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Idaho

Rural Fire Departments Finish a Safe Season

The 2007 fire season, which burned more acres on the Twin Falls District than the past three years, 32 rural fire departments in the Twin Falls District assisted the BLM in 168 fire suppression efforts. During many of these initial responses, the local fire department was the only initial attack resource available as BLM resources were committed to other fires and assignments.

Over the course of the summer, rural fire departments proved to be very professional and proficient at each incident — marked by an accident free season. Safety was emphasized all year long in the Twin Falls District and it carried over to the rural fire departments.

John Sabala, Twin Falls District fire and aviation fire mitigation manager noted, “The Twin Falls BLM has a system of sending a liaison to every fire incident



This excess BLM fire engine was purchased and refurbished by the Malta Volunteer Fire District - pictured here battling a wildland fire during the 2007 fire season.

where BLM is working with a local fire department. They approach really proved its mettle this year. The communication between BLM and the rural fire departments was the best it has ever been.”

According to Larry Messick, fire mitigation specialist, a few other factors contributed to last year’s impressive safety record. The ready reserve classes taught by BLM fire and aviation staff before and during the fire season (such as S-130, S-190 and the firefighter refresher) served to update, train and prepare firefighters. The personal protective equipment that was provided to all firefighters through the Rural Fire Assistance Program also enhanced safety. More than 250 local fire personnel were trained in 2007 through the Ready Reserve Program. This also led to a safer and more productive effort in the field. The cooperation between BLM and local fire districts has improved significantly in the last few years and it will continue to improve in the future.

RedZone Assessments Completed in Weiser, Idaho

This past summer, Weiser Rural Fire Department crews completed RedZone home assessments on 1,163 residents throughout the Weiser Area Rural Fire District. These assessments will assist the fire department in preparing, planning for and responding to fire incidents. Weiser Rural Fire Department is the first rural fire department in southwest Idaho to utilize GPS/computer mapping technologies to aid emergency response personnel.

Beginning in June of 2007, every home in the Weiser Area Rural Fire District was assessed for wildfire using an electronic survey. The survey questions pertained to a variety of factors including access to

and from the home, the topography surrounding the home, type of vegetation growing on and near the property, construction of the home (such as roof and siding materials), and other fire protection concerns such as absence of a water source, propane tanks, amount of defensible space surrounding the property, etc. Upon collection of the data, each home was assigned a wildfire hazard rating number and corresponding classification of low, moderate, high or extreme wildfire risk, based on its answers to the survey questions.



Chris Haines collects Redzone data into his Palm Pilot outside a resident in the Weiser area.

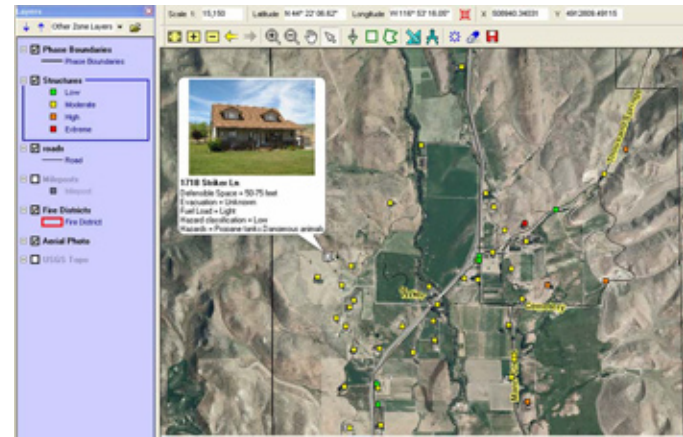
Various factors are considered when determining wildfire hazard risk and every home is different; therefore, each home receives a rating based on its own, unique characteristics. Many of the factors that contribute to higher risk ratings are not easy, nor economical to change, such as the home’s position on a steep slope, long narrow driveways, minimal room for fire engines to park and/or turn around, homes constructed with combustible materials and heavy vegetation growing near the property. Unfortunately, these factors simply put a home at higher risk of wildfire. Nonetheless, there are a number of smaller, simpler actions that homeowners can take to significantly lower their risk of wildfire. Such actions include but are not limited to: ensuring a clear and visible address at the beginning of the driveway; creating or increasing an effective



Weiser Rural Fire Department survey crew members Chris Haines, right, and Jerod Odoms, left, enter data into the RedZone computer software that they collected from the field.

information on what the homeowner can do to improve their hazard rating. Anyone living in the rural fire district who was interested in receiving a full report of their assessment could contact the Weiser Rural Fire Department.

In addition to helping the fire department prepare and respond to wildfires, RedZone will also assist them in responding to structure fires, as they will have instant access to important information about the home such as the exact location and quickest access to the home, and any other potential hazards or concerns.



Example of a Redzone screen for the Weiser project area. Each square represents a home and its hazard rating by color.

defensible space; and general clean-up of debris around the home. Although performing these actions may not reduce a home from a “high” to a “moderate” rating, they will undoubtedly improve the home’s survivability in the event of a wildfire.

The project funded through a Bureau of Land Management grant and the assistance of the West Central Highlands Resource Conservation and Development (WCHRC&D) in Emmett, Idaho has called attention to the need to improve private

properties susceptible to wildland fire around the Weiser area. The fire department is now looking at potential projects to improve the private properties located in its response area.

Charts A and B summarize some of the significant data collected during the RedZone assessments. Homes that receive a “high” or “extreme” rating are of the greatest concern to fire managers; therefore all homes in the rural fire district receiving a “high” or “extreme” hazard rating will soon receive a letter in the mail with a full report of their assessment and further

Contact: Carrie Bilbao, 208-384-3409.

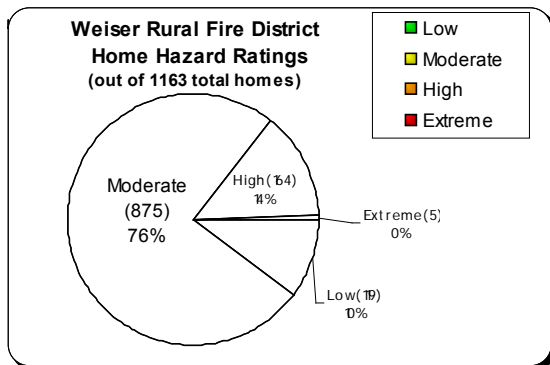


Chart A

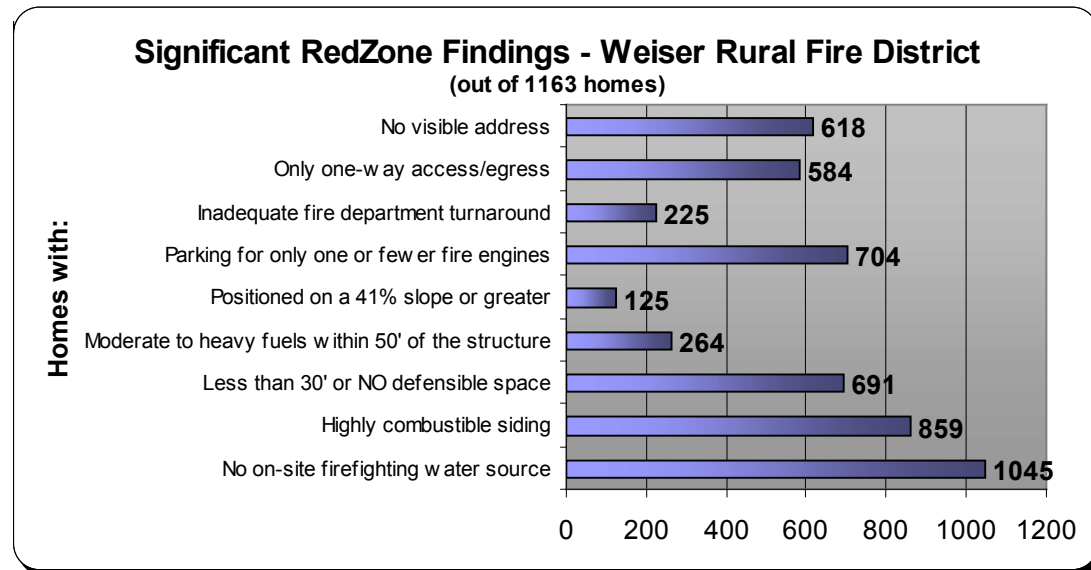


Chart B



Oregon

Bio-diesel Slash Fuel Mix

You have probably heard that some BLM districts are using bio-diesel to power their fleet vehicles and heavy equipment. Have you ever wondered how bio-diesel might work in your drip torch? Just fine, according to Medford District BLM fuels management personnel. In an effort to comply with agency policy, the Medford District BLM has been experimenting with bio-diesel and slash fuel mixing. To date, Medford BLM has used more than 1,200 gallons of bio-diesel during prescribed fire operations.

The burn mix is made by using B99 (99% bio-diesel) and regular unleaded gasoline in the standard 3:1 slash fuel mixture. Bio-based slash fuel has been utilized in both hand pile burn and broadcast burn situations since early 2006.

Bio-slash fuel burns similar to regular petroleum diesel/gas mix, but with less noxious wick smoke. Although the wick smoke is still toxic, it has more of a cooking oil smell instead of the usual sulfur or diesel fumes. The liquid form during mixing and handling is less toxic to BLM personnel and the environment. The cost after using the “off road” discount is comparable to that of retail diesel #2 prices. Bio-diesel has a solvent effect on the slash tanks and drip torches and seems to prevent sediment build up. Bio-diesel has a slightly higher flashpoint than regular diesel, but still works just fine in the 3:1 mix.

Many good reasons exist for using bio-diesel, such as energy independence, reduced toxicity, reduction of green house gases, and a positive energy balance (yields more energy than takes to produce). When ethanol (E85) becomes more available to southwest Oregon, it has potential to replace unleaded gasoline and help achieve a truer bio-slash fuel mix.



Medford District fuels technician completing ignition of prescribed fire unit using bio-slash fuel mix in drip torch.



Medford District fuels technician filling slash fuel tank with B99 bio-diesel in Phoenix, Oregon.

Fuels Treatment in Central Oregon Leads to Different Wildfire Outcome

Incident #595 was over almost before it started. News reporters didn't show up and fill their evening programs highlighting suppression efforts and threats to lives and property. Incident #595 was swiftly held at six acres and didn't even get a name. For all intents and purposes, Incident #595 was insignificant... and for that, it's remarkable.

History shows us that wildfires burning in the juniper/shrub-steppe habitat in central Oregon can have a very different outcome. In the intermix of BLM, U.S. Forest Service Crooked River National Grassland and private lands northeast of Bend, decades of fuel buildup have led to a combination of rapidly moving range fires augmented by crown fires moving through dense juniper stands, throwing embers miles ahead of the flaming front. For example, in 1996, the Little Cabin Fire above Lake Billy Chinook, burned 2,437 acres and came within 100 feet of homes. In 1999, the Elk Drive Fire burned 538 acres and came within 1-1/2 miles of the Round



Butte subdivision. And finally, in complete contrast to the outcome of Incident #595, the Eyerly Fire roared through thousands of acres and consumed 18 homes in the Three Rivers subdivision.

What was the difference between the ferocity of the Eyerly fire and Incident #595? A collaborative fuels treatment designed by Central Oregon Fire Management Service and Jefferson County Rural Fire District #1, which reduced the potential for a high intensity wildfire on the Crooked River National Grassland next to private property on Round Butte. The fuels treatment thinned juniper trees less than 12" dbh and limbed remaining trees. By removing branches near the ground, fuels specialists decreased the potential for a wildfire to ignite a tree (torching), and by increasing the distance between trees, specialists reduced the ability of a wildfire to spread from tree to tree (crown fire). Although the increased spacing opened the canopy and fostered an environment to improve understory growth, the prescription called for leaving trees every 30 feet as a means to decrease the surface wind.

On July 29, 2007, a wildfire touched off by lightning, tested the prescription. Fire crews and a Type I helicopter quickly responded, and had the fire contained within four hours of dispatch with no lives or homes lost.

Based on observations and discussions with crews who were on scene when the fire was spreading, the fire remained a surface fire. This changed fire behavior is attributed entirely to the thinning and pruning accomplished with the fuels project. Instead of crowning and spotting as it raced through a near closed-canopy juniper stand, this fire burned in a fuel model 2 (grass) with a sparse juniper overstory. Although rates of spread did increase due to higher surface winds and an increase in fine fuels, there was no spotting from the juniper trees and flame lengths were manageable

for engines and handtools. The opened, savannah-like juniper overstory allowed the aircraft to drop water directly on the fire, helping to rapidly extinguish the flames. The combined efforts of the fuels treatment and the suppression crews prevented the wildfire from not only destroying lives, property and a nearby power substation, but also from costing the agencies time, money and personnel hours for an extended suppression and rehabilitation effort.

Contact: Lisa Clark, fire mitigation specialist, 541-416-6864, lmclark@or.blm.gov.

If "Pigs" Could Fly

Have you ever wondered if pigs could fly?

On a bright sunny day in late September, 2007, something close to this occurred on the BLM Prineville District.

Logan Butte is an Area of Critical and Environmental Concern (ACEC), dedicated to the study of fossil mammals from 30 million years ago. In the 1990's, a paleontology researcher working at Logan Butte discovered the remains of a nearly complete "oreodont," or prehistoric pig-like critter, high on a steep slope. Nearly complete specimens are rare and provide science with the opportunity for comparative analysis. Because of its size and location, it took a long time for staff from the BLM and the John Day Fossil Beds National Monument to prepare the specimen for removal. By the time it was ready to be moved, the specimen was wrapped in a plaster cast three feet by two feet by two feet in size and weighed close to 600 pounds. At this weight, and given its location, there was no way it could be removed manually.

The fire and archaeology/paleontology programs in the Prineville District have a history of working

cooperatively together. In this case, thanks to Chris Hice, Unit Aviation Officer, another opportunity presented itself to help each other. The paleontology program needed a heavy object moved from a location that couldn't be accomplished safely by hand or other mechanical means, and the fire program was looking for tasks that would provide helicopter sling-loading practice for certification. This was a perfect match!

On September 24, 2007, John K. Zancanella, Paleontology Program Coordinator for OR/WA BLM, met with the Central Oregon Helitack Crew at Logan Butte. The crew consisted of pilot Morgan Kozloski; Helitack Supervisor Amy Kazmier; the Hike/Lift crew George Yocum; Mike Dake, Heidi Sprenger, and Matt Walch; and the Receiving Crew Dan Quinones, Brandi Dutton, Sarah Uvodich, Evan Hsu, Isaiah Jimenez, and Jared Nelson. Also in attendance was Regional Aviation Officer, Gary Sterling.

After the crew received a brief orientation to the Logan Butte ACEC, and fully understood the importance of the find and the accomplishment, the crew walked to where "the pig" was located. The cast was gently rolled into the cargo net and prepared for the lift. Suspended in a stationary position, the pilot gently lowered the loosely dangling long-line to the waiting lift crew. A snap of the hook and a wave of the hand and the specimen was ready for flight. The helicopter slowly raised the specimen and headed for the landing area. Within five minutes, the helicopter had taken off, collected the specimen, and safely deposited it at the landing site where it was placed into a pickup for transport.

Under agreement between the BLM and the National Park Service, the specimen will be delivered to the John Day Fossil Beds National Monument for curation, preparation and, eventually, study by researchers and interpretation for the



public. Collaboration of this sort demonstrates what can be achieved when different programs or agencies work together toward common objectives. It also demonstrates that the idea of flying pigs isn't always quite as absurd as it seems.

Nevada

BLM Fuels Program Receives National Award

The Bureau of Land Management (BLM) Ely Field Office fuels program was honored with the 2007 Excellence in Ecosystem Management Award for "Achievement in Providing Economic Opportunities for Rural Communities." The BLM partnered with the Nevada Division of Forestry and the White Pine County School District to provide biomass for the Fuels for Schools Program.

The BLM's National Fire and Aviation Office presented the award in November at the national fuels meeting. The purpose of the award is to encourage implementation of specific efforts through the National Fire Plan which address both objectives for fire and fuels management while providing economic opportunities for rural community development.

During the past three years, the Ely Field Office fuels program has established an infrastructure to use the biomass and woody material that is available from fuels reduction projects. They have developed six stewardship contracts and treated more than 2,100 acres. The highlight of the program is the Fuels for Schools project that is supplying the fuel for the biomass boiler at the David Norman Elementary School in Ely.

A collaborative effort among the Ely County Commissioners, Mojave-Southern Great Basin Resource Advisory Council, Public Land Users Advisory Committee, Fuels for Schools, and other local contractors installed a biomass heating system, making biomass the primary source of heat for the school. The project is saving money for other needed supplies within the rural school district. Last year, an estimated \$36,000 was saved by the school district by burning biomass. Students are providing tours of the system and are studying other types of renewable energy sources. Sierra Pacific Power recently installed solar panels as part of a local learning network.

New jobs and new businesses are being developed in the community. A pellet mill is under construction and plans on opening for business in the spring of 2008. The Nevada Prison System is also considering installing a biomass heating system.

For more information about the Fuels for Schools Program, contact Supervisory Natural Resource Specialist, Cody Coombs at 775-289-1854.



From the left: BLM National Fire and Aviation Directorate Assistant Director, Jim Douglas, and Fire Planning and Fuels Management Division Chief, Aden Seidlitz, present the Excellence in Ecosystem Management Award to the BLM Ely Field Office Fire Archaeologist Kurt Braun and Fire Management Specialist Bill Panagopoulos.

