

Blazing a Trail to Safety

FOR YEARS, Paul Blumhardt has worried about fire in the woods.

That's because nearly 650 homes border the edges of those woods, full of closely grown trees, downed limbs and high-standing grasses. There's an elementary school nearby. And a few churches as well.

Blumhardt, city forester for Bismarck, North Dakota, hasn't been the only one worried. Bismarck Fire Department officials had identified those woodlands in the city's southwestern end as their primary wildfire concern.

The problem, officials said, is that there hasn't been an effective way to fight fire in those woods or to keep a blaze, pushed by frequent prevailing winds, from racing through the trees to nearby homes.

Until now.

On the cutting edge

Simply put, the solution was a trail — a 25-foot-wide swath that was carefully cleared of trees and downed limbs to create an access for fire equipment and personnel into three separate but adjacent woodland areas. In total, the three trail sections run approximately 3,700 feet.

Fortunately, said Blumhardt and Assistant Bismarck Fire Chief Kermit Schaefer, those trees have not caught fire — yet. But in recent years, there have been some sizeable fires in other forested areas around Bismarck, a city of 55,392 flanked by aging woodlands that begin on the banks of the nearby Missouri River.

Drought conditions in 2001 and 2002 increased the risk and incidence of fire, drying out the stands of cottonwoods, green ash and box elder. A severe windstorm in July 2001 took its toll on the green ash and box elder, downing many limbs and trees already weakened by decay and disease. And the floor of the woods grew thick with tall brome grass, now tinder dry.

That's why Blumhardt was so intent on finding a way to make the project a reality. A lack of funding to pay for the work had been standing in his way.

But in early 2002, the North Dakota Forest Service helped change all that.

The agency was offering special cost-share grants to pay for projects that help reduce wildfire risks to communities. The U.S. Forest Service allocated the money to North Dakota through the National Fire Plan. The money is administered by the state forestry agency.

It was just the help Blumhardt had been looking for. He applied for funding to help construct the trail — one of three phases of this wildfire prevention project — and in August 2002, a grant for \$10,158 was awarded. The city spent an additional \$4,255 in cash and in-kind services for the project match.

The real work begins

Next, Assistant City Forester Jeff Heintz went to work to design the trail system. Access points were needed in three sections of contiguous woodlands, all of which border subdivisions of mobile homes, apartments, condominiums and single-family dwellings.

Heintz not only wanted to create adequate access, but also preserve the city-owned woodlands and the privacy those trees offered the adjacent homeowners.

Before clearing work began, dead brush and branches lay deep behind Tatley Meadows





A finished section of fire trail, its edge marked by the orange-tipped stake

So he crafted a meandering trail through the woods, leaving a 150-foot-wide buffer of trees between the homes and the trail. The curving shape of the trail was designed to make it look more natural and to discourage everyday traffic from driving into the woods.

Each tree to be removed was individually marked and strict guidelines were put in place so that no adjacent trees would be damaged in the process of creating the trail.

The city then contracted with a local tree service to construct the trail. To do that, tree specialists cut trees and dead limbs, hauled out the downed timber, and cleared the trail's dirt surface of small stumps and tree debris.

The access path, known after it was built simply as "the fire trail," was completed in just eight days in early January 2003. The project received high marks from local officials and nearby residents.

"I'm just so pleased to have that trail in there," said Blumhardt. "The lack of access is something that has really bothered me for a long time. Now if there is a fire in the woods, the fire department can get in and knock it down before those homes are threatened."

Schaefer agreed.

"Before, we had absolutely zero access into that area with our brush trucks, and minimal access for firefighters on foot," he said. "If a fire had started, we would have had to fight it

from the perimeter of the trees and let things burn. We knew we could mount a defense, but that would have been it. We weren't going to be able to attack the fire offensively.

"Now, the trail is going to give us both an access point to get in there and a firebreak to slow fire down," Schaefer added. "We are more apt to control the fire now than ever before. The fire will not control us."

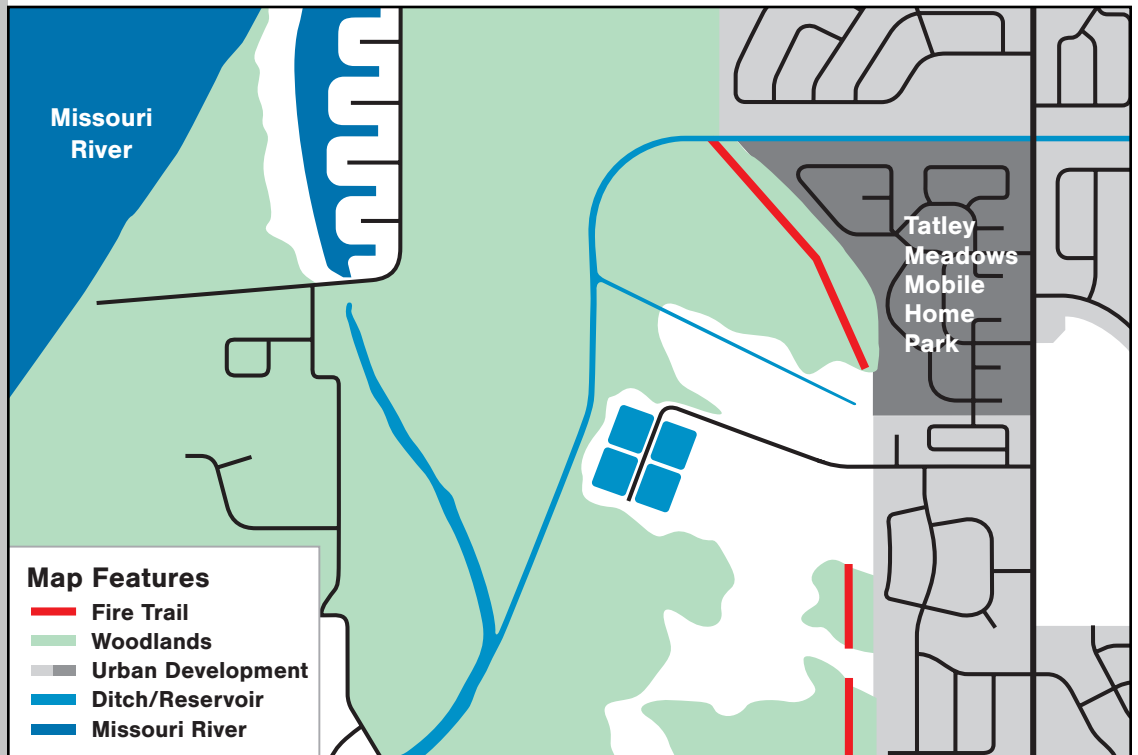
Homeowners see benefits

For Marvin and Marion Suess, whose property is adjacent to the middle trail section, the firebreak was a welcomed sight. Children often go into the area to play, they said, sometimes building makeshift forts and occasionally starting small bonfires.

One such fire, in the summer of 1998, was small enough that firefighters could put it out using fire extinguishers, Marvin Suess said. But it took extra time for firefighters to get to the fire, he added, noting that they initially tried to gain access through a neighbor's property and couldn't get through.

"Our concern has always been kids that might start a bonfire and it would get out of control," said Marvin Suess. "There's a lot of dead wood back there. All that dead [brome] grass back there, that stuff burns like gas.

"This trail is a great idea," he added. "The only way the fire department could get in



Map of the Bismarck Fire Trail and surrounding area

there before is with a fire extinguisher or have a heck of a lot of hose. Now it will give them an opportunity to get in there quick and douse a fire.”

To help stop the spread of fire, Suess said he and many of his neighbors regularly mow a wide strip of the brome grass beyond their property lines to create their own firebreaks.

Jeff Avery has lived in the Tatley Meadows Mobile Home Park for 12 years. The longest piece of the trail now runs behind his home. Because of the buffer zone, the trail is barely visible. But it is a relief to know it’s there, he said.

“We lose a lot of trees every year just because of the high winds we have here,” Avery said. “There’s a lot of dead stuff back there. Fire has been a concern for me because we are so close to the wooded area, especially as dry as it’s been the last couple of years.”

Avery and some of his neighbors also regularly mow beyond their property lines to keep down the tinder brome grass, he said.

Tatley Meadows park officials said that of the 357 homes in the park, about 10 percent of them border the woodlands. But Blumhardt and Schaefer both consider the entire park at risk if there were a fire in the woods, because of the dense population, the proximity of the trees to the homes and the possibility that

strong winds could blow hot embers into the neighborhood.

Future efforts planned

Though the trail construction was the primary concern, both Blumhardt and Schaefer said more work remains to be done before the project is considered complete.

Local officials are planning a public education campaign for the residents of all three areas to teach them about the dangers of wildfires and how to better protect their homes. The campaign will discourage residents from dumping lawn clippings, storing firewood and, in the case of youngsters, building forts in the wooded area. All have been a problem in recent years.

Blumhardt is eager to secure additional funding to clear out the downed timber in the buffer zone between the trail and the residences. Both he and Schaefer agree that the fire danger will remain high until that phase of the project is complete, especially if the current dry cycle continues well into 2003, as predicted.

With hundreds of woodland acres bordering the city’s limits, Blumhardt and Schaefer agree that more trails are needed. For now, though, they’ve taken a giant first step in managing wildfire for the city on the river. ■