

Congratulations on receiving a personalized wind map from the Center for Wind Energy (CWE) at James Madison University. We provide wind related services to local governments, state agencies, landowners, academia, non-governmental organizations, and businesses throughout the Commonwealth. *This sample map will help you understand the data provided on your map.*

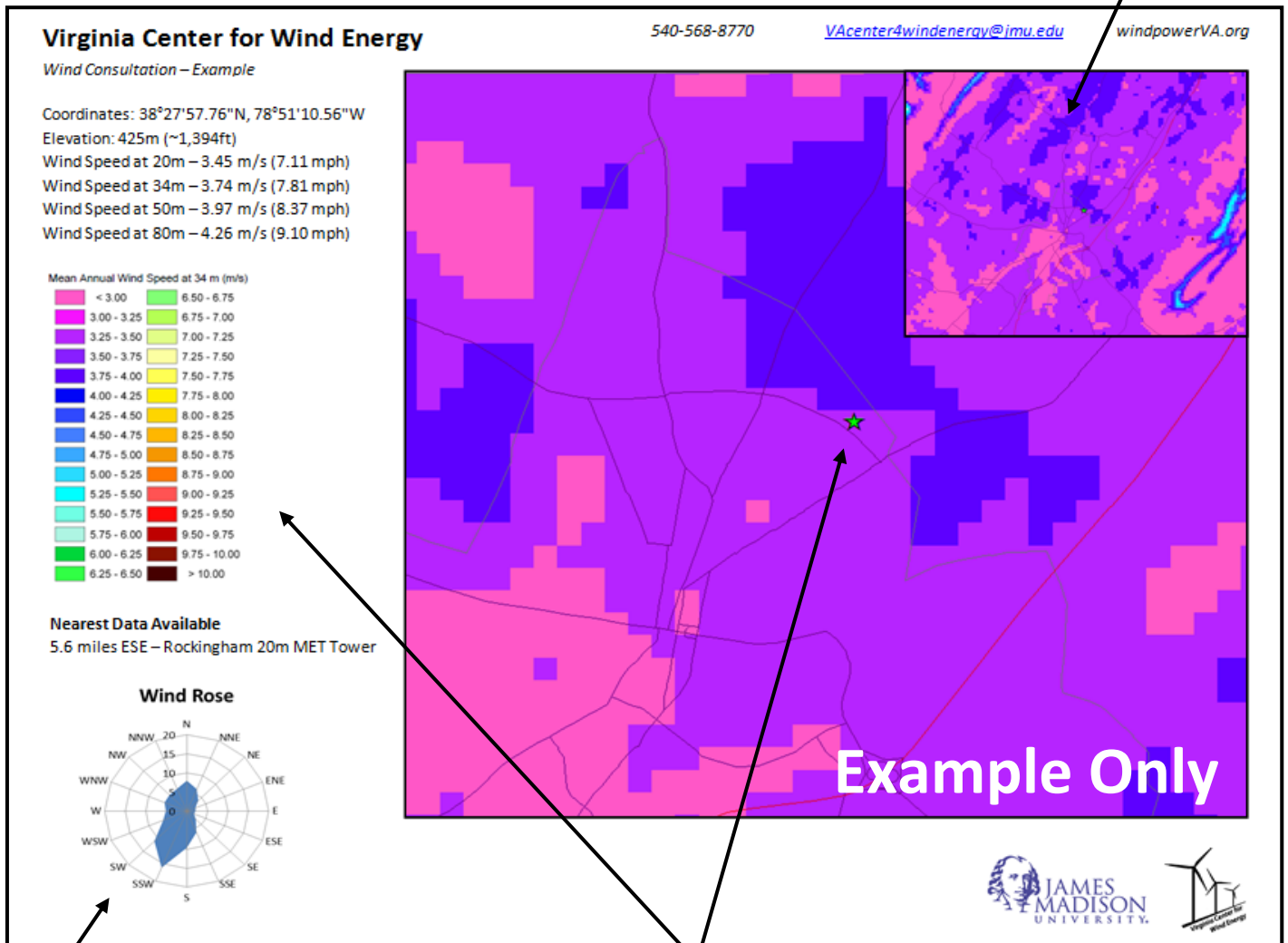
The Data

The star marks the location where we retrieved data from the wind map. The GPS coordinates and elevation for your site are provided. Estimates of your mean annual wind speed are provided in meters per second (m/s) and miles per hour (mph) at 20 meters, 34 meters, 50 meters, and 80 meters. The typical residential scale project would require a height of around 34 meters (~111ft) while 50 and 80meters (~164-262ft) is more suitable for a utility scale project. You will also see the distance to the nearest data set from your site. Such data sets have been collected through the State Based Anemometer Loan Program(SBALP) and are available upon request.

According to the USDOE publication, Small Wind Electric Systems: A Virginia Consumer's Guide, the minimum average annual wind speed is 4 m/s (9mph) for an off-grid system and 5.4 m/s (12mph) for a grid-connected system.

Inset Map

This map provides a zoomed-out view of your site. Local roads and interstates are indicated in black. Bold black lines indicate County limits.



Wind Rose

A wind rose provides an estimate of your prevailing wind direction. The blue area represents the percentage of time the wind comes from a particular direction.

For this example, approximately 16% of the wind comes from the SSW.

Wind Map

The colors on the map correspond to the mean wind speed (at 34 meters) legend on the left.

The Virginia wind map was purchased by the VCWE from AWS Truepower.