

Figure 2. Potential Wind Sites, Transmission Lines and Roads

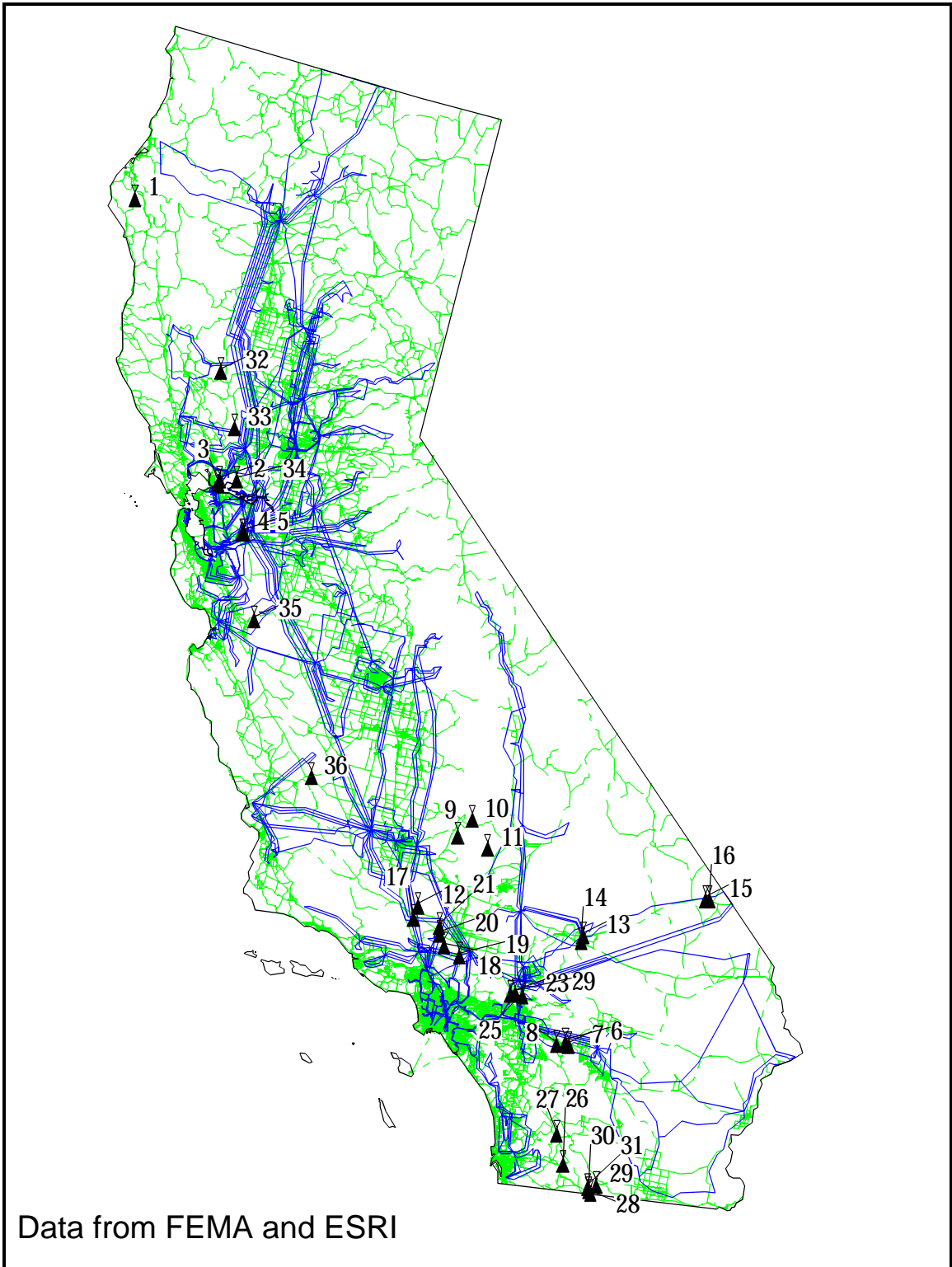


Figure 3. Wind Power Classes and Transmission Lines

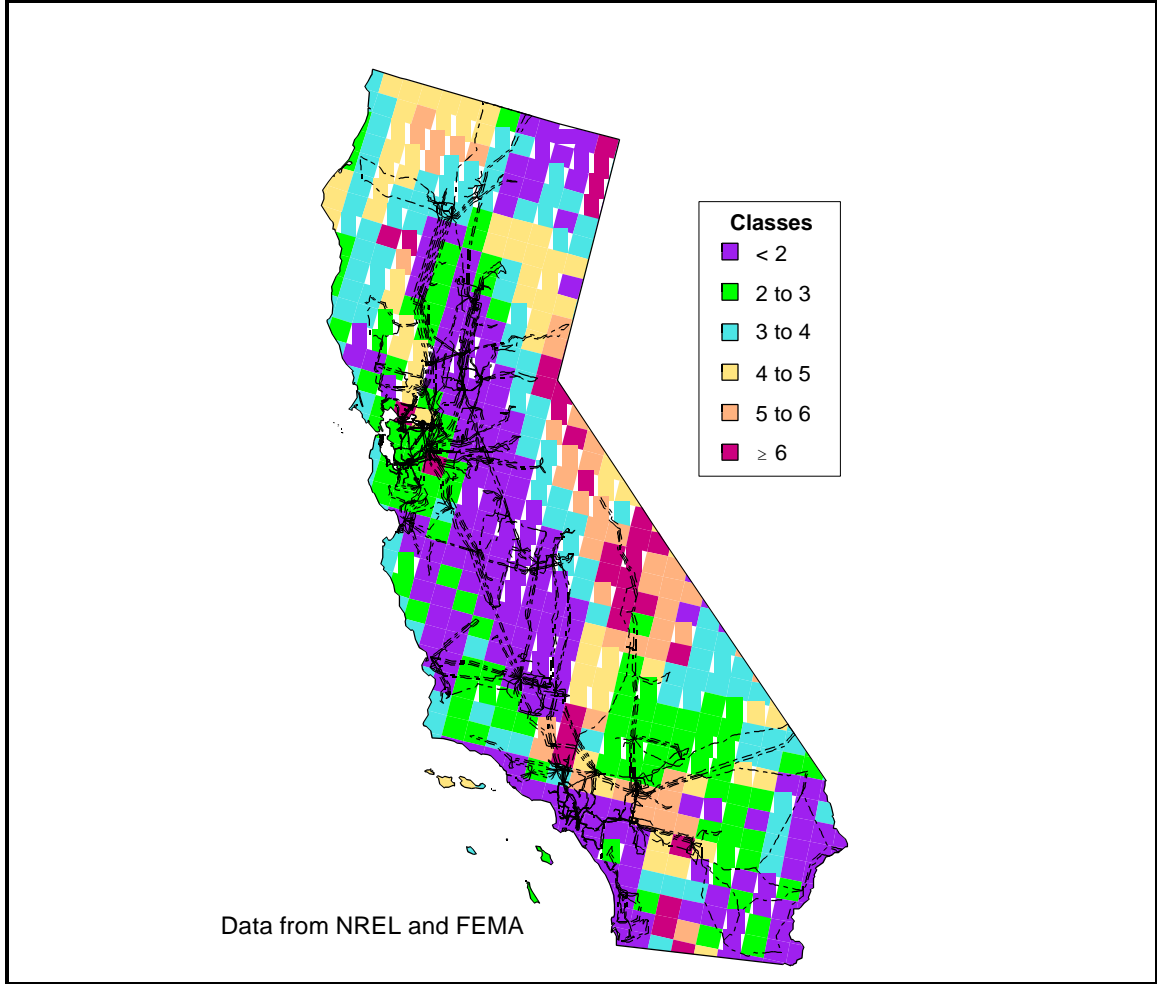


Table 2. Wind Power Classes at 50 m (164 ft)

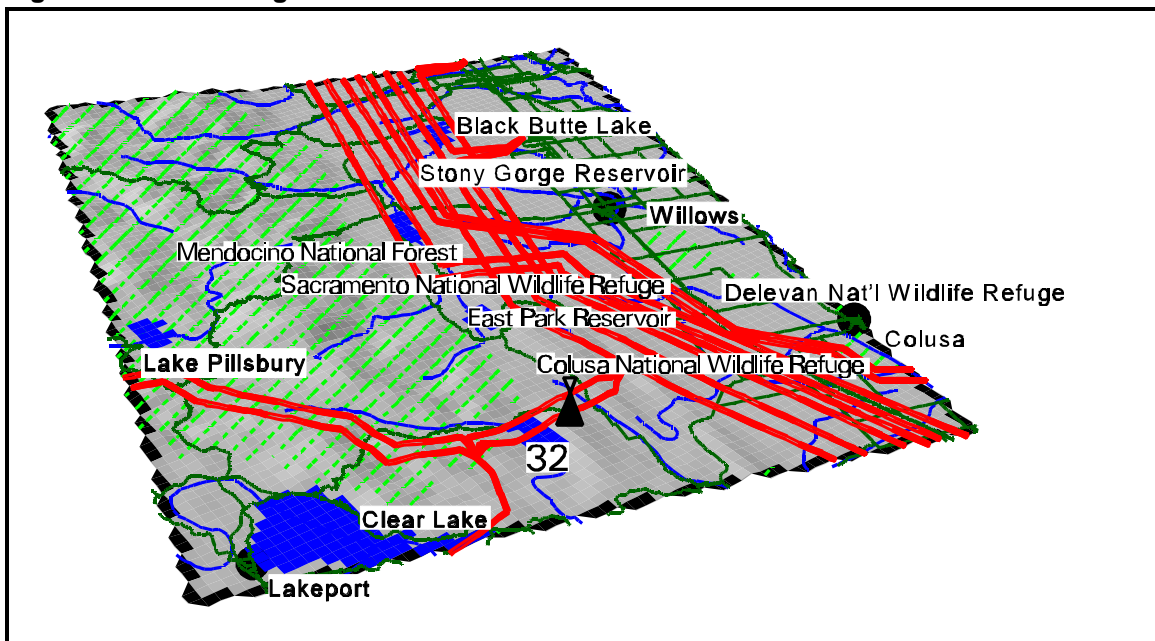
Power Class	Wind Power (W/m ²)	Speed (m/s)
<2	<200	<5.6
2-3	200-300	5.6-6.4
3-4	300-400	6.4-7.0
4-5	400-500	7.0-7.5
5-6	500-600	7.5-8.0
>6	>600	>8.0

Source: Elliott and Schwartz (1997).

To assess the viability of development at specific CEC sites and to estimate the sizes of resources, when necessary, digital elevation models (DEM), which are digital records of terrain elevations for ground positions at regularly spaced horizontal intervals, were obtained. DEMs are developed from stereo models or digital contour line files derived from the U.S. Geological Survey (USGS) topographic quadrangle maps and provided by the USGS (USGS 1990). We processed the DEMs to create GIS surface lattices and contour line coverages. Using contour lines as a backdrop, we were able to place the CEC sites on our maps, following ridge lines and general topography.

Relief maps in the vicinity of the wind sites were then produced. Relief maps were constructed from DEMs. Major roads, rivers, lakes, and transmission lines are shown on the relief maps (Figures 4 through 15). Rivers and lakes were obtained from the ESRI-ArcUSA data set. Again, wind sites are marked by the hub on the windmill symbol. We then used GIS to calculate distances from the wind sites to roads and transmission lines.

Figure 4. Walker Ridge



Data from USGS, ESRI, and FEMA