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
The Columbia River
Portland
The Dalles
Pendelton
Maupin
Warm Springs Reservation of Oregon
Salem
Deschutes River
Madras
Prineville
Eugene
Bend
Ontario
Burns
Grants Pass
Klamath Falls
Lakeview

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 WSFPI 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

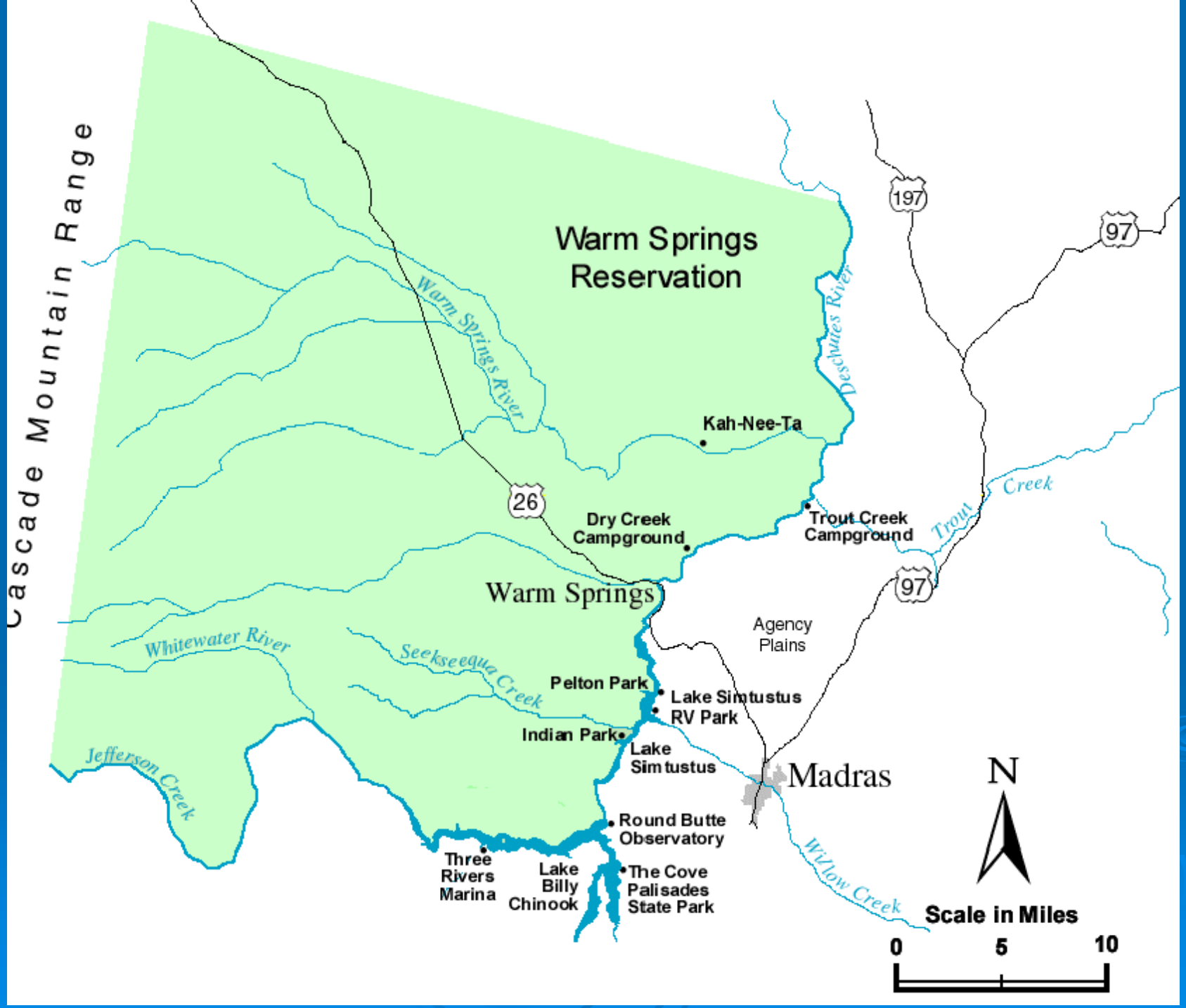
- To perform wind development assessment on tribal lands on the reservation and contiguous allotted lands.
- Is there potential for a commercial wind energy project.
- What is the current environmental constraints for such a development.
- What infrastructure is necessary to interconnect a development.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

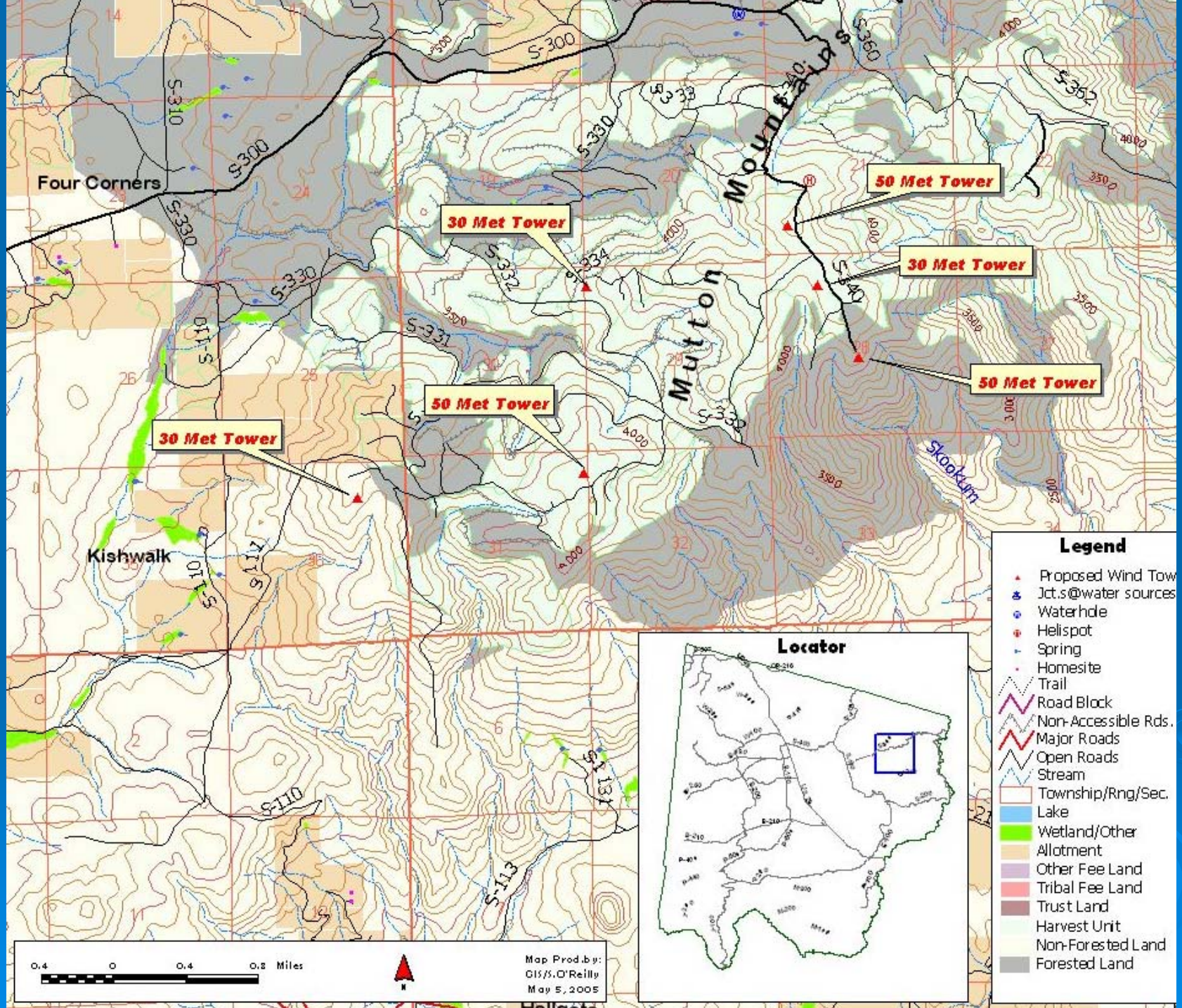
Accomplishments

- 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
Warm Springs River
Deschutes River
Kah-Nee-Ta
26
Dry Creek Campground
Trout Creek Campground
Trout Creek
197
97
97
Warm Springs
Agency Plains
Whitewater River
Seekseequa Creek
Pelton Park
Lake Simtustus RV Park
Indian Park
Lake Simtustus
Jefferson Creek
Madras
N
Round Butte Observatory
Three Rivers Marina
Lake Billy Chinook
The Cove Palisades State Park
Willow Creek
Scale in Miles
0
5
10


Four Corners
Kishwalk
Mutton Mountains
Skookum
30 Met Tower
50 Met Tower
30 Met Tower
50 Met Tower
30 Met Tower
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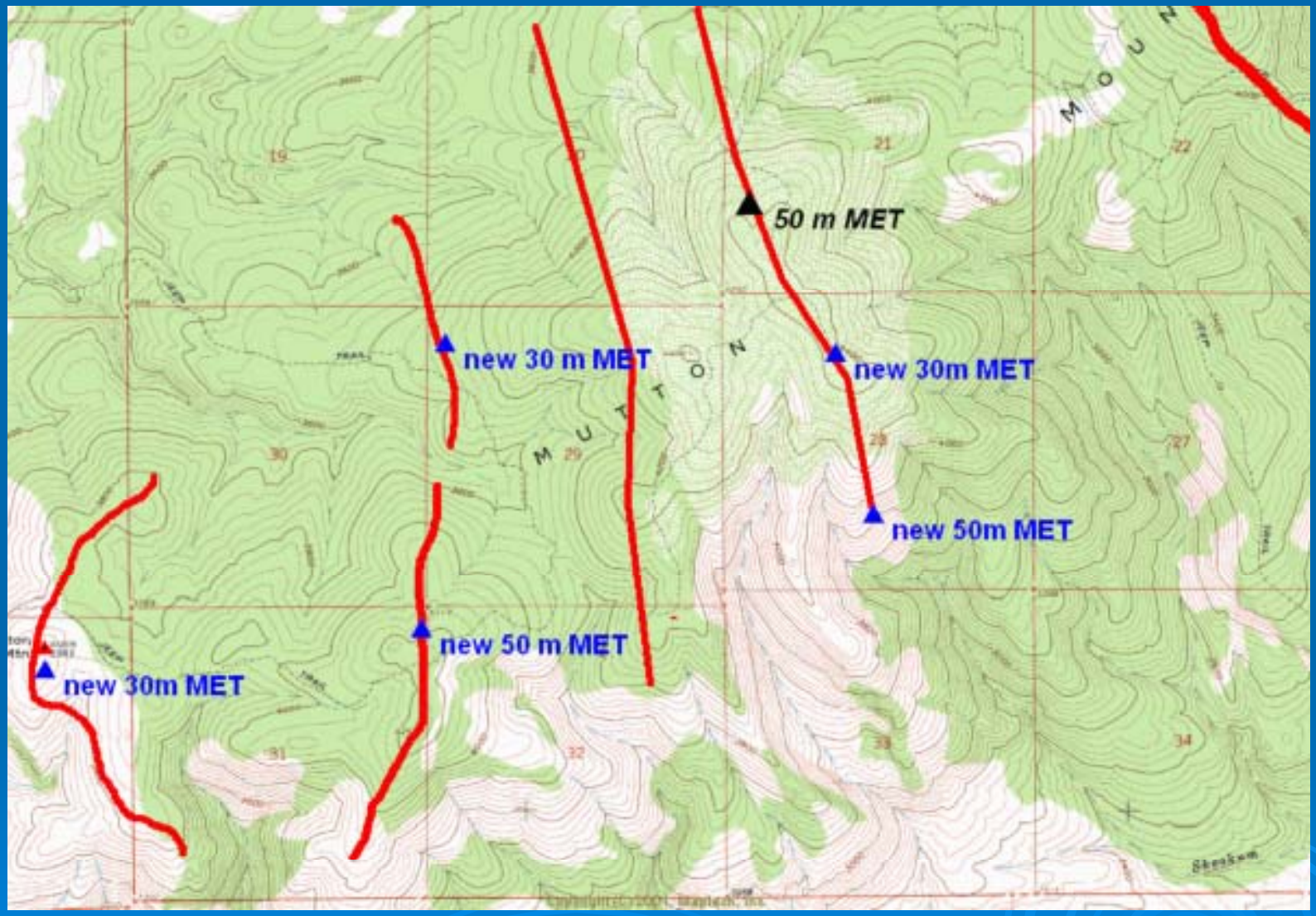
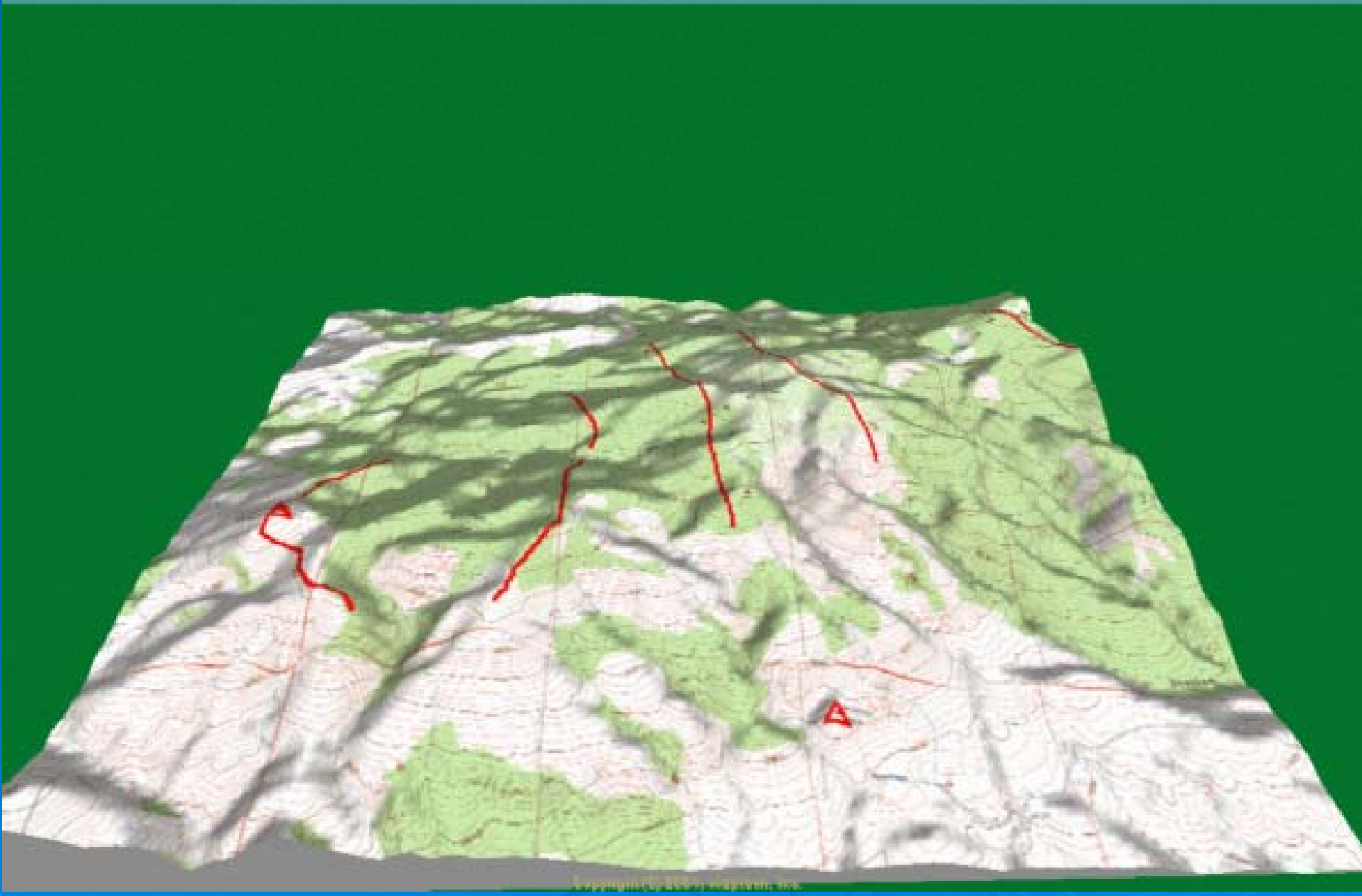
S-300
S-310
S-330
S-331
S-332
S-333
S-334
S-340
S-350
S-352
S-110
S-111
S-113
S-131
Locator
Legend
Proposed Wind Tow
Jct.s@water sources
Waterhole
Helispot
Spring
Homesite
Trail
Road Block
Non-Accessible Rds.
Major Roads
Open Roads
Stream
Township/Rng/Sec.
Lake
Wetland/Other
Allotment
Other Fee Land
Tribal Fee Land
Trust Land
Harvest Unit
Non-Forested Land
Forested Land
0.4 0 0.4 0.8 Miles
Map Prod.by:
GIS/S.O'Reilly
May 5, 2005


50 m MET
new 30 m MET
new 30m MET
new 50m MET
new 50 m MET
new 30m MET
MUTTON
MOUN



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.

Questions & Comments?

Thank you for your time.