

Management implications of vegetation and soil moisture responses to woodland fuel control

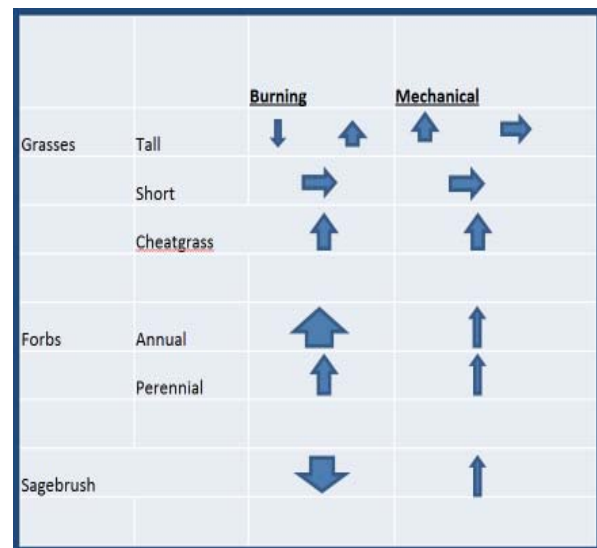
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Woodland Conclusions

- Prescribed fire kills trees and shrubs
- Mechanical cutting, shredding kills most trees, not shrubs
- Surface fuels
 - Burning reduces all classes
 - Cutting increases all classes
 - Shredding reduces to 1 and 10-hr sizes
- Treatments improve growing conditions for grasses
- Both tall perennial grasses and cheatgrass may increase a few years after treatment
- Perennial grass recovery looks promising even at previously-high tree cover
- Fire increases annual forbs
- Sagebrush seedlings are establishing in treatments
- Treatments decrease bare ground
- Future monitoring can help:
 - Determine perennial grass/weed outcomes for different environmental potentials
 - Length of treatment effectiveness
 - Recovery of shrubs
 - Effects of subsequent fire

Woodland management

- Control fuels at Phase I or II
- Warmer and drier or wetter sites have more chance of cheatgrass dominance
- Use prescribed fire to control fuels best, but use mechanical where shrubs are desired
- Mechanical treatments have risk of subsequent high intensity fires
- Follow-up shredding with prescribed fire to kill small trees, keep shrubs, and reduce fuels



Arrows indicate cover trends for functional groups as increasing, decreasing, or similar. Width of arrow indicates general magnitude. Two arrows: left arrow indicates initial response, right arrow indicates response a year or more after treatment