

**Rocky Mountain Restoration Initiative (RMRI)
 September 28, 2021, 2:00 PM - 4:00 PM
 RMRI Biomass Utilization Subcommittee
 Meeting Summary – FINAL**

RMRI BIOMASS UTILIZATION SUBCOMMITTEE	
ATTENDANCE: Patt Dorsey, Kim Hunter, Jason Lawhon, Kurt Mackes, Kate McIntire, Molly Pitts, Tim Reader, Ellen Roberts, Kirby Self, Mark Shea, Travis Smith, Jeremy Taylor, and Laura Wolf	
ACTION ITEMS	
Tim Reader and Kurt Mackes	Distribute the statewide biomass assessment framework with the caveat that the assessment is still in draft form and is likely to change.
Tim Reader	Send the registration information for the SWERI forest innovation and biomass utilization to Samuel Wallace to distribute to the group.
Laura Wolf	Send the program material and RFP for the US Forest Service's Wood Innovations Program once it is available to Samuel Wallace to distribute to the Subcommittee.
MEETING SUMMARY	
PRESENTATION TOPIC: Statewide Biomass Utilization Assessment Framework, presented by Dr. Kurt Mackes, Colorado State University (CSU)	
<p>Presentation Points:</p> <ul style="list-style-type: none"> • The Colorado State Legislature passed a bill (HB21-1180) to implement a biomass utilization grant program. The bill went through several iterations. A past iteration of the bill originally required the completion of a statewide biomass utilization assessment by spring 2022. There were many concerns around the ability of researchers to deliver an assessment so quickly. The final version of the bill did not include the statewide biomass utilization assessment. However, the legislature is still requesting a biomass utilization report be completed within a two-year timeframe. • Dr. Kurt Mackes was charged with conducting the statewide assessment. The Colorado State Forest Service (CSFS) received funding allocations to conduct the assessment and hire a research associate to help support it. He has created an initial framework for what the study will look like. • The study will begin with an introduction stating the purpose of the assessment, project goals and objectives, project description and scope of work, and study area. The study area will be the entire state of Colorado, and in some instances, the study will extend beyond Colorado boundaries to identify relevant biomass markets. The introductory section will also define different biomass terms, including what is meant by the term "woody biomass." The goal is to use the broadest term possible to include things like sawlogs, which are normally not included in the definition of "woody biomass." • The project background and justification section will describe the current condition of forests and in the state and the benefits associated with biomass removal utilization, such as wildfire mitigation, protection of communities and infrastructure, and renewable resource utilization to help meet energy needs. This section will also include a description of carbon storage and climate mitigation. • The next section will characterize and quantify woody biomass resources in two ways: 1) forest biomass and 2) wood processing/urban wood residues. • The fourth section will focus on resource availability. This section will build off the quantification of woody biomass statewide by identifying how much of the woody biomass is available for use. This section will identify barriers and incentives to utilization. 	

- Section five will look at biomass harvesting, transportation, and delivery systems. The first part of this section will identify the existing infrastructure, industry clusters, and biomass supply to determine where there is existing capacity and new opportunities for the biomass industry. This section will also examine haul distances and the transportation thresholds at which biomass utilization can be economical.
- Section six will analyze biomass utilization options. The section will look at major markets, including lumber and timber, roundwood, composite panels, and pulp and paper. Some of these markets, such as pulp and paper, are not feasible in Colorado; however, there may be opportunities to export biomass to out-of-state pulp and paper mills. Other biomass utilization options include other wood products, wood for energy, and biochar. The section will identify the most applicable wood biomass utilization options in Colorado for sawlogs and traditionally unmerchantable material.
- Section seven explores the interest in biomass energy production technologies. The interest in biomass energy is often related to the cost of fossil fuels. This section will determine if there is an opportunity to bring new biomass energy technologies to Colorado. The section will examine the scale needed for biomass energy production.
- Section eight will evaluate the social, economic, and environmental considerations related to biomass utilization. Economic considerations include workforce development and job creation. This section will identify policy incentives and policies hindering wood biomass utilization.
- Section nine will include the recommendations for woody biomass utilization. Ultimately, the assessment will identify promising sites for biomass utilization and the technologies that could be introduced in the state. The assessment will also include biomass procurement protocol and geospatial mapping in the CSFS Forest Atlas.
- The goal is to make this assessment a collaborative process by engaging partners and the public before the assessment is finalized.
- The CSFS is in the process of hiring a research associate. Once that research associate is hired, the assessment will begin, likely by the end of the year.

DISCUSSION TOPIC: Statewide Biomass Utilization Assessment Framework Presentation

Discussion Points:

- The original legislative objectives for the assessment were to advance biomass utilization in Colorado and identify the role the state could play in reducing barriers. However, since the assessment is no longer attached to the legislation, the objectives are flexible. The objectives for the assessment will likely continue to be to advance biomass utilization in Colorado and identify the role of the state in doing so.
- If possible, the assessment should include recommendations for local and regional stakeholders to advance biomass utilization in their communities on a five to ten-year horizon. For example, there could be a recommendation for Front Range, Northwest, and Southwest Colorado communities on the types of products and technologies economically viable in their region.
- California conducted a biomass utilization assessment for the state. Their assessment summarized four or

Decisions/Action Items:

- **Kurt Mackes and Tim Reader:** Distribute the statewide biomass assessment framework with the caveat that the assessment is still in draft form and is likely to change.

<p>five metrics to help determine which technologies were economically viable for local communities. This type of decision support tool may be beyond the statewide biomass utilization assessment. Still, there may be an opportunity to utilize the data from the assessment to create a tool for local decision-makers. One option is to include a forest products tool in the Forest Atlas to help distribute information.</p> <ul style="list-style-type: none"> • Part of the assessment involves collecting better real-time data on biomass utilization capacity in Colorado. • RMRI partners may be able to provide perspectives that can help develop the recommendations section in particular. • The statewide assessment will focus on woody biomass. There may be a small discussion of agricultural residues in the assessment with the Colorado Department of Agriculture's (CDA) input. Some technology may require agricultural feedstock to supplement woody biomass, so there is an important connection between woody biomass and agricultural residue that researchers should consider in the report. • There will likely be interviews/surveys with industry businesses, but the extent of those interviews/surveys is yet to be determined. Businesses will be able to provide perspective on recommendations and the barriers they face in their particular landscapes. • The goal is to make this assessment usable to encourage and increase biomass utilization on the ground to improve forest conditions across the state. • The assessment should consider how to incentivize businesses to come to Colorado to utilize the woody biomass coming from forest projects. 	
<p>DISCUSSION TOPIC: Partner updates</p>	
<p>Discussion Points:</p> <ul style="list-style-type: none"> • Tim Reader has continued to discuss the Bioeconomy Development Opportunity (BDO) Zone with staff at Colorado State Forest Service (CSFS) and the Colorado Department of Natural Resources (DNR). They are discussing the possibility of identifying candidate communities in Colorado that would benefit from the analysis. They would need to find funding to move any analysis forward. • The search for the state forester is moving forward. The Colorado State Forest Service (CSFS) hopes to announce the new hire in the coming month. 	<p>Decisions/Action Items:</p> <ul style="list-style-type: none"> • Tim Reader: Send the registration information for the SWERI forest innovation and biomass utilization to Samuel Wallace to distribute to the group. • Laura Wolf: Send the program material and RFP for the US Forest Service's Wood Innovations Program once it is available to Samuel Wallace to distribute to the Subcommittee.

- The NWTf recently hired Kate McIntire to serve as the RMRI coordinator.
- Molly Pitts and Tim Reader will be panelists at the Western Governors' Association's Working Lands, Working Communities Workshop on October 6 and 7. They will also be presenting at a Colorado economic development conference in late October.
- In November, the Southwest Ecological Restoration Institutes (SWERI) will host a forest innovation and biomass utilization workshop. There will be a pre-seminar workshop for funding opportunities for wood product businesses.
- US Forest Service (USFS) Region Two is putting together a team to analyze conservation finance opportunities.
- National forest products week is the third week in October. Laura Wolf and Nathan Van Schaik are putting together success stories to share during that week.
- The USFS's Wood Innovations Program will release a request for proposals (RFP) during the third week of October. Laura Wolf will be available to help develop and advise on proposals. She will send out the program material and RFP once it is available.

NEXT STEPS

- Samuel Wallace will distribute a Doodle to schedule the next Biomass Utilization Subcommittee meeting.