**SBEADMR Adaptive Management Monitoring Committee Notes**

**PONSSE / Tethered Logging operations briefing**

December 2, 2021

Attendees:

AMG Monitoring Committee Members: Nancy Fishering, Hilary Cooper, Mary Chapman,

Chris Jauhola, Molly Pitts, and Carlyn Perovich

AMG Members: Ben Tisdel, Robin Nicholoff, Ralph Files, Tim Kylo, Enno Heuscher, Craig Grother, Andy Goldman, Justin Musser, Jodi Rist

Science Team: Mike Battaglia, Jason Sibold, Tyler Beeton, Kevin Barrett, Jarod Dunn

USFS Staff: Roger Kyle, Matt Vasquez, Sean Ferrell, Stew Robertson; Gina Rone, Michael Salazar, Chris Olsen, Shauna Jensen

Guest Presenters: Ben Leshchinsky, Woody Chung, Chuck Rhoades

The meeting purpose was to evaluate a proposed change to the SBEADMR checklist that would allow use of PONSSE equipment (tethered cut-to-length logging) in specific circumstances. This follow-up meeting was requested at the October 28, 2021 AMG meeting in order to allow a deeper understanding of the system, its capacity, and it’s pros and cons.

Vision and need for this monitoring meeting were discussed at the October 28, 2021 full AMG meeting. The excerpt from that meeting follows: “While the upfront costs of this technology have precluded its widespread use in Colorado in the past, the current need for increasing the scope and scale of fuels mitigation treatments and an associated increase in available funding are expected to lead to more frequent use of tethered cut-to-length (CTL) harvest systems on Forest Service lands. GMUG staff feel that this technology will be an essential tool in effective forest management moving forward.”

The monitoring meeting included presentations from Ben Leshchinsky and Woody Chung on monitoring and modeling done in Oregon. The Monarch Pass demonstration and monitoring was presented by Chuck Rhodes USFS Rocky Mountain Research Station. Gina Rone the GMUG Soils and Hydro Specialist also gave detailed input.

**Takeaway facts:**

* PONSSE systems in use internationally since the 1980’s.
* Not much research on systems that use both tethering and “cut-to-length”.
* The Oregon study included a PowerPoint documenting the monitoring results. There were no

 signs of sediment movement in either the tether or hand felling sites.

* Discussion also included tethered equipment using wheels vs tracks.
* Tethered logging operations have fewer, or no landings and they experience “churning” some

 soil compaction and ruts but not at scales that exceeds USFS standards.

* The monitored treatments met USFS soil quality standards and were considered successful

 treatments.

* Mary asked about the cost-effectiveness of this system, but no data was presented.
* The Monarch monitoring research considered: hilltop erosion, water quality, tree regeneration
* and fuel dynamics. The erosion rates after year one were discussed, and further monitoring will

 occur for 2 to 3 years.

* Chuck compared the erosion at Monarch following a rain event and noted that the results were

 better on Monarch than the effects from the same size storm on the Poudre River where even

 lives were lost.

* Chuck noted that use of slash mats will need attention since each site needs available slash and

 and slash ‘mapping’ may be needed to plan the logging operation.

**Suggestions were**:

~To develop BMP’s (Best Management Practices) for using PONSSE. We may need tweaks to the current USFS standards and guidelines.

~Ben noted that roads are necessary since the tethering occurs from roads above sites. Re-tethering can occur from trees strong enough to anchor the equipment on a hillside. He also noted that one needs to compare PONSSE treated acres with those treated with more conventional logging.

~The tethered equipment can reach from 500 feet to as far as 1000 feet.

~The monitoring group and those attending the October 28th meeting suggested a field trip to the Monarch site in 2022.

~ Mike B stated that this type of approach fits the AMG model since we can both research and adapt to

 these treatments. Pre-harvest data had GPS locations and tracking can occur 10 years from today.

~Mary noted that outreach and signage on Monarch would be good to educate the public

~GMUG staff indicated that this technology is permitted under the current GMUG Forest Plan based on the USFS definition of High Flotation Equipment.

This list summarizes the approach (BMPs, signage, cost effectiveness) that will accompany any implementation of this new technology.

After discussion, Susan asked if anyone was opposed to Nancy’s offer to craft language capturing the meeting ideas to take back to the AMG monitoring committee for its review in preparation of reporting to the full AMG in February 2022. There was no opposition.

Nancy’s draft language for consideration by the AMG monitoring committee:

“Recommend approval of the proposed checklist design feature change to allow the use of PONSSE equipment with the caveats that use of this equipment would serve as a pilot project subject to monitoring, further site-specific research, and future adaptations or fine tuning of the checklist.”

Notes prepared by Nancy Fishering, AMG and AMG Monitoring Committee Member