

**From:** [Boettcher, Joanne \(DNR\)](#)  
**To:** [Dylan Ikkala](#)  
**Cc:** [Warzecha, Cynthia \(DNR\)](#); [Joyal, Lisa \(DNR\)](#)  
**Subject:** Big Bend Wind  
**Date:** Tuesday, May 19, 2020 12:07:40 PM  
**Attachments:** [image003.png](#)  
[2020\\_05\\_18\\_06\\_36\\_40.pdf](#)

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Hi Dylan,

I received the attached letter from you. I'm the new Regional Environmental Assessment Ecologist in this area. Please use me as your primary DNR contact on this project until you submit the site permit application, at which time Cynthia Warzecha will be your primary DNR contact.

Will you email me the map and shapefiles of the project boundary and any other mapped project information you have? Also, can we discuss this project briefly so you can catch me up? Kevin Mixon, my predecessor, handled the project before. I have his communications and documentation regarding this project, but it would be helpful if you could fill me in on the project, what's changed or further developed with this project since it was first proposed, environmental planning you've done based on previous DNR comments, and any other pertinent information. I will work with regional technical staff to get additional information and reviews to you once I have more information.

I see that the NHIS review was done in 2017. Those results are only valid for one year, so you will need to have an updated review completed. You can contact Lisa Joyal with that request.

Let me know what works for you to connect about this project.

Thank you,

Joanne Boettcher  
Regional Environmental Assessment Ecologist  
MNDNR – Mankato  
(507) 389-8813



## Jennie Geiger

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**From:** Boettcher, Joanne (DNR) <Joanne.Boettcher@state.mn.us>  
**Sent:** Tuesday, July 7, 2020 2:37 PM  
**To:** Dylan Ikkala  
**Cc:** Jennie Geiger; Warzecha, Cynthia (DNR); Gieseke, Tim (DNR); david.briese@mnhs.org  
**Subject:** DNR comments on Big Bend Wind and Red Rock Solar Projects  
**Attachments:** Erosion\_InvasiveSpecies\_StandardGuidance\_20200707.pdf

Hi Dylan,

Thank you for the opportunity to continue early coordination work with Apex Energy in the review of Big Bend Wind Energy project and the nested Red Rock Solar Energy project. The DNR appreciates that changes have already been made to the proposed project in response to our concerns. As mentioned when we spoke on May 26<sup>th</sup>, I replaced Kevin Mixon after his retirement. Any previous guidance that Kevin supplied is still valid and should be incorporated.

Our current comments regarding Big Bend Wind project are itemized below:

- The ***DNR Guidance for Commercial Wind Energy Projects*** and ***Avian and Bat Survey Protocols For Wind Energy*** contain standard commercial wind recommendations. Both guidance documents are located at the following web link: [https://www.dnr.state.mn.us/eco/ereview/additional\\_resources.html](https://www.dnr.state.mn.us/eco/ereview/additional_resources.html)
- An updated NHIS is required for multiple reasons: the project footprint has changed, the specific location of turbines has been identified, and the previous review is greater than one year old.
- Because a known calcareous fen is located within 5 miles of the project, we ask that you review/survey areas within the disturbance zone (planned areas of disturbance with an added 500 foot buffer; e.g. turbine construction areas, access roads, crane paths, collector lines, equipment staging areas, transmission lines, etc.) using the [MNDNR Calcareous Fen Field Assessment Procedures](#) by an experienced contractor familiar with the ecology of calcareous fen communities. If calcareous fens are identified within the disturbance zone, additional coordination with the DNR is needed. If work is planned within 500 feet of a calcareous fen, a Calcareous Fen Management Plan may be required.
- During development of the turbine layout, we recommend that at least 4-5 alternate turbine locations be included. The alternate turbine locations provide an opportunity to avoid or minimize potential impacts to natural resources and to work around other issues that arise during project development.
- Some of the turbines (e.g. T49) are very close to streams/rivers within the Watonwan River watershed. As Kevin previously communicated, habitat for bats and birds is common along waterways, and we recommend siting turbines sufficiently away from these areas to minimize bat/bird mortality.
- The project footprint contains NWI wetlands, and at least one turbine appears to be sited within a NWI wetland. WCA requirements must be fulfilled – contact the local WCA authority or BWSR to ensure WCA requirements are met. We generally recommend that projects avoid any wetland type areas as these soils do not generally support project components and construction delays/difficulties are common.
- Use wildlife-friendly erosion control products to minimize entrapment and death of small animals (additional details attached). We also recommend mulches free from plastics, particularly when used near waterbodies.
- Use invasive species prevention best management practices, which include inspecting and cleaning equipment at a site before moving to another site (additional details attached).

Comments regarding the Red Rock Solar project:

- An NHIS review is required. Please submit the NHIS data request form (form at link of the [NHIS webpage](#)).

- The project footprint contains NWI wetlands. WCA requirements must be fulfilled – contact the WCA authority to check that. We generally recommend that projects avoid any wetland type areas as these soils do not generally support project components and construction delays/difficulties are common.
- Please follow the Commercial Solar Siting Guidance:  
[http://files.dnr.state.mn.us/publications/ewr/commercial\\_solar\\_siting\\_guidance.pdf](http://files.dnr.state.mn.us/publications/ewr/commercial_solar_siting_guidance.pdf)
- Please follow the Prairie Establishment & Maintenance Technical Guidance for Solar Projects:  
[http://files.dnr.state.mn.us/publications/ewr/prairie\\_solar\\_tech\\_guidance.pdf](http://files.dnr.state.mn.us/publications/ewr/prairie_solar_tech_guidance.pdf)
- Use wildlife friendly erosion control and invasive species prevention BMPs (details attached).

Please note that this review is based on the turbine locations and project boundaries you supplied via a May 28<sup>th</sup> email. If additional changes to the project footprint, turbines, or other resource concerns are identified, additional review may be necessary. Also as a note, no access roads, transmission lines, or other infrastructure was supplied or reviewed; likewise, no water appropriation, stream crossing, or other potential impacts to water bodies were discussed or reviewed. If additional changes are made to the project, please contact us with those changes at your soonest convenience. This review should not be construed as a full environmental review of the project impacts.

We understand that the Upper Sioux community, the Lower Sioux community, and the Minnesota Historical Society have expressed concerns about visual impacts to Red Rock Ridge and Jeffers Petroglyphs. According to [DNR's commercial wind guidance](#), "A viewshed analysis may be recommended by the DNR to determine if potential impacts would occur to state parks, Scientific and Natural Areas, National Historic Districts, or National Historic Landmark Districts". Although the DNR is not recommending a viewshed analysis, we acknowledge that any measures to minimize visual impacts to Red Rock Ridge and Jeffers Petroglyphs would benefit the recreational experiences of visitors to Rock Ridge Prairie Scientific Natural Area. Furthermore, we encourage Apex to continue working with the Lower Sioux community and the Upper Sioux community to avoid impacts and concerns regarding cultural resources.

Please let me know if you need more information.

Thanks,

Joanne Boettcher  
Regional Environmental Assessment Ecologist  
MNDNR – Mankato  
(507) 389-8813



## Standard Erosion Control and Invasive Species Prevention Best Practices

Take precautions when working near waterbodies to prevent sedimentation and erosion:

- Erodible surfaces should not be left exposed for greater than one day. For example, work should not commence late in the week if it will be left unfinished over a weekend.
- Work should not commence if rain is predicted.
- All wheeled or tracked construction equipment should be restricted to work areas above the stream bank.
- Fill material should not be stockpiled in the floodplain.
- Backfill placed below Ordinary High Water (OHW) should consist of clean granular material free of fines, silts, soils, and mud.
- Use [Best Practices for DNR General Public Waters Work Permit GP 2004-0001: Species Protection](#). Refer to pages: 3, 11, 14, 16, 25, 33, and 34 as relevant to a particular project.
- Vegetative “grout” should be incorporated with any installed rip rap (see page 33 of above link).
- [Native species planting/seeding](#) should be used.
- DNR Public Waters Work Permit may be required. Permit requirements must be followed.

Use wildlife friendly erosion control:

- Biodegradable netting should be used, preferably natural materials with short degradation periods.
- Erosion control blankets should be limited to bio-netting or natural netting types due to the risk of entanglement and death of small animals. [2018 MnDOT Standards Specifications for Construction](#) identify acceptable materials in Category 3N or 4N mulches.
- Do not use products that require UV-light to degrade (also called “photodegradable”), as they do not degrade properly when covered/shaded.
- Do not use products containing plastic mesh netting or other plastic components.
- Do not use mulch products that contain synthetic (plastic) fiber additives near waterbodies.
- See [Wildlife Friendly Erosion Control](#) for more information.

Take active steps to prevent invasive species introduction and spread:

- Clean all equipment (including but not limited to: vehicles, clothing, and gear) at a site prior to moving to another site. All soil, aggregate material, mulch, vegetation, seeds, animals, etc. need to be removed using a hand tool, brush, compressed air, pressure washer, or otherwise.
- If equipment is not cleaned before arriving to a work site, then clean the equipment in the parking or staging area, ensuring no material is deposited at the new site. Material cleaned from equipment should be disposed of legally.
- All equipment (including but not limited to: waders, tracked vehicles, barges, boats, turbidity curtain, sheet pile, and pumps) used for work in an “infested water” must be adequately decontaminated. See [Watercraft Decontamination Manual](#) for more information.
- See [Come Clean, Leave Clean](#) for more detailed guidance. This guidance is required for those working on DNR lands as part of grant or contract or are working under a permit, your grant, contract, or permit.

### Referenced Links

[https://files.dnr.state.mn.us/waters/watermgmt\\_section/pwpermits/gp\\_2004\\_0001\\_chapter1.pdf](https://files.dnr.state.mn.us/waters/watermgmt_section/pwpermits/gp_2004_0001_chapter1.pdf)

<https://bwsr.state.mn.us/seed-mixes>

<https://files.dnr.state.mn.us/eco/nongame/wildlife-friendly-erosion-control.pdf>

<http://www.dot.state.mn.us/pre-letting/spec/2018/2018-spec-book-final.pdf>

<https://www.dnr.state.mn.us/invasives/dnrlands.html>

<https://www.dnr.state.mn.us/invasives/dnrlands.html>

[https://files.dnr.state.mn.us/natural\\_resources/invasives/mndnr\\_ais\\_decontamination\\_handbook.pdf](https://files.dnr.state.mn.us/natural_resources/invasives/mndnr_ais_decontamination_handbook.pdf)

May 19, 2020

Dylan Ikkala  
Development Manager  
Apex Clean Energy, Inc.  
8665 Hudson Boulevard North, Suite 110  
Lake Elmo, MN 55042

Re: Big Bend Wind Farm

Dear Dylan Ikkala:

The Minnesota Pollution Control Agency (MPCA) Environmental Review Unit has reviewed the information in the letter and attachment dated May 8, 2020, regarding the Big Bend Wind Farm in Cottonwood and Watonwan counties, Minnesota. Based on the limited information provided, and regarding matters for which the MPCA has regulatory responsibility or other interests, the MPCA staff has the following comments for your consideration.

- If the total project area will disturb a total of one acre or more of land, a National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) Construction Stormwater (CSW) Permit is required from the MPCA. The owner and operator (usually the general contractor) are jointly responsible for obtaining and complying with the conditions of the CSW Permit. A detailed Stormwater Pollution Prevention Plan (SWPPP), containing stormwater management requirements both during and post construction, as well as erosion control and sediment control requirements during construction, must be prepared prior to submitting a CSW Permit application. CSW Permit coverage is required prior to commencing land disturbing activities (i.e., clearing, grading, filling, or excavating) relating to the project. For an overview of this permit and program, please refer to the following factsheet: <http://www.pca.state.mn.us/publications/wq-strm2-05.pdf>. Questions regarding CSW Permit requirements should be directed to Roberta Getman at 507-206-2629 or [Roberta.Getman@state.mn.us](mailto:Roberta.Getman@state.mn.us).
- The MPCA recommends you utilize the MPCA Special Waters and Impaired Waters Search mapping tool to identify special or impaired waters located near proposed projects. The mapping tool is located on the MPCA website at: <http://pca-gis02.pca.state.mn.us/CSW/index.html>. Construction stormwater related impairments will dictate additional increased stormwater treatment during construction and require additional increased permanent treatment post construction. These requirements will be included in the NPDES/SDS CSW Permit. The project proposer should determine that compliance with these increased stormwater water quality treatments can be achieved on the project site or elsewhere. Information regarding the MPCA's CSW Program can be found on the MPCA's website at <http://www.pca.state.mn.us/water/stormwater/stormwater-c.html>.

Dylan Ikkala  
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Questions regarding CSW Permit requirements should be directed to Roberta Getman at 507-206-2629 or [Roberta.Getman@state.mn.us](mailto:Roberta.Getman@state.mn.us).

In addition, any project that will result in over 50 acres of disturbed area and has a discharge point within one mile of a special or impaired water is required to submit their SWPPP to the MPCA for a review at least 30 days prior to the commencement of land disturbing activities. If the SWPPP is found to be out of compliance with the terms and conditions of the General Permit, further delay may occur. The MPCA encourages the project proposer to meet with staff at preliminary points to avoid this situation. Questions regarding SWPPPs should be directed to Todd Smith at 651-757-2732 or [Todd.Smith@state.mn.us](mailto:Todd.Smith@state.mn.us).

We appreciate the opportunity to review this project. Please be aware that this letter does not constitute approval by the MPCA of any or all elements of the project for the purpose of pending or future permit action(s) by the MPCA. Ultimately, it is the responsibility of the project proposer to secure any required permits and to comply with any requisite permit conditions. If you have any questions concerning our review of this project, please contact me by email at [Karen.kromar@state.mn.us](mailto:Karen.kromar@state.mn.us) or by telephone at 651-757-2508.

Sincerely,

*Karen Kromar*

Karen Kromar  
Project Manager  
Environmental Review Unit  
Resource Management and Assistance Division

KK:bt

cc: Dan Card, MPCA, St. Paul  
Roberta Getman, MPCA, Rochester  
Todd Smith, MPCA, St. Paul  
Randy Hukriede, MPCA, Marshall