

Columbia Hazardous Fuels Reduction and Habitat Restoration Project



Columbia Project Area (pre-treatment)



OVERVIEW

The project began in fall 2009 and was completed in spring 2010.

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 the communities of East Carbon, Sunnyside, and Columbia.

Wildlife habitat enhancement incorporates seeding for grasses and shrubs, opening up dense pinyon/juniper woodlands, and leaving old growth pinyon/juniper woodlands as travel corridors and shelter for wildlife.

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

Plant community restoration achieved by seed application, thinning pinyon/juniper, and restricting livestock grazing for two years in the project area (allowing plants to establish).

GOALS

- Reduce the potential loss of life and property from wildfire for adjacent communities.
- Preserve and enhance critical winter habitat and forage for wildlife.
- Diversify age class of trees within the project area.
- Restore ecological resilience to watersheds.

Winter Pile Burning



Bullhog Chipping



TREATMENTS

- Chipping
- Thin, Pile, and Burn
- Seeding

HISTORY

The Columbia area ecosystem is dominated by pinyon (*Pinus edulis*) and juniper (*Juniperus osteosperma*) trees. During the past century pinyon and juniper (P-J) woodlands have dramatically encroached into the domain of 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 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 that 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 sage brush and grass lands. Most of these regimes are now FRCC-2 or 3, where FRCC-3 is 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



**Columbia Bullhog Plot 4 – 0° Transect
October 27, 2009 pretreatment**



**Columbia Bullhog Plot 4 – 0° Transect – June 23,
2011 second year post treatment and seed response**

COLLABORATION

- The Utah Watershed Restoration Initiative (UWRI) has been an integral partner contributing funds for seed purchase and equipment rentals.
- Participation for project design was a collaborative effort within the BLM, Moab Field Office's Fuels, Wildlife, Hydrology, 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 Columbia Project.
- The Utah BLM was allocated American Recovery and Reinvestment Act (ARRA) fuels reduction funding for this project. Extra ARRA funds received in 2010 were used to implement additional treatments.

ACHIEVEMENTS

- This project has reduced 1,373 acres of dense pinyon/juniper woodlands that could have fueled a high-intensity wildland fire near the communities of East Carbon, Sunnyside, and Columbia. Future wildfires will be easier to suppress and the threat to life and property has been greatly reduced.
- The success of the Columbia 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, Price Field Office



Price BLM

Columbia Project Area

