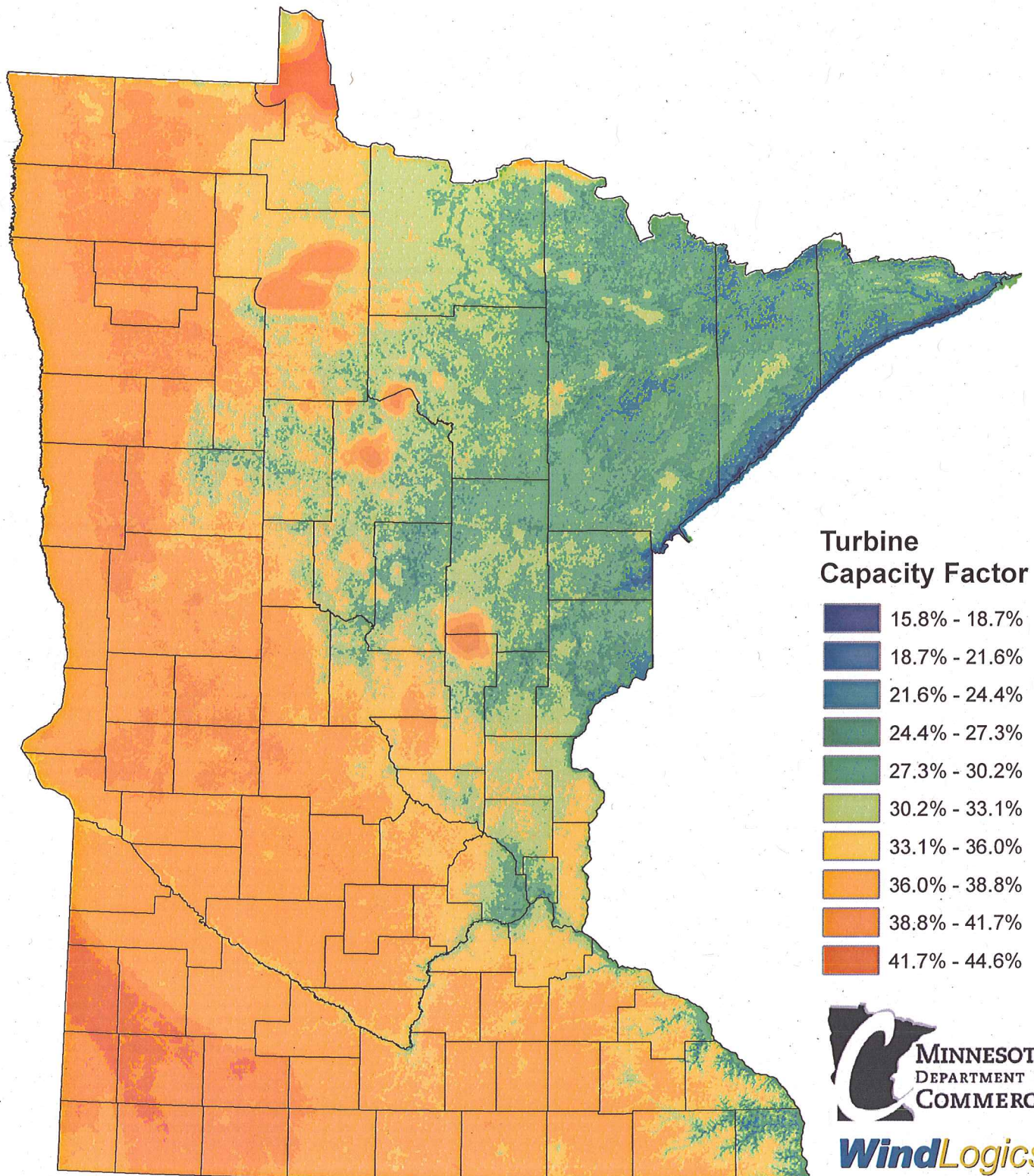
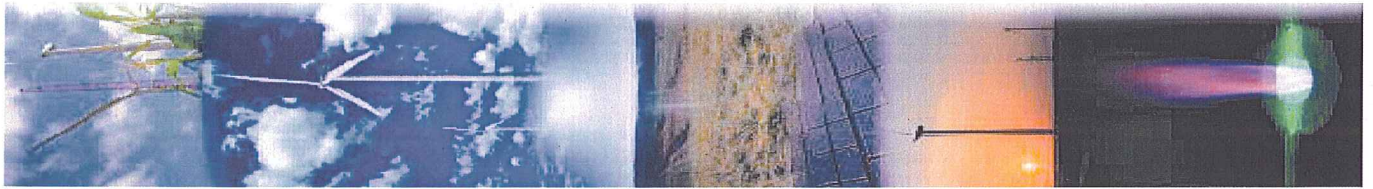


Minnesota's Wind Resource by Capacity Factor at 80 Meters

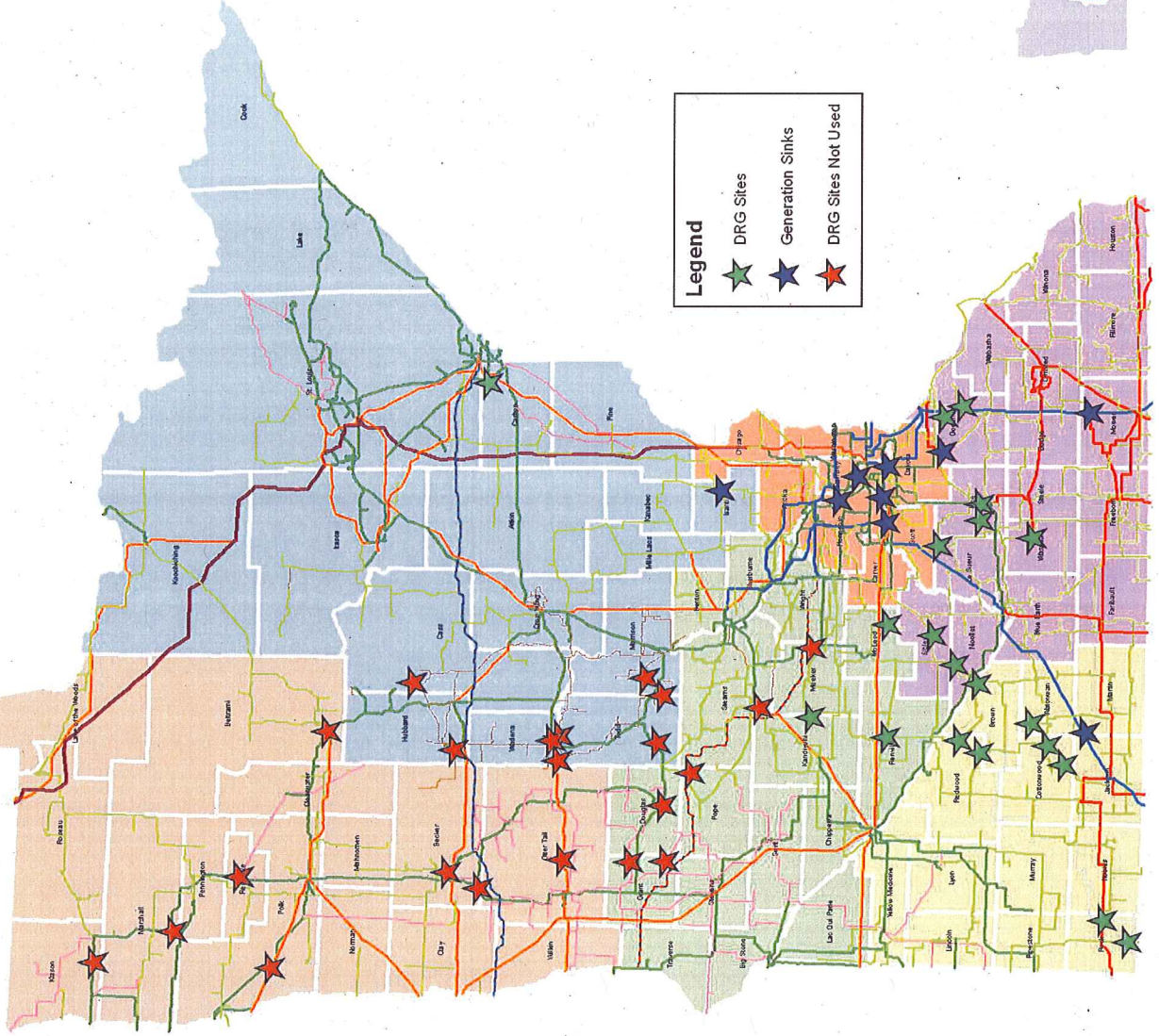


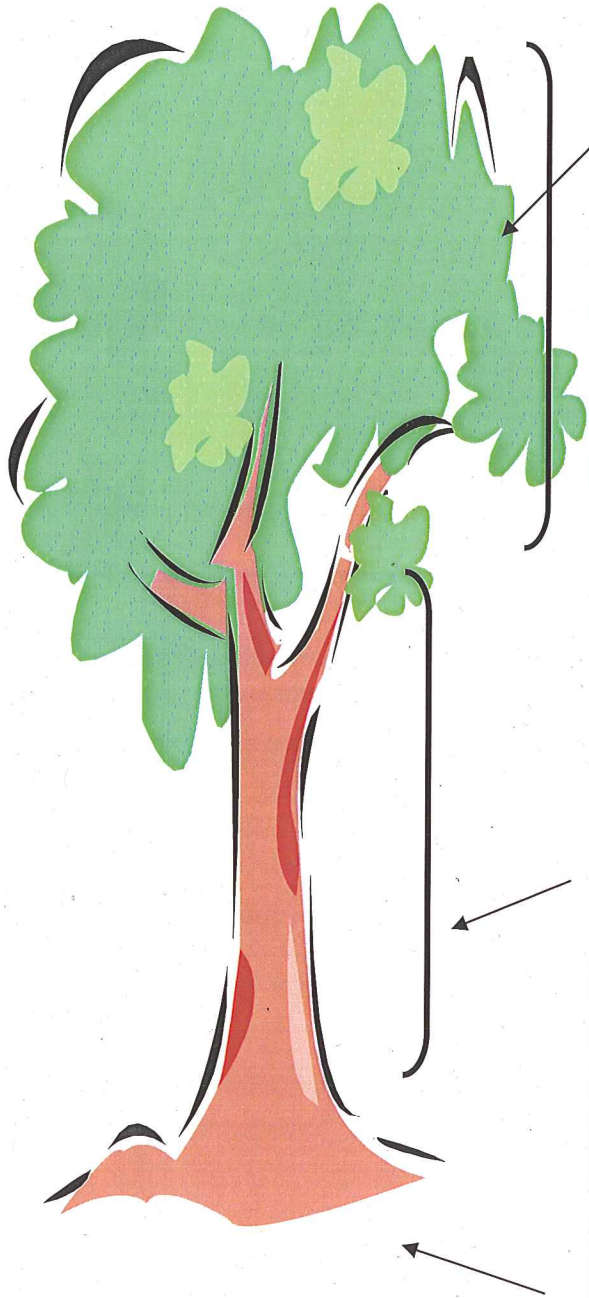
This map has been prepared under contract by WindLogics for the Department of Commerce using the best available weather data sources and the latest physics-based weather modeling technology and statistical techniques. The data that were used to develop the map have been statistically adjusted to accurately represent long-term (40 year) wind speeds over the state. Capacity factors are based on a 1.65 MW turbine, and production has been discounted 15% to represent real world conditions. Data has been averaged over a cell area 500 meters square, and within any one cell there could be features that increase or decrease the values shown on this map. This map shows the general variation of Minnesota's wind resource and should not be used to determine the performance of specific projects.

January 2006



Map of Final DRG Sites





Tops, Limbs and Branches 18% Volume

- Estimated Current Statewide Demand for Open-market Non-mill residue Woody Biomass = 900,787 Green Tons (GT)
 - Open-market Non-mill residue Woody Biomass includes: logging residue and roundwood and may include salvage sites, land clearing debris, dead trees and urban wood waste.
 - Only some of the above sources of Woody Biomass are forest-derived.
- Estimated Annual Statewide Supply of Woody Biomass (Logging Residue) across all ownerships = 1,740,416 GT
 - Assumes a merchantable timber harvest
 - Assumes 50% recoverability
- Estimated Total Statewide Inventory of Woody Biomass = 151,972,621 GT
 - FIA data. Accounts for 18% of total live standing timber
 - Not an annual figure
 - Does not account for BMPs or extraction rates

Traditional Wood Product 77% Volume

- Current (2005) Wood Harvested and Utilized by Industry and Fuelwood Users from State Lands = 8.32 million GT
- Estimated Total Statewide Inventory of Live Tree Volume to a 3 inch top = 650,105,101 GT
 - FIA data. Accounts for 77% of total live standing timber volume
 - Not an annual figure

Stumps 5% Volume

- Currently, the harvesting of stumps is not a frequently used practice in MN

Brushland and Timber Stand Improvement (TSI)/Pre-commercial Material

- Estimated Annual Available Statewide Brushland Material = 1,195,693 GT
 - Assumes a 15 year rotation
 - Does not account for BMPs or extraction rates
- Range of Estimated Annual Available Statewide TSI/Pre-commercial Material =
 - 154,673 GT for a Low Range Estimate
 - 386,681 GT for a High Range Estimate
 - Does not account for BMPs or extraction rates