Wind Resources in Montana

Federal and Park Land

Federal and Parks Reclassified

Land Use

Land Use Reclassified

Wind Power

Wind Power Reclassified

Final Calculation

We started out with a Basic Map of Montana. We then used various types of data pertinent to the project. We converted them to raster data. After that we reclassified them, then performed a raster calculation with them. Wind Power Classification (WPC) is a good example of our process—we started out with a Vector file showing various wind power classifications from the National Renewable Energy Laboratory. We converted it to a raster and then reclassified it. This gives us exactly two categories: 1 and 0. 1 being usable land based on WPC, 0 being not. This makes a calculation extremely easy. After reclassifying all of the different data types, we simply multiplied all of the reclassified data together. We ended up with a final calculation, showing all of the places that Wind Farms could be put up.

Conclusions

Montana has tremendous wind power generation capability, possibly even to the point of energy independence. Wind power can bring Montana and the rest of the country into a bright future.

Sources

1) National Renewable Energy Laboratory
2) US Census Bureau
3) Mt.gov-Montana Natural Heritage Metadata

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