeding species (May 1 to June 15) and late breeding species (June 16 to July 15). Surveys were conducted over two years at 78 total survey plots (2021; June 7, 8, 20 and 21) and (2022; June 8, 9, 12, 25, 26, and 27).
- Acoustic bat surveys (two surveys) focused on spring migration (May 1 to 31) and summer/fall migration (July 15 to October 15). Acoustic bat detectors were placed at 5 monitoring locations, with one location paired to a 30 m elevated microphone. Surveys were completed in 2021.



- Field investigations to determine the extent of native grassland and other important natural habitats (e.g., wetlands, riparian habitats). These surveys were conducted over two years, in 2021 and 2022.

Results of these surveys are being provided to EPA in the required Renewable Energy Project Submission Template. EPA will review the results of these surveys and potential impacts of the Project to wildlife and wildlife habitat and issue a Renewable Energy Project Referral Report that provides an assessment of overall risk to wildlife for the Project. This Referral Report is then provided to the Alberta Utilities Commission (AUC) as part of the Project Application.

EPA provides the survey protocol requirements in the Wildlife Directive for Alberta Wind Energy Projects to allow for an assessment of Project risk to wildlife and wildlife habitat. In addition to the surveys completed to date, the Project will be repeating sharp-tailed grouse and raptor surveys every 2 years until construction begins. Should new wildlife features and associated setbacks interact with project infrastructure during these surveys, the project will work with EPA to determine additional mitigation strategies if required.

The Project is located approximately 63 km southeast of the nearest eaglewatch.ca observation site in Crowsnest Pass. The spring and fall bird migration surveys, raptor nest surveys, and grassland breeding bird surveys provide EPA with the information required to assess eagle usage of the project area.

2) Recent surveys conducted by the Waterton Biosphere Reserve Association, have shown that this area is a hotbed of activity for threatened Trumpeter Swans. Have species' specific surveys for Trumpeter Swans been carried out as part of the planning for this project? if so, what are the mediations? What active sites were identified? And why is this area being chosen, despite it being an important migratory route for the species?

The Alberta Sensitive Species Inventory Guidelines (Government of Alberta 2013) do not provide specific survey guidelines for trumpeter swans. Surveys conducted for spring and fall bird migration and breeding bird surveys provide EPA the information required to assess trumpeter swan usage within the project area. 5 individual trumpeter swans were observed during the fall bird migration surveys. In addition, EPA provides a trumpeter swan watercourse mapping layer of all known trumpeter swan breeding areas in the province. The project siting incorporated the required 800 m setback from these features.

3) This area falls within active Sharp-Tailed Grouse range, another species of concern. Have species' specific surveys been done to identify affected Leks (dancing/breeding grounds)? What mediations are being applied and where are the sites located in relation to the planned structures?

Sharp-tailed grouse lek surveys were completed in the project area following the Alberta Sensitive Species Inventory Guidelines (Government of Alberta 2013). A



total of 59 survey plots conducted over 2021 and 2022 were completed over two separate rounds during the lekking period. Of the 4 grouse leks identified during these surveys, 2 leks have temporary project infrastructure (i.e., collector lines) infringing the recommended 500 m setback. One of these setbacks follows an existing disturbance (i.e., municipal road). The project has committed to constructing these temporary disturbances outside of the lekking period (1 hour before sunrise to 3 hours after sunrise, from March 15 to May 15). EPA will review these potential impacts when assessing the project's risk to wildlife and wildlife habitat.

4) Have Human Resource Values (HRV's) been surveyed for on the project footprint? The project area has many historic locations, unique to the settlement and ranching in the area, including one of the original auction markets in Canada, an original camp for the Northwest Mounted Police, and the historic Cochrane, Church, and Palmer ranches. We are concerned that this type of project will affect this rural and historic landscape. Will this project disturb and/or impact the historic values?

As part of the project's AUC Rule 007 Application, a *Historical Resources Act* assessment was completed and submitted to Alberta Culture, Multiculturalism and Status of Women (ACMSW) through the Online Permitting and Clearance System. This assessment provides the location of all proposed project infrastructure in relation to the Historic Resource Values (HRVs) listed in the region. ACMSW then reviews the project and provides an Historic Resources Act Approval. This Approval may contain conditions for additional historical resources impact assessments depending on the potential interactions with the final project layout. These additional assessments, if required, would occur prior to construction.

5) Where will the future electricity transmission lines be run associated with this project? How will the wind farm be connected to the existing transmission grid? Will a new substation be built in the coming years? Where will it be built? Have other affected communities or counties been notified of the potential transmission line location, it is unfair to them to not be aware of why such developments in their area would be needed as they would be directly affected by those transmission lines.

The transmission line, which will be required for the project, will be applied for in a separate application and will have its own assessment and consultation process. TransAlta will conduct a thorough assessment of routing alternatives and has retained an experienced route development company to support the process of identifying lower impact routes. TransAlta is working with the Alberta Electric System Operator (AESO) on the transmission line and expects that a new line will be needed to connect the windfarm to the existing transmission lines located east of Pincher Creek however the exact locations are still unknown and will only be determined through an iterative approach of combining technical information with stakeholder feedback. One new substation will be constructed on the windfarm leased land as a part of the windfarm, no other substations are required.



The Transmission line development and application is based on the AESO and AUC processes and TransAlta will be engaging with potentially affected communities and counties in conjunction with the AESO to work with the potentially affected stakeholders more directly.

TransAlta is and will be undertaking an environmental assessment of the potential routing and will incorporate features like wetlands and native grasslands in the route development in an effort to minimize impacts.

There is no public information available at this time as route development is still underway and we await the next steps as directed by the AESO.

6) What is the exact placement of the turbines? The map shared by TransAlta delineates only a project area, not turbine locations, when will these structure locations be made public? How many turbines exactly will be placed? We have heard numbers varying from 46 in the package provided to the Village of Hill Spring and 67 on the TransAlta project site. One person who asked this question via email and was told 50 by TransAlta reps. What is the correct number, why are there so many different answers, are there future expansions being considered and planned for this project area and is that why the number is inconsistent? How can you effectively plan and site turbines, including setting them back from sensitive features, if you don't know how many you are building.

The current turbine layout that was shared at the Open House is attached to the end of this document. The number of turbines depends on which make and model of turbine we use for the project. TransAlta is still determining this information. The expectation is that there will be no more than 50 turbines, but more likely 46 turbines.

Note: there are 56 turbine locations presented in the current turbine layout (map attached). This is because we have included potential alternate locations in order to mitigate potential impacts. As part of determining the make and model of turbine, we are also evaluating which turbines will be included, and which will be removed from the layout.

We hope to have this updated information for the next Stakeholder Engagement Session.

All 56 turbine locations shown have been sited utilizing EPA environmental guidelines as well as municipal and county requirements.

There is no expansion being considered for this project.

7) Have rare plant and rare plant communities been surveyed and delineated? For vegetation you mention "habitat mapping". That is not the same as a rare plant survey so have you or have you not completed them. If so, what year were they completed, was it during the growing season and will more be completed this year?

The project has been sited outside of the EPA endangered and threatened plant ranges. Specific rare plant and rare plant community surveys have not been



completed at this time. Surveys to assess the extent of native grassland and other important natural habitats (e.g., wetlands, riparian habitats) were conducted over two years, in 2021 and 2022. The Alberta Conservation Information Management System (ACIMS) database maintains lists of species and ecological communities of conservation concern on tracked and watch lists. If a plant species or community occurs on these lists, they are referred to as listed plants or listed plant communities. A review of the ACIMS database was conducted for the project area, and only one species, a non-sensitive species, *Bistorta bistortoides*, was found to occur within the southwest portion of the project area.

Project siting then incorporated this information to minimize potential interactions with these habitats where there is potential for rare plants and rare plant communities to occur.

8) Where will the gravel, and other construction materials be acquired? Some of the gravel pits in this area have active Bank Swallow colonies. Will TransAlta ensure that TransAlta and its contractors do not disturb these colonies and that the Migratory Bird Convention Act is followed?

Bank swallow colonies were identified during the grassland breeding bird surveys conducted in 2021 and 2022 in the project area. The project has been sited to avoid all swallow colonies and recommended 100 m setbacks. Should gravel be required for the project, requirements of the Migratory Bird Convention Act will be followed.

9) Will TransAlta ensure its entire project and project contractors abide by the conditions, best practices and guidelines outlined by Environment Canada in respect to the Migratory Bird Act?

As a condition of employment, all contractors will abide by the project specific Environmental Protection Plan and other relevant plans which incorporate and outline compliance with applicable best practices and guidelines including the Migratory Bird Act.



10) What were the qualifications of the biologist/s who completed the to date environmental assessment work? Was the work conducted by senior biologists with professional designation or by summer students and/or junior biologist/s acting under a senior biologist's oversight? If so, did the senior biologist/s accompany junior biologist/s on site during field assessments, or was the work overseen from a corporate office? Were the individuals specifically trained and experienced in this habitat zone? Will TransAlta meet Wildlife Wind Energy Directive 100.3.16 during construction having on-site, experienced wildlife biologists to monitor all construction activities?

As required by EPA in the Wildlife Directive for Alberta Wind Energy Projects, all surveys were conducted by experienced wildlife biologists, which must have:

- The ability to positively identify target species by sight and/or sound.
- Familiarity with the species biology, including habitat requirements of the species and experience in identifying the species habitat features.
- Familiarity with survey methods as described in the Sensitive Species Inventory Guidelines.
- Attained a Bachelor of Sciences degree in Biology, Environmental Sciences, Renewable Resources, or hold a Technical Diploma in Natural Resources or Environmental Management from a certified College.

The project will meet the requirements of the Wildlife Directive for Alberta Wind Energy Projects with the use of experienced wildlife biologists to monitor construction activities as committed in the submission to EPA.

11) Were amphibian surveys completed? Have considerations been made in regard to recent efforts to re-establish Northern Leopard Frogs in the area? Have considerations and mitigations been planned to prevent disturbance to amphibian seasonal migrations to and from wetlands and freshwater bodies or during post reproductive dispersal?

Acoustic and visual amphibian surveys have not conducted for the Project. As per Standard 100.2.2 of the Wildlife Directive for Alberta Wind Energy Projects, amphibian surveys are not one of the required surveys. EPA identifies in the Wildlife Directive for Alberta Wind Energy Projects that projects should avoid siting within 100 m of any wetland class (bog, fen, marsh, shallow open water, swamp) identified in Table 1 in the Alberta Wetland Classification System except for wetland classes with Water Permanence listed as Temporary to address amphibian breeding habitat. If project construction activities occur within 100 m of these wetlands, the project has committed to scheduling activities outside the breeding and dispersal period for sensitive amphibians (i.e., April 15 to September 30). Silt fencing will be erected to impede the movement of amphibians into the construction area. Should construction activities be required within the breeding and dispersal period, an experienced wildlife biologist will monitor and relocate individual amphibians to the nearest appropriate



habitat away from construction activities under a Research and Collection permit obtained from EPA prior to movement.

12) This area has endangered species of bats. Were bat surveys completed? When were they completed, and will more be completed this year?

Acoustic bat surveys (two surveys) focused on spring migration (May 1 to 31) and summer/fall migration (July 15 to October 15) were conducted. Acoustic bat detectors were placed at 5 monitoring locations, with one location paired to a 30 m elevated microphone. Surveys were completed in 2021. This survey effort aligns with the requirements of the Wildlife Directive for Alberta Wind Energy Projects and allows EPA to assess the potential risk of the project to bats.

13) The claim is that this project will provide economic stimulus to our community. How many local workers does TransAlta intend to hire for this project? Will local Unions be contracted for staffing? Will workers be staying in Hill Spring, or will they be staying in communities outside of the project area that will receive the economic stimulus instead of the directly affected community?

TransAlta will work with the construction contractors on lodging and will explore local options, such as rental housing, motels, and campsites, as well as the surrounding community. The labour force will fluctuate throughout the construction period and will see a peak of 150 to 170 people on site. The contractors used for the construction will be encouraged to seek local skilled workers to complement their crews where possible. Both union and non-union contractors will have the opportunity to bid on available work.

14) When will this project be applied for to the AUC?

TransAlta expects to be submitting our Wind Farm Application to the AUC in June 2023. The Riplinger Project is currently in Stage 1 of the AUC 007 Application Process.

15) How will TransAlta manage traffic during construction? Have considerations been made regarding harvest seasons, cattle drives, heavy tourist traffic? Will roads and or road allowances be developed to facilitate construction traffic and heavy loads travelling throughout the area? Will the towns affected be provided bonds for roadway use and impacts?

A traffic management plan/traffic accommodation study will be completed during the detailed planning phase of the project. Road use agreements will detail TransAlta's obligations regarding access and use of the applicable public roadway, including the provisions under which any damage to the roadway must be repaired, as well as the required financial security. Roadway improvements, such as widening, may be required at some intersections to accommodate the long loads during turbine



component delivery. In addition, TransAlta sets construction speed limits through the project site for the various contractors to adhere to help ensure safety of the public and workers. TransAlta will maintain the roads throughout construction to ensure they are in good, safe conditions, this includes the application of dust control and snow removal, as needed.

With respect to landowner activities like cattle drives, TransAlta works with the landowner to accommodate their needs. Our construction site manager typically has relationships with landowners and would be available to discuss any plans the landowners have to ensure these activities are not impacted by the construction.

16) Large mammals in particular, Elk, Mule Deer, Whitetail Deer, Grizzly and Black Bear, and Cougars use this corridor. This area is so abundant and important to these species' it falls in the "Grizzly Bear Support Zone". Has a large mammal movement survey been completed? Does the project have mitigations planned for winter habitat refuge and breeding/rearing seasonal movements? Will the project shutdown during critical weather events to allow free movement of large mammals to cover provided by the adjacent river valleys? Has TransAlta conducted large carnivore surveys and movement studies to limit disturbance specifically to large carnivore movements?

The Wildlife Directive for Alberta Wind Energy Projects addresses large mammal movement through siting considerations related to the Key Wildlife Biodiversity Zones (KWBZs). In the project area, the only permanent project infrastructure within the KWBZ is a single overhead collector line which will not impact wildlife movement during seasonal movements in the KWBZ. There is one KWBZ that is associated with the Belly River. The project has committed to constructing the one collector line crossing of this feature outside of the required December 15th to April 30th timing restriction to reduce potential impacts to large mammals moving through this corridor. To date there is no evidence that wind farms affect large mammals.

In addition, the Directive requires that projects must be sited to avoid or minimize occurrence in grizzly bear zones. The project has been sited outside of all identified core and secondary grizzly bear zones to avoid potential impacts to grizzly bears.

17) The proposed project will be very close to an *international Waterton/Glacier* Dark Sky Reserve, how will the lighting on the turbines be of impact to the reserve?

Transport Canada regulates turbine lighting in compliance with Standard 621. TransAlta has not completed our lighting plan at this time, but it will be compliant with Standard 621. TransAlta will also investigate the benefits of implementing dimming technology that reduces the brightness of the aviation lights when atmospheric conditions allow. The dimming technology would dim the lighting in clear skies and intensify the lighting under cloudy or low visibility conditions to level similar to current wind farms.

18) The proposed project has an area falling within a Unesco Biosphere



Reserve. Has the Waterton Biosphere Reserve and its buffer zone been considered in the project planning? What were the considerations if any?

The project has not engaged with the Waterton Biosphere Reserve (WBR) at this time but is aware of the project's location relative to the buffer and transition zone, and that a wide range of economic activities take place within this zone. The project is also aware of the WBR's strategic priority of investigating and promoting the development of alternate energy (e.g., solar, wind, and geothermal) for the biosphere. The project is working through the required regulatory review by meeting the requirements of EPA and AUC to address the potential environmental impacts of the project. At this time, TransAlta is not aware that the UNESCO designation noted above carries any incremental regulatory or legislative controls or requirements.

19) What are the potential impacts to ground water with regards to foundation installation, and potential oil leaks? How do the turbines contain oil leaks, will they have some form of secondary containment for protection during a leak? Has water quality been tested and will it be monitored, and for how long post construction? Will it be monitored for the lifespan of the project? Have local drinking water wells been assessed by TransAlta to ensure no loss to drinking water quality or volume will occur? How will TransAlta ensure no impact occurs, and if a change in drinking water quality or access occurs what will TransAlta do to compensate affected users?

The potential impacts to ground water are addressed in the project's environmental evaluation that will be submitted to the AUC as part of the Rule 007 Application. Groundwater is a specific valued component that is assessed, and potential impacts to groundwater are addressed through an assessment of existing groundwater wells in proximity to project infrastructure. For wind energy projects, the size of the turbine foundations do not typically affect groundwater movement through the region. Potential impacts to groundwater are therefore typically limited to potential small spills during construction from construction equipment. The project addresses spill response prevention and mitigations in the Environmental Evaluation and Environmental Protection Plan for the project.

20) What measure will be taken to prevent the introduction and establishment of invasive plant species? Have occurrences of existing invasive species been documented? Will project equipment be guaranteed to be weed free throughout construction? Will weeds and invasive plants be monitored for and controlled post construction? During the project lifespan? Will wash stations be used for project vehicles entering the project footprint? Leaving the project footprint? How will landowners be compensate for controlling weeds that escape from the ROW (including crop loss)?

As part of the AUC Rule 007 Application, the project must submit a Conservation and



Reclamation Plan to align with the requirements of the Conservation and Reclamation Directive for Renewable Energy Operations (Government of Alberta 2018). As part of this Directive, the project must complete a pre-disturbance site assessment to detail soil and vegetation prior to construction. This is followed by an interim reclamation site assessment conducted for a minimum of 3 years following construction to address potential weed and soil concerns. Finally, the project must complete a final reclamation certificate assessment following project decommissioning and reclamation to receive a reclamation certificate. This ensures the project will meet a trajectory towards equivalent land capability at the end of project life.

In addition to the Directive and Conservation and Reclamation Plan, the project has committed to industry standards and best management practices to address spread of weeds and invasive species as per the Alberta *Weed Control Act*.

Compensation between TransAlta and landowners is confidential and will remain so.

21) What erosion control measure will be implemented during and post construction? How will TransAlta limit wind erosion during the construction phase and during vegetation re-establishment?

The project is required to submit a Conservation and Reclamation Plan to align with the requirements of the Conservation and Reclamation Directive for Renewable Energy Operations (Government of Alberta 2018). As part of this plan, the project is required to address potential wind and water erosion concerns. TransAlta has experience successfully implementing industry standards and best management practices to control wind and water erosion during construction. Following construction, the project is required by the Directive to monitor seeding and revegetation results for a minimum of 3 years post-construction to ensure that vegetation establishment is occurring and meeting equivalent land capability in the project area.

22) Will the project be using dust control measures on roadways and build sites? Will chemical dust control be used? Will water be drawn from the adjacent Bull and Cutthroat trout habitat to do this, or will the project have its own water sources for doing dust control?

Our construction contractors will implement dust control measures during component delivery and site construction activities. These measures will include speed limits on project roads, and the use of water trucks and/or application of calcium chloride to gravel roads. Calcium chloride is a commonly used dust suppressant that attracts moisture from the air to bind particulate matter together. We will plan to have our own water for completing dust control. Any water required for construction will be sourced in compliance with provincial and municipal laws and regulations



22) How will TransAlta limit potential wildlife mortalities, particularly avian mortalities throughout the lifespan of the project and its additional phase developments of transmission lines and potential substations?

As part of the project submission to EPA, the project is required by the Wildlife Directive for Wind Energy Projects to develop a construction and operation mitigation plan. Within this plan, the project has committed to implementing mitigation strategies to EPA to address potential wildlife mortality concerns during construction and operations for the life of the project. Following project commissioning, the project is required to complete a minimum of 3 years of post-construction mortality monitoring and submitting yearly results to EPA to review. The project has also committed to immediate notification to EPA should significant mortality events be observed. The project has committed to working with EPA to address potential impacts and implement operational mitigation strategies should EPA determine that wildlife mortalities are a concern at the project.

23) Has TransAlta consulted with local First Nations regarding the spiritual and cultural impacts of a large industrial development on First Nations Traditional Lands?

TransAlta is following the AUC's guidance on consultation with First Nations on Treaty 7 lands.

25) How will the project affect tourism in the area? Has a tourism review been conducted? Will the project impact local tourism, access to Provincial recreation areas or National Park visitation?

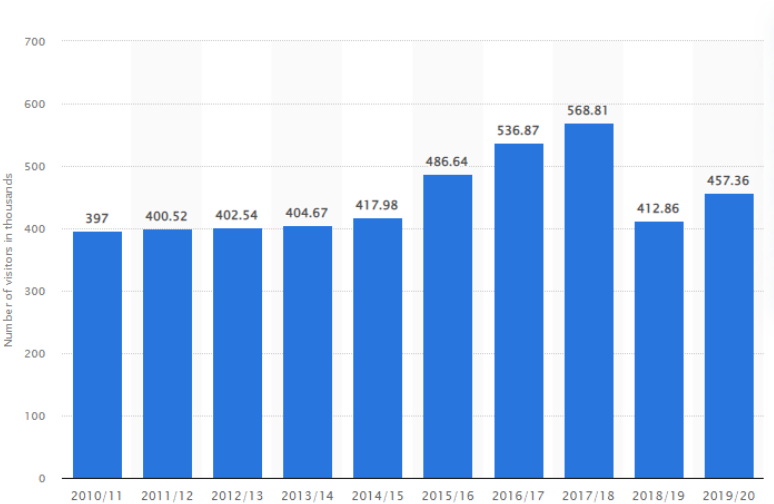
TransAlta is unaware of any specific study or assessment of the integration of wind energy and tourism, nor has a specific assessment been completed. That said wind turbines haven't been developed throughout southern Alberta, including the Pincher Creek and Fort McLeod areas that Waterton users travel through – similar to how they would use the Riplinger Project area. Current statistics in the Waterton area do not show any significant effects to tourism numbers.

The project is not expected to impact local tourism, access to provincial recreation areas or national park visitation.

If we look at tourism numbers in Southern Alberta over the 2010-2020 period, the number of visitors has stayed fairly consistent with the introduction of wind turbines in the area and the larger drop in 2018 would likely be associated with forest fire activity in and around the park that year. Below is a chart of tourism numbers from Waterton Lakes National Park.



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<https://www.statista.com/statistics/501627/visitors-to-waterton-lakes-national-park/#statisticContainer>

26) Residents value this area in part because of how quiet it is. Has TransAlta conducted a study on the existing level of sound in this area. How will it ensure that increased noise disturbance does not occur and affect residents?

TransAlta has commissioned a third-party noise impact study following the procedure and requirements of AUC Rule 012. <https://www.auc.ab.ca/rules/rules-home/>

The preliminary results portrayed at TransAlta's open house are compliant with Rule 012 and were modelled to reflect a worst-case scenario with all 56 potential turbine locations populated with the largest turbine model under consideration, with no consideration for wind related noise masking. Noise impact limits are firm, and any exceedance must be remedied by either locating the turbine farther from the noise receptor (house) or applying an operational limit to the turbine to prevent excess noise generation during the time period of the exceedance.



27) The Waterton Reservoir is an important waterbody for numerous bird species and hosts bird colonies. The project occurs between the Reservoir, the Waterton River and the Belly River which fall under the "high risk watersheds" of the Eastern Slopes and are Key Biodiversity Zones. In addition, this area is laden with numerous wetlands between the rivers, which are becoming rarer and rarer. Why is the project being located in an area so rich in water resources that clearly acts as an important flight paths for birds? Is this not out of line with the Wildlife Wind Energy Directive 100.2.11 indicating that turbine location cannot obstruct bird movement?

Standard 100.2.11 in the Directive refers to the spacing of wind turbines to allow for sufficient space for birds to move. The project has sited all turbines a minimum of 200 m apart to align with this standard. Migratory bird staging areas were surveyed in 2021 as described in the spring and fall migratory bird surveys to meet the requirements of the Directive.

28) Claims have been made that property values will not be affected by this project. How are these claims founded? Have studies of this effect been looked at for an area equivalent in viewscape, tourism values and natural resource values equivalent to this, as all these features could be jeopardized by this type of industrial development. This is not a Not In My Backyard or anti-renewable energy situation, this area is unique in terms of its natural sensitivities, remoteness, tourism values and viewscape, which is part of why it is part of a designated Biosphere (one of only 2 in Alberta and only 19 across all of Canada). Why build here?

Publicly available information indicates that there are no conclusive findings that suggest that the wind farms have impact on the value of properties in the nearby vicinity. The only Canadian-based study that was primarily focused on rural or rural residential properties is the 2014 study by Richard J. Vyn and Ryan M. McCullough and it concluded that there was no impact.

The site for the Riplinger Wind Power Project was selected based on numerous criteria including but not limited to presence of cultivated lands, wind resource, and interconnection availability. The AUC will determine if the project is in the best interested of Albertans.

29) What setbacks will apply to the Palmer airstrip. Will turbines near it blink perpetually? Will those turbines have additional setbacks from residences to account for this disruption?

The Palmer Ranch is identified as a stakeholder to the project and will be consulted regarding their private airstrip. The project will work Transport Canada to appropriately identify which turbines are required to be lit with navigation lights per Standard 621 and we are assessing the use of auto dimming lights that will operate with reduced intensity during clear conditions but increase their intensity, to level similar to current wind farms, for safety during low visibility conditions (fog,



snow, rain).

30) The project area occurs within the Foothills Fescue and Rough Fescue grasslands, a high value forage for cattle and wildlife like elk, deer and moose. This is one of the most endangered ecosystems in the world, notoriously difficult to reclaim. Why is the project being placed in this unique region?

The project has been sited to avoid or minimize impacts to native grasslands. The project is committed to working with EPA to avoid environmental impacts where possible and incorporate industry standard best management practices to minimize potential impacts where they may occur. EPA will review potential project impacts to these areas and the proposed mitigation measures and provide an assessment of project risk to wildlife and wildlife features in the renewable energy referral report for the project.

31) What will be the reclamation plan? Given the situation with Orphan Wells in this province, a commitment for ensuring appropriate reclamation following the project's end life is essential to taxpayers, especially in rural communities that bear the brunt of this cost when companies do not meet their obligations.

As part of the AUC Rule 007 Application, the project must submit a Conservation and Reclamation Plan to align with the requirements of the Conservation and Reclamation Directive for Renewable Energy Operations (Government of Alberta 2018). As part of this Directive, the project must complete a pre-disturbance site assessment to detail soil and vegetation prior to construction. This is followed by an interim reclamation site assessment conducted for a minimum of 3 years following construction to address potential weed and soil concerns. Finally, the project must complete a final reclamation certificate assessment following project decommissioning and reclamation to receive a reclamation certificate. This ensures the project will meet a trajectory towards equivalent land capability at the end of project life.

TransAlta has over 110 years of generation experience and is the only company who has successfully fully decommissioned a wind farm in Canada. TransAlta's Cowley Ridge wind farm was the first wind farm commissioned in Canada and was safely and successfully decommissioned by TransAlta in 2022.

32) What portion of this project has been surveyed on foot versus roadside surveys due to access permission issues? Will on foot surveys now be carried out to ensure that surveys were accurate?

Surveys were conducted on foot and some survey plots were taken from roadside following the Sensitive Species Inventory Guidelines, AEP Bird Migration Protocol, and Alberta Wetland Policy protocols (including required coverage). Wetlands were also ground truthed and delineated within the Project area and this



information, including maps, will be publicly available upon filing our AUC application. All wildlife and wildlife habitat surveys were conducted following the requirements of the Wildlife Directive for Alberta Wind Energy Projects and the Alberta Sensitive Species Inventory Guidelines. EPA reviews survey efforts as part of the project submission to ensure that required standards are met and that surveys have been conducted by experienced wildlife biologists as defined in the Directive.

33) Many people affected by this project, including those residing in the town of Hill Spring, were not given notification. Why?

TransAlta is following the guidance of the Alberta Utilities Commission rules for a wind development of this size and nature. Requirements are to consult with stakeholders within 1500m of the project boundary.

TransAlta pulled land titles within the 1500m footprint of the project to provide addresses to contact stakeholders and provide them with project information via the mailout in December 2022.

Any person with interest in the Riplinger Project is welcome to contact us directly with their questions and we will include them in our Participant Involvement Program. It is not our intention to exclude stakeholders that are outside the 1500m radius. If stakeholders were missed when we initiated the notification and consultation process in December 2022, we apologize and we strive to notify all relevant stakeholders throughout the consultation process.

If any stakeholders have questions or concerns regarding the project, they can email TransAlta at Canadian_Projects@transalta.com or leave a voicemail at 1-877-547-3365 Extension 1. Information regarding the Riplinger Wind Power Project can also be found on our website at <https://transalta.com/about-us/our-operations/projects-in-development/riplinger/>

34) Have all impacted wetlands been delineated? How many wetlands will be crossed by this project or the associated transmission lines? How will potential impacts be mitigated? When will Water Act Approvals be applied for?

All wetlands within the project area were identified and classified following Pathway 3 from the Alberta Wetland Identification and Delineation Directive (Government of Alberta 2015), consisting of a desktop delineation followed by field verification of wetlands within the original Project footprint to identify, delineate and classify wetlands. The desktop delineation relied on the Alberta Merged Wetland Inventory (Government of Alberta 2020a), the Alberta Biodiversity Monitoring Institute Wetland Inventory (Alberta Biodiversity Monitoring Institute 2022), and a review of publicly available aerial imagery (ESRI 2021). Field delineation and classification then occurred at all wetlands being impacted by the project.

For timing of the Water Act Approval process, the project would submit for all required approvals and code of practice notifications following AUC approval for the



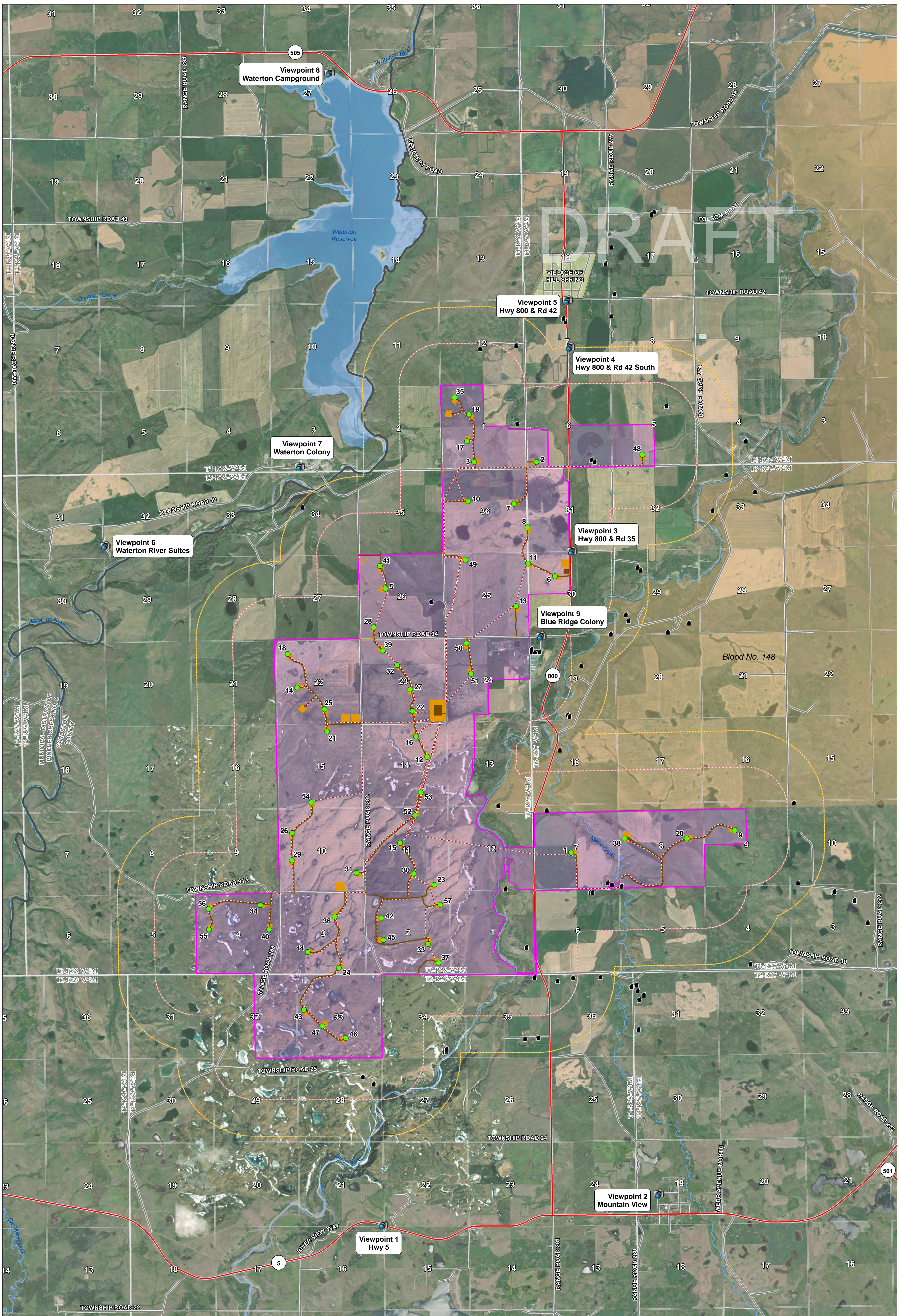
project. Approvals would be obtained prior to construction occurring within any wetland boundary. Mitigation measures provided in the submission would be dependent on the nature of the impacts occurring, and AEP would provide review and approval based on those mitigations aligning with the Alberta Wetland Policy and Water Act requirements.

35) Are you aware of the Chief Mountain Cumulative Effects study that applies to the project area? Have the recommendations and best practices if this study been part of the planning process? Will they be? How does this project contribute to Cumulative Effects for the project area and how will you mitigate those impacts?

The Project has reviewed the Chief Mountain Cumulative Effects study that was provided during the project open house. While cumulative effects are not the object of either the EPA or AUC process, several of the environmental considerations addressed in that study are included in the project submission report to EPA and the environmental evaluation provided to the AUC as part of the application process (e.g., native grassland, wildlife and wildlife habitat, ground and surface water). The project notes that the key consideration identified for wind energy projects in the Chief Mountain Cumulative Effects study are the potential loss of native grasslands, with an estimate of future projects impacting up to 15% of native grasslands. The Riplinger project has been sited to have 0 turbines on native grassland, and minimal permanent project footprint sited on native grassland habitat. EPA and AUC will review the potential project impacts proposed and determine if the project has adequately addressed these concerns.

36) Are you aware of the MLUST tool developed by Pincher Creek MD by Miistakis to aid planning sustainability for wind and solar energy? Cardston County does not have the forethought for this tool however the MLUST report for PC MD shows very high-risk zones and no-go zones directly across the Waterton River adjacent to this proposed project. Why is this being considered in this extremely sensitive area?

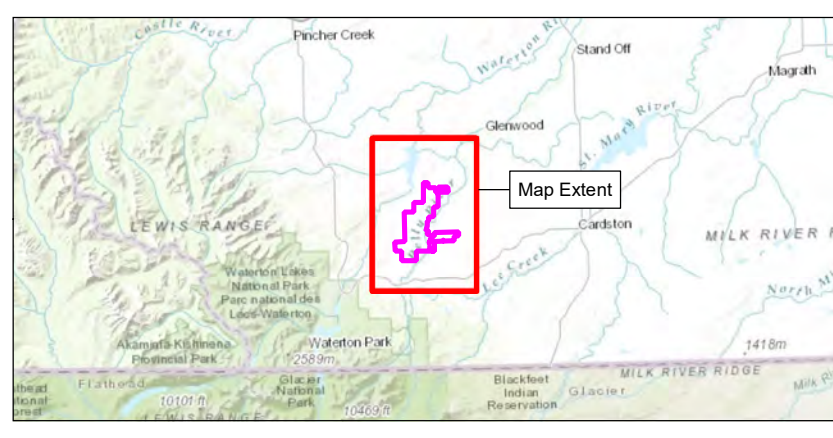
The project has relied on the information requirements as outlined in the Wildlife Directive for Alberta Wind Energy Projects, including wildlife and wildlife habitat survey protocols and information requirements that are submitted to the EPA for their review of potential impacts to wildlife. The AUC relies on this review by EPA, in addition to the other environmental, stakeholder, land use, and historical resource components of the Rule 007 Application process to determine if the project is in the interest of the province.



Legend

- Proposed Turbine Location
- Underground Collector Line
- Permanent Disturbance Footprint
- Temporary Disturbance Footprint
- Project Area
- 1500 m Notification Radius
- 800 m Notification Radius
- Visual Location
- Residence
- Highway
- Road
- Municipal Boundary
- Urban Area
- Blood No. 148 Reserve Land

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 NAD 1983 CSRS 10TM/AEP Forest
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Sources

- Contains information licensed under the Open Government Licence - Alberta Government
- Aerial Image: ESRI World Imagery
- Inset Map: ESRI World Topographic Map

Notes

1. All mapped features are approximate and should be used for discussion purposes only.
2. This map is not intended to be a "stand-alone" document, but a visual aid of the information contained within the referenced Report. It is intended to be used in conjunction with the scope of services and limitations described therein.

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Riplinger Wind Power Project

Draft Overview Map

105863-01 Production Date: Feb 13, 2023 Figure 2