

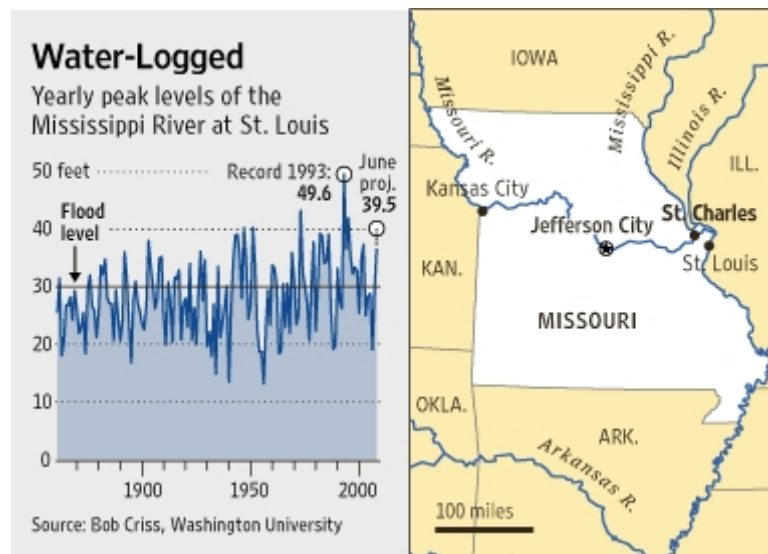
Floods Dredge Up Dispute

Critics Say Building Near Rivers Is Cause Of Recent Problems

By DOUGLAS BELKIN
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ST. CHARLES, Mo. -- Since the historic flood of 1993, nearly 30,000 homes have been built on land that was underwater around the Mississippi and Missouri rivers near St. Louis. This weekend, the dwellers may find out if they built wisely.

As the swollen Mississippi rolls south, breaching levees, drowning crops and submerging towns, a debate is intensifying among scientists, environmentalists and developers about whether development not only flirts with disaster, but helps cause it.



Developers who started building a planned, 5,700-unit subdivision called New Town at St. Charles after the 1993 flood said the river waters would never reach New Town's borders. But residents of New Town, about 20 miles west of St. Louis, are uneasy.

"I asked my sister this morning if she had flood insurance," said Patty Moore, who was walking her dog near the town green this week. "She said, 'We live between two rivers, it would be foolish not to.'"

The White House on Wednesday asked Congress for \$1.8 billion in emergency disaster aid in the wake of the Midwest floods. The money is intended to replenish the federal disaster-relief fund in anticipation of future losses. Losses from the current floods might have been higher if the federal government hadn't purchased low-lying land after the 1993 flood caused \$12 billion in damage. The government has since bought out thousands of homeowners and turned much of their land into parks and undeveloped areas.

Around St. Louis, where the Mississippi is expected to crest this weekend, a number of scientists and activists argue the floods aren't caused by heavy rainfall but by irresponsible development. There has been considerable building since 1993 in Greater St. Louis, where demand for accessible property is at a premium. New and expanding communities pushed for new, taller and stronger levees.

By building along the riverbanks and forcing the Mississippi into a bed that is less than half the width of where it ran a century ago, residents are displacing water and forcing the river to run faster and higher. That, in turn, increases demand for taller, broader levees.

But as those levees make way for development that paves over wetlands, more runoff water is channeled into the river. Critics said the result is a self-perpetuating cycle: The rivers rise higher, new levees are built bigger, the rivers rise again.



Bob Chriss, a professor of earth and planetary sciences at Washington University in St. Louis, said about the same amount of water washed down the Mississippi during a flood in 1903 as did in 1993. But in 1903, the river crested at 38 feet in St. Louis; in 1993, the waters rose to almost 50 feet.

"We're making these flood levels higher," Mr. Chriss said. "A stage of 38 feet was almost unheard of 100 years ago. Now it happens all the time."

Tim Kusky, a professor of natural sciences at St. Louis University, said, "Eventually some of these levees are going to fail. The question is when, not if."

At the center of the problem is an absence of any comprehensive river-management plan. Each levee along the Mississippi is under local control.

"Each levee has a small impact, but cumulatively they can have a large impact," said David Busse, the chief of engineering and construction for the St. Louis District of the Army Corps of Engineers. "From an engineering point of view, it would be great to look at the system as a system." Past efforts to assemble such a plan have fallen short.

The Army Corps itself, which helps build levees, has been a target of criticism by groups such as

the Great Rivers Habitat Alliance in St. Louis, an advocacy group led by Adolphus Busch IV, a scion of the beer-making family. The organization was founded in 2000 to fight development on the flood plain between the Mississippi and Missouri rivers.

Mr. Busch said floods have three times destroyed his home on a 2,000-acre spread west of St. Louis. In 1993, water rose to the second floor. Since then, he has had the structure raised onto an 18-foot-high mound of earth. "The Corps can't keep pushing more water downstream and then be surprised when there are serious consequences," Mr. Busch said.



Getty Images

Rex Hipes walked on a sandbag wall around the American Legion hall in Clarksville, Mo.

Once planned, levees are rarely stopped, but a recent lawsuit halted construction of a levee on the Missouri River in Jefferson City, Mo., on environmental grounds.

"[Hurricane] Katrina was the real turning point for all of this," Mr. Busch said. "For a long time the Army Corps of Engineers was as close as you could get to God in the United States, but I think that's finally changing."

The Corps' Mr. Busse said the agency is neutral when it comes to building levees and acts at the request of Congress and local communities.

--John D. McKinnon contributed to this article.

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