

Wildfire Web Site a ‘Hit’ for Homeowners

Colorado Springs residents go online to find fire rating

IT'S A CITY SYNONYMOUS WITH PIKES PEAK, whose breathtaking views inspired a visiting professor of literature by the name of Kathryn Lee Bates to pen the words to “America the Beautiful” nearly a century ago.

Colorado Springs’ legendary grandeur has always drawn people attracted to its natural beauty and healthy climate. On a typical June day, a steady stream of vehicles makes its way to the 14,110-foot summit of “America’s mountain,” where tourists step from their cars to take in this top-of-the-world panorama.

But in June 2002, traffic on the Pikes Peak Highway slowed to a trickle, and the region’s purple mountain majesty gave way to a more sinister hue.

A raging forest fire burned just 20 or so miles northwest of town. The Hayman Fire, named after a mining ghost town in the nearby Pike National Forest, would eventually cover 137,000 acres, making it the largest wildfire in the history of the state. A banner headline in the Colorado Springs Gazette proclaimed “Colorado Burning!” Thousands of residents in three counties bordering the national forest would be ordered to evacuate. And while flames never directly threatened city residents, fire had left its calling card.

One year earlier, a vision

It was the kind of sight that Fire Chief Manuel Navarro of the Colorado Springs Fire Department had seen before and one that he anticipated with dread and preparation.

A veteran of the 1991 Oakland Hills Fire in California that killed 25 and destroyed more than 3,300 homes, Navarro came to Colorado in 1994. The state was then experiencing a relatively wet phase. But by 2000, Colorado’s woodlands were so dry that wildfires destroyed a record 21,527 acres. In 2001, only moderate fire activity occurred despite tinder-dry conditions and sizzling summer heat.

Chief Navarro sat back in his office chair at CSFD Headquarters and talked about the



Colorado Springs Fire Chief Manuel Navarro

looming threat of wildfires. Outside, beyond the broad boulevards and busy city streets, the iconic profile of Pikes Peak stood out against a brilliant, almost blinding blue backdrop.

Navarro’s eyes took on a faraway look.

“I can tell you unabashedly that it’s going to happen. It’s not a question of *if*, but *when*.”

Navarro was concerned about the growing threat in an area the fire department refers to as the “red zone.” Also known as the wildland/urban interface, this is an area of mixed use where development encroaches on the forested hills west of town. Nearly 45,000 Colorado Springs homes are located in this high-risk environment.

When asked about the Oakland fires, Navarro passed a finger over his furrowed brow. His raspy voice betrayed a hint of weariness in having to go over the painful events of ten years ago—yet one more time.



From vision, commitment

Enter Bill Mills.

As a 33-year veteran of the fire service, Mills knows the drill. With his breezy speech and jaunty manner, “Old Fireman Bill,” as he sometimes refers to himself, combines the evangelist’s fervor when preaching the mitigation gospel with the cynic’s cold eye to just how difficult it can be to change human behavior.

Attired in his crisp dress blues, Mills plays the part effortlessly, making the jargon-laden terminology of the fire expert sound like folk wisdom, smart and funny at the same time. Scratch the surface, though, and you’ll find Mills’ belief in the importance of his mission is bedrock.

Mills likes to joke about his roundabout speaking style. (“I usually have to walk around back to find the barn door.”) Ask Navarro, though, and the chief will tell you that Mills is focused, passionate and relentless.

In the summer of 2001, Mills stood on the observation deck of the Will Rogers Memorial, which is perched on the side of Cheyenne Mountain in the shadow of Pikes Peak. From this lofty 8,000-foot viewpoint, he extended his arm over the entire sweep of the city’s wildland interface—“my area of concern”—a 64-square-mile expanse that is bigger than Los Angeles if you include jurisdictions where the department has mutual aid agreements.

“What you see here is the scope of what we believe to be the largest ground-level residential risk-assessment ever conducted in this country—more than 44,000 homes and businesses,” he said.

North and south, roads snake through foothills, where shingled rooftops peak over the tips of Ponderosa pines. Mills pointed north to a cluster of residences nestled on a tree-topped mesa. He had been working with a homeowners’ association to get the neighbors to create defensible space on their property.

Colorado Springs Fire Department Wildland Risk Management Officer Bill Mills at the Will Rogers Memorial above Colorado Springs, his 64-square-mile “area of concern.”

“The Oakland fires were interesting in a number of ways,” he said. “Twenty years before, that same area was hit, but we were saved by a change in the weather and only 20 homes were lost.”

Navarro paused before adding, “Next time we weren’t so lucky.

“The conditions here in the Springs really concern me. In some ways, this is potentially worse than Oakland,” he said. “When I came here, I vowed that I would never stand in front of a group as I did in Oakland, and listen to residents one after another say that the fire department never informed them of the wildfire danger.”

His vision—some would call it a pipe dream—was to affect nothing short of a wholesale change in the way the local community looks at wildfire threat. It would require deft political skills, formidable powers of public persuasion and sheer doggedness to navigate the “spider web” of competing interests, conflicting authorities and overlapping jurisdictions to get the job done.

“What’s needed is nothing less than a paradigm shift in the way people view living with fire, and their responsibilities to protect themselves and others,” Navarro said.

The new chief quickly learned he was starting from scratch. “I saw right away that we had to do something, so we bit the bullet under a tight budget and created a payroll slot for a person to direct our wildfire mitigation effort.”

Navarro turned to an old hand who had a reputation for fixing things to become the department’s first Wildland Risk Management Officer.

Although he was pleased with the progress made with the group so far, he made a droll confession that all of his outreach efforts haven't met with the same success.

"After preaching mitigation to a lot of empty seats in libraries and church basements, the thought occurred to me that my audience was probably at home sitting in front of a computer. That's when it hit me. We'd put the results of our risk assessment—along with all our other wildfire mitigation information—on the Internet."

The Web site would serve as an accurate and authoritative gauge of the community's exposure to fire danger. Mills thought that by highlighting ratings for every property, he could educate individuals and stimulate action. It would enable people to look up their own address to see how they stack up on a color-coded scale, and take action to get their rating changed.

"We're practicing emergency management here," he said. "We'll take our best knowledge and science, present it to policymakers and bottom-line types in a user-friendly format and ask, 'Where do you want to be with this?' If they're not committed, then we can put it on the shelf next to plans for grasshopper invasions and such."

Commitment to a plan

The basic ingredients for creating an interactive Web site were already in place: the daunting door-to-door assessment, which had begun in 1999, was moving toward completion; much of the Geographic Information Systems (GIS) data needed to chart the map could be borrowed from existing information already found in other city departments such as public works and planning; and the fire department already had a GIS specialist who could lend expertise in putting the pieces together.

The challenge lay in committing time, money and resources to complete the survey, and then to design and market the site. Again, Mills was not breaking ground, but

merely adding value to his master mitigation plan with the addition of an online fire map. In the end, the interactive map would become the centerpiece of the department's Firewise Web site.

"We had to sell people on the overall project, using science and not just sound bites," he said. "We had a broad vision of how mitigation practices could be implemented throughout the community, through public outreach that included the Web site, through vegetation management, code development, ordinances... but also through partnerships with foresters, environmentalists, wildlife managers and utility companies. We didn't just rush out to buy a chipper so we could start clearing trees.

"This is not a cookbook. Planning and getting buy-in from others is hard. There's no way you can do this without feeling pain. Getting results is the fun part."

In the spirit of partnership, Mills helped others who needed his expertise to further their own goals, and shared in their success. When the U. S. Forest Service looked for worthwhile thinning projects, Mills proposed creating defensible space around the historic Cheyenne Mountain Zoo on the western edge of the city, while lending his public information and mitigation planning skills to the zoo on behalf of the fire department. Later, when the insurance industry worked to get a roofing ordinance passed in the Springs as a protection against rising hail-damage claims, Mills pitched in on the department's behalf—the new materials also carry a high fire-resistant rating.

"Once you're able to enlist broad support and assemble a team, you become pretty potent," Mills remarked.

On the basis of a comprehensive 48-page plan and solid partnerships, the department was awarded a \$129,732 Assistance to Firefighters Grant from the Federal Emergency Management Agency/U.S. Fire Administration in 2001. Together with \$55,600 in matching funds from the

city of Colorado Springs, Mills was able to hire a full-time Firewise coordinator, Cathy Prudhomme. In addition to being knowledgeable about fire programs, Prudhomme brought excellent community relations skills and public relations savvy to the job.

At the beginning of 2002, Mills had reason to feel good about the progress of the mitigation plan. He had a strong team and enough financial support to carry him through the coming year. He had gained the support of his chief and city government,

and local, state and federal partners were engaged in their own ways of furthering the prevention plan.

Yet two nagging questions remained. First, there was the perennial question of how to get individuals to take responsibility for reducing their fire danger. Would the Web site really make a difference in motivating people?

A second, more troubling question remained. What would the new fire season bring? And would a damaging wildfire strike before the department had posted its risk map, warning residents of the potentially dangerous situation? From the looks of things, “Old Fireman Bill” had plenty of reason to worry.

June 8, 2002: The Hayman Fire

As the 2002 wildfire season drew near, Mills was hardly alone in his concern. Extreme springtime fire conditions developing in the wooded foothills outside of town foreshadowed catastrophic summertime conflagrations. Colorado was in the midst of one of its worst droughts in recorded history. Ground vegetation in much of the state had moisture content of 1 percent to 4 percent, and big timber was said to be drier than kiln-treated two-by-fours found in a lumberyard.

Topping it off, the legacy of a century of effective fire suppression had created forests that, to Mills’ trained eye, looked like huge stands of undampened matchsticks ready to ignite. The prospect of a raging wildfire devastating Colorado Springs on Mills’ watch made the “old fireman” anxious indeed.

In mid-April, the governor of Colorado warned citizens of the severe fire season ahead. Already the year’s fire activity outpaced the acreage consumed in the catastrophic 2000 season. For anyone who was paying attention, the signs were there, but in the minds of people in the fire service, all the warning flags waved ominously red, orange and yellow.

A quiet section of the Hayman Fire



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— Manuel Navarro

Mills had seen the threat coming far back in winter. He had stepped up work on the Web site for the first quarter of the year, realizing that an active fire season presented an opportunity to encourage homeowners in the wildland/urban interface to take preventative action. When larger fires with names such as Black Mountain, Snaking, Schoonover and Iron Mountain flared in May and June—and the number of homes lost in these fires approached 100—Mills and his team raced to launch the site.

At about 4 p.m. on the afternoon of June 8, a plume of smoke rose northwest of town in the Pike National Forest. Under the watchful eye of the U. S. Forest Service, the fire’s flames laid down some during the night. But next morning—an otherwise quiet Sunday morning—the fire simply exploded, sending smoke spiraling upward with a monstrous heat-induced fury until a huge mushroom cloud emerged full-blown above the jagged line of the Rockies.

In just 24 hours, the Hayman Fire grew to become the largest wildfire in Colorado history. Ultimately, it would take 21 days to contain the blaze, and only after it had destroyed 133 homes, covered 214 square miles, and forced the evacuation of more than 8,000 residents, most of them from the outermost suburbs of Denver to the north.

For weeks, wildfires would dominate the news in Colorado Springs. At first, feathery, ashen fallout floated for miles on waves of superheated winds off the mountainsides. A telltale odor hung in the air. Then dust stole into homes, leaving a whitish layer of film on surfaces everywhere. People were seen walking the downtown streets with handkerchiefs covering their mouths, while others complained of a sick feeling in the pit of their stomachs. The red and orange hues of sunset served as daily reminders that the powerful forces of wildfire were still on the loose.

To Mills’ way of thinking, the shroud of smoke that cloaked Colorado Springs for

nearly a month was a kind of advertising campaign for the mitigation message. He was determined to capitalize on it.

“In a strange way, it all seemed to come together. The Hayman presented us with a tremendous teaching opportunity. The community would be our outdoor classroom. And the Web site would be our adult education tool,” Mills said.

David Blankenship, the department’s senior GIS analyst, redoubled his efforts, working 16-hour shifts in an all-out drive to the finish. More and more, Mills and Prudhomme found themselves at their phones. Suddenly there was demand to learn more about fire mitigation.

“People were forced to think about the danger, and they had never been in that position before,” said Mills. “This one hit home.”

The city’s Web-based wildland fire map was launched June 12, just four days after the Hayman first flared. As part of the department’s official kick-off, local media and city council members joined the public in looking up their addresses online to find their fire rating. The reception was both exciting and gratifying. It was a big day for Navarro, Mills, Prudhomme and for the rest of the mitigation team.

Next day, the mitigation office buzzed like a pizza parlor on Super Bowl Sunday, with phones ringing off the hook. Residents had looked up their property and were eager for more information or advice. For the next month or so, the site averaged 500 hits a day. More than 100 homeowners took action and came back to the department to get their rating upgraded on the Web site map.

In their phone conversations, e-mails and comments at community meetings, residents were “talking the talk,” using terms such as “defensible space,” “fuel load” and “risk-assessment rating.”

The mitigation message was finally sinking in, and Mills savored the moment.

“Listening to them talk mitigation, to me it was sweet music.”

“One of the smartest things we did was to enlist the media in helping us get the message out.”

— Cathy Prudhomme

Lessons learned

By December 2002, six months after the Hayman Fire, Mills and Prudhomme could still be found busily at work. The mitigation office was a two-person shop, with GIS specialist Blankenship called in from time to time to update the Web site. Understandably, hits on the site had slowed to a trickle. Still, there were a handful of mitigation projects on the books to keep the work flowing.

And it was no time to become complacent. The department was concerned about the 2003 fire season, which was shaping up to be every bit as bad as the previous year's. Besides, given the rate of growth and residential turnover in the Springs, they knew there was always a new audience for their message.

When asked about some of the lessons learned from the Web site launch, a few thoughts came to mind.

“One of the smartest things we did was to enlist the media in helping us get the message out. With their interest and support, we were able to save money we thought we'd need to spend on marketing, and put it toward more public outreach,” Prudhomme said. “Coverage was so effective that I believe we would have had a good response from the public, Hayman or no Hayman.

“Another pleasant surprise has been the willingness on the part of many individuals to champion the cause,” Prudhomme continued. “When people called in to talk about their risk, they often mentioned the danger level for the entire neighborhood. We invited them—you might even say that we brow-beat them—to organize a neighborhood meeting, and many times they did. Don't underestimate people's willingness to help.”

One of those willing to step forward was Baaron Pittenger, a resident of Broadmoor Bluffs at the base of Cheyenne Mountain. Pittenger attended a neighborhood meeting hosted by Mills after, in his own words, “the Hayman Fire significantly raised my awareness level.”

What he learned at the meeting—information later confirmed by the online fire map—was that his home and all those in the surrounding neighborhood were rated as being in “extreme” risk of wildfire. Previously, Pittenger admitted, he had no idea that he was living in such a high-risk zone.

This realization inspired Pittenger, a former executive with the U.S. Olympic Committee, to do something meaningful for the community. He began organizing a non-profit group to promote fire mitigation and give citizens a voice in how they want to deal with the increasing threat of wildfire to their community.

“Baaron Pittenger is an outstanding example of someone who has taken individual responsibility. Not only that, he's become a strong advocate for community-wide wildfire mitigation,” said Prudhomme.

She also remarked on an interesting social phenomenon. It seemed that people who looked up their home parcel also made note of how the rest of the neighborhood rates.

“Call it pride, or call it social pressure, but most people don't want to be the only ‘hot spot’ in the neighborhood,” she said.

Prudhomme has found that she sometimes has to reassure homeowners that their color code is not going to be used by insurance companies to raise rates, a common concern. She explains that these worries are groundless, since companies base their rates on actual losses, and instead encourages homeowners to take steps to reduce their risk and promote the changes as a positive.

Mills found a rise in attendance and in the level of awareness at public meetings, which he attributes in large part to the Web site.

“People are doing their homework. When the fire service speaks at these occasions, we're able to download visuals from the Web site, and give people an accurate picture of how the neighborhood is managing its risk, and we have a much higher level of discussion about what needs to be done,” he said.

“I also learned that you can only push people so far before they resist your efforts. They have to come to you. By making our map detailed to the level of the individual homeowner, we gave people a reason to come to us when they were ready to come to us,” Mills said.

Mills advised others engaged in the mitigation effort to share their success. In November 2002, the fire department learned that it had received special national recognition from the U.S. Fire Administration for the department’s effective use of its 2001 grant. Based in part on the success of the Web site, the city council voted to fund the mitigation team for the coming year.

“Others may learn from what you were able to achieve, and it gives your program credibility with local officials and the community,” he said.

Last, but not least, Mills cited the unwavering support of his department as a major reason for the team’s success. “Chief Navarro has always stood behind our efforts, and my immediate boss, Fire Marshall Brett Lacey, has worked with us every step of the way to make sure that wildfire mitigation is an important part of the department’s mission.”

But challenges lay ahead. With across-the-board cuts in city government, resources were especially tight. In recent weeks, Mills and Prudhomme had begun keeping a list of callers who have taken mitigation action and would like their rating re-evaluated. Due to staff limitations, they will plan to put on a different hat and personally make the inspections at the beginning of the new year.

According to Mills, it’s a constant battle to tilt the odds a little more in favor of community safety, and it’s not always easy to know where your effort stands. But he keeps at it.

“You’d be surprised at the number of people who are willing to ‘take knife in teeth’ and join us in the fight to make the community a better place once you give them a sense of the important role they play in the effort,” he said. ■

