

## Idaho

### Fire Departments Use Geographic Information System for Analysis

Driving through Portneuf Gap south of Pocatello, Idaho it is easy to pass the town of Inkom if you miss the exit sign. The town's not big – less than 1,000 people live there – but it ranks high on the Eastern Idaho Interagency Fire Center's priority areas of concern for a serious wildfire.

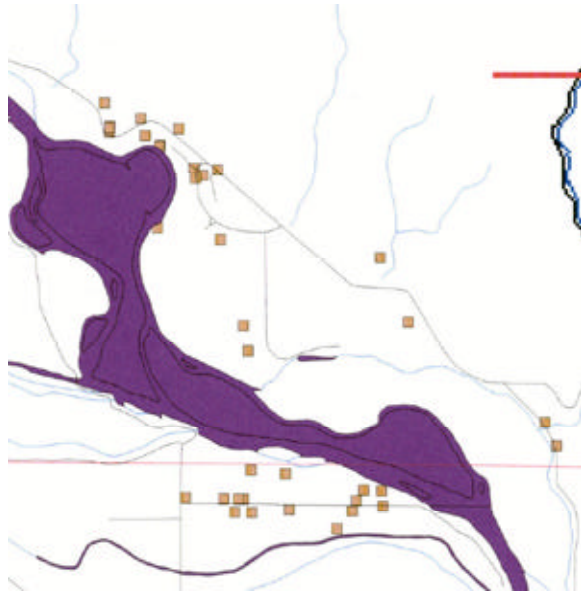
Inkom is not alone as an area of concern. Much of the greater Pocatello area is on it, as well as Lava Hot Springs, Downey, McCammon, and other communities in Bannock County, Idaho. Several other eastern Idaho communities are also on the list, and have already done independent community evaluations on where their fire preparedness needs to improve.

Along with Inkom, many of these communities are in the midst of conducting a geographic information system analysis of potential hazards fire fighters will face when confronting a wildfire near homes and businesses.

"We've got a pretty good chunk done, about 55 homes. We still have about 200 more to go," said Chris Ottonello, Inkom's fire chief. "We're basically looking for better ways to protect structures in the event of a fire. Things like propane tanks, the width of roads, whether a house is saveable."

A hazard analysis provides the local fire department with a tool to prepare for a wildfire. "They are looking for things like propane tanks, gas lines, access routes, turnarounds, road hazards, and so on," said Faye Christiansen, a Fire Prevention and Mitigation specialist for the BLM in Idaho Falls. In short, fire fighters are looking for anything that may make fighting an oncoming wildfire more difficult, or even dangerous.

An hour and a half north on the interstate, fire fighters in the Jefferson County Central Fire District are also using home evaluations as a way



*Light squares shown on a geographic information system map indicate possible hazards for firefighters. Using the computer software, clicking on the light-colored squares bring up actual photos of the hazard.*

of identifying dangers. But Fire Chief Kirt Hayes has also seen a side benefit. "It's allowed us to meet one-on-one with the homeowners and talk to them about their home's construction, water supplies, fuel loads, and what the homeowner can do to fix problems," said Hayes. He says that the response from homeowners has been highly positive. Fire fighters use the opportunity to drop off existing BLM printed material like "Living With Fire" to show how to protect and beautify homes with fire resistant materials.

While a few companies are developing software to make the task easier (see *Snapshots'* February 21 edition for an article on using "Red Zone" in Arizona), the main purpose is to identify and publish information useful to homeowners and firefighters. The information may be compiled in a geographic information system database with links to photos of the potential hazards.

Hayes says that interfacing fire and fuels data with the geographic information system has potentially far-reaching benefits. He recalled the



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South Fork of the Snake River flood near his community in 1997. “It would have been great during the ‘97 flood if we could have drawn a square around the effected area and handed the sheriff a list of homeowners that needed to be evacuated,” he said. Having the data on hand with photos of homes and potential hazards, he said, will help with a wide variety of possible emergencies.

Inkom Fire Chief Ottonello also plans to make the information he gathers available to homeowners or other local fire departments, including BLM and the Forest Service, in case it’s needed when a fire breaks. He said that while the city already has an evacuation plan in place, the information that he’s gathering in this analysis will help beef up the existing plan.

Fred Judd, BLM’s lead Fire Mitigation and Education Specialist for Eastern Idaho, is optimistic about the potential to integrate GIS with home assessments. “Can you imagine the benefits of a system like this for helping us to identify hazards across

the area?” he said. “The possibilities are staggering!”

Use of the geographic information system is new to many smaller counties in Idaho who are just discovering its potential. Beside fire protection, Judd is aware of a local high school group in Bingham County that has been locating noxious weed patches and inputting the data into a format for use by the county’s weed program. He also sees opportunities to identify rights of way, gas lines, and other potential hazards. Judd hopes that all local communities will make their data available to BLM to provide a clear picture of the interrelationships within different areas.

Contact: David Howell, (208) 524-7500



*Pictures of homes, such as these in the Inkom area, can be accessed to be used as photo points on laptop computers used by firefighters when dealing with wildfire. They are also useful for home inspection reports given to residents.*



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## Idaho Falls

### Puppets at Work

Puppets? What's so wonderful about puppets? They have become a popular topic at the Idaho Falls BLM office since the prevention team began putting on puppet shows for children in the area. The shows are very popular and are quickly becoming one of the best ways to teach children about fire prevention and safety.



*Fire prevention puppets in action.*

The puppet show idea first began when Faye Christiansen, a Fire Prevention and Mitigation specialist for the BLM in Idaho Falls, attended the Oregon Fire Marshal Conference earlier this year. After seeing and participating in a puppet show at the conference, Christiansen decided to bring one to Eastern Idaho. She felt it would be a way to teach the children, while making it fun and entertaining at the same time.

The first step in establishing the puppet show was to order the puppets. The original concept to use puppets looking like people, but was soon changed to one with animal puppets. The animals helped to reinforce the wildland message and were less expensive. Christiansen and her staff also ordered a music CD which includes songs that teach

children match safety, good fire-bad fire, and “stop, drop and roll.”

The next step was the stage. In order to save money on the project, Christiansen and staff built their own puppet stage with PVC pipe and fittings. To cover the pipe, a screen was made from dark fabric and was attached using velcro.

Finally, before the show could be performed everyone had to practice, practice, practice. The show requires three to five people to animate the puppets. There are currently five characters involved in this production. They include: Frank the Fireman, Billy Buffalo, Curly Coyote, Maury Moose and Hooty the Owl.

Since production began in mid-April, 20 different shows have been held for over 500 children. The children love to see the characters and often sing along with the music. Not only do the children enjoy the show, but the puppeteers also have fun.

“Although the puppet show took some time and effort to put together, it has definitely been worth it,” says Christiansen. Because the puppet show has been so successful, Christiansen and her staff are planning to expand the program and are currently working on new scripts to teach other fire prevention messages.



*Puppet show presented at a local school. Kids loved it!*

Contact: Andrea Hooper, (208) 524-7613



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## National Interagency Fire Center

### Boise River Festival Community Outreach

The Boise River Festival is an annual event in Idaho's capital city that brings large numbers of people together to enjoy three days of sunshine and activities along the popular river greenbelt. The non-profit event held June 27 through the 30th this year saw several hundred thousand people take part.

One of the key attractions at the festival this year was the tent display and activities hosted by the National Interagency Fire Center (NIFC), which is located in Boise. Staff from the fire center, Lower Snake River District, Idaho State Office, and the Boise National Forest provided learning opportunities for children and parents through the use of model Firesafe homes. A "hands on" interaction was used to allow people to make changes to model homes in the wildland urban interface and make them more resistant to



*The festival was heavily promoted by media and local business, which helped to ensure a large turnout over three days.*

wildfires. "We talked to lots of kids and their parents about fire safety at the River Festival and everyone seemed to enjoy the firewise activities," said Larry Hamilton, Office of Fire and Aviation director.



*Dave Marion of the National Interagency Coordination Center gives an explanation about FireSafe homes to one of the young people who visited during the event.*



*Youngsters got to try on firefighter nomex clothes, even though some appeared a bit dubious at the experience!*



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Another popular part of the display was the presence of Smokey Bear. Children flocked around him with abundant hugs. He gave them photo opportunities and he passed out pins with a fire prevention message.

The annual event provided just the right backdrop to share information about safety, mitigation and prevention to many people during a great summer weekend.

Contact: Toni Rohm, (208) 387-5457



*Smokey was a big attraction at the NIFC tent!*



*Tony Rohm from NIFC gives a prize to sisters who took the FireSafe challenge.*

For the 2003 wildfire season, the BLM Burns District is implementing the Red Flag Program, a community based wildfire awareness and protection activity. In 2001, a similar program was initiated in California and is managed by the Greater Laguna Coast Fire Safe Council. The Burns fire zone has taken this base program and modified it to fit the situation in Harney County.

The scenic qualities of Harney County include the Malheur Wildlife Refuge, Malheur National Forest, BLM Steens Mountain, and the Alvord Desert draw hikers, campers, fishers, hunters, and many others from Oregon and around the nation. Each year, lightning

starts many of the wildfires across the area, however, human caused fires stretch resources and exacerbate the long Oregon wildfire season. The goal of Burns' Red Flag Program is to provide a highly visible reminder to residents and visitors to be extra careful and vigilant on days with severe fire weather conditions and extreme fire behavior potential. Another aim of the program is to stimulate public awareness and involvement in zone fire prevention and presuppression activities.

Local Red Flag Program volunteers will be given a 3



*Red Flags emblazoned with this graphic will be given to volunteers to display during a Red Flag Alert.*

## Oregon

### Oregon-Burns District Red Flag Program

The southeastern Oregon neighboring communities of Burns and Hines are no strangers to the dangers of wildland fires. In 1990, the 74,000 acre Pine Springs Basin Fire threatened both communities. As a result of that fire, the Burns Interagency Fire Zone was formed. The four agencies within the zone are the USDA Forest Service, BLM, US Fish and Wildlife Service, and Oregon Department Forestry. They work together to prevent and suppress wildfires in the broad high desert expanse of southeastern Oregon.



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foot by 5 foot red flag to display during predicted dry lighting, low humidity, strong winds or other combinations leading to a Red Flag fire weather alert. In 48 and 24 hour stages leading up to potential Red Flag Warnings, agency program coordinators will contact volunteers, preparing them to raise their red flags throughout southeastern Oregon. As fire weather conditions improve, coordinators will issue a cancellation order, signaling volunteers to bring their flags down.

Through local newspaper and radio news shows, Red Flag coordinators in Burns are promoting the citizen volunteer program. A brochure with program information and coordinators will be available this summer. Looking ahead, volunteers will be trained to identify severe weather conditions common to Harney County and to assist in reporting wildland fires. Red Flag efforts are supported through the zone prevention program and are intended to reflect objectives identified in the National Fire Plan.

Contact: Katie McConnell, (541) 573-4550

## Washington

### Spokane District Sun Mountain Ranch Wildland Urban Interface Project

Residents of the Sun Mountain Ranch, a private subdivision in north-central Washington, are learning how to make their 750-acre development less prone to wildfire hazards thanks to funds from the National Fire Plan. The wildland urban interface project is helping to protect more than one hundred homes already built in this scenic residential area in Okanogan County, less than one mile southwest of the historic town of Winthrop. The area encompasses a strip of private land about 40-miles wide sandwiched between national forest and BLM lands. Although the primary beneficiaries of this project are the subdivision landowners, surrounding properties also benefit from the reduced risk of wildfire.



*Stimulating community involvement in the Burns Interagency Fire Zone program might help prevent wildfires like the human caused incident in the Pueblo Mountains shown above.*

There are three primary vegetative types within the Sun Mountain Ranch area. They include dense ponderosa pine forest with 25 percent of the area averaging over 900 trees per acre, open grass-shrub areas with decadent stands of bitterbrush, and mixed timber and shrubs

The treatments are expected to reduce the risk of stand-replacing crown fires by thinning the trees and removing ladder fuels. Treatments will also help protect subdivision structures.

Project components identified included creation of fuel breaks, thinning overstocked stands, and pruning bitterbrush and other shrubs that present fuel hazards along roads. Projects done to date have used both mechanical and hand equipment. Non-merchantable trees were chipped, or piled and burned. A Firewise Workshop was also held to build community support.

The Forest Service, Washington Department of Natural Resources, and local fire district actively



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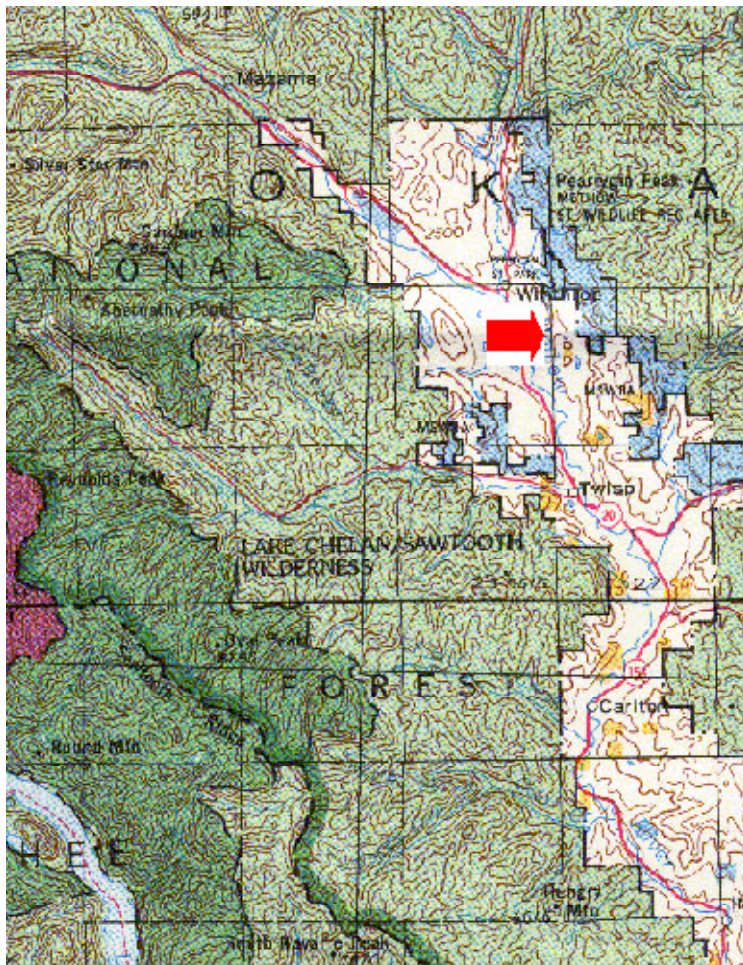
participated in planning, designing, and implementing the project. The Bureau of Land Management assigned a wildlife specialist and an archaeologist to conduct wildlife and cultural resource surveys within the project area. Neighborhood residents also participated.

The project is undergoing additional phases of treatment. As of May 2003, a sizeable portion of the area had been thinned. Future treatments include construction of a fuel break and bitterbrush pruning. Resource specialists with the BLM Spokane District, will continue to monitor these efforts.

Contact: *Kathy Helm, (509) 536-1252)*



*This is a post-treatment photograph taken in an area that has been thinned. Ladder fuels and brush have also been removed (or piled). This photo was taken near a residence and is a good example of defensible space. A fire will not quickly move through here; nor will it climb into the crowns.*



*Sun Mountain Ranch development is one mile south of Winthrop, Washington.*



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