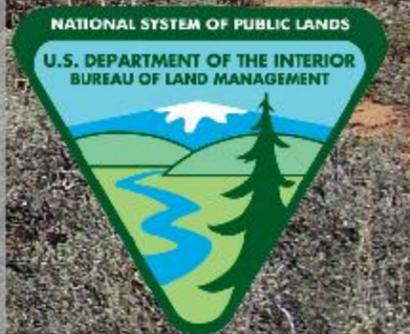
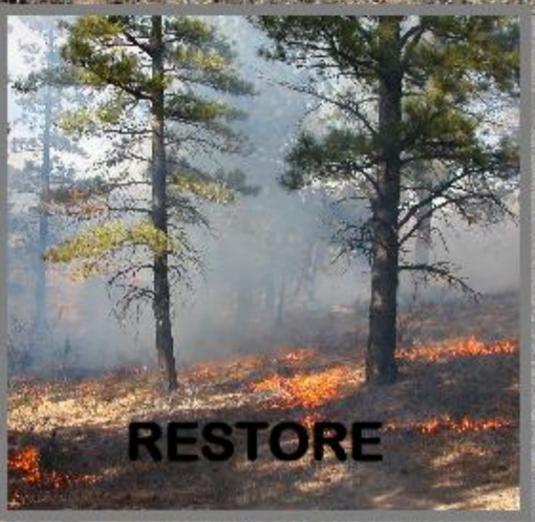
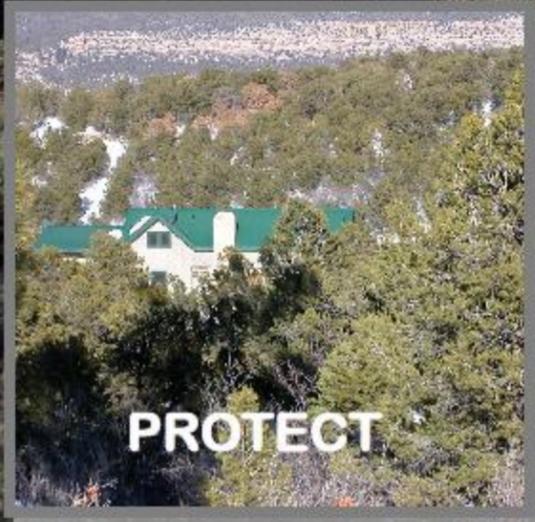


RAY MESA FUELS REDUCTION & HABITAT RESTORATION PROJECT





OVERVIEW

Multiple phases of the project will occur over many years.

Phase I began in 2004.

Planned and coordinated utilizing in-depth scientific research.

Various methods of vegetation treatments have been implemented to:

1. Protect against wildfires
2. Enhance wildlife habitat
3. Improve watersheds
4. Restore plant communities

Wildfire protection includes thinning dense pinyon/juniper trees adjacent to communities, next to roads, and around utility corridors.

Wildlife habitat enhancement incorporates seeding (for forbs, grass, and shrubs), clearing the understory in ponderosa pine stands, and leaving old growth pinyon/juniper woodlands as shelter and travel corridors for wildlife.

Watershed improvement consists of increasing ephemeral stream flows and decreasing soil run off and erosion.

Plant community restoration is achieved by seed application, harrowing degraded and over-grazed sagebrush flats, thinning pinyon/juniper, and restricting livestock grazing for two seasons in each phase allowing plants to establish.

GOALS

- Reduce the potential loss of life and property from wildfire for adjacent communities.
- Reduce stand density in pinyon/juniper.
- Reduce the risk of stand replacement fire.
- Preserve and restore ponderosa pine stands.
- Improve ecosystem health and habitat by increasing perennial grasses and shrubs.



TREATMENTS

- Thin, Pile, and Burn
- Chipping
- Lop, Scatter, and Burn
- Seeding
- Understory Burn
- Broadcast burn

HISTORY

The Ray Mesa area is a high desert ecosystem with a complex vegetative mix composed of pinyon and juniper (P-J) woodlands, ponderosa pine stands, oak brush, and open sagebrush flats. During the past century P-J woodlands have dramatically encroached into the domain of these vital vegetation regimes on this landscape. P-J woodlands represent the third most extensive vegetation type in the continental U.S. Recent comparison by historical photo documentation shows there has been a 100% P-J increase across southern Utah. P-J woodlands are highly flammable and the Ray Mesa area has high fire frequency due to lightning. BLM fire managers are concerned that large destructive fires in the area are imminent.

Fire Regime Condition Class (FRCC) is a general classification of the historical role fire played across a landscape prior to modern human intervention. P-J encroachment has played a significant role in fire regime departure among vegetation groups including ponderosa pine, sage brush, and grasslands. Most of these regimes are now FRCC-2 or 3 where FRCC-3 is a complete departure from historic fire occurrence and dominant vegetation class.

Over the past several decades, P-J encroachment has been a major focus for the BLM due to its spatial extent and the undesirable consequences of fire regime change. Vegetative competition from P-J has contributed to declines in forage production, diminished habitat quality for wildlife, decreased herbaceous cover, and increases in soil erosion with implications for long-term ecosystem sustainability.

MONITORING AND REPEAT PHOTOGRAPHY



**Ray Mesa II Photo Point 2-June 3, 2010
Thin, Pile & Burn (post-thin & pre-burn)**



**Ray Mesa II Photo Point 2-June 3, 2012
Thin, Pile & Burn (2nd year post treatment)**

COLLABORATION

- The Utah Watershed Restoration Initiative (UWRI) has been an integral partner contributing funds for seed and equipment rentals.
- Participation for project design was a collaborative effort within the BLM Moab Field Office's Fuels, Wildlife, and Range staffs.
- Utah Forestry Fire and State Lands developed Community Wildfire Protection Plans with adjacent communities which were incorporated into the design of the Ray Mesa Project.
- Colorado University has been intrinsically involved with this project for scientific research. Monitoring plots were set up in the project to measure erosion (from wind and rain), nutrient cycling, soil moisture, post vegetative response, and species composition. Colorado University has ongoing studies and evaluations that will be shared with the scientific community. The studies are valuable to the BLM to ensure that future rangeland health and restoration projects achieve desired outcomes.

ACHIEVEMENTS

- This unique desert ecosystem, once at risk from the impacts of pinyon/juniper encroachment and wildfire, now has tangible signs of restoration, diversity, and resilience.
- The success of the Ray Mesa Project is the unification of sound land management practice and the application of contemporary scientific research.



Utah Fire Info

www.UtahFireInfo.gov
for more info and
other on-going projects

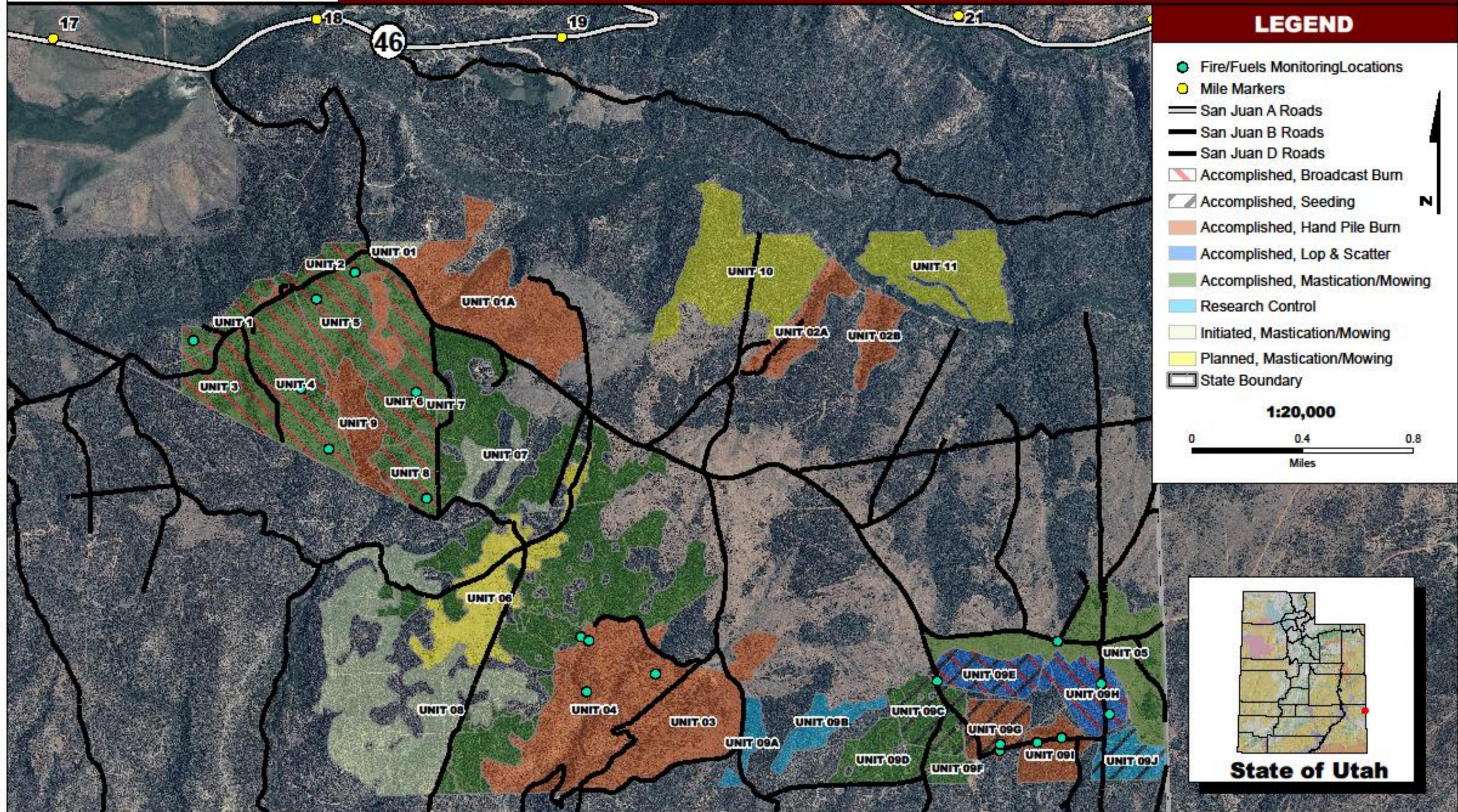
BLM, Canyon Country Fire Zone, Moab Field Office



Moab BLM



Ray Mesa I and II Project Areas



LEGEND

- Fire/Fuels Monitoring Locations
- Mile Markers
- San Juan A Roads
- San Juan B Roads
- San Juan D Roads
- Accomplished, Broadcast Burn
- Accomplished, Seeding
- Accomplished, Hand Pile Burn
- Accomplished, Lop & Scatter
- Accomplished, Mastication/Mowing
- Research Control
- Initiated, Mastication/Mowing
- Planned, Mastication/Mowing
- State Boundary

1:20,000

