

# *WOOD WASTE UTILIZATION ASSESSMENT*



Taos Community  
Meeting

June 8, 2016

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TSS Consultants



# PRESENTATION OVERVIEW

- Overview of Assessment
- Target Study Area
- Value Added Utilization Examples
- Vegetation Cover
- Landownership
- Project Timeline
- Questions



# WOOD UTILIZATION ASSESSMENT – PART I

## **Tasks to be completed:**

- Biomass feedstock supply analysis
- Biomass supply competition analysis
- Regional biomass feedstock supply analysis
- Value-Added utilization options
- Draft and Final Report

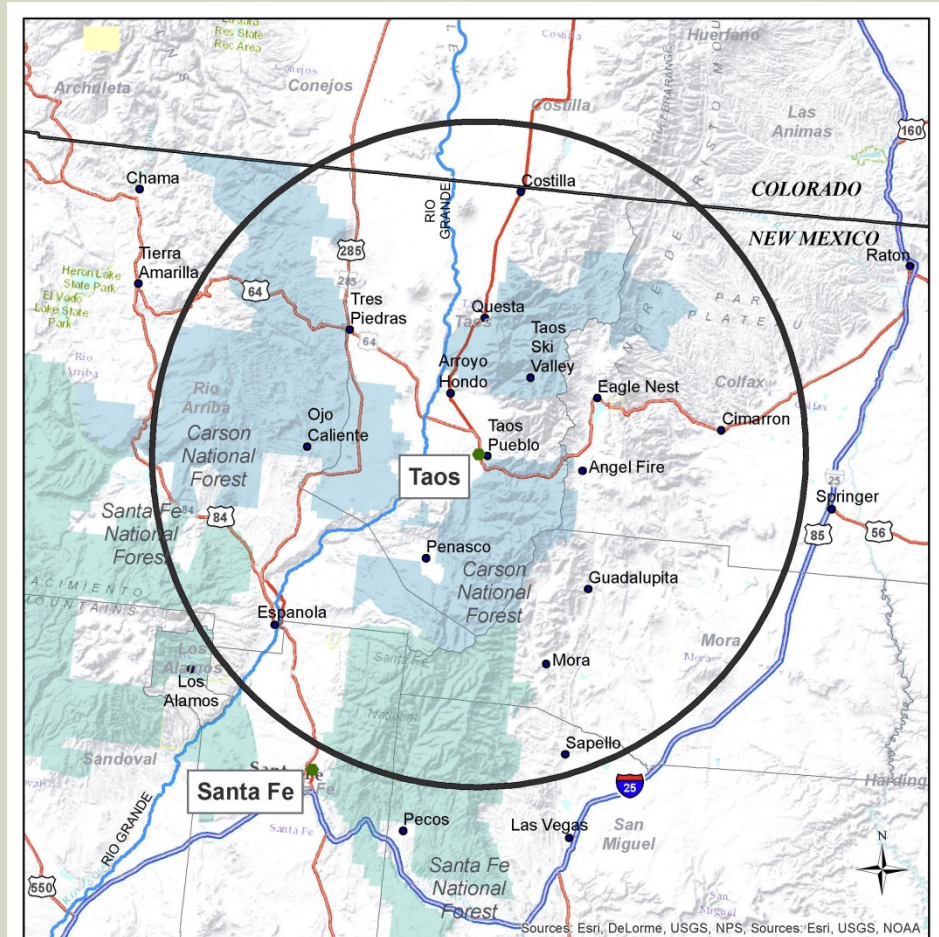
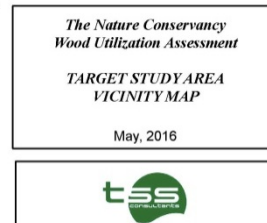
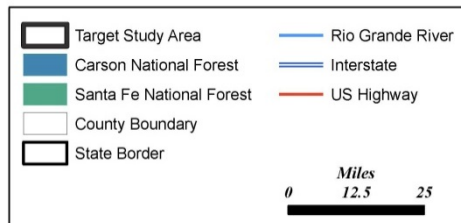
# TYPES OF WOOD WASTE CONSIDERED

- Forest residuals from management operations (limbs, tops, small diameter stems)
- Woodland restoration residuals (pinon-juniper removals)
- Wood waste from hazardous fuels reduction activities (limbs, small stems)
- Forest products manufacturing byproducts (sawdust, bark, shavings)
- Urban wood waste (tree trimmings, pallets, clean construction wood)



# TARGET STUDY AREA

- Target Study Area (TSA) is a 50 mile radius from Taos
- 5,026,090 acres
- Includes portions of the Carson and Santa Fe National Forests



# WOOD UTILIZATION ASSESSMENT – PART II

## Key questions to be addressed:


- What value-added forest biomass utilization business models, scaled to local resource sustainability, have the highest potential for successful implementation by local contractors?
- Which business models are complementary such that a coordinated approach is possible – one that facilitates multiple businesses producing a variety of value-added products?
- How should these multiple businesses coordinate so that a healthy equilibrium and triple bottom line, represented by a balance between local environment, community and economy, is accomplished?

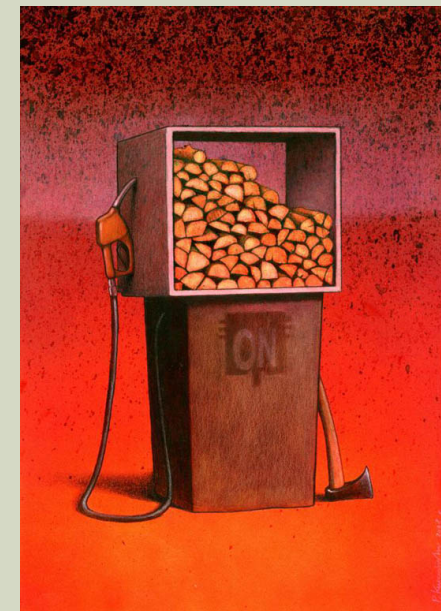
# EXAMPLES OF VALUE-ADDED OPTIONS

- Power and thermal energy
- Soil amendments (e.g., compost and biochar) and landscape cover
- Biochar as filtering media
- Animal bedding
- Post/pole products for agricultural use
- Post/pole products for architectural use (such as vigas)
- Fencing products



# EXAMPLES OF VALUE-ADDED OPTIONS (cont'd)

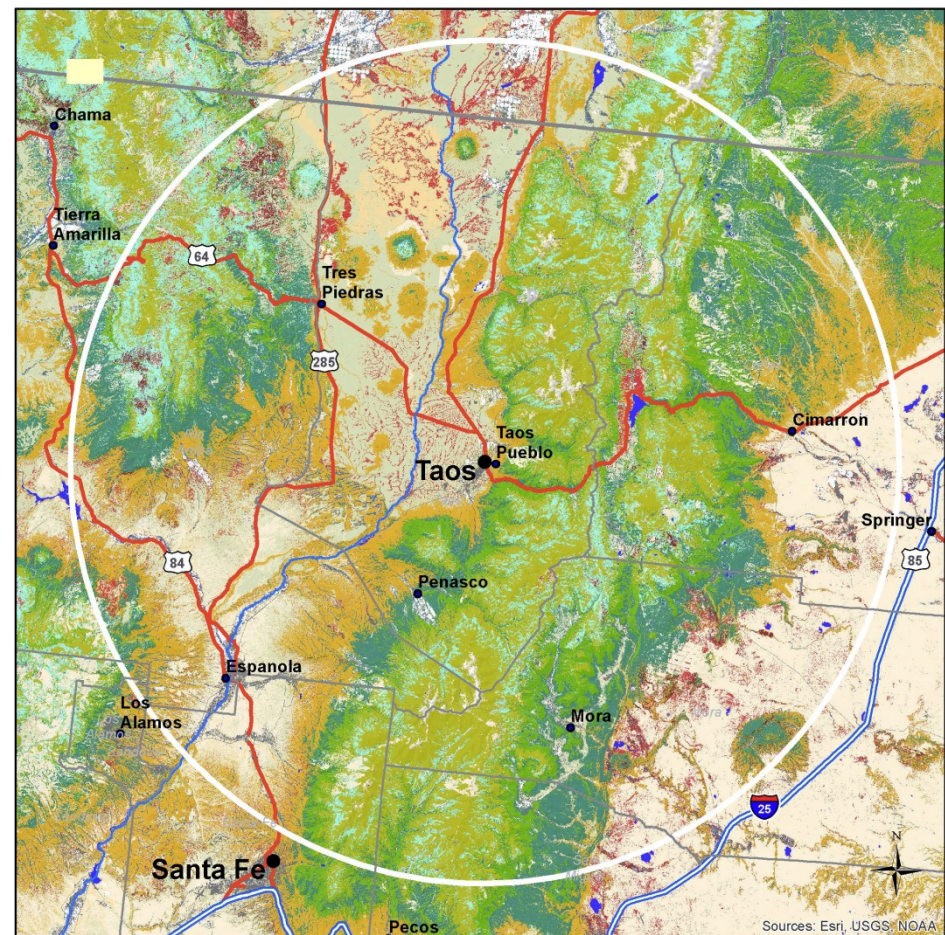
- Firewood and densified fuel logs
- Wood pellets for heating and/or power
- Community-scale combined power and heat production
- Greenhouse and native plants nursery
- Rustic furniture/outdoor recreation sets
- Small log sawmill
 
- Advanced biofuels for transportation
- Bioproducts (biochemicals, nanocellulose)



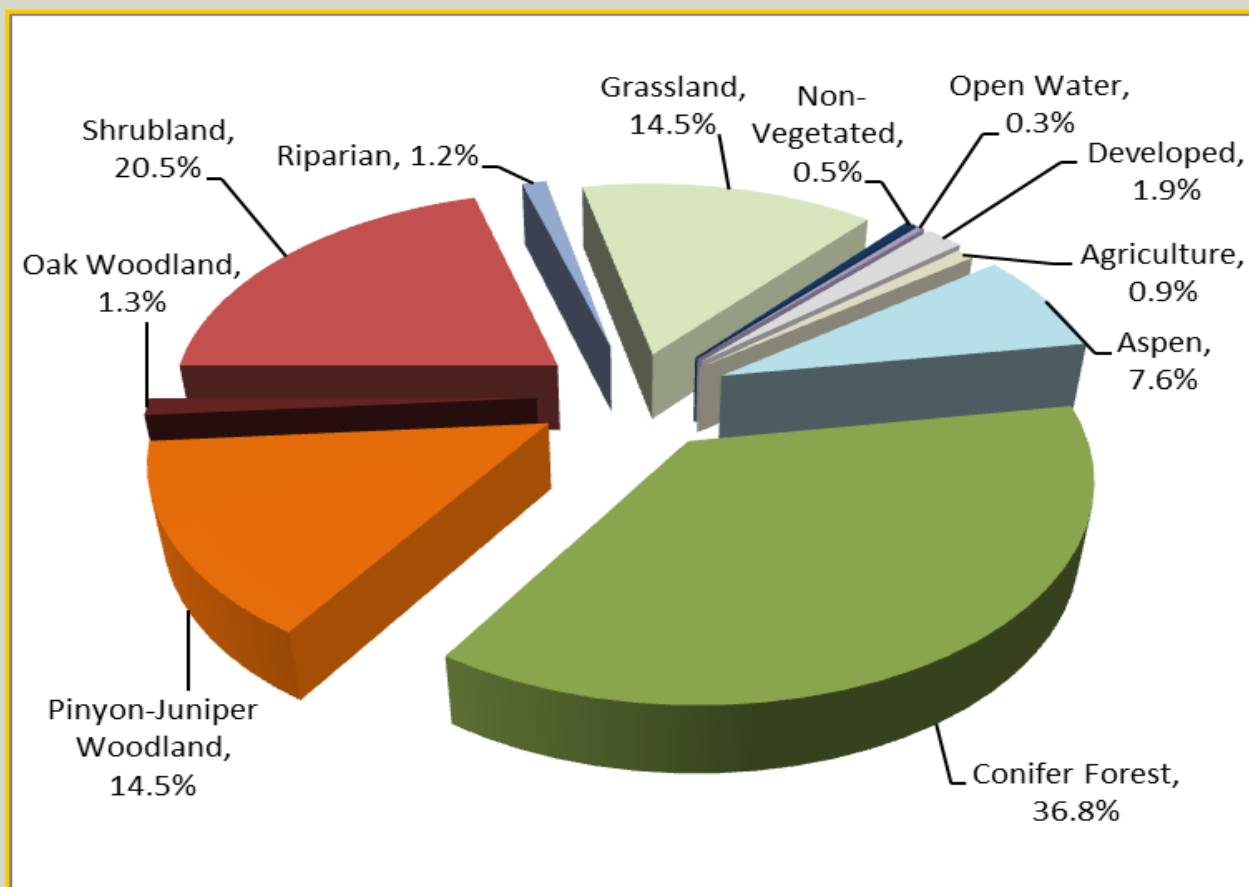


# VEGETATION COVER MAP

- TSA has the common vegetation types of the southern Rocky Mountains
- Vegetation types range from high elevation aspen and spruce-fir to lower elevation grasslands or sagebrush and shrublands

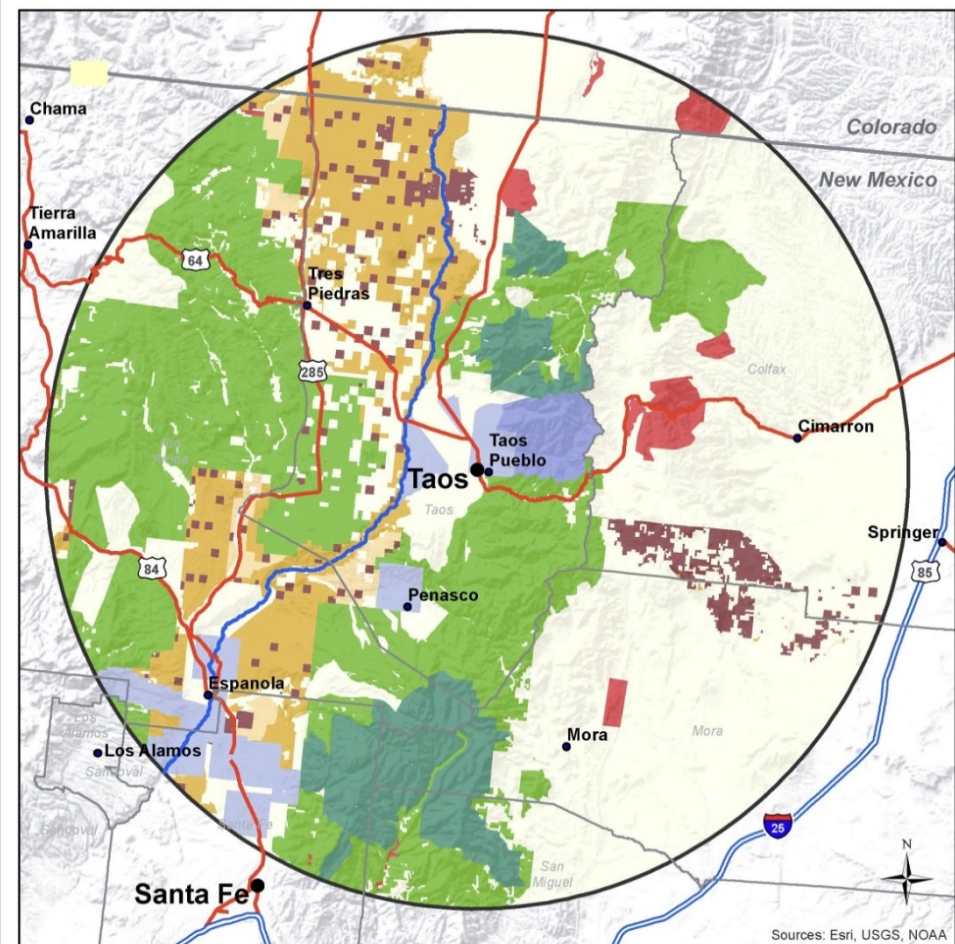
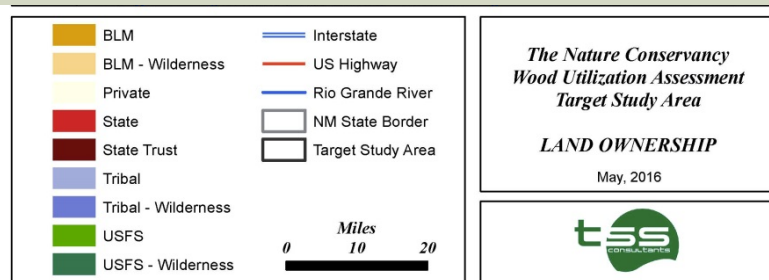


# VEGETATION COVER FINDINGS

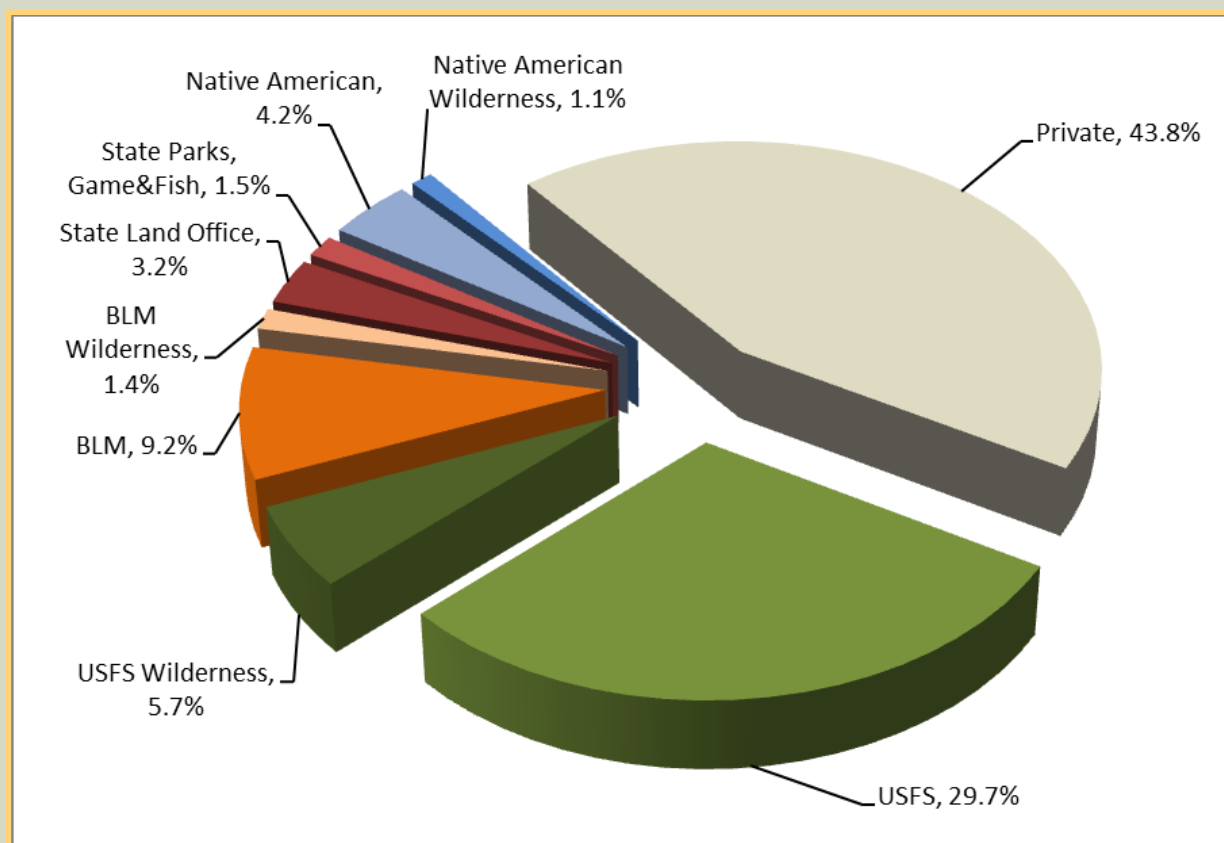


# LANDOWNERSHIP MAP

- Major Landowners are the USFS, BLM, NM State, Native American and Private
- USFS, BLM, and Native American lands have wilderness exclusions
- NM State lands include Parks, Game and Fish and State Land Office.



# LANDOWNERSHIP FINDINGS





# VEGETATION BY LANDOWNER

- Land ownership of potentially available biomass
- Forest and woodland vegetation types by ownership class

Forest or Woodland Vegetation Type	USFS (Non Wilderness)		State Land Office		BLM (Non Wilderness)		Private		Pueblo (Non Wilderness)	
	ACRES	%	ACRES	%	ACRES	%	ACRES	%	ACRES	%
Aspen	181,584	47.4%	5,893	1.5%	2,120	0.6%	141,872	37.0%	800	0.2%
Conifer Forest	699,225	37.8%	40,429.	2.2%	10,472	0.6%	770,241	41.7%	14,824	0.8%
Oak Woodland	24,421	37.9%	1,341	2.1%	1,015	1.6%	35,481	55.1%	404	0.6%
Pinyon-Juniper Woodland	212,155	29.0%	19,692	2.7%	99,492	13.6%	331,4956	45.4%	41,716	5.7%

\* PERCENT calculation:

Total vegetation type acres in the TSA, what percent is found in specified ownership class.

# PROJECT TIMELINE

<i><b>TASK</b></i>	<i><b>COMPLETION DATE</b></i>
Pre-Work Conference	April
Biomass Feedstock Supply Analysis	June
Biomass Feedstock Competition Analysis	July
Regional Biomass Feedstock Analysis	August
<b>Community Meeting #2</b>	<b>August 25</b>
Value-Added Opportunities Analysis	September
Draft Report	November
Final Report	December

# QUESTIONS or HECKLING REMARKS?



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