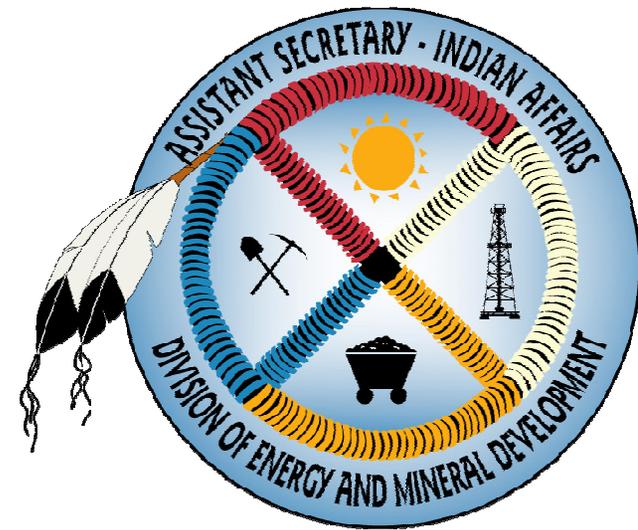


Assistant Secretary-Indian Affairs
Office of Indian Energy and Economic
Development



Project Overviews

Scott Haase
Renewable Energy Engineer
ASIA, Division of Energy and Mineral Development

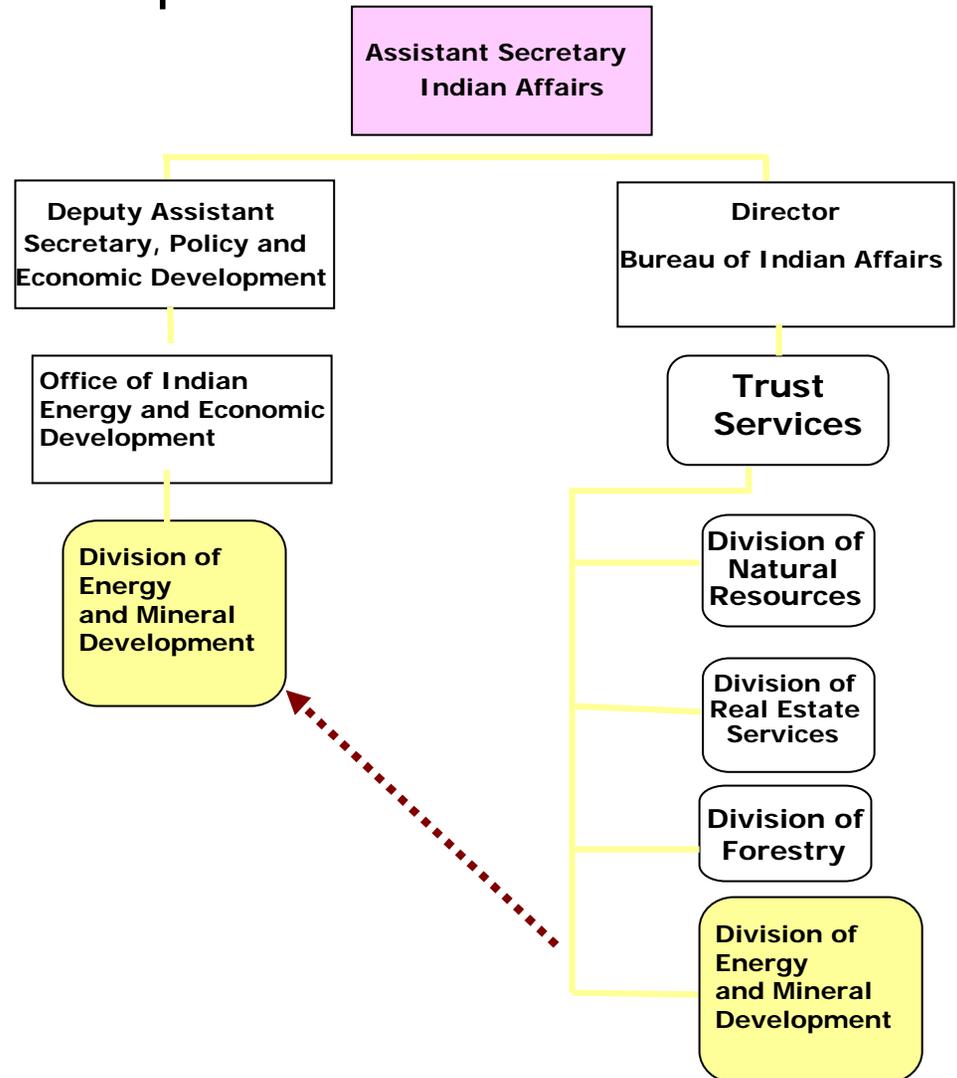
Presented at:
U.S. DOE Tribal Energy Program Annual Meeting

October 26, 2006

Reassignment of the DEMD to the Office of Indian Energy and Economic Development

Prior to April 14, 2005 the Division was under the Office of Trust Services.

The Division now reports to a newly formed office – The Office of Indian Energy and Economic Development



DEMD Responsibilities

- Assist tribes with implementing effective energy and mineral development strategies
- Provide the best possible technical, engineering and economic advice to Indian landowners seeking to manage and develop their energy and mineral resources
- Manage Indian energy and mineral data

Energy and Mineral Development Program

- Provides funding to Tribes to evaluate energy and mineral options
- Presently funding 60+ tribal renewable energy projects
- New request for proposals (RFP) due December 15 2006

DEMD-Funded Projects Being Presented Today

Tribe	Project Type
Colville	Biomass harvest and cogen (brief results)
Mescalero Apache	Biomass power, pellets, liquid fuels
Hualapai Tribe	Tribal utility and wind assessment
St. Croix	Biomass cogeneration
BIA Southwest Regional Office	Biomass facility heating at BIA facilities
Ewiiapaayp	Wind Assessment
Red Lake	Bio-oil and biomass heating of a greenhouse
Aqua Caliente Band of Cahuilla Indians	Solar

Colville

Woody Biomass Feasibility Study

- Determine woody biomass availability, sustainability and economics
- Assess biomass use to optimize revenues and use of logging and mill residue
- Develop tribal load data
- Evaluate Colville Indian Power & Veneer (CIPV) cogen plant
- Assess new options for biomass power to improve CIPV performance and profitability



Current Harvesting Conditions

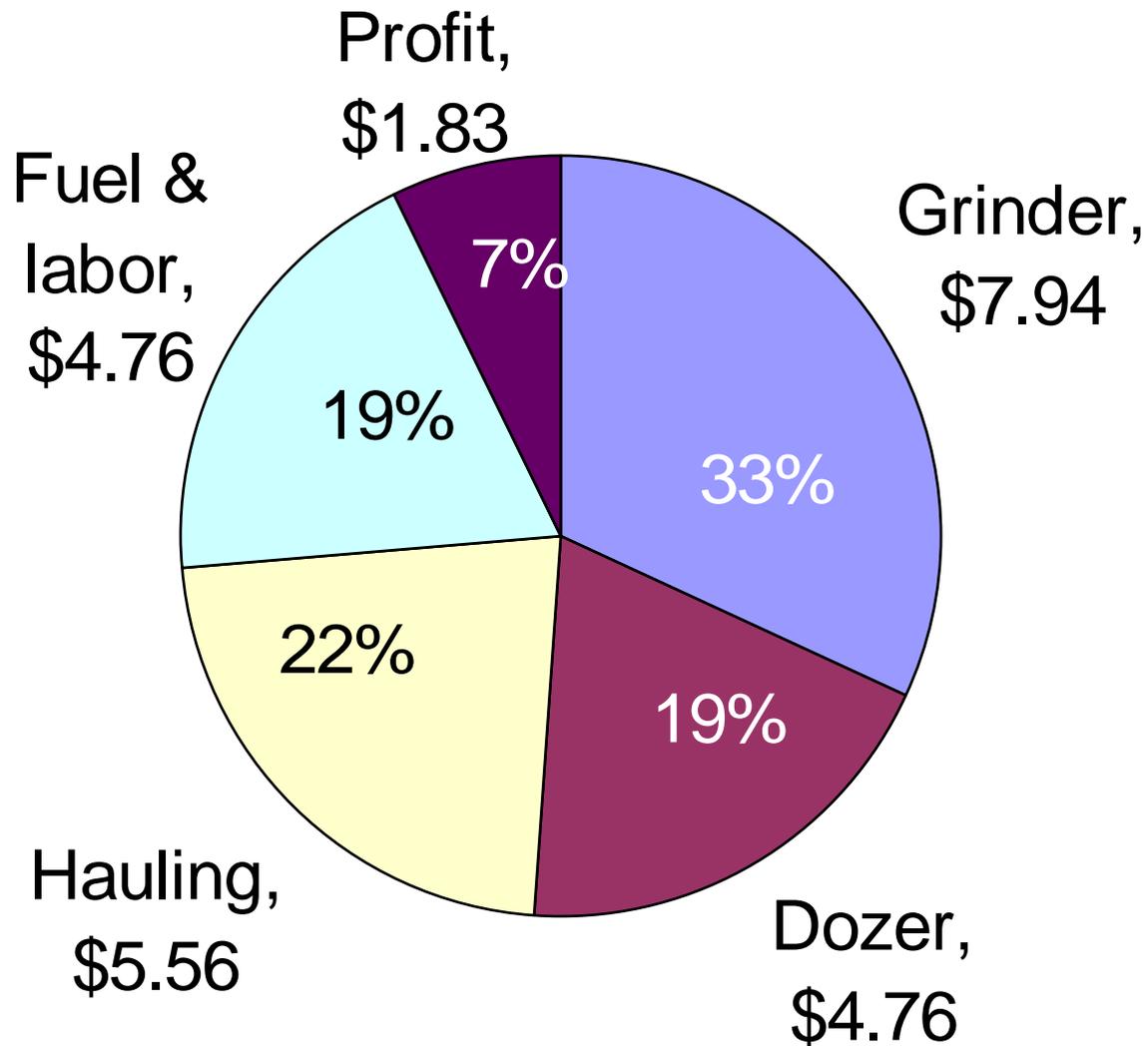
- 78 Million Board Feet harvested annually
- Tribe owns 2 saw mills:
 - Colville Indian Precision Pine (CIPP)
 - Colville Indian Power and Veneer (CIPV)
 - 9 MW Cogeneration power plant
- Timber production has the potential to generate 62,000-94,000 green tons of biomass annually



Biomass Harvest Cost

712 Acre Slash Chipping Operation

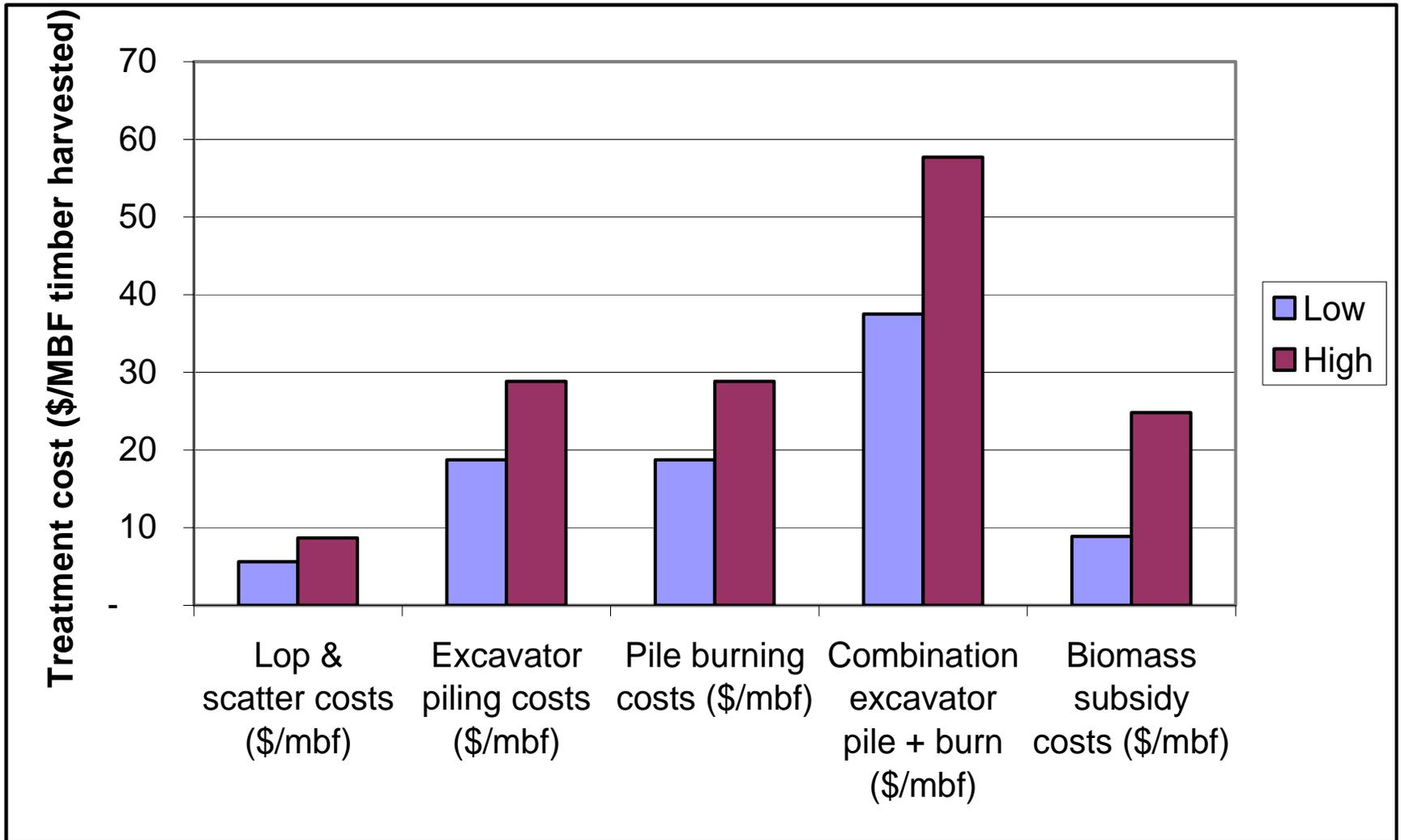
(Total = \$24.85/Green ton)



Avoided Slash Treatment Costs Mineral Ridge, Block 25

Acres	355
Merchantable timber (mbf)	913
Biomass removed (tons)	1,013
Biomass chipping and hauling cost (\$/ton)	\$24.84
Biomass subsidy paid by CTF (\$/green ton)	\$19.84
Biomass subsidy paid by CTF	\$20,098
Typical slash treatment costs that would have been incurred (excavator pile and burn @ \$300/acre)	\$106,500
Savings	\$86,402
Savings per mbf	\$94.64
Savings per acre	\$243.39

CTF Biomass Subsidy vs. Conventional Slash Treatment



Contact

Scott Haase
AS-IA, Office of Indian Energy
and Economic Development
12136 W. Bayaud, Suite 300
Lakewood, CO 80228
Phone: 720-407-0667
Cell: 303-842-3249