



Renewable Energy & Wildlands Conservation

West-wide Planning Efforts

RMLUI Conference || March 4, 2010

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The Wilderness Society



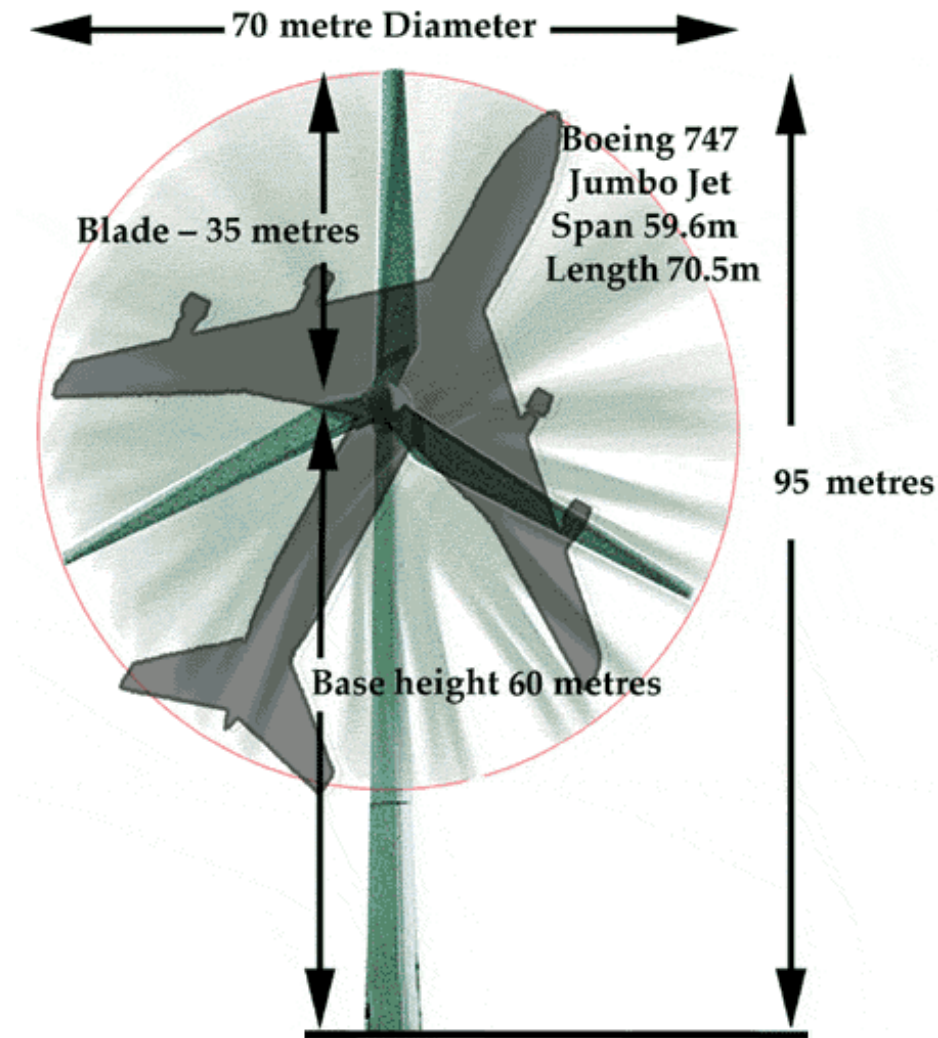
New Opportunity

- Significant resources under federal control
- But technologies have big footprints, at least for now
- Not able to mitigate all impacts – including wildlife, scenic, land-use, recreational, cultural, etc.
- Not reason *not* to proceed, but reason to move forward intelligently
- Multiple ongoing planning efforts offer opportunities for engagement in decisions with far-reaching implications



Wind

- Wind turbines – work like reverse fans
- Can produce 5 MW or more per turbine; current average 1.5-3 MW
- Towers range from about 30 to 500+ feet high
- Require about 60 acres per MW (but only 5%, or 3 acres, is directly used)



Solar – Photovoltaic (PV)

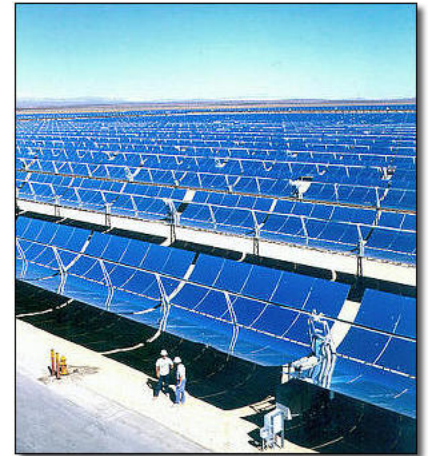


- Use semiconducting materials such as silicon to convert sunlight directly into energy
- Can use both direct and diffuse sunlight



Solar – Concentrating Solar Power (CSP)

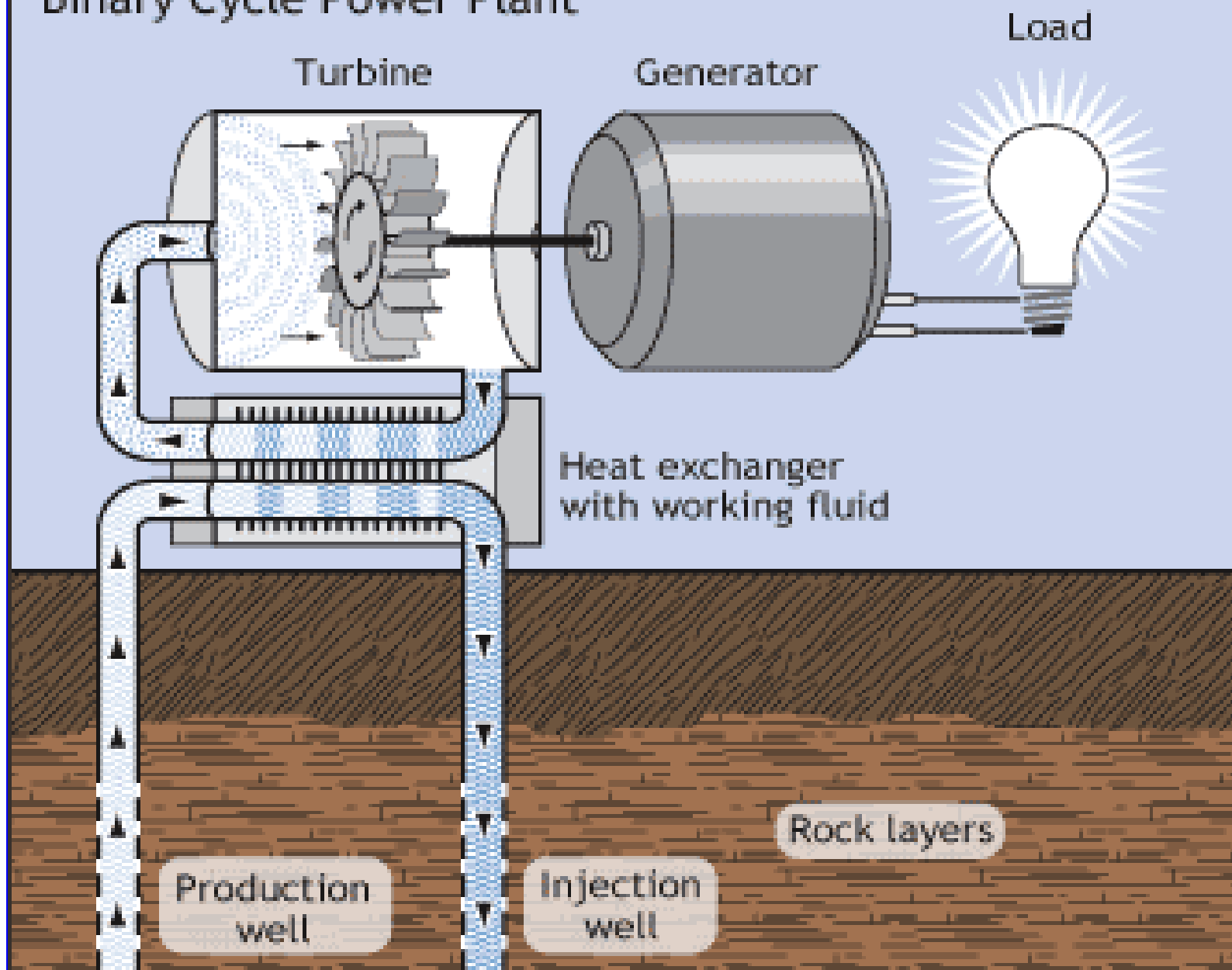
- Use focused sunlight to create heat, which is then used to create electricity
- Require about 5 to 10 acres per MW
- Parabolic Trough
- Dish/engine
- Power Tower



Kramer Junction Solar Plant

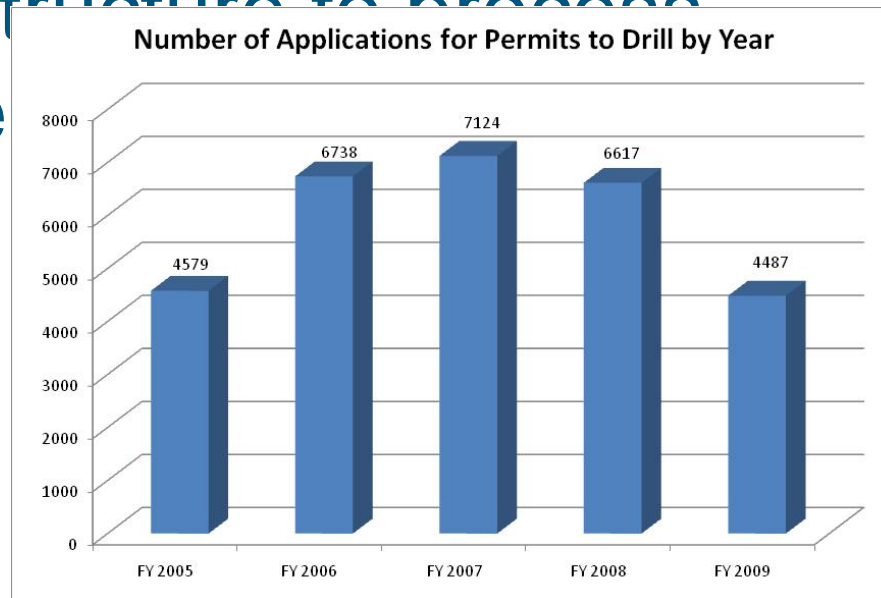
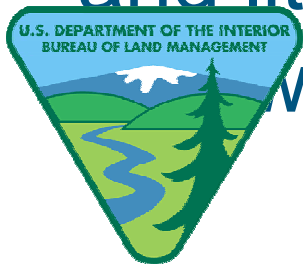


Binary Cycle Power Plant



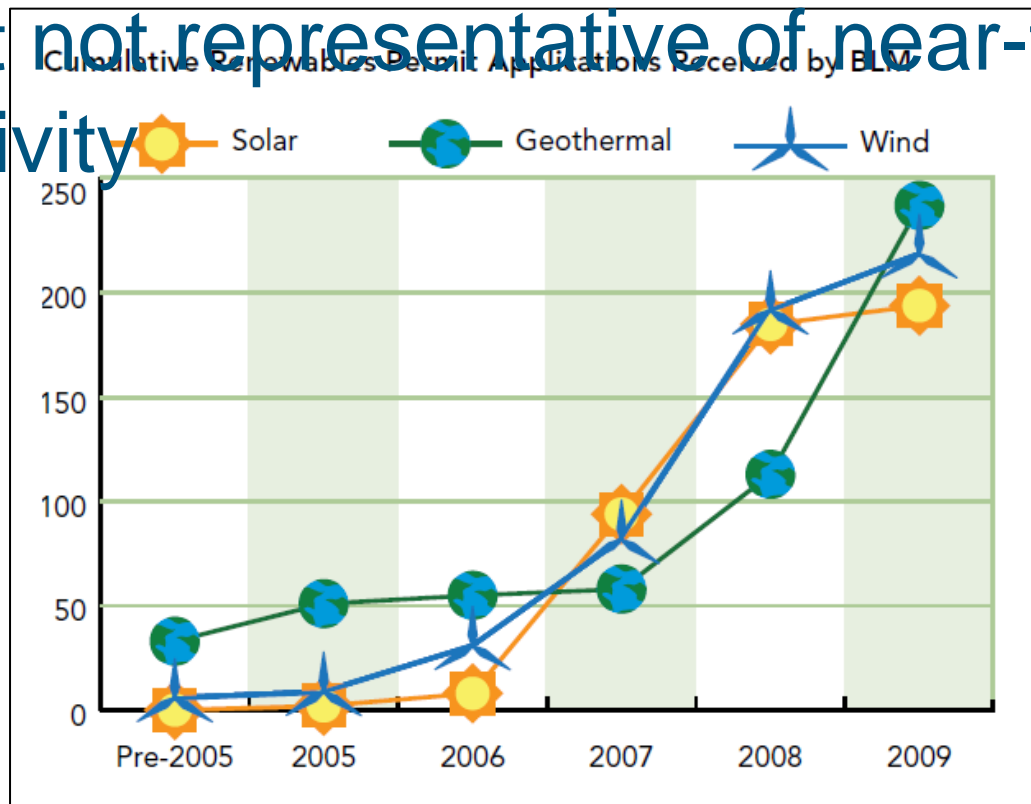
Starting from Scratch

- DOI structures reflect singular focus of agency resources to oil and gas activity
- Few resources, limited experience, and little structure to process available



Demand is Growing

- Major uptick in public land applications
- But not representative of near-term activity

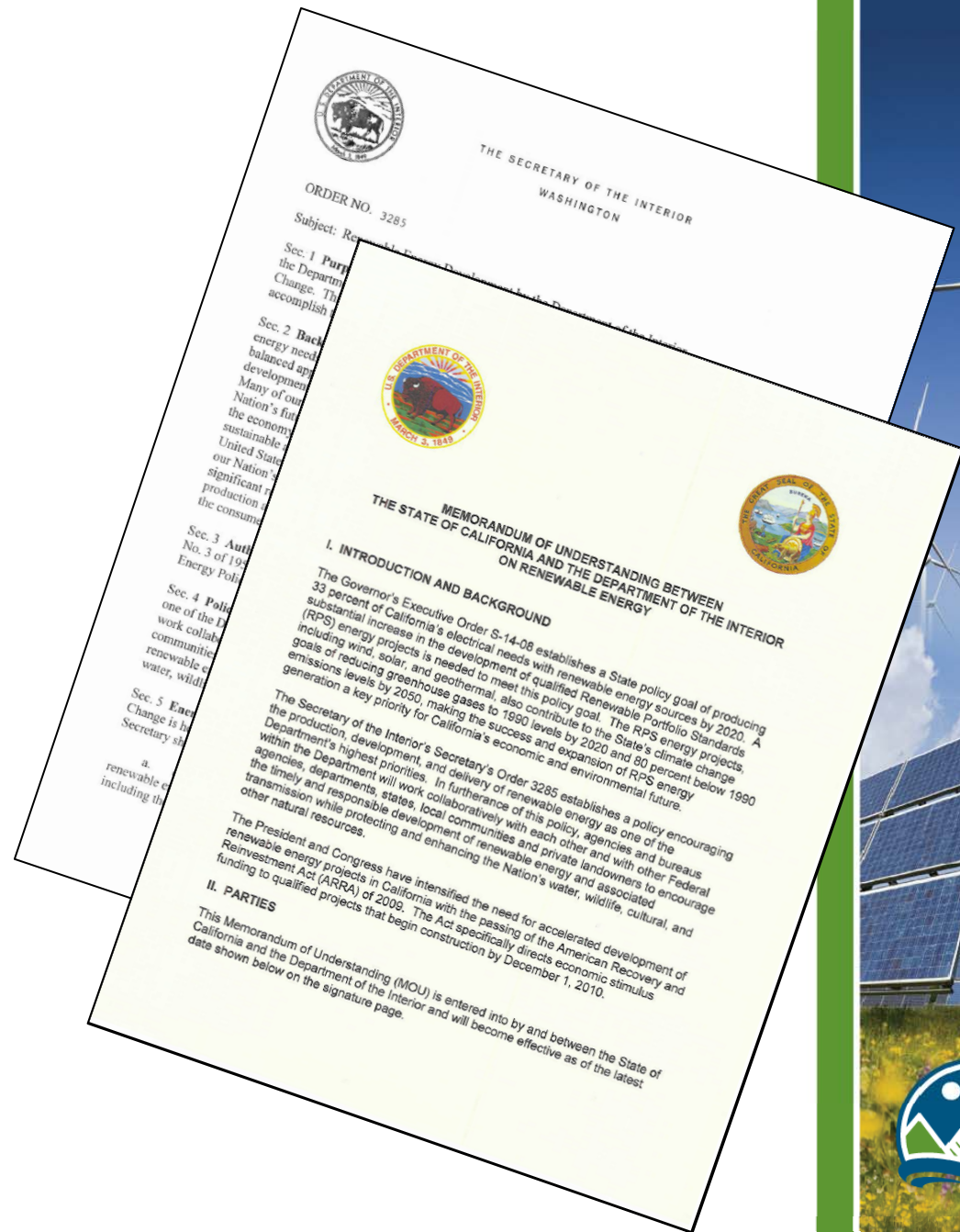


Source: The Wilderness Society analysis of BLM data, November 2009.



DOI's Vision

- Building new processes
- Learning from past mistakes
- Importance of environmental review



2010 – A Tipping Point

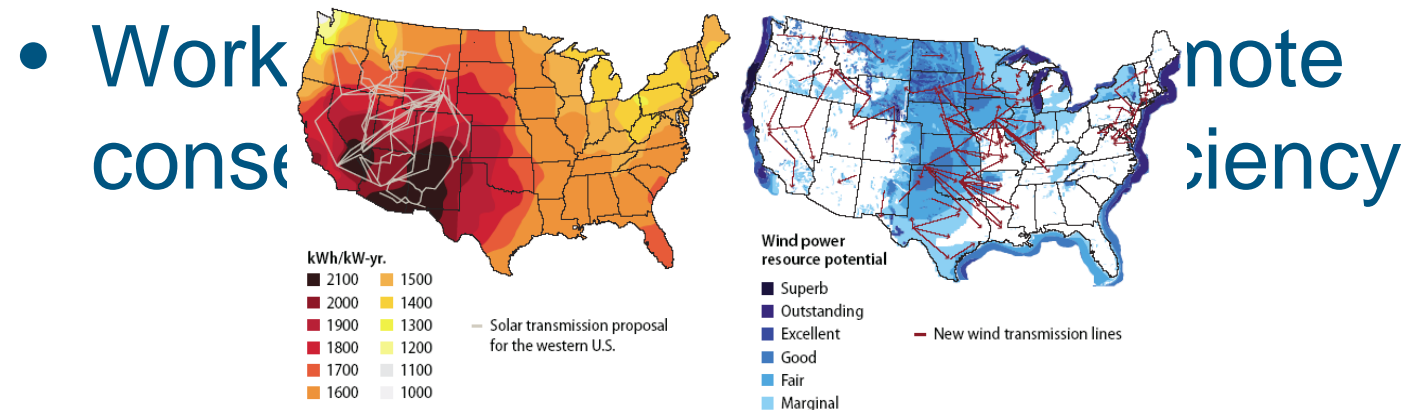
"34 fast-tracked projects...are currently undergoing detailed environmental impact reviews, and if ultimately approved, some 5,000-6,000 megawatts of new capacity, in California, Arizona, and Nevada, could be permitted for construction by the end of this year."

- Secretary Salazar, January 28, 2010



TWS Approach

- Working to instill responsible siting and development principles in law and policy
- Working with developers and partners to find suitable places in the west

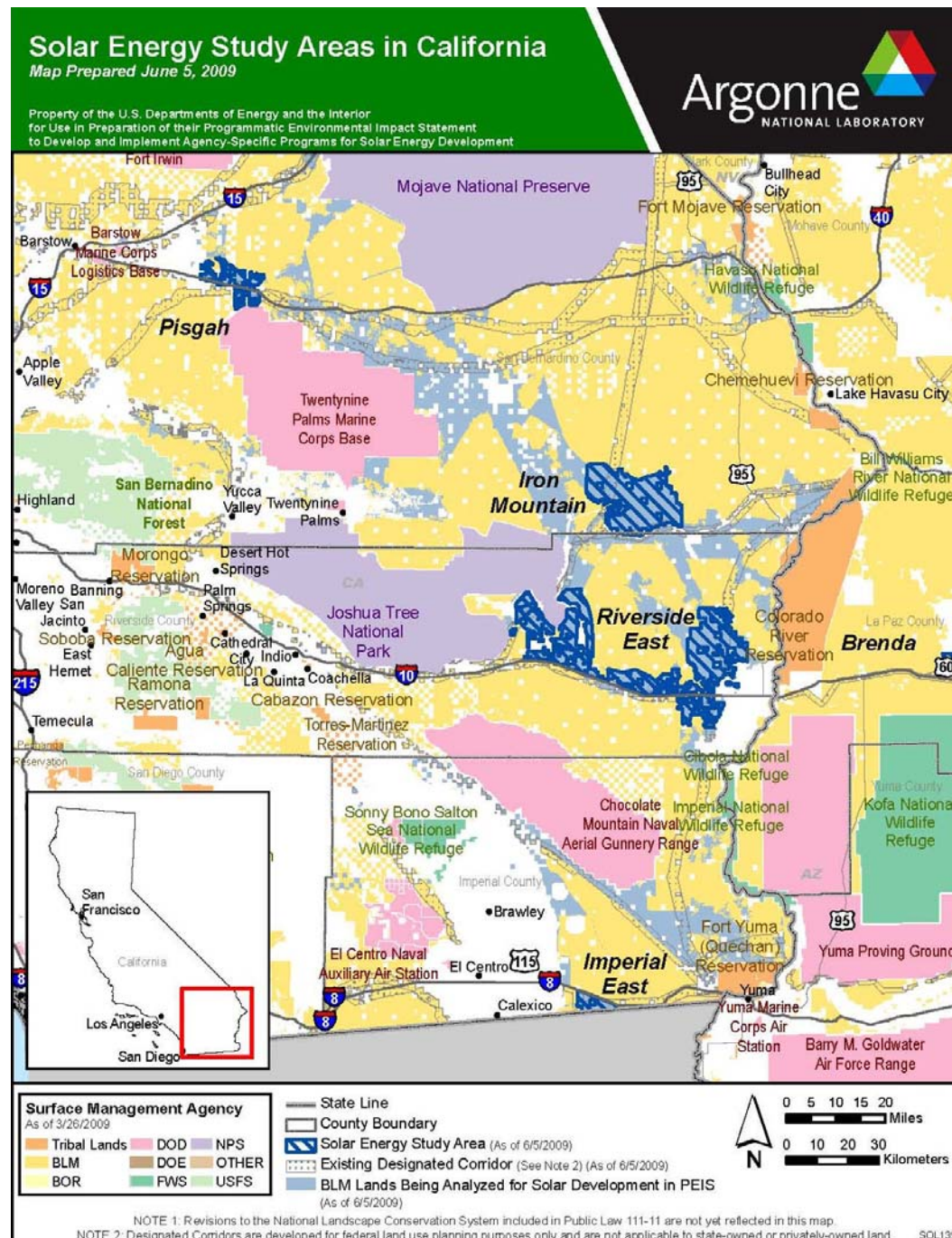


West-wide Planning Efforts

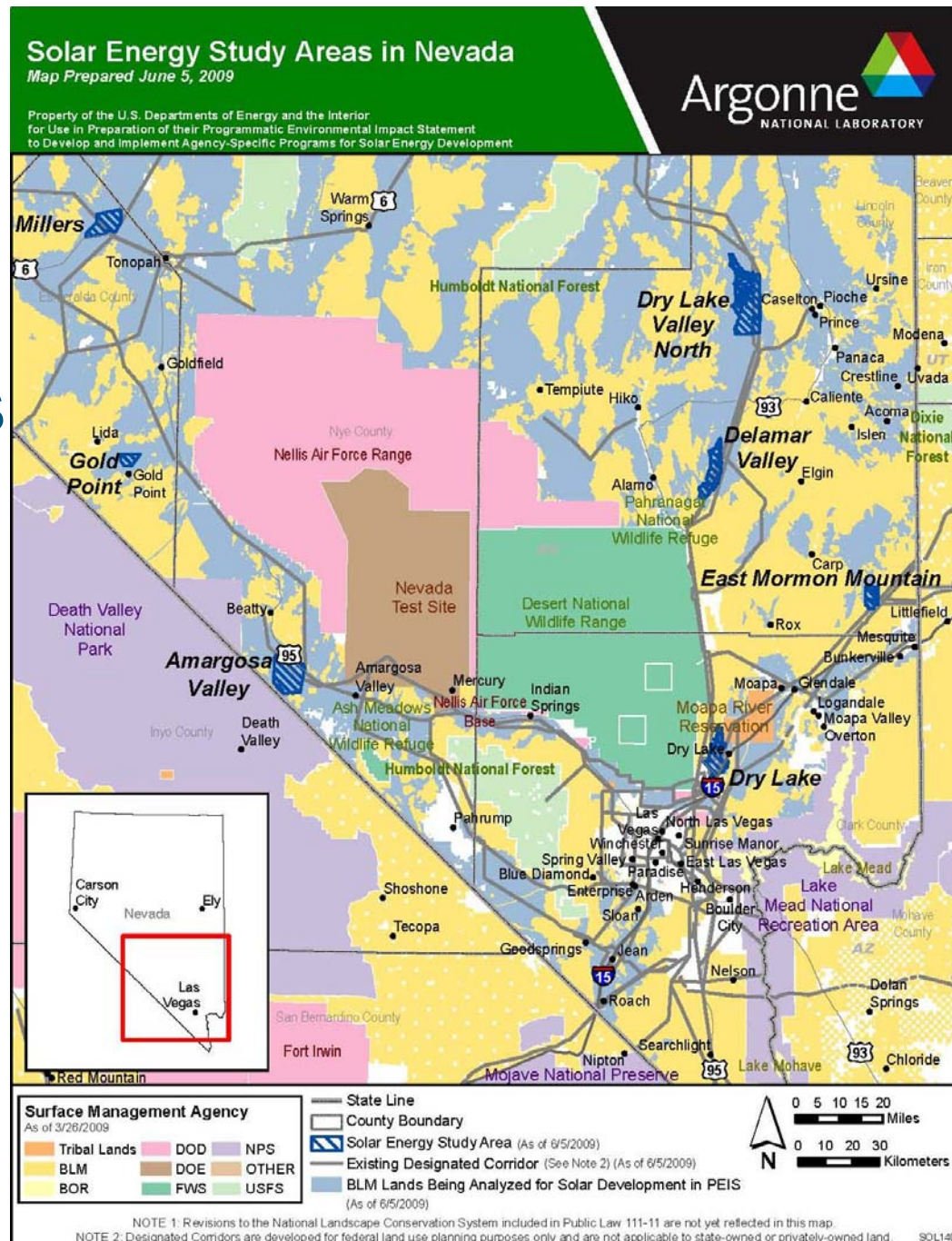
- BLM Solar Programmatic Environmental Impact Statement
- BLM Wind PEIS
- BLM/FS Geothermal PEIS
- BLM/DOE West-wide Energy Corridors PEIS
- Western Governors' Association Western Renewable Energy Zones project
- Other efforts (e.g. Western Electricity Coordinating Council transmission planning, etc.)



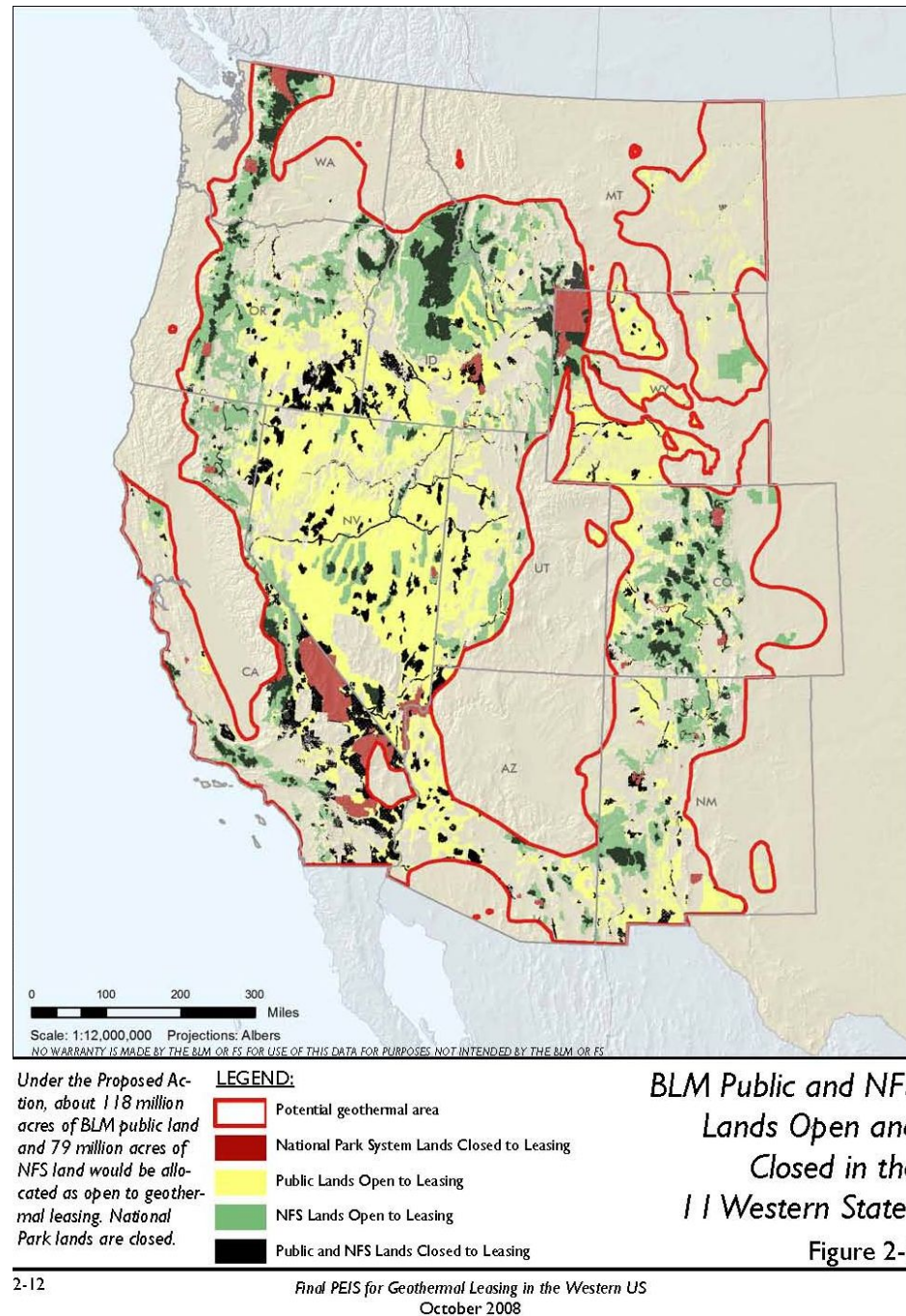
Solar PEIS:
Solar
Energy
Study Areas
– California;
over
350,000
acres, up to
70,000 MW
of potential
if fully
developed



Solar PEIS:
Solar
Energy
Study Areas
– Nevada;
nearly
150,000
acres, up to
29,000 MW
of potential
if fully
developed



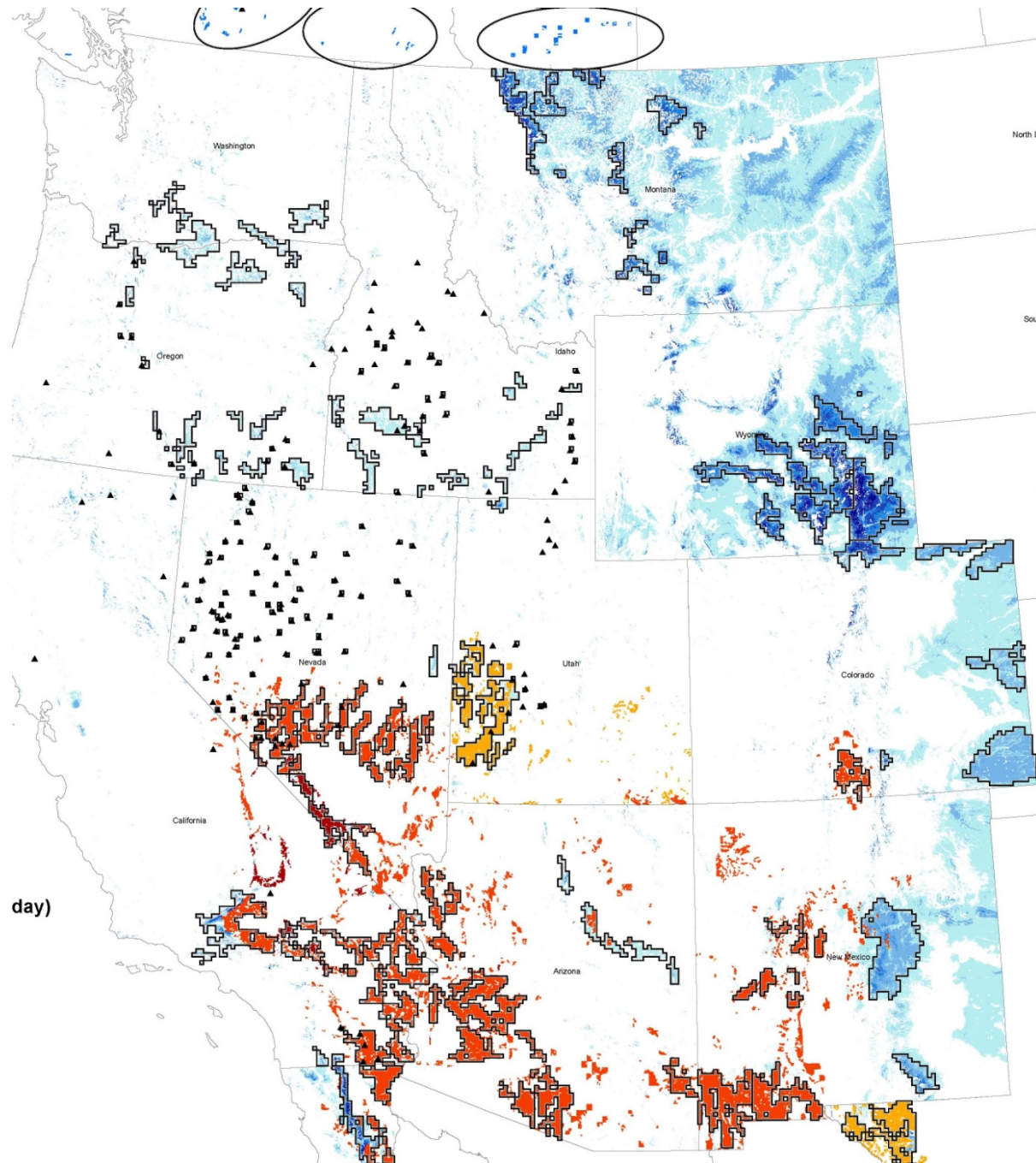
Geothermal PEIS – Areas Open and Closed to Leasing; 197 million acres open to leasing



West-wide Energy Corridors - over 6,000 miles of corridors in 11 western states

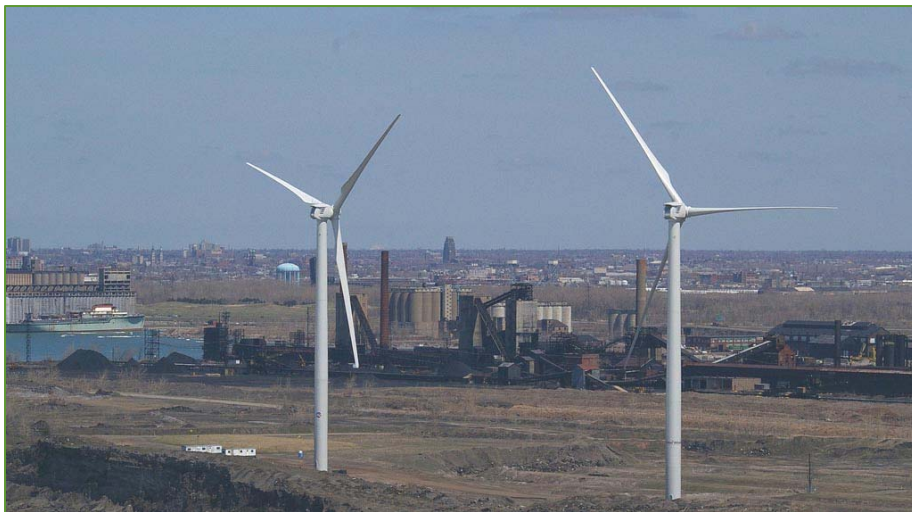


WGA
WREZ
– QRA
Map –
over 80
million
acres,
235,000 MW
of
potential



Opportunities

- Partnering to find fast tracks, other projects we can support
- Engaging in planning initiatives
- Pushing for creative solutions like reusing brownfields for renewable



Questions – at end of panel



"Of course it's renewable — you just throw more *sticks* on it!"

www.wilderness.org

