

Snapshots

December 9, 2005



Successful BLM Projects
Supporting the National Fire Plan

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Biomass "Utilized" in New Mexico Holiday Parade

Twas' a fortnight before Christmas, and all through the town,
The Electric Light Parade was spoken of, without ever a frown.

The Carlsbad Interagency Fire Organization float was designed with the utmost of care,
A proper woodland setting for Santa and Smokey must be on there,

So where to find trees in the desert southwest,
Perhaps pinons thinned from a fuels reduction project might be best,

It's not quite the biomass utilization that most folks expect,
But it is reusing the trees, so what the heck,

The float is prepared and the parade begins,
Smokey and Santa arrive and everyone grins,

So who would have guessed that the first place prize,
Would go to the firefighters float with the reutilized tree design,

So as we approach this festive time of the year,
We send Seasons Greetings to all and to all good cheer.

Happy Holidays from the Carlsbad Interagency Fire Organization!



Smokey and his buddy Santa proudly display their first place float trophy.



The award winning float.

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New Mexico

International Effort Helps Restore Wood Canyon Ecosystem

Wood Canyon is located in the foothills of the Guadalupe Mountains in southeastern New Mexico. With over 2,600 acres of public land located in the canyon, the Carlsbad BLM Field Office proposed using prescribed fire as a tool to improve the health of the ecosystem. The desired outcomes of the project included reducing the unnaturally high densities of one-seed juniper, Wheeler sotol and lecheguilla while increasing perennial grass cover.

Los Diablos crew bus and others enroute to Woods Canyon.



Members of the Los Diablos crew working on the Wood Canyon prescribed fire.

The local fire staff extended an invitation to numerous agencies to assist with the burn. In addition to local resources from the city fire department, county emergency management agency, U.S. Forest Service, Bureau of Indian Affairs, and National Park Service, the project benefited from the participation of two Type II hand crews from the Los Diablos International Fire Crew of Mexico. The Los Diablos crews were coordinated through Big Bend National Park and arrived in Carlsbad with

bilingual crew chiefs. In addition, the Carlsbad Interagency Fire Program provided two agency fire staff members who were fluent in Spanish to assure all aspects of the project were understood by crew members.

In June 2005, the assembled crews used drip torches to blackline the perimeter of the project



Crews begin the blacklining operation around the perimeter of the project area.

area. Helicopters were used to ignite the interior due to the rugged topography of the area. The Wood Canyon prescribed fire was a success.

As grass cover is restored on the site it is expected that soil loss will be reduced, water retained, palatability of browse species increased, and wildlife habitat improved. In addition, it's anticipated that periodic low intensity fires will now be able to maintain the burn unit in its restored grassland condition.

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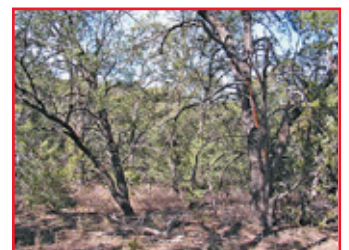
Tularosa Watershed Work Underway

The Sacramento Mountains, located in south-central New Mexico have seen their share of large, destructive wildfires in past decades. Since the year 2000, the Lincoln National Forest and the Mescalero Apache Indian Reservation has been host to several Type I and Type II wildfire incidents. The preponderance of accumulated fuels in these and surrounding

areas have led fire managers to assume that more destructive fires lie ahead.

One area that has worried land managers surrounds the small unincorporated community of Bent, New Mexico. This rugged landscape, comprised of mixed ownership lands and characterized by thick stands of pinon and juniper, lies southwest of the larger community of Mescalero and adjacent to the Mescalero Apache Indian Reservation boundary. The Las Cruces District BLM has ownership and provides protection for most of the woodlands. Being aware of the problem, the district took steps to deal with it. After three years of planning, consultations with the Mescalero Apache Tribe, and collaboration among local governments and private landowners the fruit of this labor is resulting in work being accomplished.

In October of 2005 the first phase of fuels treatments was completed with a fuelbreak along the boundary of the BLM and tribal lands. A total of 116 acres have been treated with mechanical thinning and handpiling. The project will



Fuel loading conditions prior to treatment.

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Thinned fuel break, center of photo.

eventually comprise a total of 1,430 acres, 900 of which are BLM, 280 acres of private, and 250 acres of state lands.

The project will take a landscape approach using mainly mechanical thinning with a variety of holistic prescriptions for creating natural looking openings and meadows including savannah-like woodlands and clumps of denser trees for wildlife cover, visual appeal and shading. Hand seeding using native grass seed will be done to enhance the grass cover. Erosion control will be accomplished by utilizing brush and logs as gully plugs. Due to the remote and roadless nature of the area there is no plan to utilize the accumulation of biomass at this



View of Sierra Blanca peak from treatment site.

time. Utilizing prescribed fire techniques will consume the biomass by pile burning in the fuelbreak and broadcast burning blocks of the rest of the project.

The Mescalero Apache Tribe has been very grateful of the efforts done by the BLM and is now in the planning stage to continue seamless fuels treatments on their side of the boundary.

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Montana

Howery Island Restoration Project

A contractor hired through an indefinite delivery, indefinite quantity contract cleared 100 acres at the Howery Island Recreation area west of Hysham, Montana during the winter of 2004-2005. The contractor hired local people who used chainsaws and chippers to remove Russian olive and tamarisk (salt cedar) which had taken over the area.

Both species are non-native and often out-compete native species. Another contractor chemically treated the stumps to prevent re-sprouting of the trees. This had to take place within hours of cutting the Russian olives.

The project was funded with range and hazard fuels funds and was implemented in response to BLM's Rangeland Standards and Guides assessment. The assessment determined that the area did not meet standards due to the high number of Russian olive and tamarisk. The area was also determined to be at high risk for human-caused fires due to the recreation site and the amount of seasonal agricultural burning in the area.

The treatment is the first step in restoring the former open character of the cottonwood galleries. The removal of the olive and tamarisk in combination with good moisture has already resulted in the sprouting and additional establishment of browse species such as currant, chokecherry, rose, and tree species such as cottonwood, willow, dogwood, ash, and elm. Native grasses and forbs are also now found at Howrey's Island.

Another 100 acres are planned for treatment during the winter of 2005-06 through the indefinite delivery, indefinite quantity process. This time, the fuels will be piled and ground using mechanical equipment.

Before and after photos of the Howery Island Restoration Project along the Yellowstone River.



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Nevada

Fuels For Schools Program Boiler Heats Classrooms, Educates Community

An experimental hot water boiler has been burning shredded pinyon and juniper wood at an Ely elementary school since the building's heating system was retrofitted in October 2004.

The boiler retrofit, which cost \$972,000, was part of a \$3 million energy retrofit for the White Pine County School District. So far, the district has been able to save \$16,000 to \$18,000 a month. When the debt repayment is made, the district expects to save about \$197,000 a year on energy costs.

The shredded pinyon and juniper wood is a more economical source of heating fuel than commercially available heating oil and natural gas. The shredded wood is the end result of hazardous fuels reduction efforts near the Mount Wilson Guest Ranch, 22 miles north of Pioche. Shredding pinyon and juniper trees in areas of high fuel loads reduces the threat of wildland fire danger to a community. Additionally, clearing some areas of pinyon and juniper trees promotes the health of the rangeland by allowing the growth of grasses and shrubs that had been shaded out by the woodlands.

The BLM, Nevada Division of Forestry and the U.S. Forest



A conveyer belt moves wood chips from the storage bin on the right to the furnace, shown on the left.



The BLM contractor uses an excavator to feed felled pinyon-juniper to the shredder. Biomass is subsequently loaded into the waiting semi-truck.



Contract excavator loading felled pinyon-juniper onto a conveyor belt feeding the shredder. A separate conveyor belt hauls the shredded biomass to a waiting semi-truck for hauling.

Service have provided 1,000 tons of shredded pinyon and juniper biomass to the White Pine County School District. That is enough to meet the district's heating needs for more than six years, if all the schools were using the system.

The David E. Norman Elementary School was retrofitted with the wood-burning boiler, under an innovative program called Fuels for Schools. The Nevada Division of Forestry started the wood-burning boiler pilot project with funding from the Forest Service. Similar pilot projects are ongoing in selected Idaho and North Dakota schools.

The high-tech boiler burns the shredded wood at temperatures exceeding 2,000 degrees F., producing mostly water and ash. Particulate matter emissions are well below Environmental Protection Agency standards.

Students at Norman Elementary monitor the boiler system's performance as part of their science curriculum, so the pilot project adds to their educational experience.

Under the Fuels for Schools program, the pilot project schools serve as demonstration models and information sources, gathering monitoring data and hosting tours for interested groups.

Should the pilot program at Norman Elementary be successful, similar boilers may be retrofitted in other White Pine County Schools.

Wyoming

Interspersing Early Seral Stages within Wyoming Big Sagebrush Communities

In Wyoming's Bighorn Basin, the Bureau of Land Management's Cody Field Office is attempting to increase sagebrush seral stage diversity at the landscape and watershed scale, as well as reduce vegetative fuel loads. Multiple methods were used to accomplish this, such as mowing with a tractor, prescribed burning, and seeding.

In the last four years, the Cody Field Office developed six projects and treated approximately 7,000 acres. Primary restoration objectives are being achieved and can be attributed to the use of appropriate vegetative treatment methods, coupled with good, long-term livestock grazing management.

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habitat for all plants and animals that depend on a functional sagebrush ecosystem. The map shows the strategic placement of treatments within the parameters of the landscape. Sage grouse leks were buffered by untreated areas to maintain suitable nesting conditions. Encroaching vegetation near prairie dog towns was mowed to encourage town expansion. Strips were mowed near roads to create a fuel break, aiding fire suppression efforts should a wildland fire occur.

Point count transects, line intercept transects, lek counts, and prairie dog activity monitoring results should show whether or not these treatments have improved habitat. Increases in forbs, grasses and cryptobiotic crusts interspersed within a sagebrush community at the appropriate treatment proportions for sage grouse nesting and brood-rearing areas is the model that the Cody office uses to improve habitat of this “umbrella” species. By managing for healthy sage grouse populations, habitat needs are met for other species coexisting with sage grouse, which may be harder to manage for individually.

The Nature Conservancy’s Heart Mountain Grassbank was critical in allowing livestock grazing flexibility, providing for three years of total rest for treatments within the Sage Creek project area near Cody. Rest and good, long-term livestock management increases resilience to cheatgrass and other weeds

by increasing the density and vigor of competitive, native herbaceous species. These types of arrangements greatly enhance treatment results. The YU Bench project also has been successful at managing sagebrush and improving wildlife habitat, while rotating cattle to ensure two growing seasons rest for plant recovery, and enabling treatment of over 5,000 acres.

In addition to The Nature Conservancy, the Cody Field Office has partnered for funding and project implementation with the Wyoming Game and Fish Department Sage Grouse Conservation Fund, Rocky Mountain Elk Foundation, Marathon Oil Company, Bighorn Basin Sage Grouse Working Group, and local grazing permittees.

The Cody fuel reduction treatments are a product of blending similar program objectives, building partnerships, and finding creative solutions to implement projects benefiting the land and community.

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Before and after photos of treatment area.



Part of the area seeded.