

## **Sandoval County Regional Biomass Working Group**

Friday, February 16<sup>th</sup> 2018

### **Action Items:**

- Next Working Group Meeting, Friday April 13<sup>th</sup> 10:00 – 12:00, Sandoval County Complex
- Speak with the Sandoval Economic Alliance about expanding the market for various biomass products
- Look into involving the Anderson School of Management in the product marketing and fiscal analysis process
- Contact Jim Brooks a composting professional with the Coronado SWCD

### **Small Group Recap**

#### Forest Service Modernization Process

- Goal to streamline the NEPA process through the use of technology
- Fires and flooding in California are helping to encourage increased forest treatments
  - o Use of Lidar and GIS to identify historic/cultural sites without a 100% on the ground survey
  - o Potential to develop exclusion zones for forest treatments

#### Economic Opportunity Zones

- New Tax Bill allows census tracts to be designated as Economic Opportunity Zones
  - o Allows tax payments within the zone to be deferred for up to 10 years
  - o Zones must be 20% below the poverty line with a total of 63 to potentially be selected by the governor.
  - o Could provide a significant incentive for biomass development

#### The Nature Conservancy Feedstock Analysis

- Estimates for feedstock are based on 3 different funding scenarios
  - o 80% difference in feedstock availability between top and bottom scenarios
  - o Estimates a supply in excess of 30,000 tons/year of biomass
  - o 5-year peaks at 140,000 tons/year dropping to 40,000 tons/year by year 80
  - o Current thinning projects do not prioritize feedstock production, changing management goals can lead to increased feedstock supply

### **Jemez Pueblo as Potential Biomass Location:**

- Located off US 550 near San Ysidro
  - o Pueblo leadership would be supportive of site use
  - o 60-acre property with access to power and natural gas, potential to expand the site through pueblo participation

- Site is not trust land, designated as “Fee simple site” making development easier
- Potential to apply for 319 funding to further planning efforts

### **Sawmill and Pellet Plant in Milan:**

- Sawmill currently runs at a breakeven point profit is created through pellet production
  - Attempting to develop energy from unusable biomass
  - Current talks with Matt Allen to discuss biomass opportunities
  - Currently funded for 3-5 years with existing contracts
  - Future work may include an additional 30-50,000 acres of treatments

### **Biomass Product Discussion**

- 3 potential uses for biomass
  - Mechanical - firewood, lumber and other wood products
  - Thermal – fuel, pellets, etc.
  - Chemical – Industrial applications, replacing petroleum-based products
- Project does not want to compete with existing businesses
  - Simple product markets are saturated
  - Chemical and thermal options presently experience less competition
- Primary goal to create jobs for Sandoval County and increase the rate of forest thinning
  - Target of 200 jobs created
- Potential to reverse funding declines for federal forestry restoration
  - Is there any opportunity for renewal of CFRP program
  - Great need for funding and cutting cost for treatment per acre could greatly increase funding
  - NM is currently \$600-\$1000/ acre treated
  - Other parts of US are closer to \$300/ acre treated due to expanded forest product profitability

### **Biofuels/Specialized Chemicals**

- DOD interest in biofuels is high currently handing out large-scale contracts
- Difficulty producing more energy than what is used in fabrication
- Specialized chemicals may be more effective
  - Acetic acid
  - Hydrogen
- Expanded need to successfully market chemical products
  - Albuquerque/Rio Rancho lacks a large industrial base
  - Size matters – 10 tons/day is large quantity and can be sold at bulk pricing rates
  - Could be potentially financed with “futures trading”
  - Hydrogen could be sold to Intel
- The cost of transportation is not necessarily prohibitive
  - Shipping would increase exports for Albuquerque, preventing “deadhead” shipping into the city (transporting empty containers)

## Essential Oils from Juniper

- Currently one manufacturer in the East Mountains
  - Requires a homogeneous feedstock supply
  - Likely not a scale that it would be profitable

## Composting and Ground Cover

- Potential as Alternative Daily Ground Cover for SC Landfill
  - Compost facility uses 22 tons a week
  - Alternative Daily Cover potential demand of 50 tons/week
  - Mulch is currently used for erosion control on exposed slopes
- Significant need for mulch within the Coronado SWCD
  - Would need approximately 65,000 cubic yards of mulch for total coverage
  - Difficulty securing funding for this scale of implementation

## Biochar

- Market does not currently exist for Biochar products despite numerous potential uses
  - Water filtration
  - Soil Amendment
  - Use at coal fire power plants as an emission reduction tool
- Various processes to create different types of biochar including activated carbon
  - Different processes increase value and application possibilities
  - Activated carbon, \$1200 dollars a ton
  - Carbon for Mercury filtration can be up to \$3,000 a ton
  - US paying \$800 /ton for source carbon for biochar (coconut shells)