

OREGON NATURAL DESERT ASSOCIATION



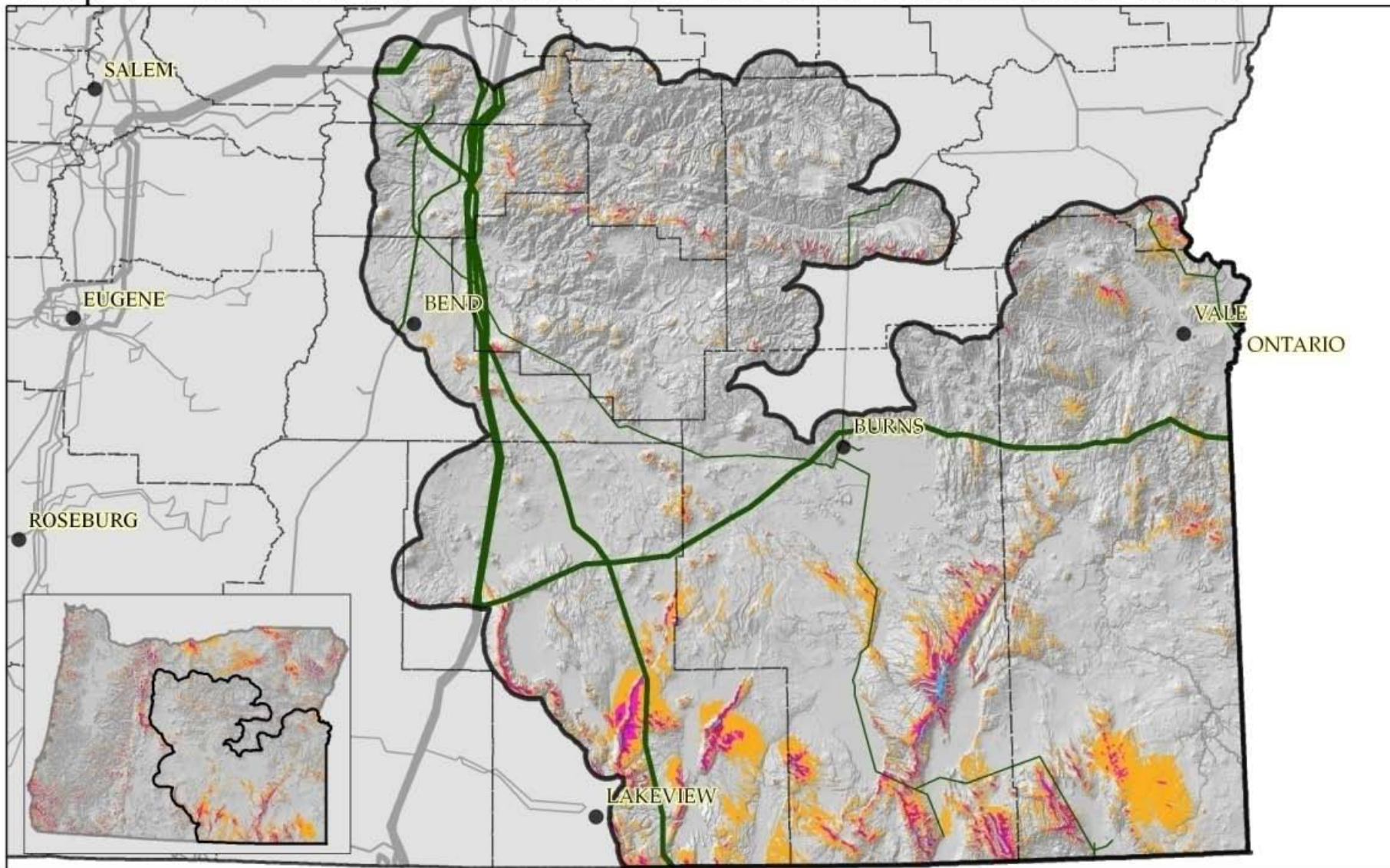
RENEWABLE ENERGY IN OREGON'S HIGH DESERT

Renewable Energy Surge

- National and state mandates
 - Energy independence
 - Address climate change
 - Develop clean sources of renewable energy
- Oregon's desert has outstanding wind, solar and geothermal energy potential
 - Potential conflicts with world-class wildlife and wildlands values.



Wind Power Potential and Electric Transmission Lines



Wind Power Potential

- Fair
- Good
- Excellent
- Outstanding
- Superb

Utility Lines KV

- 115 - 161 KV
- 230 KV
- 345 KV
- 500 KV



0 25 50 Miles

Data Sources:

Wind Resource Potential-
this data set has been
validated by NREL and
wind energy meteorological
consultants



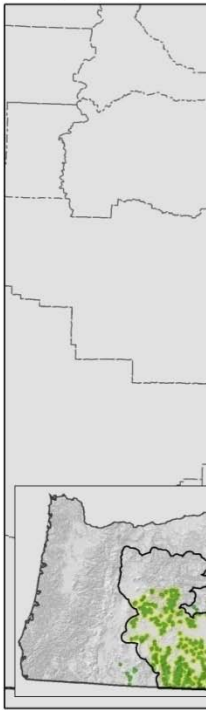
Conserving Wildlife and Wildlands



Conflict Analysis

Map 13

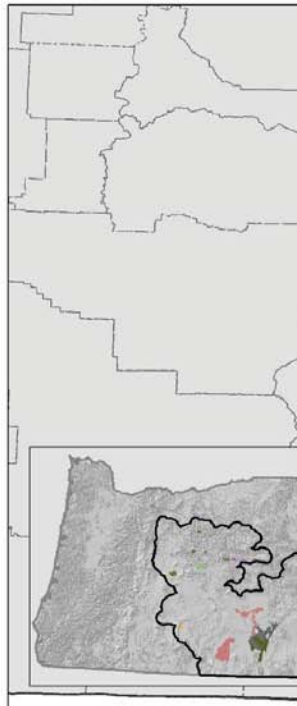
Greater Sage Grouse Breeding Sites



Greater Sage Grouse Leaks
 Sage Steppe Report Bo
 Sage Grouse Leaks (3 m
 Sage Grouse Leaks (5 m

Map 6

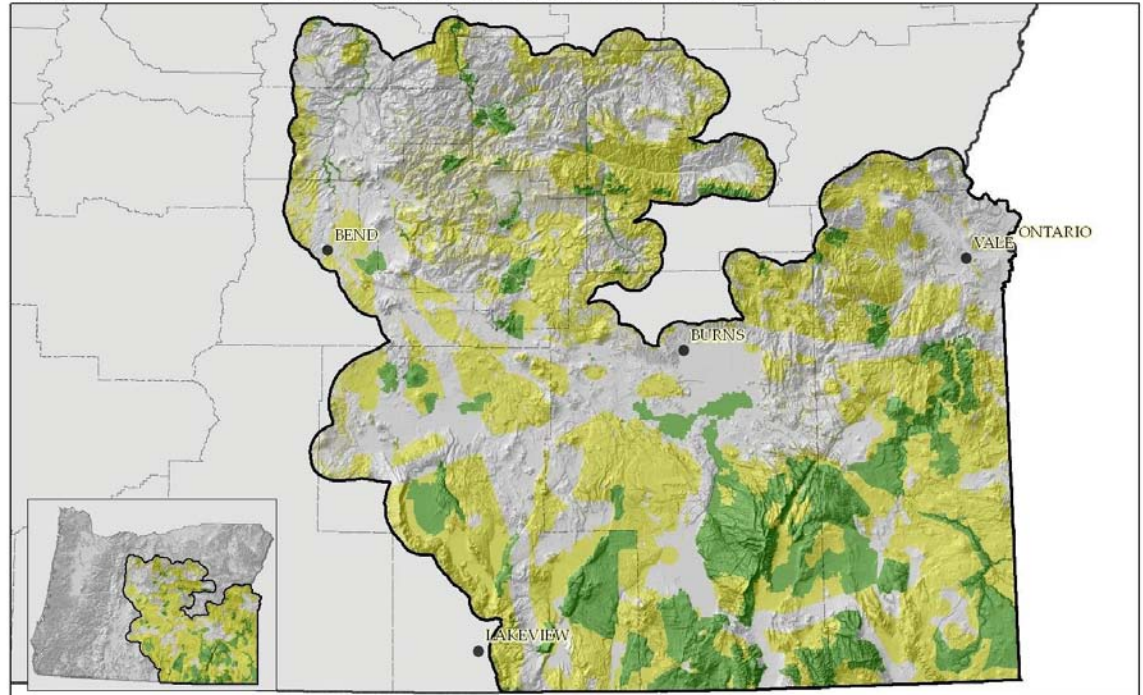
Federal and State Special Designations



Land Management Designation
 National Wildlife Refuge
 Wilderness Area
 Steens CMPA
 Wil
 Stat
 Roa

Map 1

Environmental and Social Conflict Analysis



Exclusion and Conflict Areas
 Low to Moderate Potential Conflict Areas (6.8 million acres)
 High Conflict Potential Areas (13.6 million acres)
 Exclusion Areas (3.8 million acres)



Data Sources:
 ONDA performed a spatial analysis from multiple sources (see maps 5 - 17) to determine exclusion areas (areas off-limits to development by law) and potential conflict areas (see text).



Potential Environmental Conflict

Exclusion Areas

- Wilderness/WSAs
- Wild & Scenic Rivers
- Wildlife Refuges
- National Parks
- Steens CMPA
- USFS Roadless Areas

691,000 acres

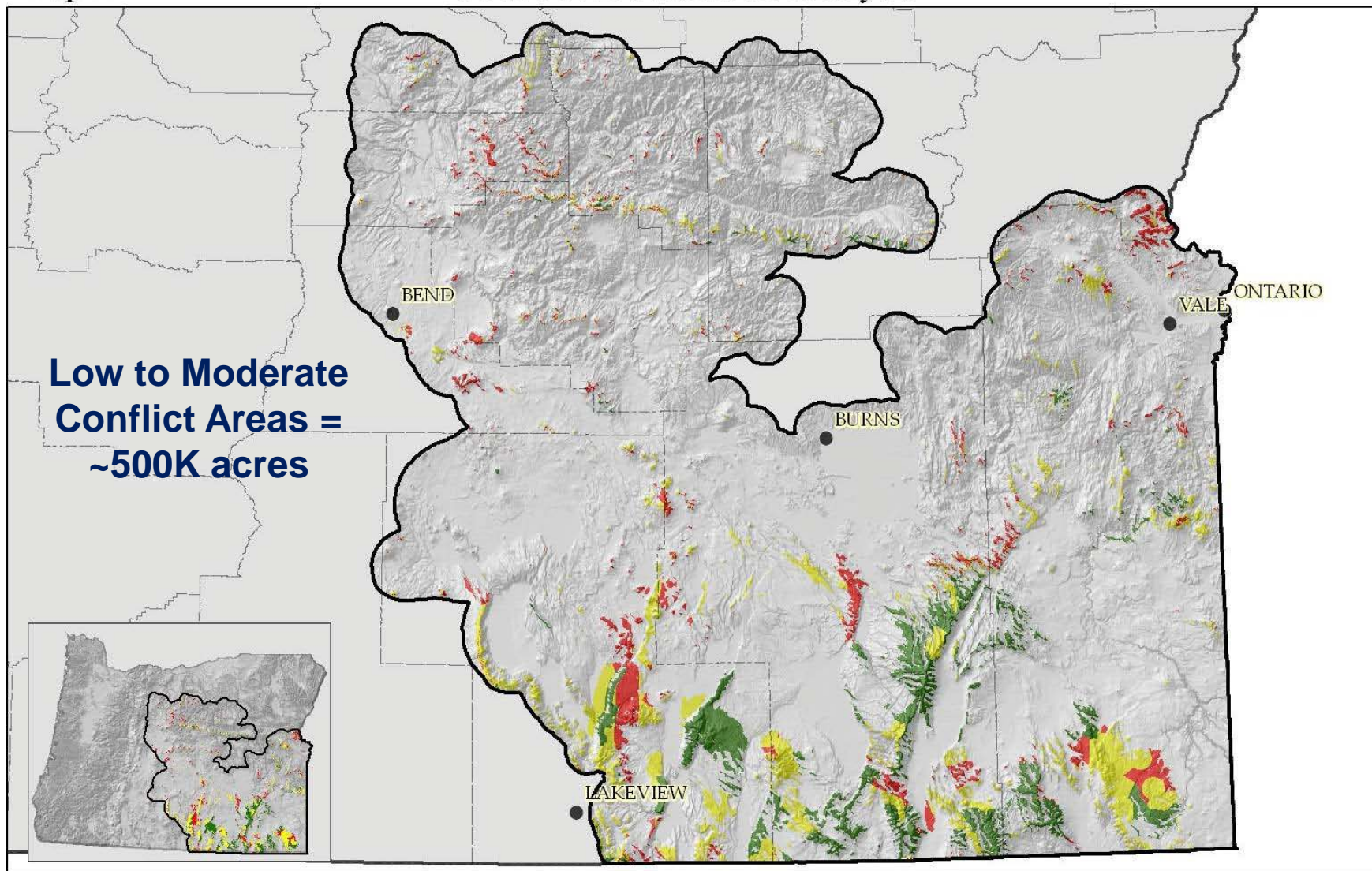
High Conflict Areas

- Proposed Wilderness
- Steens Withdrawal
- Sensitive bat species
- Sage grouse leks
- VRM-Class 2
- ACECs and RNAs

927,000 acres




DRAFT

Wind Power Resource Analysis



**Low to Moderate
Conflict Areas =
~500K acres**

Exclusion and Conflict Areas

-  Low to Moderate Conflict Potential with Wind Resources (467,000 acres)
-  High Conflict Potential with Wind Resources (927,000 acres)
-  Exclusion Zones with Wind Resources (691,000 acres)



Data Sources:

ONDA performed a spatial analysis from multiple sources (see maps 5 - 17) to determine areas with fair to superb wind potential related to conflict zones.



Best practices and siting recommendations

- Two years of pre-development environmental studies using standardized methods.
- Avoid recognized exclusion areas.
- Minimize viewshed impacts near communities and in historic and recreation sites.
- Prioritize potential wind development sites near existing transmission, final customers, and pre-existing disturbance.
- Conduct comprehensive evaluations consistent with the Oregon Columbia Plateau Ecoregion Wind Energy Siting and Permitting Guidelines.
- Prepare studies, development and mitigation plans and conduct the permitting process following the Oregon Energy Facility Siting Council's site certification process or a local equivalent process and enforceable resource protection standards.
- Evaluate projects' contribution to cumulative impacts of wind development throughout Oregon's high desert.

Thank you!

For more information about ONDA, go to www.onda.org



Spring Basin Wilderness Area, Photo by Jim Davis