

BLM Paradigm project seeks to break repeated fire cycle in SW Idaho with aggressive fire breaks plan

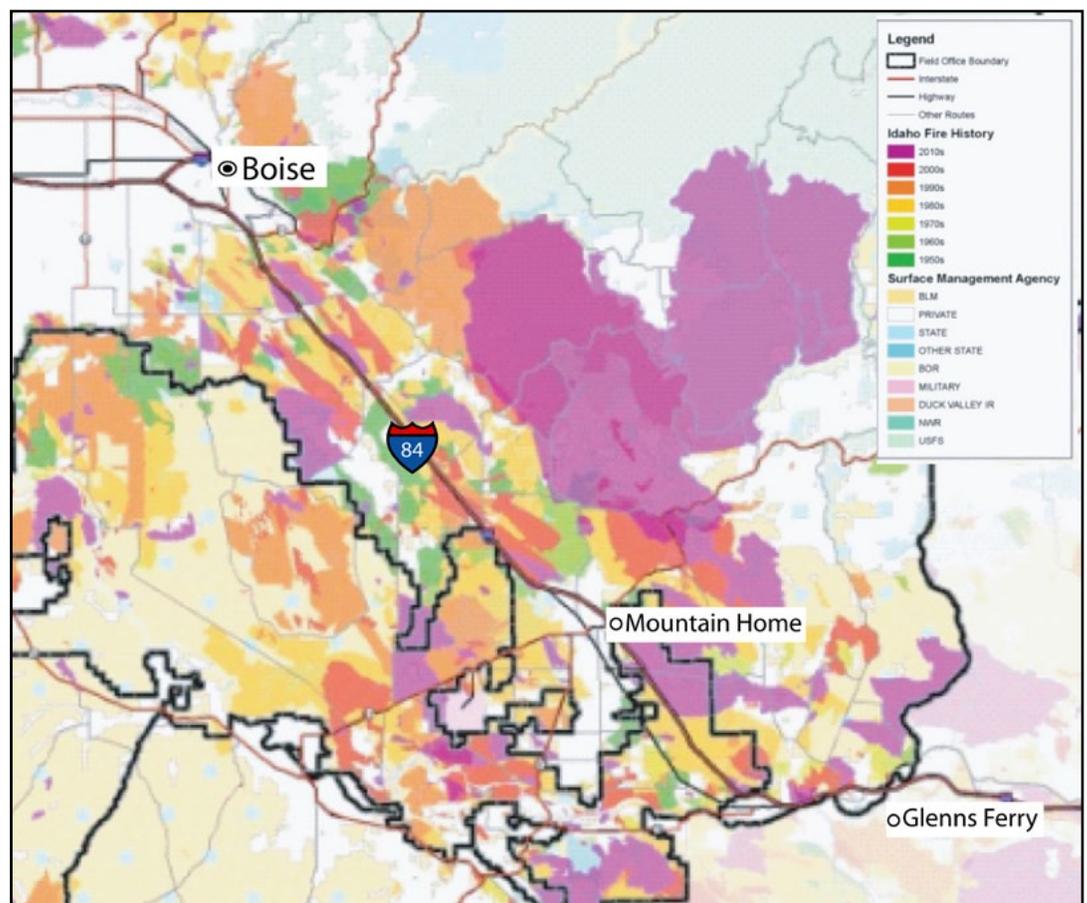
By Steve Stuebner

Dozens of range fires have been ignited by humans, vehicles and lightning along the Interstate 84 corridor between Boise and Glens Ferry for decades. In fact, over the last 35 years, more than 170,000 acres have burned in the 294,000-acre area. Eighty percent of the fires were human-caused and 20 percent were ignited by lightning.

Some of these areas have burned repeatedly, charring sagebrush and other vital perennial plants to the point where invasive species such as cheatgrass have overtaken burned-over lands. But the Bureau of Land Management, the primary landowner in the project area between Boise and Glens Ferry, wants to try to stop the vicious fire cycle. Ranchers do, too.

It's not only the worst hot spot in Idaho, in terms of fire frequency, it's the worst hot spot in the nation. BLM experts say it's a deadly combination of vehicle ignitions, lightning strikes and highly flammable cheatgrass that fuel the fire cycle.

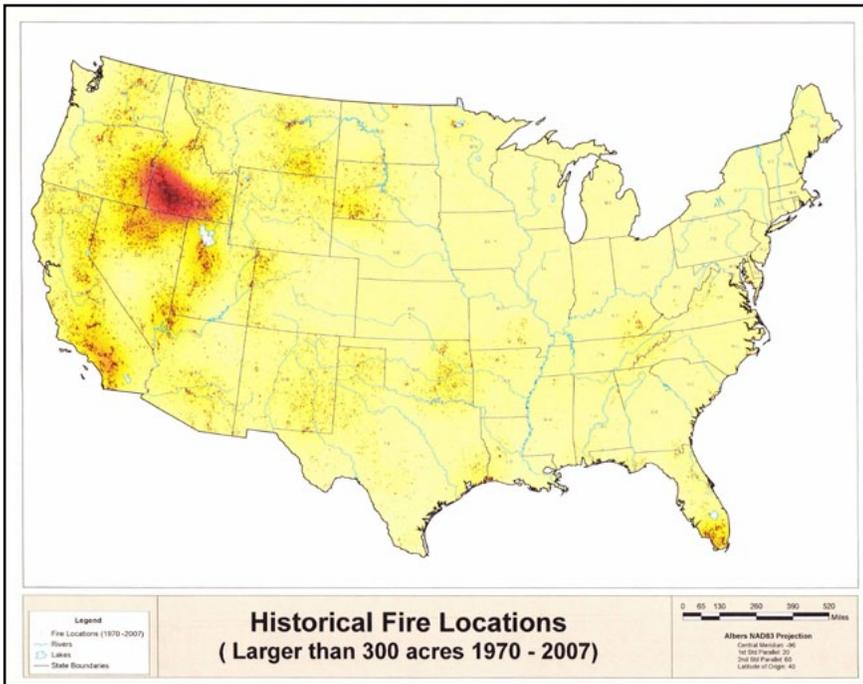
"With the travel corridors, we're getting a lot of ignitions because of the vehicles and stuff like that," said Lance Okeson, fire management officer for the Bureau of Land Management Boise District. "But we also have a lot of lightning every summer. This is a lightning belt. So you not only have the human factor overriding it, you've got the invasion of cheatgrass, and then you've got the continuing lightning. All those three things together are why we've lost a lot of habitat out here."



Fire history of I-84 corridor between Boise and Mountain Home 1957-2013 shows a pattern of many fires over 6 decades, including areas that burned multiple times.

Map courtesy BLM Boise District.

The solution endorsed by the BLM's new Paradigm Project is to create 356 miles of fire breaks between Boise and Glens Ferry to give firefighters a better chance to stop fires when they're small. The fuel breaks will be created across the landscape on state, private and BLM lands. The Idaho Department of Lands, the rancher-led Mountain Home Rangeland Fire Protection Association (RFPA), and the Idaho Transportation Department are all working together on the \$7 million project.



SW Idaho is the hotspot in the nation when it comes to fire frequency. Eighty percent of the fires were human-caused, often by vehicles. Trailer bearings, flat tires and catalytic converters can ignite fires.



tions from vehicle fires, and planting green strips next to the freeway with a hardy perennial grass called crested wheatgrass.

"This is another green strip in the right of way for the freeway," says Mike Pellant, Great Basin Ecologist for the BLM. "It was treated with an herbicide to remove the cheatgrass and then seeded with crested wheatgrass. It's very green right now. The good thing about it is that it keeps the cheatgrass down, breaks up the fuel continuity, which reduces the likelihood of a wildfire."

"It's been real successful working with the Idaho Dept. of Transportation," Okeson says. "Our ignitions between Boise and Mountain Home have literally gone down to almost nothing."

"We're actually taking this to a landscape level, linking it all together, across all of those ownerships," Okeson says. "That's a big deal."

Charlie Lyons, a member of the Mountain Home RFPA, said the ranchers are very supportive of the Paradigm project and stopping the fire cycle in SW Idaho. "Yeah, a lot of us in this area have been behind it for a long time," Lyons says. "It's a double-whammy, these fires are in this area. We lose forage, which is a big asset to us, and then we lose a lot of habitat, too."

Post-fire, ranchers have to find new places to graze their cattle because any public lands affected by the fires are typically closed for two growing seasons. That causes a hardship as well.

"When we do burn, and we're off for two years or longer, the rehab has been largely unsuccessful at the lower elevations, we get a lot of annuals that come in after the fires, and then it's pretty devastating to burrowing owls and critters that depend on that sagebrush steppe," Lyons says.

On BLM lands, the fuel breaks will be a mix of widened dirt roads and vegetative "green strips." On private lands, ranchers from the Mountain Home RFPA are disking dirt strips next to highways to prevent fires from burning rangelands.

Along Interstate 84, ITD crews are mowing vegetation in the median, placing gravel next to the highway shoulder to reduce igni-



Forage koshia is a hardy perennial shrub, imported from Asia, that can out-compete cheatgrass in the hot and dry environment along I-84 in the Mountain Home desert. The BLM will plant more green strips of forage koshia to serve as fuel breaks.

Pellant has been working on reducing the wildfire risk for several decades with a variety of green strip projects for the BLM. Over the years, they've found that a perennial shrub introduced from Asia, Forage Kochia, works best.

"This is forage kochia," Pellant says, crouching next to a plant on BLM land near Mountain Home. "It's a low-growing shrub or half shrub. It's from Central Asia. It's evolved with cheatgrass. And one of the benefits we've found is that it's very fire-resistant. It stays green throughout the summer, has a high moisture content, doesn't have any volatile oils, and the best benefit from a resource standpoint is that it's very palatable and nutritious for livestock, and for wildlife."

"We started using it in the mid-1980s as a green strip species. Basically trying to break up fires by placing fire-resistant vegetation in strategic locations. And over the years, we've found that this is the best vegetation we can use to stop wildfires in the summer."

"There's been three occasions over the last 20 years, where a small fire had started and literally ran into the forage kochia and stopped or didn't go beyond and start a big fire," Pellant says. "On one of those fires, we actually looked at the forage kochia and how much moisture it had. And found in late August, it had 38 percent water in the plant. And we looked at cheatgrass, and it was 1 percent moisture. Take home message is the more moisture in the plant, the more effective it is in stopping the fire."



Lance Okeson stands next to a BLM fuel break that's been mowed next to a dirt road. 356 miles of fuel breaks are planned in the \$7 million BLM Paradigm Project. ITD and the Mountain Home RFPA are partners in the project.



The idea is to keep the flame lengths down so firefighters can stop the fires from spreading past a fire break.

Over the years, the BLM planted more than 500 miles of green strips in Southwest Idaho to prevent fires. The Paradigm project takes the fire prevention program to the next level with an integrated approach of fuel breaks across the landscape.

For one thing, the fuel breaks will be much more extensive and wider than before to give firefighters a better chance to stop a wildfire.

When wildfires race across the landscape, the flame lengths may reach 12-18 feet high in sagebrush and 4-6 feet high in cheatgrass, experts say.

"As fires move into these fuel breaks, they not only break apart but the flame length gets reduced quite

a bit," Okeson says. "What we're looking for, in regards to firefighting and holding is a flame length that's 4 feet or less and that's where we (firefighters) can really make hay."

"There's 3 legs to the fire triangle. One leg is oxygen, the other leg is heat, and third leg is fuels. You have to have all three legs of the fire triangle to sustain it. If you break any one of those legs, it can't burn, right? As a land management agency, the only thing we can manipulate is fuel."

To bolster fire breaks along dirt roads, the BLM will disk a wider swath as much as 100 feet wide on both sides. They also plan to mow vegetation on both sides of the road in cases where sagebrush and robust vegetation are present. They expect to use targeted grazing in some instances for the same purpose.

"Yeah, I think it'll definitely help," Lyons says of the fuel breaks. "The BLM, those guys are firefighters, they understand what it takes to stop a fire for a firefighter. In this area, we get tremendous wind events, like today. And we're trying to match what they're doing on state ground and private ground."

Overall, land managers and ranchers are hoping they can stop range fires quickly in the corridor on a consistent bases so they could begin work on restoring the landscape.

"Our argument is, if you want to get sagebrush back on this landscape and make it a bunchgrass plant community again, if it takes 35 years to grow a stand of sagebrush on the Snake River Plain, and it burns every 2 to 7 years, are we ever going to rehabilitate that and get it back to what it was? It's physically impossible. So the first step toward the rehabilitation of that is to stabilize the fire situation," Oke-son says.

Stopping the fire cycle along the freeway corridor also would allow the BLM to improve habitat in the Morley Nelson Snake River Birds of Prey National Conservation Area, an area that supports more than 700 nesting pairs of birds of prey, the most in North America.

Since the late 1970s, more than two-thirds of the shrub-steppe habitat has been lost in the birds of prey area, likely causing a downturn in jackrabbits and golden eagles that nest in the canyon. "Historically, there were 28-30 pairs of nesting golden eagles, and right now we're in the range of 22-24 pairs of eagles," says Larry Ridenhauer, public information officer for the BLM, with a Swainson's hawk on his fist. "We have lost a lot of that prey habitat, and in order to maintain populations, you need the prey base to feed all of those eagles."

Prairie falcon populations have not been as affected by the loss of shrub habitat. They feed mostly on ground squirrels. "Whether or not that has caused changes in populations is hard to say," he says.

Another part of the solution will be to reduce human-caused fires along the freeway corridor via public education and advertising. Many of the human-caused fires are a result of catalytic converters failing, vehicle or trailer bearings failing, flat tires throwing out sparks or people tossing burning cigarettes out the window, BLM officials say.

The Idaho Rangeland Resource Commission has posted fire prevention posters at the I-84 rest stop between



Golden eagle numbers have dropped in the Morley Nelson Snake River Birds of Prey National Conservation Area over the last 40 years as fires have burned up shrub-steppe habitat.

Boise and Mountain Home. State and federal agencies also are working on fire prevention campaigns. There's the "One Less Spark" fire prevention campaign, Firewise fire-prevention principles (clearing flammable objects away from homes), outreach to K-12 students in schools, public outreach meetings and a web site called "Idaho Fire Info."

"In regards to education, we really want the public to pay attention to that," Okeson says. "A big ignition source for us has been the bearings on trailers. If you can do your part in regards to maintaining your vehicles and trailers, that'll help reduce ignitions."

"We have a program Firewise that we're really involved with at the Boise District. We're looking at communities in the wildland/urban interface and what can they do to manage fuels around their homes and help us out by creating that defensible space.

"If we aren't tied down and worrying about protecting your homes, then we can put more resources on rangeland fires and protect that habitat from burning up."

In the meantime, the BLM plans to begin seeding green strips and creating fuel breaks next to roads this fall to implement the Paradigm project. Ranchers and ITD already are moving ahead with their part of the plan. And then, only time will tell if the multi-pronged plan works to stop the vicious fire cycle in Southwest Idaho.

"You've got to stop this fire cycle," Lyons says. "Everybody's working together to figure this out."

Steve Stuebner is the writer and producer of LifeontheRange.org, an educational project sponsored by the Idaho Rangeland Resource Commission.



Homeowners need to do their part to practice Firewise principles and keep burnable items away from their homes so the agencies can focus on protecting rangelands.