

The Confederated Tribes Of Warm Springs

Presentation to DOE Department of Renewable Energy

*For
Wind Energy Assessment
on
Confederated Tribes of Warm Springs
Reservation of Oregon*

October, 2005

*Prepared by:
Warm Springs Power Enterprises*



STATE OF OREGON



CTWS History with Energy Development

- Intro to Power business in 1955 with the development of the Pelton Project.
- 1970 with the installation of three 3 Mw steam turbines at Warm Springs Forest Products Industries (WSFPI).
- 1982 completed the installation of the Pelton Reregulating Dam Hydroelectric Project
- 1990 begin preliminary Geothermal reconnaissance
- 2003 begin wind energy assessment on tribal lands, currently underway
- 2004 Working with Tribal, State, Federal and private firms to expand Biomass plant at our WSPFI complex. It will replacing the existing units with one co-gen unit rated at 19 Mw unit.

Warm Springs Forest Products Industries



Pelton Project



Round Butte Project



Pelton Reregulating Dam



CTWS Wind Assessment

Warm Springs Power Enterprises is the business entity of the Tribes charged with managing energy developments and investigating development opportunities.

Warm Springs Power Enterprises is the lead branch for the tribe for the grant from the Department of Energy to explore wind energy potential on reservation land.

Project Participants

- Tribal Council, 11 members
- Jim Manion, GM, Warm Springs Power Ent.
- Bobby Brunoe, GM CTWS Natural Resources
- Morris Holliday, Operations Assistant WSPE
- David McClain, Project oversight, DW McClain Associates
- Stel Walker, Principle Wind Scientist, OR State University
- Power Systems Engineers, Inc
- Warm Springs GEO Visions Enterprises
- Tribal Attorneys

Project Overview

- To perform wind development assessment on tribal lands on the reservation and contiguous allotted lands.
- Is there potential for a commercial wind energy project.
- What is the current environmental constraints for such a development.
- What infrastructure is necessary to interconnect a development.
- What are the current energy market conditions.

Accomplishments

- Four different areas reviewed for initial potential
- Have identified area of highest potential
 - Initiated a preliminary wildlife inventory
 - Initiated initial cultural resource inventory
- Wind farm potential currently rated at marginal in this area

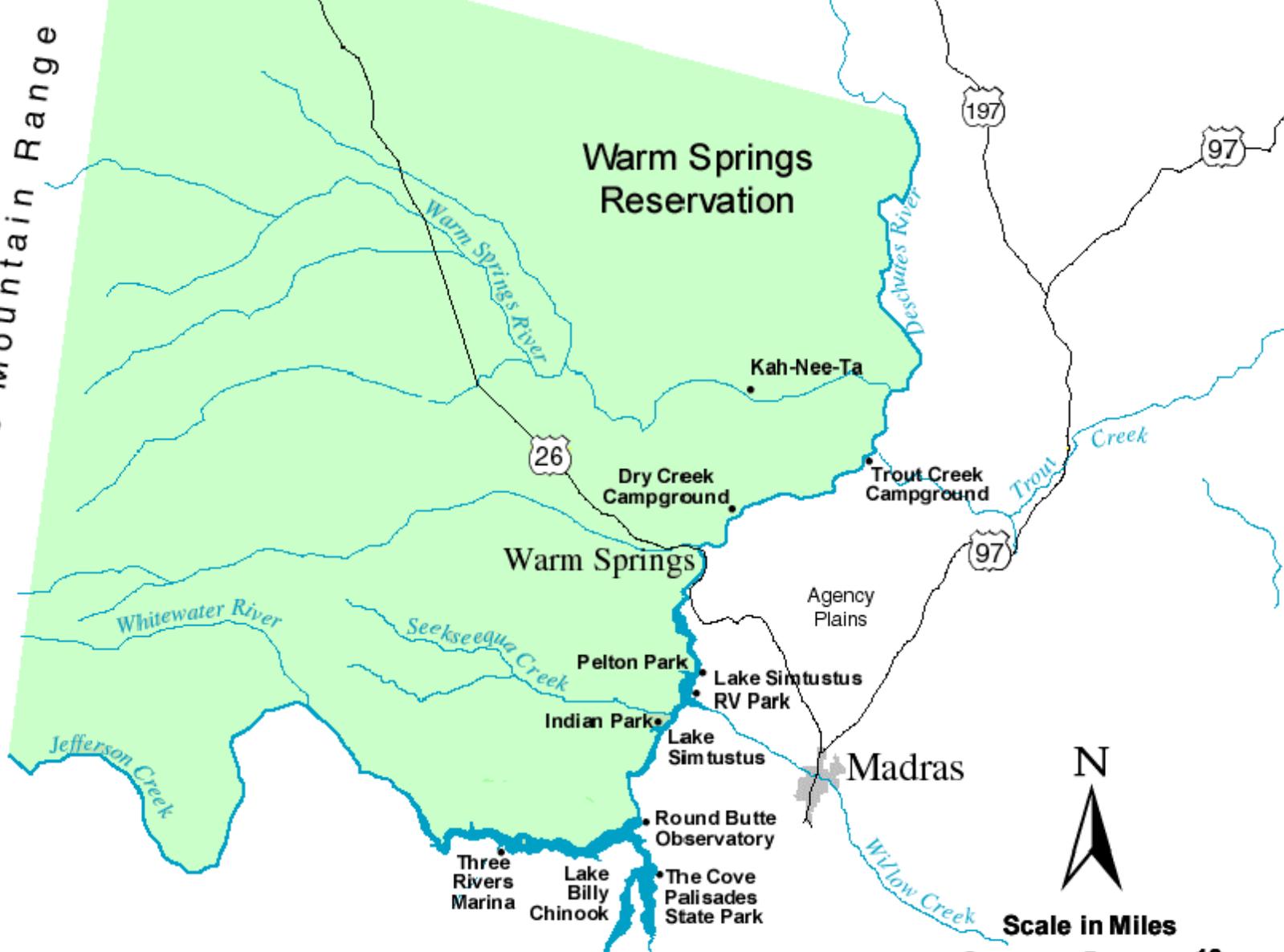


Activities Yet to Complete

- Will be initiating economic analysis in spring of 2006.
- Reviewing transmission interconnection options.
- Perform the social sensitivity analysis.

Cascade Mountain Range

Warm Springs Reservation



197

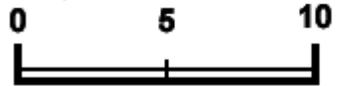
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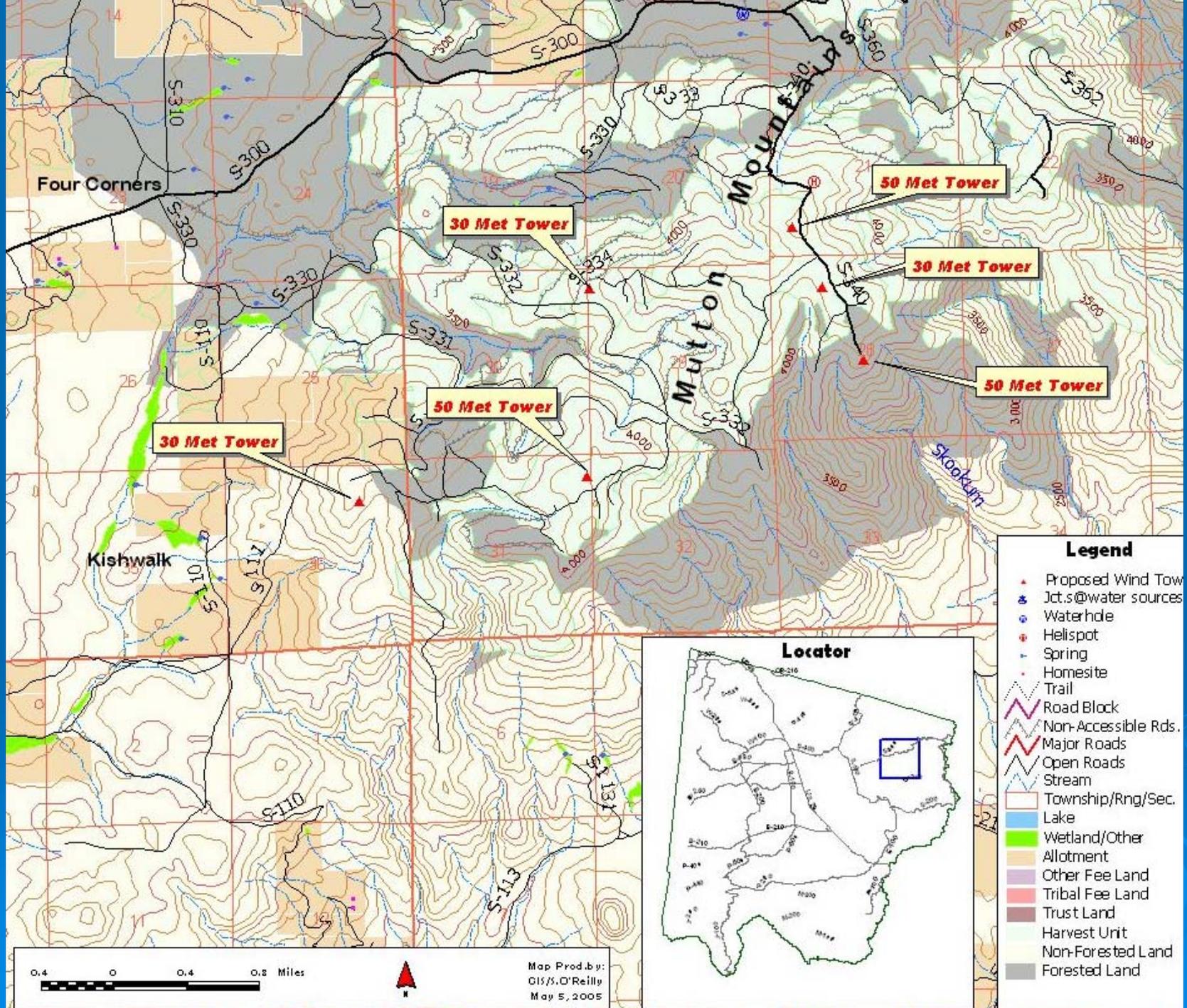
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Scale in Miles





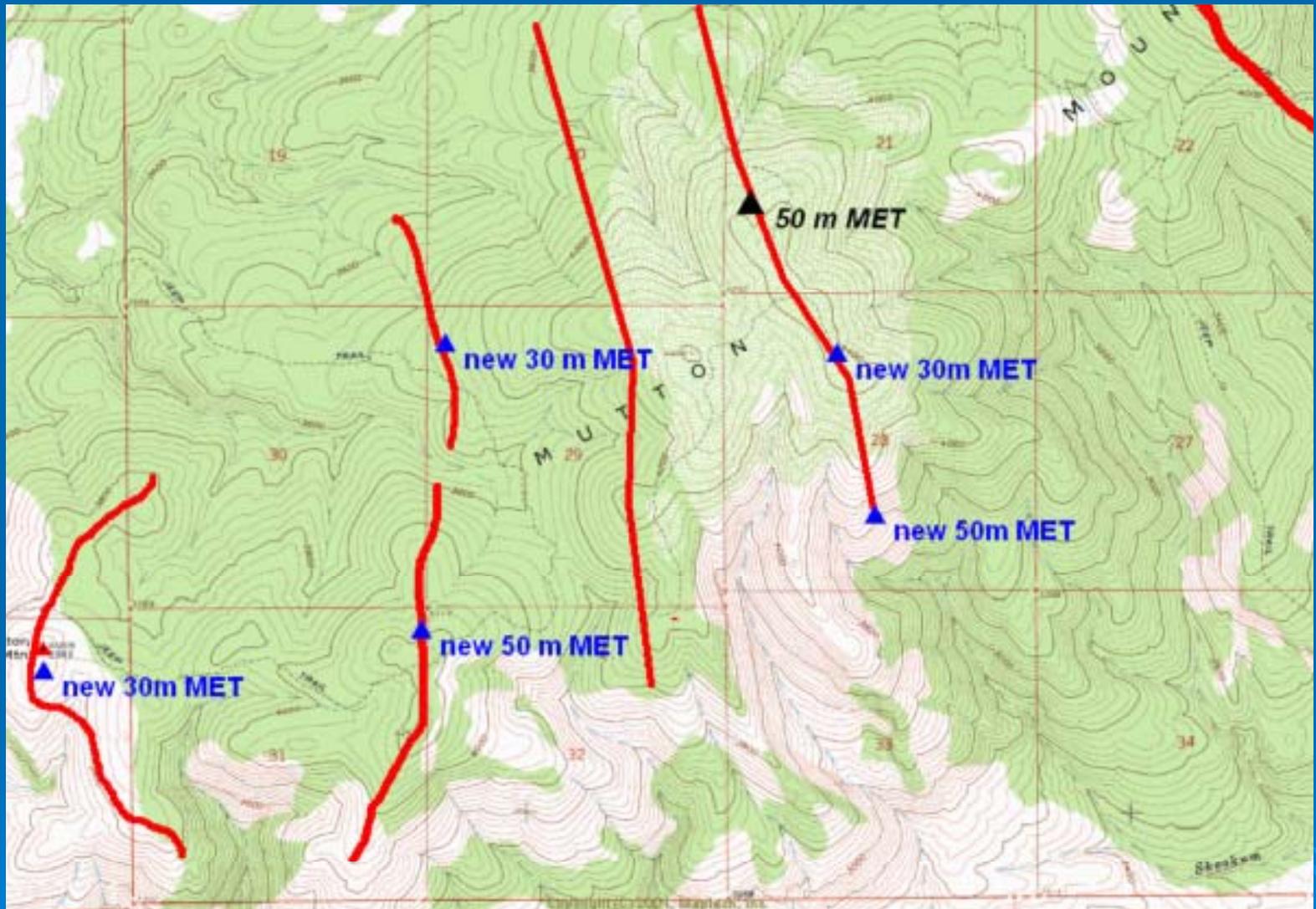


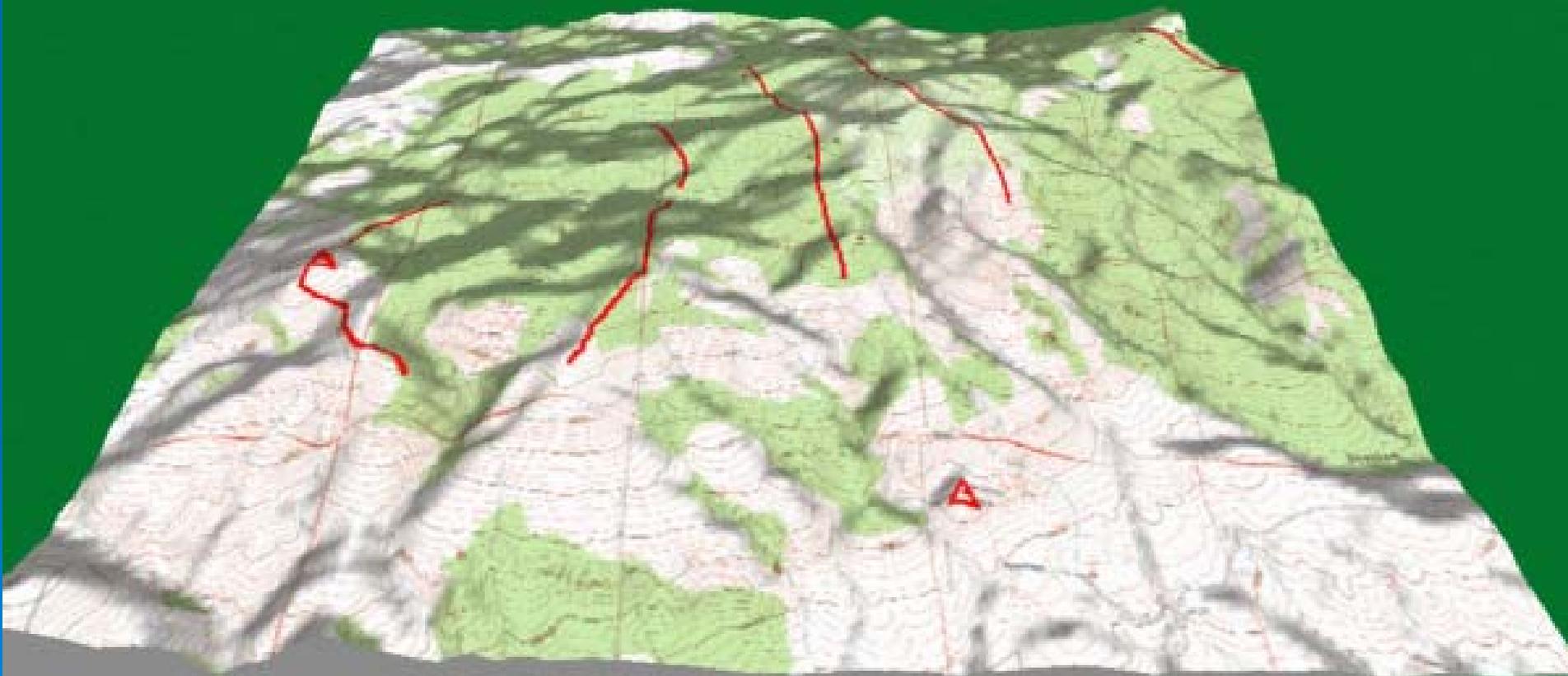
Legend

- ▲ Proposed Wind Tower
- ⊕ Jct.s @ water sources
- Water hole
- ⊙ Helispot
- ⊙ Spring
- ⊙ Homesite
- Trail
- ⚡ Road Block
- ⚡ Non- Accessible Rds.
- ⚡ Major Roads
- ⚡ Open Roads
- Stream
- Township/Rng/Sec.
- Lake
- Wetland/Other
- Allotment
- Other Fee Land
- Tribal Fee Land
- Trust Land
- Harvest Unit
- Non-Forsted Land
- Forested Land

Locator







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You know you have wind
energy generation
potential

IF



Your trees grow like this....



Future Development

- Still accessing potential.
- Tribal Council has supported renewable energy development.
- Will explore options on development in future. If shows promising potential.
- Developer's, don't call us quite yet, still compiling data and will announce if and when we are ready to move to next stage.

A sunset over a body of water. The sky is filled with orange and yellow clouds, reflecting on the water's surface. The horizon is dark, suggesting a distant landmass or trees.

Questions & Comments?

Thank you for your time.