

The background image is a scenic landscape of a mountain valley. In the foreground, there is a wide river with a sandy and rocky bed, surrounded by tall, dry grasses and shrubs. The middle ground features a dense forest of trees with vibrant autumn foliage in shades of yellow, orange, and red. In the background, a steep, forested mountain rises, covered in green and brown vegetation. The sky is not visible.

Landscape and Watershed Scale Projects to Restore Pinyon-Juniper Woodlands US Forest Service Humboldt – Toiyabe National Forest

Legislative Committee on Public Lands

**By Jeanne Higgins, H-T Forest Supervisor and Jose Noriega, Ely District Ranger
June 19, 2012**

EXHIBIT F – LANDS
Document consists of 19 slides.
Entire Exhibit provided.
Meeting Date: 06-19-12

Changes in the Pinyon-Juniper Landscape

Woody species favor a warming climate. In the Great Basin this means accelerated growth and expansion of Pinyon-Juniper.

Vegetation changes are influenced by past management actions, current programs and management actions, climate change, and invasive species.

Wildlife habitat for key wildlife species, such as sage grouse, mule deer, and pygmy rabbits are being lost due to the expansion and increase in densities of Pinyon-Juniper.

Increased densities of Pinyon-Juniper also impact the hydrologic function of springs, meadows, streams and other riparian communities through surface water reduction.

A key factor in effective restoration of Pinyon-Juniper and sagebrush ecosystems is to take a landscape scale approach to implementation.



National Forest System in Nevada

Total acres = 5,657,694.

Of that, 43% or 2,410,919 acres have Pinyon and/or Juniper in their vegetation communities.

Planned Treatments for 2012

- **9,600 acres planned for treatment within the Ely, Austin-Tonopah, Bridgeport and Ruby Mountains RDs**

Treatment Costs

Treatment costs are a challenge to plan and implement projects at the scale that may be necessary to restore the landscape.

Central and Eastern Nevada Treatments Costs

- **Hand Cutting Phase I Pinyon-Juniper with chainsaws = \$50/acre**
- **Prescribed fire in Phase I or II Pinyon-Juniper = \$50 - \$100/acre**
- **Hand Cutting in Phase II Pinyon-Juniper with chainsaws = \$80 - \$200/acre**
- **Mastication within Phase II Pinyon-Juniper = \$300 - \$400/acre**

Western Nevada Treatments

- **Hand cutting with chainsaws = \$200 - \$450/acre**

Utilization Opportunities

A photograph of a large fire burning in a forest. The fire is intense, with bright orange and yellow flames visible. Thick, dark smoke is rising from the fire, filling the upper portion of the image. The background shows a forest of evergreen trees on a hillside.

Many areas identified for treatment provide opportunities for the utilization of biomass to meet restoration objectives and reduce treatment costs.

Biomass could be utilized for a variety of products such as fuelwood, biochar, wood pellets, other wood products used to produce heat and/or electricity.

Vegetation and Fuels Projects On The Ely Ranger District





PROJECTS

- **North Schell Restoration Project**
 - 24,000+ acres.
- **Ward Mountain Restoration Project**
 - Multi Agency planning
 - 120,000 acres on BLM, Forest Service, and Tribal Lands.
- **Currant Creek Prescribed Burn**
 - Over 4,000 acres treated.

Projects (cont.)

- **Grant –Quinn PJ Whacking Project**
 - Decision- May 2012 to treat up to 15,000 acres.
- **South Schell Pinyon-Juniper Project**
 - Decision - June 2012 to treat up to 15,000 acres.
- **Adaven Prescribed Burn**
 - Decision - December 2012 to treat 5,000 acres.

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Projects (cont.)

Southern White Pine Watershed Restoration Project

- In the pre-planning phases on a 180,000 acre analysis area.

Projects (cont.)

Worthington Canyon Restoration Project

- Eastern Nevada Landscape Coalition leads planning, implementation and monitoring of this project in the Duck Creek Basin.

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Central White Pine Project Before



Central White Pine Project After

5,000+ acres treated with 7,000 additional acres in
progress or planned

Lowry Fuels Reduction Project

Over 2,000 acres treated with more planned



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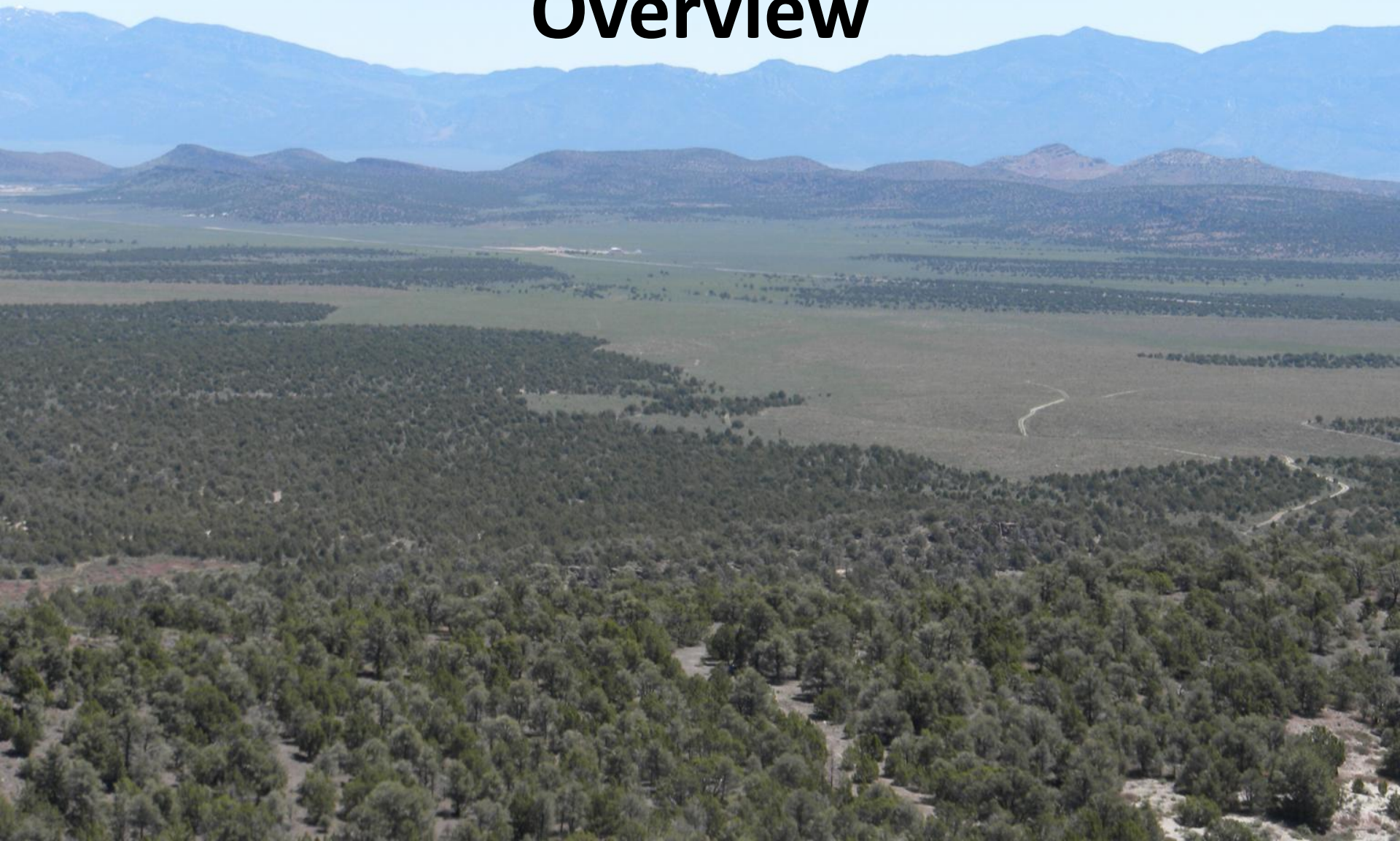
Lowry Fuels Reduction Project After Mastication



A wide-angle landscape photograph showing a restoration project. The foreground is filled with dense, tangled sagebrush, some of which is yellowed and dead, and many bare, light-colored branches. A large, weathered log lies horizontally in the middle ground. The background consists of a flat, open plain with sparse vegetation, leading up to a range of rugged, rocky mountains under a clear blue sky.

White Pine Sagebrush Restoration Project

White Pine Sagebrush Project Overview



White Pine Sagebrush Project Before



White Pine Sagebrush Project After

Over 3,000 acres treated with additional acres planned.

Any Questions ???



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