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**A flood of floods** from page 8

including those in Dakota Dunes, are coping with groundwater in basements and crawl spaces. Some rivers and streams remained above flood stage well into August, and where water lingers, mold takes hold.

The duration of floods also leaves scant time for critical cleanup before frost and snow freeze the mess in a cold time capsule until next year's thaw. And if water tables don't drop before the freeze, the aftermath of the floods will wreak additional havoc on public and private water and septic systems.

Local governments spent many millions preparing for the flood and protecting residents from it. But it will take many more millions to repair the damage to roads, bridges and other public infrastructure once things dry out, though the financial strain is cushioned by federal and state disaster reimbursement programs.

The same is not true for homeowners and businesses, whose properties were generally not covered by insurance. Officials in Minot estimate that only 10 percent of inundated homes were insured for flood, and anecdotes from elsewhere suggest similarly low coverage. Most people didn't buy insurance because they believed that flooding was unlikely; and if it did occur, existing levees and other measures would protect them. Now, only the most egregiously damaged areas will receive grant assistance from federal disaster programs, and it won't come close to covering private losses.

The floods have also imposed myriad small indignities on community life. The North Dakota State Fair in Minot had to be canceled this year because of damage to the fairgrounds and the city's general state of emergency. "For the city, it's a difficult thing to lose," said Waind, city administrator. But he admitted (and other local sources concurred), "I think there was a little bit of relief."

Many people spoke of stress and depression, and of a grieving process similar to that experienced with the loss of a loved one. Some of that grief is over trees—millions upon millions—that are feared drowned because roots have been submerged for weeks on end, starved of oxygen.

Communities likely will have to rebuild with less help from the outside compared with previous major disasters. In the 1997 flood that devastated Grand Forks, the city received a pile of federal money from a variety of agencies to help affected homeowners, businesses and local governments, with grant money for home buyouts, new flood protections, even new home building.

## A seeping feeling

One of the most widespread but hidden effects of flooding in the district involves groundwater. Though many communities avoided widespread inundation, the height of floods in the Missouri and Souris rivers and their many tributaries pushed up groundwater tables everywhere, sending water seeping—sometimes gushing—into basements and crawl spaces.

Cheri Kilby is the head of emergency services in Fergus County, Mont. There, she said groundwater seepage "has been almost unreal. We have had people talk about water shooting up from cracks in the basement. We have springs where there were not springs before. Hillsides are slipping down and taking foundations with them."

Groundwater seepage can usually be managed with a sump pump or two. But the longevity of floods in many locations meant that homeowners were battling groundwater seepage on a 24/7 basis for weeks or even months. The failure of a pump—or even a temporary power outage—can lead to significant water damage. Even if pumping succeeds in keeping water at bay, high groundwater also creates tremendous pressure on structures; foundations can buckle. And like flooding, damage from groundwater is often not covered by homeowners insurance.

Save for the many pump hoses that snake out of homes in affected areas, these problems are mostly out of view, so no one knows the full extent of the problem. But anecdotes about groundwater problems abound. One Montana restoration business said it received 450 calls from people with flooded basements in Billings, Joliet and Roundup in early June. One store in the Billings region reportedly sold 150 water pumps in an hour; another store, 80 pumps in 40 minutes.

Said one North Dakota state official: "Grand Forks was made whole."

While Minot will receive significant reimbursement for the money spent preparing for and cleaning up after the flood, fiscal realities at the federal level mean the city and its residents will bear more of the costs of flooding—including improvements to existing flood protections—than Grand Forks. "We're telling them that. You might as well tell them the facts," said the state official.

In Pierre, Mayor Laurie Gill was asked if the city expected any additional support beyond FEMA assistance. "I'm not getting my hopes up," she said.

At the same time, Gill and other local sources repeatedly expressed pride at the can-do mentality of their communities. Residents across the district played an integral role in efforts to protect the property of family, friends

and complete strangers, particularly early on when communities were scrambling to develop and execute broader safeguards. An estimated 15 million to 18 million sandbags, and possibly more, were filled by local government workers, residents and even nonresidents looking to help.

Gill insisted on that bootstrapping early on. Once it was known how severe the flooding would be, the city told residents "to prepare as if there is no government [flood] protection. We didn't want to get into that pickle." City engineers, with the help of private contractors, went neighborhood to neighborhood measuring property elevations and scratching lines on homes to show people how high the flood would get and telling them where they could find sandbags.

After the floods, Pierre is facing steep costs—upward of \$13 million, according



Multiple pump hoses carry groundwater over a dike in rural Union County, S.D.

The city of Pierre, S.D., conducted a (nonscientific) survey of area residents, including those across the river in Fort Pierre. Among 314 respondents, 240 had water in their crawl space or basement, more than two-thirds were already dealing with mold issues, 54 experienced structural movement and one in 10 had experienced a sewer backup. Separately, Fort Pierre Mayor Sam Tidball estimated that about half of the 800 or so households in the community were dealing with groundwater seepage.

Rick Jensen owns several small businesses, most of them in or near downtown Pierre, which was threatened by flooding from the Missouri River. Thanks to major levees, downtown was spared, but virtually everyone is coping with encroaching groundwater. Jensen said he has bought 12 sump pumps for his properties, at \$140 each.

The long duration of the Missouri River flood brings additional challenges as winter approaches. Blake Barringer, manager of Brosz Engineering and president of the Pierre Economic Development Corp., said that if the ground freezes before high water tables recede, the city faces all kinds of problems. "We're going to have busted basements, water mains and roads."

—Ronald A. Wirtz

to the city—for myriad repairs to roads, water systems, parks, a municipal golf course and other items. "It would be easy to get sucked into the gloom and doom, the oh-woe-is-us," said Gill. "But there's a [recovery] plan, and we're organized." She pointed to recent efforts to oversee cleanup and debris management, a recovery group that includes community stakeholders and a public facilities committee that is focusing on long-term restoration of the city.

The city is also sitting on a healthy fund balance of \$11 million, or about 25 percent of the city's annual budget. Said Gill: "We've done everything we could over the years to save money, and now everybody sees why we do that." **f**

—Aaron Richins, research assistant, contributed flood data and other research to this article.