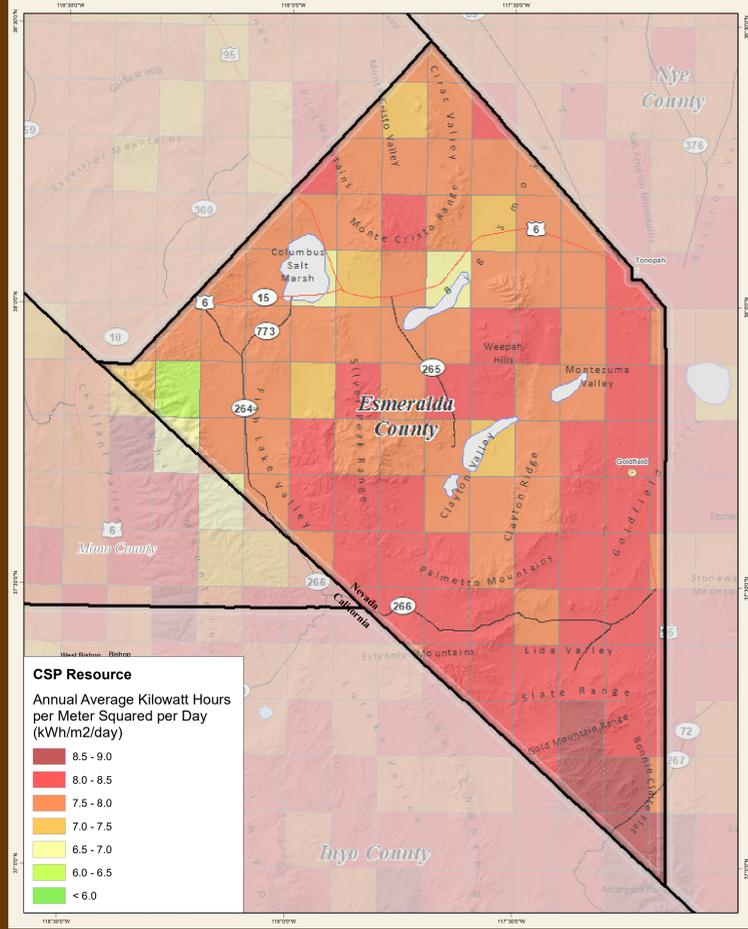
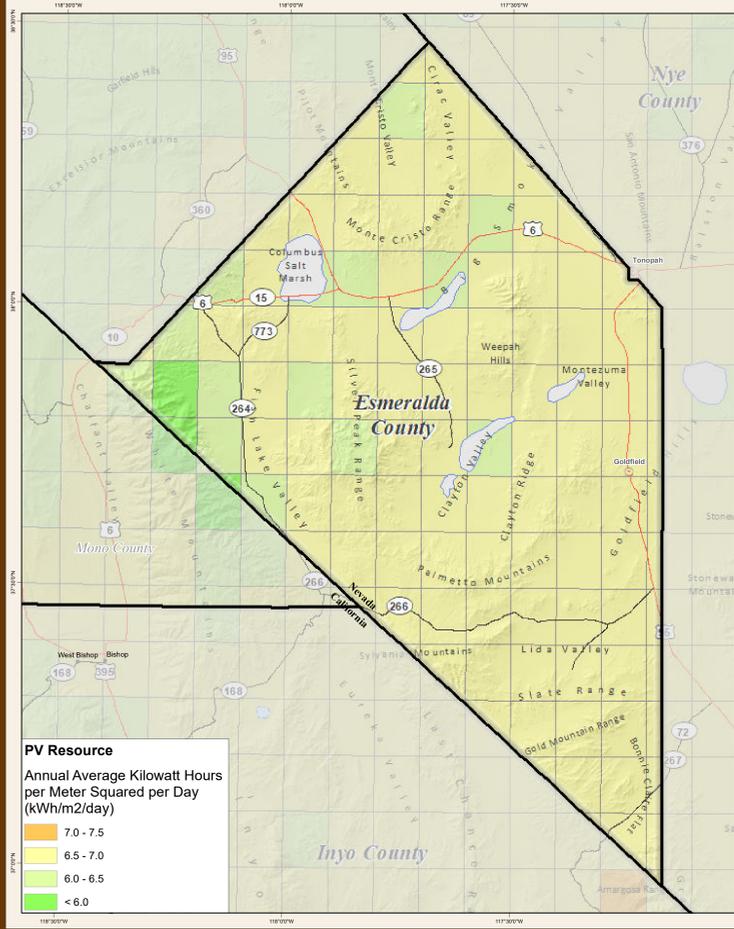


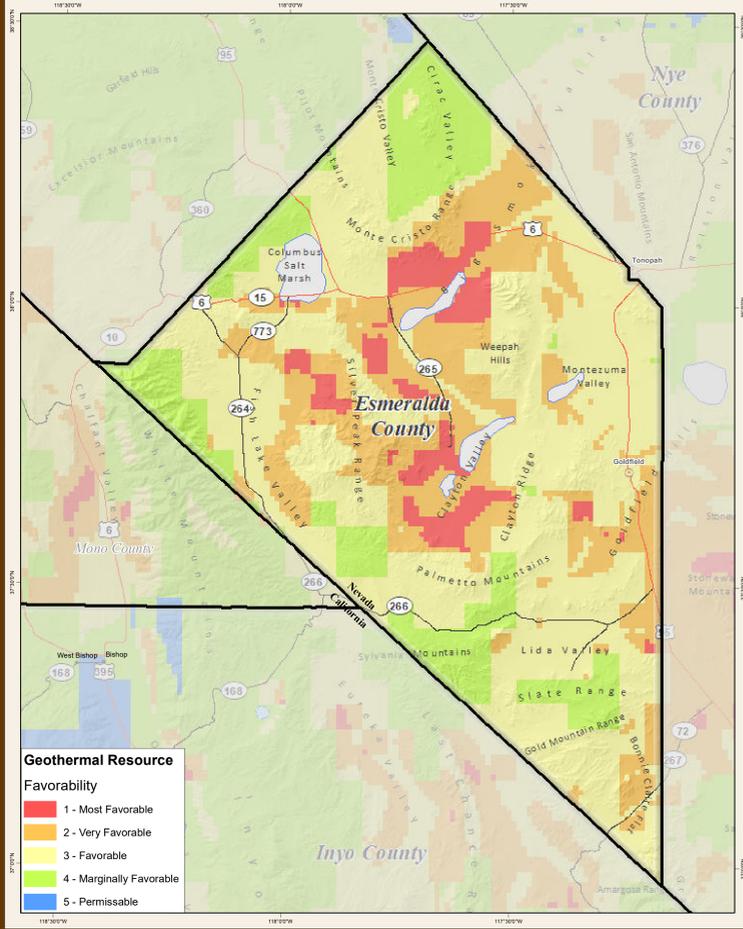
CONCENTRATING SOLAR POWER (CSP) RESOURCE



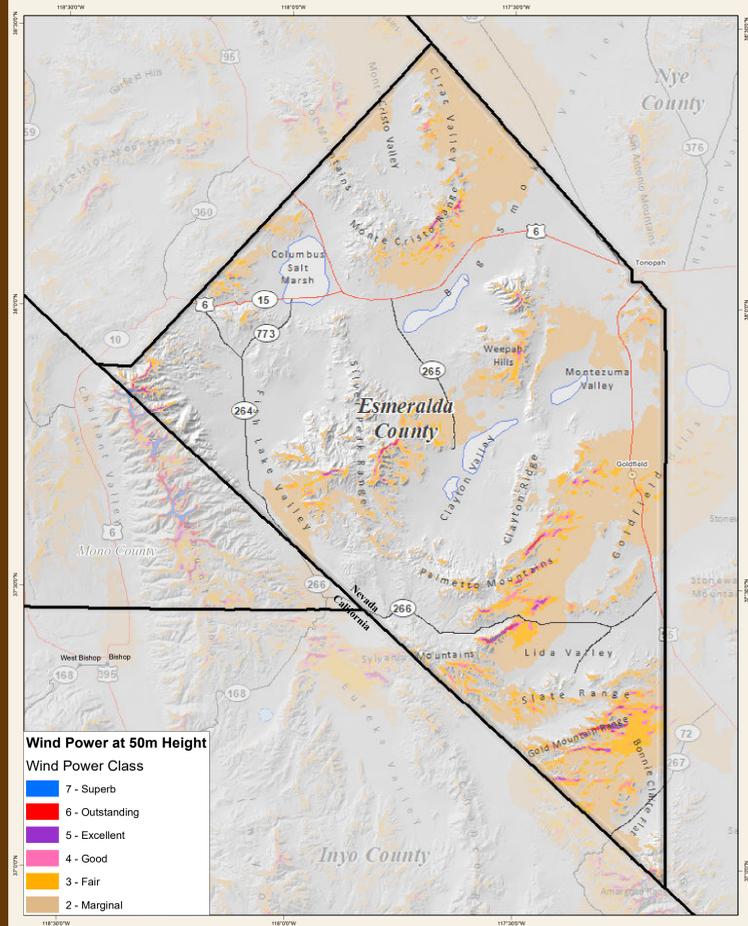
PHOTOVOLTAIC (PV) SOLAR RESOURCE



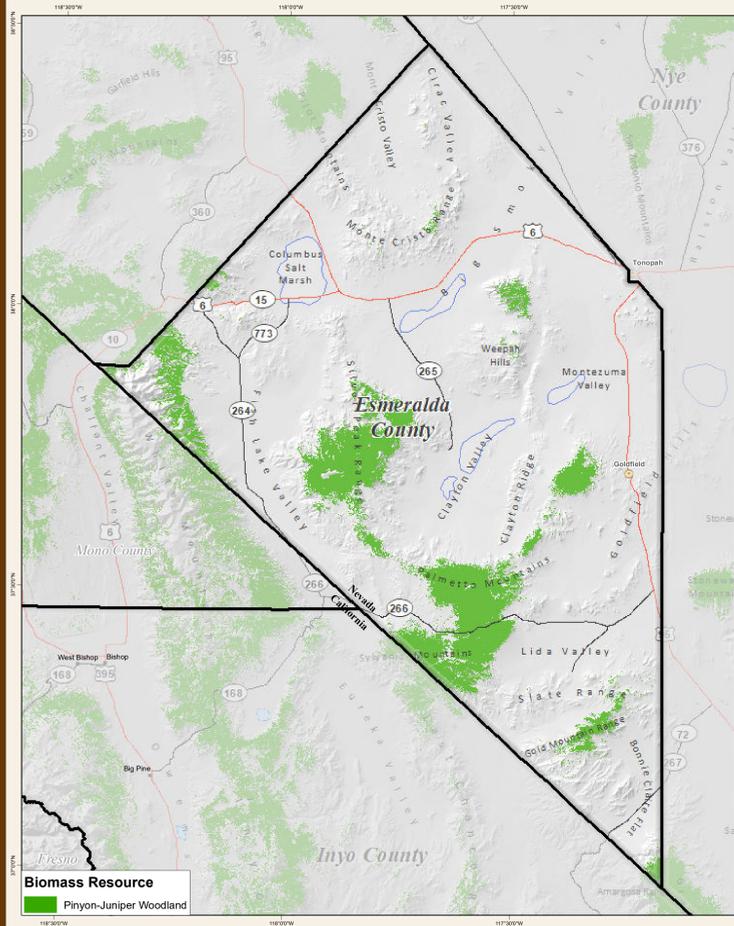
GEOHERMAL RESOURCE



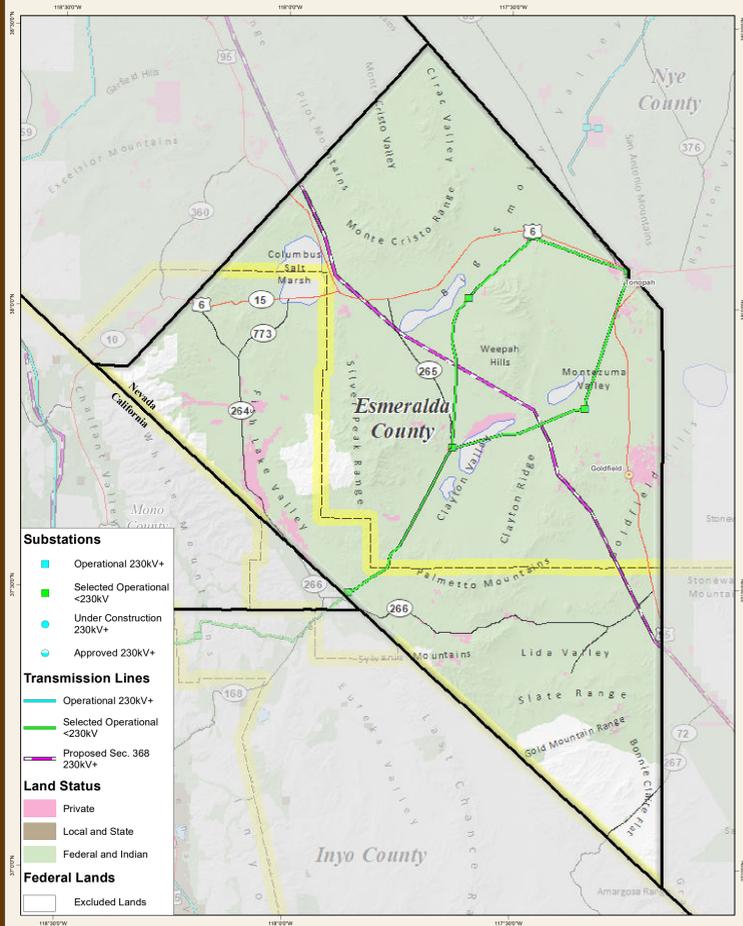
WIND POWER RESOURCE



BIOMASS RESOURCE



TRANSMISSION AND LAND STATUS



RURAL DESERT SOUTHWEST BROWNFIELDS COALITION ESMERALDA COUNTY, NV RENEWABLE ENERGY RESOURCES

SOLAR RESOURCE DISCUSSION AND SOURCES

The top left two maps show solar resource for Concentrating Solar Power (CSP) and tiled Photovoltaic (PV). CSP uses Direct Normal Irradiation (DNI) data and PV uses solar resource available to a photovoltaic panel, oriented south at an angle. The solar resource is in units of kWh/m2/day annually averaged for 1989-2009 over 10 sq km surface cells. The data was developed by SUNY Albany and National Renewable Energy Laboratory - NREL (2012), and are available from http://www.nrel.gov/data_solar.html. Values at 7.0+ (CSP) and 6.5+ (PV) kWh/m2/day are considered excellent potential.

GEOHERMAL RESOURCE DISCUSSION AND SOURCES

The top right map ranks favorability for Geothermal Potential on the ability to predict geothermal systems based on many factors as related to known geothermal systems. These data were presented in the Nevada Bureau of Mines and Geology Map 151 by Coobough and Others (2005). The map and data are available at <http://www.nbrmg.unr.edu/GeothermalIndex.html>.

WIND RESOURCE DISCUSSION AND SOURCES

The lower left map shows the annual average Wind Resource at 50-meter height above ground surface based on potential Wind Power Density in Wind (watts per meter squared). Wind power is divided into seven classes where class 3 or greater areas are suitable for most utility-scale wind turbine applications, class 2 areas are marginal for utility-scale applications, but may be suitable for rural applications, and class 1 areas (not shown) are generally not suitable. This data was developed by AWS TrueWind/NREL (2003), and is available from http://www.nrel.gov/data_wind.html.

BIOMASS RESOURCE DISCUSSION AND SOURCES

The lower center map displays the location of Great Basin Pinyon-Juniper Woodland, a biomass energy resource in the Lincoln County Regional Development Authority at <http://lcrda.com/index.html>. Mapped Pinyon-Juniper woodlands were extracted from the Southwest Regional GAP Landcover (SWRGAP, 2004) for Arizona, Nevada, and Utah and the California GAP Landcover (2008), available, respectively, at <http://earth.gis.usu.edu/swrgap/landcover.html> and <http://gap.utdaho.edu/index.php/calfornia-land-cover/>.

TRANSMISSION AND LAND STATUS DISCUSSION AND SOURCES

The lower right map shows 2017 land status in background, available from AZ, CA, NV, & UT BLM websites. Water bodies and excluded federal lands from the BLM/DOE Final Programmatic EIS for Solar Energy Development in Six Southwestern States (ES 12-24 DOE/EIS-0403, July 2012) are available at <http://solareis.anl.gov/maps/gis/index.cfm>. Excluded federal lands are shown in white. Electric utility (yellow hatched names) service areas are delineated by yellow buffered dashed outlines. Service areas are from the Nevada Rural Electric Association, Valley Electric Association (VEA), NV Energy, and the California Energy Commission. An overlay of photointerpreted transmission lines and substations (including switches) for capacities 230 kV or greater are also shown. Selected transmission lines and substations with lesser capacities are shown for the intertie area between VEA and Southern California Edison service areas. Transmission facilities are provided for informational purposes and may not be complete, especially outside the RDSBC.

OTHER DATA DISCUSSION AND SOURCES

Roads and State/County boundaries are from or modified from US Census TIGER data, 2011. Towns and Cities are from ESRI 2010 data. Hillshade was developed from the Shuttle Radar Topography Mission (SRTM) 90m Database (<http://srtm.csi.cgiar.org>).

Common Map Data

- County Seat
- Towns (Population 500+)
- Interstate Highway
- US Highway
- State Highway
- Other Roads
- Lakes and Reservoirs
- Lakes and Reservoirs, Intermittent
- Playa

The maps focus on Esmeralda County, Nevada, one of the six county Rural Desert Southwest Brownfields Coalition (RDSBC) members. The other county members are Lincoln, Nye, and White Pine, Nevada and Inyo, California. In the maps the counties other than Esmeralda County have a transparent white overlay that subdues their display.

Produced By: TerraSpectra Geomatics
Date Produced: November 7, 2017
Grid/Units: UTM, Zone 11, Meters
Projection: Transverse Mercator
Datum/Spheroid: GRS80/NAD83

0 5 10 20 30 40 50 Miles
1 inch = 11.8 miles

