Highlighting BLM projects that support the National Fire Plan.

-



Montana

Rosebud County Fuel Reduction

Rosebud County, in rural eastern Montana, is getting into fuel reduction work in a big way. The county has several growing subdivisions in the wildland-urban interface with an abundance of ponderosa pine, grass, and sagebrush and history of frequent wildland fires. The county's fire department has a limited number of fire engines and is further challenged with a limited water supply near the subdivisions.

National Fire Plan capability is allowing the county to obtain much-needed help to reduce fuels in the interface. As the result of an assistance agreement with BLM's Miles City Field Office, the Rosebud County Volunteer Fire Department is implementing a community assessment and mitigation plan. The fire department hired a contractor to complete the plan and assessment. The contractor in turn trained firefighters to gather information about fuel types, conduct hazard assessments, and look at different fuel treatment options for the project.

Firefighters have completed home evaluations and GPS mapping and developed plans to treat up to 6,000 acres. The treatments will significantly reduce the fire hazard to communities as well as improve the safety of fire crews and local residents when wildfires do occur. A large portion of the fuel to be removed is standing and dead timber resulting from past fires, but the treatments will also include thinning live trees and shrubs.

Residents of the area are being contacted for input and involvement throughout each stage of the process. The county has initiated five-year "Participation Agreement(s) for Fuels Reduction" with homeowners. These agreements will allow homeowners to receive help in making their home firewise. The homeowners will be responsible for 25 percent of the cost and for maintaining the treated area for the term of the agreement.

Due to snow this past winter and early onset of fire season, the focus so far has been on homeowner education. Participants are eager to begin implementing the plan. Doug Martens, Rosebud County Fire Warden, said, "I'm excited and anxious to get started on this project. The funding is a great deal for the department to keep folks employed. And, if a wildfire does occur, not as many resources will have to be committed to structure protection." Without the Community Assistance Agreement, the county wouldn't have had the funds for the training or the implementation, plus the dollars spent have gone back into the community, helping the county economy.



A home in Rosebud County survives wildfire. This fire helped prompt fuel reduction work with local homeowners.



The Rosebud County Volunteer Fire Department goes through fuel mitigation training.



An example of some fuel reduction work to be completed around a home in the wildland-urban interface.



Highlighting BLM projects that support the National Fire Plan.

Dead Wood Removed in Deadwood

The town of Deadwood, South Dakota seems especially aptly named these days as thousands of acres of dead trees adjoin the town, the result of the 12,000-acre Grizzly Gulch Fire which occurred in 2002. The fire forced the evacuation of the communities of Lead and Deadwood for three days.

The BLM South Dakota Field Office is working to reduce the amount of dead wood in the area with a 970acre fuel reduction project adjacent to the town. A BLM contractor is cutting and piling dead trees and brush. The piles will be burned during the winter months and the ground rehabbed and seeded with native species. Trees larger than ten inches in diameter are being left for woodpecker habitat. Broadcast burning treatments are planned in the future to maintain and further reduce fuel loads as the larger trees fall and the thick pine regeneration develops.

The local public is appreciative of the work being done. Several adjacent homeowners and landowners have hired the contractor for similar work. This will make the BLM's treatment more effective by carrying it across boundaries

Contact: Terry Chaplin, South Dakota Field Office, (605) 720-0745



A close-up view of the area pre-treatment.



After cutting and piling above the town.



After cutting and piling.

Work in progress with homes next to treatment area.

Organized using the incident command system, the partners completed the project the first week of June. Each day started with a safety briefing, and no accidents or injuries occurred. The trestle and pipeline should be safe from major damage due to wildland fire for several years.

BLM's South Dakota Field Office provided its eight-person Ft. Meade Fuels Module, the South Dakota Division of Wildland Fire Suppression provided one engine crew, its 20-

Fuels Work Protects Water Supply in South Dakota

The water supply for Lead and Deadwood, South Dakota is more secure since the completion of a fuels reduction project earlier this summer. A 300-foot long redwood pipeline, three feet in diameter, runs above ground on a wood and steel trestle and supplies approximately one million gallons of water a day to the Lead-Deadwood Sanitary Districtwater for residents and businesses. Homestake Mining Company, which owned the 100 plus year-old pipeline, recently turned it over to the sanitary district.

During a regular interagency wildlandurban interface coordination meeting in February, members of the group identified a critical need to protect the pipeline from wildfire. A dense ponderosa and spruce forest with heavy ground fuels surrounded the pipeline, and a fire in the forest could easily damage the wooden pipe and weaken the steel trestle, endangering or interrupting the water supply to thousands of people. The Bureau of Land Management had already scheduled a fuel reduction project for the area within the next several years, but the group decided to make it a priority.

Snapshots 2004 Highlighting BLM projects that support the National Fire Plan.



person suppression crew, and two wildlandurban interface specialists, the South Dakota Division of Forestry provided two chippers capable of handling material up to 18 inches in diameter, the Lawrence County Fire Advisory Board provided a skidder and operator, the Lead-Deadwood Sanitary District provided funds to the City of Lead for a parks department crew, and the Lead



Forest Service film crew documents the project.



Crews carrying limbs to the chipper.



A view of the pipeline after treatment.

Firewise committee provided six people from its organization.

Contact: Terry Chaplin, South Dakota Field Office, (605) 720-0745

Arizona

Black Canyon City-Agua Fire Success Story

On the morning of June 3, a wildland fire started in Black Canvon City, north of Phoenix. and quickly spread into the brushfilled Agua Fria River bottom. Fifteen residences on the south side of the river were threatened and the fire soon moved north toward other structures. Assisted by other federal and municipal agencies, the Arizona State Land Department, BLM and Black Canyon City Fire Department worked together to safely suppress the fire at 20 acres of private land. The fire was halted at a fuel break.

The success of this operation can be credited in part to three years of community prevention and mitigation efforts planned and performed jointly by the BLM and Black Canyon City Volunteer Fire Department. Working under the guidelines of the National Fire Plan, the BLM assessed at-risk communities, determining Black Canyon City as an area threatened by potential fires in the wildland-urban interface. A study of 1,500 residences and lots identified the southwest corner of town where public lands with fuel loadings bounded residential development. The evaluation also found that the most consistent threat was the river bottom running through town

BLM and adjacent lands southwest of town were thinned and opened up to allow access for fire equipment and to reduce the potential of a devastating fire. The BLM and Black Canyon Fire Department used town meetings, flyers and demonstration events to promote defensible space.



Fire was halted by the fuel break.



Highlighting BLM projects that support the National Fire Plan.

A fuel break was constructed in the river bottom to prevent a fire from spreading east and west into town. A defensible space demonstration was held at Harmill Plaza, a commercial building containing several businesses and the town's only bank. The treated area allowed access completely around the wooden structure by removing heavy loadings of mesquite trees and brush that abutted the building.

Maintenance has been performed annually since 2001 during BLM- and fire department-sponsored "chipper days" when firefighters chip and arrange to haul away vegetation removed from residential lots to create defensible space. The most recent "chipper day" was April 17, when 80 yards of chipped vegetation was removed.

The fire six weeks later started in the residential area behind Harmill Plaza. The defensible space allowed the fire chief to position an engine to abate the flames that threatened the structure, which sustained no damage. The fire spread to the east and west, reaching the fuel break and stopping its westward spread. That allowed firefighters to concentrate efforts on the east end and the residences immediately threatened. Beyond the fuel break, the river bottom has continuous fuels for miles with numerous homes adjacent to the river.

Home Depot Hosts Safety Fair

An Arizona BLM fire crew recently participated in a child safety fair hosted by Home Depot in Sierra Vista. The Home Depot has worked with the BLM on several Arizona Firewise Communities projects in past years. Home Depot has helped fund statewide Firewise workshops and is currently funding permanent Firewise exhibits.



Fire crew members providing information at the home fair.

Fire crew members handed out Smokey Bear items to the kids. About one hundred children attended this wildfire prevention outreach. Rulers, coloring books, Smokey Bear comics and other prevention materials promoted fire safety to the children. Another engine crew from Salt Lake City, Utah, assisted the local BLM engine's firefighters.

Contact: Dan Quintana, Engine Module Leader, Sierra Vista, AZ, (928) 439-6407

Prescribed Fire in the San Pedro Corridor

BLM fire crews from the Safford-Tucson Fire Management Zone have successfully completed burning two of three planned burn units in the riparian area of the San Pedro River in southeastern Arizona. These are the first prescribed fire attempts in the river corridor. After an initial review, land managers determined that resource objectives were met, though further monitoring will study longterm fire effects.

The main resource objectives were to maintain canopy cover and structural diversity of the cottonwood-willow gallery, reduce the number of flood debris piles, lessen fuel loading in and adjacent to the riparian area, minimize the number, intensity and size of wildfires and improve wildlife habitat for species such as Southwestern willow flycatcher, yellow-billed cuckoo, grey hawk, yellow warbler and other species.



Riparian area on the San Pedro River treated with prescribed burn.

Highlighting BLM projects that support the National Fire Plan.



The efforts were also designed to reduce fuel loading and promote structural diversity of vegetation within the mesquite bosque while increasing cover and density of native perennial grasses such as blue grama, sideoats grama, green sprangletop, plains bristlegrass, sacaton and tobosa grass.

Contact: Mark Pater, Zone Fire Ecologist, Safford Field Office at (928) 348-4416 or Dan Quintana, Engine Module Leader, San Pedro Project Office at (520) 439-6407

Paradise Fuel Break Helps Control Transient Fire

The Transient Fire in February covered eight acres on BLM lands overseen by the Yuma Field Office. The humancaused fire along the Colorado River started next to a trailer park within the northern city limits of Yuma, Arizona and spread until it reached an area from which fuel had been removed.

The one-acre Paradise fuel break created in April 2003 caused the western spread of the fire to be contained and controlled. Without



Paradise fuel break after the fire in April 2004. Photo was taken along the western side of the Transient Fire looking west across the break.

this buffer, the fire would have likely spread through at least another 10 acres of high-quality riparian habitat that the endangered Southwestern willow flycatcher (*Empidonax traillii extimus*) uses for migration. The fuel break allowed firefighters to safely lay hose to knock down the fire before it could spot into fuels further west or across the river into California where the Riverland Resort Trailer Park would have been threatened.

Contact: Dave Repass at (928) 317-3211 or Lori Cook at (928) 317-3243

Nevada

November 2003 Fuels Treatments Yield Promising Results

Heavy growth of sagebrush and pinyon and juniper woodlands on the edge of Austin in central Nevada posed a potential danger to the community from wildland fire. The historic mining town had an extensive fire history and was almost destroyed by a catastrophic wildfire in 1981.

In order to reduce the town's vulnerability to the dangers of wildland fire, the BLM's Battle Mountain Field Office and the Nevada Division of Forestry jointly undertook a multi-phase, multi-year project, which initially targeted 1,000 acres of heavy sagebrush for treatment in November 2003. The heavy brush was mowed and masticated, and afterwards crews reseeded the area with fireresistant species of perennial grasses and forbs.

By May 2004, BLM monitoring of the site revealed that first phase seeding efforts had yielded successful results. Monitoring of the site is continuing.

The multi-phase project is not only aimed at reducing the threat of wildfires to Austin, but also improving rangeland health. The town, which is located in a narrow canyon in the Toiyabe Mountains on U.S. Highway 50, contains a large number of historic structures.

The November 2003 fuels treatments were done in multiple strips, 40 feet wide, with each strip separated by approximately 40 feet of untreated fuels. These fuel breaks are designed to protect adjacent private property, homes and other structures from wildfire, as well as to reduce fire intensity and rate of spread.

Should wildland fire strike the area, the fuel breaks will also offer wildland firefighting crews a greater margin of safety to suppress these fires. The fuels treatments are designed to make native plant species more competitive with invasive plants.

The main threat to Austin comes from dense stands of sagebrush, as well as from dense, overstocked stands of pinyon and juniper trees. A fall 2001 BLM community risk assessment identified three areas on BLM lands, several areas on Forest Service lands, and several areas on private property where hazardous fuels reduction



Area treated below the Austin, Nevada school.







Photo of area around the power sub-station in October 2003 following the mowing and mastication treatment.

projects could reduce the threat of wildfire to the community.

The Nevada Division of Forestry is also working with private land owners to reduce hazardous fuels on private property in the Austin area.

The second and third phases of the joint BLM-Nevada Division of Forestry project will focus on reducing the threat of wildfire in the pinyon and juniper stands around Austin. The second phase is scheduled for summer 2005, and the third for 2006.

These treatments would involve the use of firefighting hand crews, along with issuing commercial wood cutting permits to thin the pinyon and juniper stands. The trees would be thinned to a minimum canopy spacing of 30 feet. The felled trees would be made available for sale as fire wood, and the slash would be chipped or piled and burned, depending upon size and location.

The level of canopy spacing would eliminate the potential for a crown fire in the treated pinyon and juniper woodlands. Opening the woodland canopy would also enhance the growth of native plants, which are more resistant to wildland fires.

Affected grazing units will be allowed to rest for two growing seasons, or



Same area as it looks in July 2004.

until they meet the Northeastern Great Basin Resource Advisory Council's Standards and Guidelines for Rangeland Health.

Manhattan Citizens Take Initiative to Make Town Fire-Safe

When employees of the BLM's Battle Mountain Field Office talked to the citizens of Manhattan, Nevada, about the danger that wildland fire posed to their community, the citizens took BLM's advice to heart.

By the fall of 2003, Nevada Division of Forestry crews had worked with the local chapter of the Nevada Fire Safe Council and local land owners to thin seven acres of pinyon and juniper stands on private lands on the edge of town, and by the spring of 2004 they were working together to create defensible space around Manhattan's homes, business, public buildings and historic structures.

The seven acres of pinyon and juniper woodlands treated by state crews will become part of a larger hazardous fuels reduction project, which the Bureau of Land Management's Battle Mountain Field Office is conducting in cooperation with the U.S. Forest Service's Humboldt-Toiyabe National Forest, the Nevada Division of Forestry and the local chapter of the Nevada Fire Safe Council.

The multi-year, multi-phase hazardous fuels reduction project is aimed at reducing the threat of wildfires in the wildland-urban interface and improving rangeland health.

Manhattan is located in a narrow canyon the Toquima Mountain Range, east of Big Smoky Valley, between Tonopah and Austin. The town started

Snapshots 2004 Highlighting BLM projects that support the National Fire Plan.



out as a mining camp in the late 1800s and contains many historic structures.

The main wildfire threat to the Manhattan community is from dense, overstocked pinyon and juniper stands that create an extremely high risk for crown fire.

During the first phase of the project, which starts in August, BLM will treat vegetation on approximately 100 acres of public land just north and south of Manhattan.

BLM completed a community risk assessment for Manhattan in October 2002, which identified three areas on public lands, one area on U.S. Forest Service land, and several areas on private property where hazardous fuels reduction projects could reduce the threat of wildfire to the community.

August thinning operations will include the use of hand crews, as well as the issuing of commercial wood cutting permits. The treatment involves thinning the pinyon and juniper trees to a minimum canopy spacing of 30 feet. This level of canopy spacing should eliminate the potential for a crown fire in the pinyon and juniper woodlands treated with this prescription.

Timber and slash that results from thinning efforts will either be made available for sale as fire wood, chipped or piled and burned, depending upon size and location.

The fuel breaks that result from hazardous fuels reduction treatments will help protect adjacent private property, homes and other structures from wildfires that start on public lands, and will also help protect public lands from fires that begin on private property or on local roads.

The second phase of the Manhattan hazardous fuels reduction project will start in 2005, and involve an additional 110 acres. Monitoring of the treated sites is scheduled to begin in May 2005, and will focus on noxious weeds. The monitoring will determine if maintenance treatments are needed.



Hazardous fuels work shows after work done by the local Fire Safe Council Chapter, and Nevada Division of Forestry crews.



BLM plans fuel reduction work in this adjacent area. Photo shows how the land looks prior to thinning operations.