

## **Appendix B**

### **Aquatic Resources Desktop Assessment**

## TECHNICAL MEMORANDUM

**To:** Tatanka Ridge Wind, LLC  
1125 NW Couch Street, Suite 600  
Portland, Oregon 97209

**From:** Jake Powell, Senior Project Manager and Ecologist, SWCA Environmental Consultants

**Date:** May 17, 2018

**Re:** Aquatic Resources Desktop Mapping for the Tatanka Ridge Wind Project

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SWCA Environmental Consultants (SWCA) completed desktop mapping of aquatic resources for the Tatanka Ridge Wind Project (project) in Deuel County, South Dakota. The purpose of the desktop mapping is to identify aquatic resources that could qualify as waters of the U.S. (WOUS) and be subject to U. S. Army Corps of Engineers Section 404 permitting under the Clean Water Act, and, subsequently, to use the results to guide project infrastructure siting. Potential aquatic resources (wetlands or waterbodies with ordinary high water marks) were mapped in a geographic information system (GIS) polygon or line shapefile. The results were submitted to Tatanka Ridge Wind, LLC on May 15, 2018.

The desktop mapping was completed using the Esri ArcMap program. I completed the mapping; in addition to being a senior project manager and ecologist, I am also a wetland biologist experienced with aerial imagery interpretation and wetland resources in eastern South Dakota.

The following spatial layers were used to guide the mapping:

- U.S. Fish and Wildlife Service National Wetlands Inventory (NWI) database
- U.S. Geological Survey National Hydrography Dataset (NHD)
- National Agriculture Imagery Program (NAIP) 2016 digital orthophotography
- NAIP 2016 color infrared imagery
- Natural Resources Conservation Service Soil Survey Geographic Database (SSURGO) soil survey data
- Google Earth historical imagery 1984 through 2016
- Buffalo Ridge III Wind Project wetland delineation layers<sup>1</sup>

If you have any questions or would like additional information, please contact me at 307-673-4303 or [jpowell@swca.com](mailto:jpowell@swca.com).

Sincerely,



Jake Powell, SWCA Senior Project Manager / Ecologist

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<sup>1</sup> HDR Engineering Inc. 2009. Wetland Report for Buffalo Ridge III Wind Project. Minneapolis, Minnesota. November 2009.

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