Snapshots

August 19, 2005

Successful BLM Projects
Supporting the National Fire Plan

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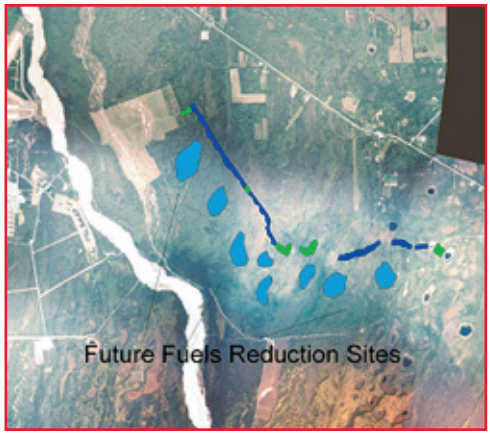
Alaska

North Jarvis Stand Conversion Project

Alaska's North Jarvis Stand Conversion Project is a visual testimony of taking a proactive approach in an area where wildland fire has potential to disturb community and private property.

Two years ago, BLM's Alaska Fire Service and U.S. Army Alaska began work to establish a stand conversion from black spruce to hardwoods as a proactive step should a fire ignite on military lands either through natural causes or military training exercises.

Most of an area around Delta Junction, Alaska, has previously burned and is a vegetative mosaic, except for the Jarvis area which consists of nearly solid black spruce. The Alaska mountain range channels strong winds toward the Fort Wainwright Donnelly Training Area military installation and town of Delta Junction. The stand conversion fuel break is not expected to stop a wind driven crown fire, but is strategically placed to break up fuel continuity and provide an area from which to fight fire.



Conceptualized portrayal of the existing stand conversion fuel break and the proposed polygons which will be cleared as funding becomes available.

Work started in 2003 with hand thinning on both ends of the break to present a park like transition between natural vegetation and a five mile long, 300 foot wide swath that has been etched into thick black spruce. Piles left from thinning were burned after snow fell in fall 2003 and 2004. Two mechanical treatments were tested to create the break to determine which was most cost efficient and reached the desired outcome.

Photo shows three mechanical treatments starting with the hand-thinned area, looking toward the hydro axe treatment which transitions to the shear blade area. Maggie Rogers photo

Project leader Mark Musitano, military zone fuels specialist said that trying both shear blade and hydro axe equipment treatments provided "a good opportunity to look at the difference on the ground and cost."

About 10 percent of work was done with a hydro axe and the remainder with a shear blade. Using the hydro axe cost about $2,500 per acre. Shear blade treatment cost about $1,100 per acre, including cost to burn windrows in fall 2005 and 2006. Shear blade treatment was deemed most economically feasible and the operation was finished in spring 2005. When windrow piles have cured they will be burned to clear the break of leftover vegetation.

Ongoing research is being conducted throughout the project. Tree and shrub composition and density, ground cover, percentage bare soil, duff depth and permafrost depth are all being monitored by

A view along the fuel break. Mark Musitano photo

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Photo shows three mechanical treatments starting with the hand-thinned area, looking toward the hydro axe treatment which transitions to the shear blade area. Maggie Rogers photo

army and BLM Alaska Fire Service personnel. Permanent plots are in place and used to obtain data.

Completion of this work is the first in a three phase plan. The second phase involves working with the State of Alaska Division of Forestry in Delta Junction to promote defensible space emphasizing Firewise guidelines. The third phase is progressing as funding is available to clear a series of polygons south of the break to alter fuel continuity.

Interagency and community cooperation has been a key component to the project's success. Personnel from BLM Alaska Fire Service, U.S. Army Alaska, Salcha Big Delta Soil and Water Conservation District, and USDA Natural Resource Conservation Service have cooperated effectively to complete the first phase in a short period of time.

Eastern States

Hotshots at the Beach

In early June 2005, Jackson Hotshots traveled to Fort Morgan Peninsula in Alabama to build sand fence along several BLM beachfront tracts. BLM Eastern States Jackson Field Office Wildlife Biologist Faye Winters, Geographic Information Specialist Bob Schoolar, and Public Affairs Specialist Shayne Banks joined the Hotshots to work on the project.

In just two days at total of approximately one mile of sand fence was laid along three separate beachfront tracts. The sand fence will help rebuild dunes following damage caused by Hurricane Ivan. The fence will also allow nesting sea turtles to pass through to higher nesting sites on the beach. In addition to building fence, BLM cleaned up debris that remained after the hurricane.

Local residents were glad to see BLM personnel working on tracts and several offered to help. One resident even wrote to say, "Seeing all of the development

Hotshots working to build sand fence in southern Alabama.

that is going on in this area, my wife and I were actually considering leaving, but I think we may now wait and see what direction the BLM takes with the land."

Unfortunately, days after the fence was completed, tropical storm Arlene swept ashore in the Gulf Shores area doing damage to newly laid fence. However, Hotshots were quick to respond and immediately traveled back to Gulf Shores and repaired the damage. Soon after Arlene, Hurricane Dennis followed essentially the same path. Most fencing survived Hurricane Dennis and did its job accelerating sand deposition in many areas, but there are

Crew removes trash from Hurricane Ivan that accumulated on the beachfront area.

areas where the fence will still need repairs. The local Fish and Wildlife Service is currently assessing damage and the Hotshots plan to return to repair it after fire season.

Contact, Shayne Banks (601) 977-5405

One section of sand fence completed by the Jackson Hotshots on BLM managed beachfront tracts.

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California

Bizz Johnson National Recreation Trail Fuels Success

An ongoing fuels reduction project was instrumental in allowing firefighters to quickly contain a fireworks caused wildfire near Susanville, California, preventing damage to a national recreation trail and nearby homes.

It was the third time in five years that fuels reduction work near the Bizz Johnson National Recreation Trail has played a key role in limiting wildfire damage in this area.

Children playing with fireworks started the most recent blaze on a hot, windy Saturday afternoon in Hobo Camp Day Use Area, a popular picnicking and swimming spot along the Bizz Johnson Trail. The fire took off quickly through dry brush along the edge of the former railroad bed, burning upslope into pine forest on the west edge of Susanville.

Fire in the Hobo Camp Day Use Area quickly dropped when it reached the Bizz Johnson Trail treatment.

Conditions were ripe for disaster. Fuels were dry, and winds were blowing through the recreation area that is bordered on three sides by urban interface development. Fortunately for firefighters and community, Bureau of Land Management crews had been busy in the area over for eight years, removing heavy brush and ladder fuels.

The fire got a quick start, burning intensely in a non-treated area, torching brush several large pines, but dropped to the ground when it reached the treated area. The initial attack incident commander reported a ground fire with a moderate rate of spread and engine crews attacked the fire directly, holding it to just over an acre.

Showing where the fire dropped and was stopped.

The blaze behaved just as fire managers had hoped when they launched the Bizz Johnson Fuels Reduction Project in 1997. With hazardous fuel loading gone, a potentially disastrous fire was manageable and resource damage was held to a minimum.

Objective of this fuels reduction project has been to remove hazardous fuels buildup with hope that any fire originating on the trail or adjacent recreation sites would be slowed or stopped by the treatment area, allowing for quick containment by fire crews.
Treatments involved cutting and piling brush and small trees, limbing larger trees and piling dead and downed materials. The project was completed last spring when piles were burned.

Winding through 30 miles of forests and Susan River Canyon between the communities of Susanville and Westwood, Bizz Johnson Trail is a popular recreation destination for local residents and visitors. It provides easy access to wildlands for hikers, joggers, mountain bikers and equestrians.

Because the trail is popular, close to communities and rich in forest and wildlife resources, fire and natural resource managers have long recognized a need for fuels reduction projects that would create defensible buffer zones between the trail and surrounding communities and forests.

The fuels reduction project proved its worth while still in its early stages. In 2001, this project helped fire crews keep the 4,000-acre Devil Fire from roaring out of Susan River Canyon and into Susanville. That fire, started by a target shooter, burned nearly seven miles through forests above the trail. It slowed considerably when it hit thinned forests of the Hobo Camp Day Use Area.

Only two years later, crews were able to keep a wildfire out of the Hobo Camp area, also because it burned at a manageable rate in forest thinned as part of this project. That fire originated in a home workshop in the urban interface area of western Susanville.

"We've been very pleased that the Bizz Johnson Fuels Reduction Project has performed as planned," said BLM Eagle Lake Field Manager Dayne Barron, "and we know the community appreciates the project as well. These fires provided some anxious moments, but in the end they demonstrated the value of well planned, well executed fuels reduction work."

Contact: Karl Todd, fire education and mitigation specialist in the Eagle Lake Field Office, (530) 257-0456

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Ecosystem Restoration through Wood Utilization

Some of the biomass created with pickup shown for size comparison.

Biomass landing with some logs in the foreground.

The South Knob Stewardship Project is part of a landscape level effort to restore ecosystems and reduce hazardous fuels on private, Forest Service and BLM lands in rural northeastern California. Surrounding the project area are several thousand acres of restored sagebrush-steppe, aspen groves, springs and wetlands where once occurred hazardous levels of overstocked pine and fir stands.

South Knob is one of the first projects to utilize the Bureau of Land Management's stewardship authority in California. Stewardship contracts involve projects which care for land through broad-based community public and community involvement. Project cooperators for South Knob include Lassen County Fire Safe Council, Day Lassen Bench Fire Safe Council, private landowners and the BLM Alturas Field Office.

Area photos before (above) and after (below) thinning.

Planning started in July of 2003 and completion is expected by the end of November 2005. The project area covered 375 acres of over stocked pine and fir with interspersed pockets of aspen. Where timber stands faded into sagebrush, juniper had encroached to unnatural levels.

Project goals were to improve forest health, enhance aspen stands and remove encroaching juniper while utilizing woody material generated. Trees to be removed were chosen based on a number of factors including their form, condition, and position of their crown within the canopy, as well as aspect, and proximity to aspen stands and leave trees.

A local contractor was awarded the contract and accomplished the job with enthusiasm and professionalism. Over 275 thousand board feet of merchantable timber and 5,000 tons of biomass were removed from on site and utilized at a mill and cogeneration plant in Burney, California. Timber and biomass generated from the project helped to offset costs of restoration.

The South Knob Stewardship Project by itself is a small, but when combined with other area collaborative projects, a broad scale ecosystem-based restoration effort begins to take form.

Contact: Peter Hall, BLM Alturas Field Office forester, (530) 233-7928

Fire Safe Councils Help Chip Away at Forest Fuel in San Diego County

San Diego's urban setting is by no means safe from wildfires that have ripped through the West in recent years. The Cedar Fire in October 2003, in fact, crept into the city's borders.

"There is now a tremendous awareness of danger," said Marty Leavitt, district manager for the Resource Conservation District of Greater San Diego County, "…for everyone, not just rural areas."

The San Diego district is active in the Fire Safe Council of San Diego County, which also includes the Mission and Upper San Luis Rey Resource Conservation Districts. The council has gone to great lengths to attack fire before it starts, and the Greater San Diego Resource Conservation District has helped to build a number of localized fire safe councils to do work on the ground. Now those councils are helping to implement community wildfire protection plans throughout the region.

In 2001, the Bureau of Land Management, through the National Fire Plan, awarded $476,000 to support fire safe councils and provide a county-wide chipping program for high-risk rural residences within one-and-a-half miles of federal lands. That was only the beginning. A subsequent BLM

grant was awarded in 2003 for chipping and ongoing fire safe council support, and in 2004 the U.S. Forest Service awarded $1.41 million in grant funds for additional fuel reduction and fire safe council work throughout San Diego County.

"There was a huge, huge concern about the unburned areas," said Leavitt. "One of the Forest Service grants focused on the Palomar Mountain area, and so the BLM grant focused on the Greater Julian area."

According to Leavitt, the chipping program has been a great success. "To this day, Palomar is unburned," said Leavitt. Since 2002, a total of 61,286 tons of vegetation has been chipped on private lands. Landowners then typically use material for mulch or road covering.

Fire Safe Councils Help Get the Job Done

The BLM grant in 2001 helped establish a two person office in Greater San Diego County, but the program has been able to expand by establishing fire safe councils throughout the region. The councils localize work and help bring awareness to wildfire concerns.

Robin Kinmont, fire safe council coordinator of the Fire Safe Council of San Diego County, acts as a liaison between that group and landowners. Her mission is to develop more council throughout the region. She often identifies a high risk community that needs vegetation management or has other concerns, and will go door-to-door to promote a community meeting. Her group also regularly sets up booths at parades or chili cook offs to promote good work being done.

"As more people find out about fire safe councils they come to me out of curiosity," said Kinmont.

The goal is to have 100 fire safe councils in the area by 2007. Currently 32 have been formed, six are emerging, and 62 others have been targeted.

Local residents helped by clearing areas around homes.

The county wide chipping program was completed in conjunction with local people clearing their property.

"Some of them have received individual funding to do clearing and educational outreach in their areas," said Leavitt. "Some of them have not received funding but they find ways to do it anyway."

Implementing Community Wildfire Protection Plans is the Priority

Since the beginning of this year, the state fire safe council and statewide fire alliance established funding priority for applicants with community wildfire protection plans in place. Fire safe councils are helping put those plans into action, and Kinmont, through the Office of Emergency Services, is rewriting the emergency evacuation disaster planning book.

"I saw a need to get this information out into the communities as soon as possible," said Kinmont, "because it gives them another avenue to access funding."

Kinmont also organized a Community Wildfire Protection Plan Action Committee to answer questions about the plan at fire safe council meetings.

Another reason why fire safe councils have worked in helping to prevent wildfire is because they are cost effective. According to Leavitt, pre-fire management costs 10 cents for every dollar spent fighting fires, and work done by fire safe council volunteers is invaluable.

The county-wide chipping program, for example, is inexpensive because residents and volunteers take on more responsibility for doing all trimming and clearing. The resource conservation district requires that all pre-chipped material not be tractor stacked

and contain no junk wood or rocks.

"We make it as easy on the contractor as possible," said Leavitt. "So there is a big workload put on homeowners and residents to do this work. And I think they've done a great job."

To improve fire protection for landowners in urban-wildland interface areas surrounding San Diego, the Resource Conservation District of Greater San Diego County has also formed a relationship with several area fire departments to help with mapping and access. Volunteers have cut down tall grasses and improved signage so that homes in danger can be more easily found.

The district has also engaged in a dead tree removal project being conducted in the San Diego, Riverside and San Bernardino communities. More than $120 million in special congressional allocations in 2004, managed by the Natural Resources Conservation Service through the Emergency Watershed Protection Program, has helped to remove trees that were damaged by disease or fire due to drought problems in recent years.

All of these programs and funding have helped to bring awareness to southern California about the dangers of wildfire, said Leavitt.

"The painful experience of the fire has served to really highlight the need for ongoing work by residents of all of San Diego County," said Leavitt. "It also underscores the tremendous need for ongoing funding to help support their efforts."

Contact: Marty Leavitt, (619) 562-0096, or email mleavitt@firesafesdcounty.org.

Cedarville Volunteers Acquire New Firefighting Tool

Surprise Valley firefighters' capabilities got a boost thanks to transfer of an all-terrain fire engine from the Bureau of Land Management to the Cedarville Volunteer Fire Department.

"We are proud to be able to make this engine available for local use," said Owen Billingsley, manager of BLM's Surprise Field Office in Cedarville. "Everyone will benefit from this equipment transfer."

Cedarville Chief Dan Ross said, "This fire engine will significantly increase our ability to provide quality fire protection for Surprise Valley residents."

In addition to serving the Cedarville department, the four wheel drive, 500-gallon fire engine is expected to fight fires throughout the entire valley as part of mutual aid agreements among the Cedarville, Eagleville, Lake City and Fort Bidwell Fire Departments, BLM, Bureau of Indian Affairs and Modoc National Forest.
The engine was declared surplus by BLM when it was replaced by a new unit earlier this year.

Garth Jeffers, fire management officer for BLM's Surprise Field Office in Cedarville, said the volunteer fire department used a $20,000 BLM Rural Assistance Grant toward the $25,000 purchase price for the engine. The federal grant was awarded as part of the National Fire Plan.

Jeffers said the "Model 14" engine can carry five crew members in an enclosed cab. In addition to using its internal water tank, the engine can pump water from ponds, creeks and other sources. The engine can spray fire retardant foam and be used for "mobile attack," spraying water while moving to enable firefighters to effectively battle fast moving brush and grass fires.

Jeffers said its high clearance; four wheel drive design enables the engine to attack wildland fires in rugged terrain and to fight structure fires during snowy and icy winter conditions.

Contact: Garth Jeffers, fire management officer, BLM Surprise Field Office, (530) 279-2729

On hand for the ceremonial transfer of keys were from left, Arnold Degarmo, BLM engine captain; Ray Gorzell, assistant fire chief, Cedarville Volunteer Fire Department; Garth Jeffers, BLM Surprise Field Office fire management officer; Dan Ross, chief, Cedarville Volunteer Fire Department; Owen Billingsley, BLM Surprise Field Office manager; Tanner Rosette, BLM Surprise Field Office fuels specialist.