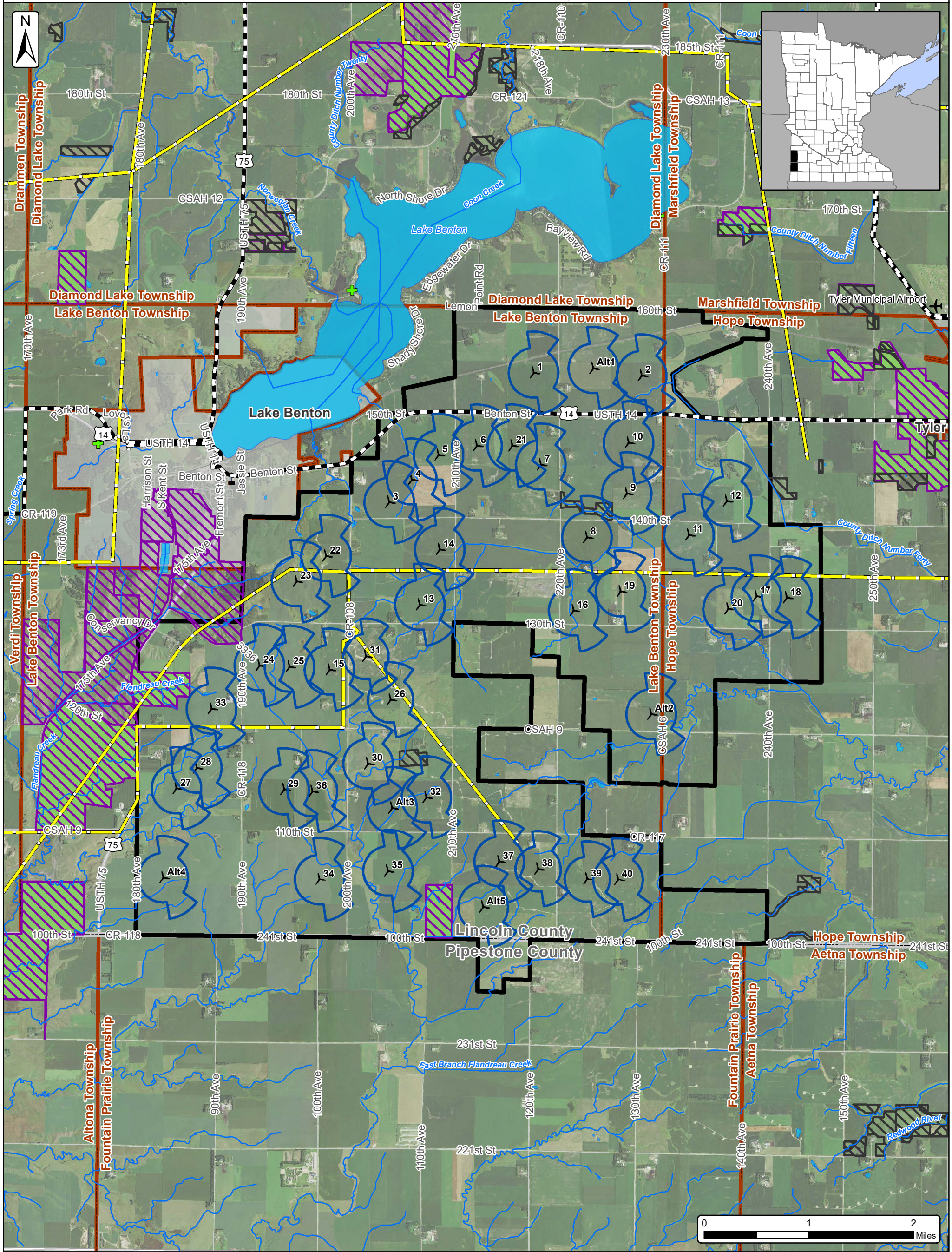


# Buffalo Ridge Wind

## Figure 4 - Turbine Layout and Constraints

Lincoln County & Pipestone County, Minnesota



|                                     |  |                                     |
|-------------------------------------|--|-------------------------------------|
| Airports (USGS)                     | Watercourses (NHD)                                       | Turbine Layout (2/11/2020)          |
| Schools (USGS)                      | Waterbodies (NHD)  | Project Area 5/9/2019 (±17,609 Ac.) |
| County Parks                        | Protected Areas (USGS)                                   | Cities                              |
| Snowmobile Trails (MNDNR)           | State Funded Conservation Easements (RIM Reserve - BWSR) | Townships                           |
| Transmission Lines (Velocity Suite) | Wildlife Management Areas (MNDNR)                        | Counties                            |
|                                     | 3x5 Wind Buffer  |                                     |

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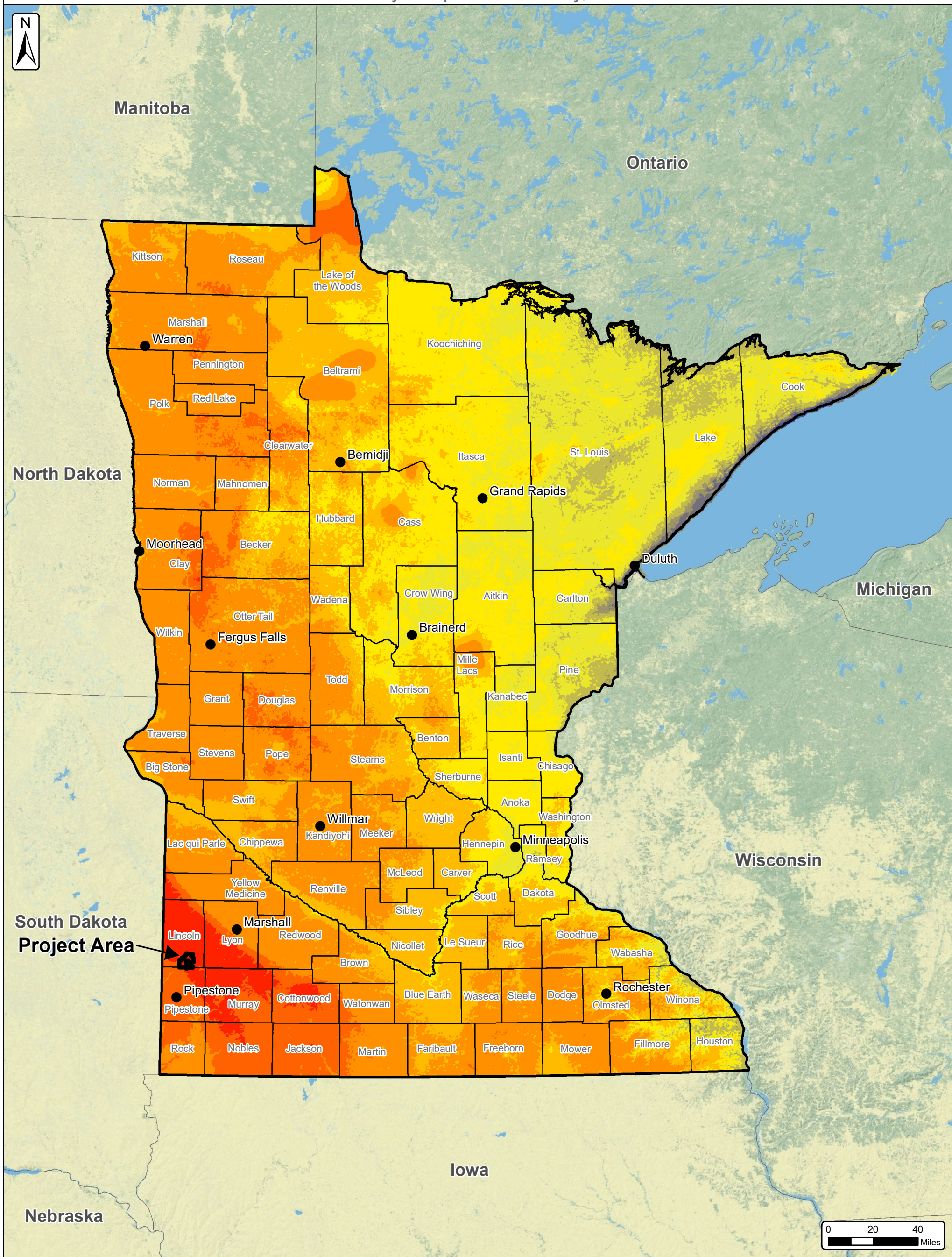
SOURCE: USDA NAIP 2017 IMAGERY



# Buffalo Ridge Wind

## Figure 5A - State Wind Resources Map

Lincoln County & Pipestone County, Minnesota



| Wind Speed          |                         |
|---------------------|-------------------------|
| Meters/Second (mph) |                         |
|                     | 5.5 - 5.9 (12.3 - 13.2) |
|                     | 5.9 - 6.3 (13.2 - 14.1) |
|                     | 6.3 - 6.7 (14.1 - 15)   |
|                     | 6.7 - 7.1 (15 - 15.9)   |
|                     | 7.1 - 7.5 (15.9 - 16.8) |
|                     | 7.5 - 7.9 (16.8 - 17.7) |
|                     | 7.9 - 8.3 (17.7 - 18.6) |
|                     | 8.3 - 8.7 (18.6 - 19.5) |
|                     | 8.7 - 9.1 (19.5 - 20.4) |
|                     | 9.1 - 9.5 (20.4 - 21.3) |

Project Area  
5/9/2019 (±17,609 Ac.)

Counties



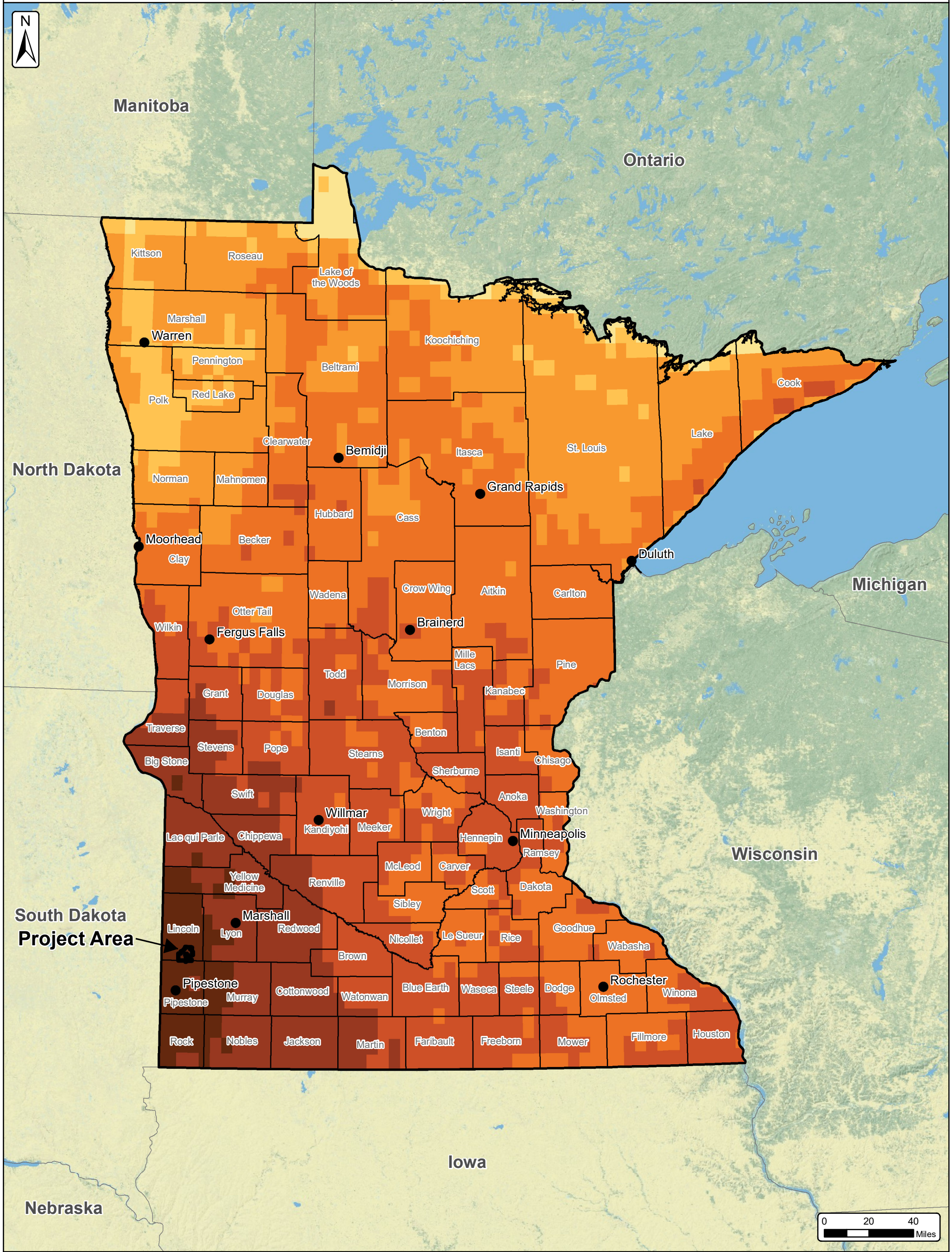
SOURCE: ESRI BASEMAPS



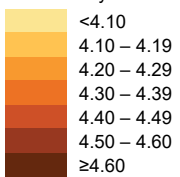
# Buffalo Ridge Wind

## Figure 5B - State Solar Irradiance Map

Lincoln County & Pipestone County, Minnesota



Annual Average Solar Resource  
(SUNY/NREL, 2015)  
kWh/m<sup>2</sup>/Day



Project Area  
5/9/2019 (±17,609 Ac.)

Counties



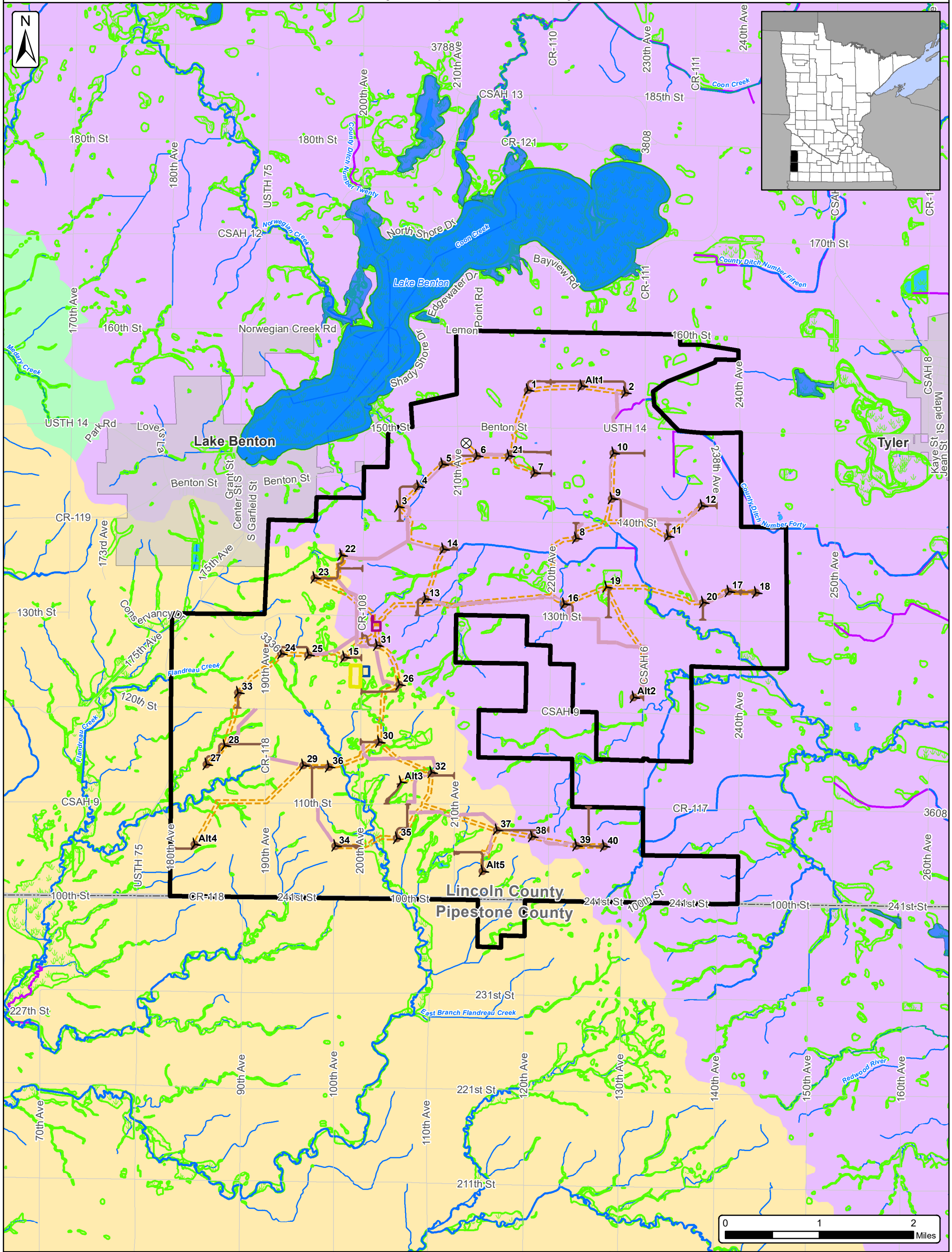
SOURCE: ESRI BASEMAPS



# Buffalo Ridge Wind

## Figure 6 - Surface Water Map

Lincoln County & Pipestone County, Minnesota



- |  |                                  |   |
|--|----------------------------------|---|
| Watercourses (NHD)                     | Wetlands (NWI with MNDNR Update) | Turbine Layout (2/11/2020)                  |
| Waterbodies (NHD)                      | Watersheds (NHD- HUC8)           | MET Tower                                   |
| Assessed Streams (MNDNR)               | Lower Big Sioux                  | Access Road (2/13/2020)                     |
| Public Watercourses (MNDNR)            | Middle Big Sioux                 | Preliminary Crane Paths                     |
| Buffer Protection Watercourses (MNDNR) | Redwood                          | Collection Corridor (2/13/2020)             |
| Public Water Basin (MNDNR)             |                                  | O&M Area (05/16/2019)                       |
|  |                                  | Proposed Substation (03/29/2019)            |
|  |                                  | Potential Laydown/ Batch Plant (07/25/2019) |

Project Area 5/9/2019 (±17,609 Ac.)

Cities

Counties

**COMMERCE DEPARTMENT**

SOURCE: NHD WATERSHEDS

