Monitoring upland silvicultural treatments in the southern Blues CFLRP area
Two types of monitoring

Observational (field trips)  Data-driven
Two forest types

Dry pine

Mixed conifer
Lessons learned from observational monitoring

Dry pine:

Basal area targets of approximately 30-60 square feet per acre are appropriate in forested areas.

Create small patches and openings... meet basal area targets at unit scale, not acre scale.
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Mixed conifer:

Basal area targets of approximately 40-70 square feet per acre are appropriate in forested areas.

Meet basal area targets at unit scale, not acre scale.

Remove more shade tolerant species (grand fir).
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Aggressively restore aspen.
Lessons learned from observational monitoring

All forest types:

Burn more.
Lessons learned from data-driven monitoring: Fine fuels matter
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![Fine surface fuel (tons per acre) over years](chart.png)
Lessons learned from data-driven monitoring: Salvage
Lessons learned from data-driven monitoring: Dead trees fall down
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Salvage: 249% increase in surface fuel loading

No salvage: 346% increase in surface fuel loading
Thanks

Co-PI: Becky Miller

BMFP staff and board:
Mark, SJ, Pam, Dave, Ben, Glen, Zach, Elise

Malheur NF: Nathan Poage, Joe Rausch, Steve Beverlin, Amanda Lindsay (and many others)

The crew: Kat Morici, Kate Williams, Kylie Meyer, Brett Morisette, Courtnay Pogainis, Hana Maaiah, Tyler Mesberg, Lexa McAllister, Jordan Woodcock, Claire Moreland-Ochoa, Alex Martinez-Held, Amanda Bintliff, Kevin Mason, Julia Olszewski, Leigh Anna Morgan, Tatiana Dolgushina, Kayla Gunter, Jamie Martenson, Tatum VanDam, Kate Wellons, Joel Riggs, Clark Chesshir, and Lizzie Schattle
Will: Sites are regenerating after large fires, but species composition is skewed towards shade tolerant species (e.g., grand fir).

Christy: Trees respond differently to wildfire and thinning. Low severity fire and/or thinning may optimize tree defenses.

Skye: We can restore historical basal area and density with a particular fire severity, but it is difficult if not impossible to restore historical species composition.

Kerry: We are treating a lot of acres! Although there are significant lags between planning and completion of the full suite of restoration activities. There is a huge lag in prescribed fire.

Julia: We can characterize the effects of treatments using remote sensing tools over large areas.