



June 25, 2008

Guest column: Rethink our heavy reliance on levees

MARY KELLY is the vice president of rivers and deltas for Environmental Defense Fund, a national nonprofit organization.

Once again, residents of the Mississippi basin are facing the heartbreak and challenge of dealing with widespread flooding. It is impossible not to admire their resilience and toughness in the face of this disaster. But, once the immediate crisis has passed, it's time to recognize that trying to control Mother Nature is always more expensive, and less successful, than working with her.

We have spent billions of dollars on levees and flood-control infrastructure in the Midwest to protect and encourage development of river flood plains and low-lying wetlands, but it clearly is not working. We saw it with the Mississippi floods in 1993, which caused billions in damages and forced tens of thousands from their homes. Now, here we are again, 15 years later, and flooding in the Midwest is once again breaking or over-topping levees and causing billions in damages to hard-working farmers, forcing people from their homes and putting historic downtowns under water. Between the 1993 floods and today's catastrophe, we saw levees fail to protect the residents of New Orleans from Hurricane Katrina's furious storm surge.

We also know that the federal government recently assessed the integrity and protection level of thousands of miles of levees from coast to coast and found many of them seriously deficient. In extreme storm conditions, the kinds of flooding and damages we saw in Iowa, Missouri and other states in recent weeks will be seen in many other parts of the country.

Our heavy reliance on levees, which are hugely expensive to build and maintain, is sorely misplaced. It leads people to think that living in a flood plain is risk-free, behind levees that their builders touted as offering protection against a "100-year" or "500-year" storm.

Nothing could be further from the truth. As the time-worn refrain goes, there are only two kinds of levees - those that have already failed and those that will fail.

To make matters worse, our choices have tended to make floodwaters run faster, increasing the damage and danger. Levees narrow the river and speed it up. The near total loss of wetlands in the agricultural Midwest exacerbates the problem, because those wetlands naturally stored stormwater and slowed runoff to streams and rivers. And the loss of riverside forests that also slow and absorb flood flows has added to the current misery.

We need to change our approach to flood protection. At all levels of government, here is what resources and incentives should be focused on:

- Buyouts of vulnerable lands to decrease the people and property in harm's way.
- Returning those and other lands to forests and wetlands to provide flood buffers.
- Better disclosure of the risks of living in flood plains, even for those lands behind a levee.
- Reforming the taxpayer-funded National Flood Insurance Program to remove incentives for new flood-plain development.
- Reorienting our approach to flood protection, placing high priority where possible on use of the river's natural flood plain instead of expensive levee and pump systems.

There is no time to waste in implementing these solutions. Just this week, the U.S. Climate Change Science program issued a report predicting that climate change is likely to increase the frequency of extreme weather, including heavy flooding. Mother Nature is trying to tell us something. Let's listen, before she yells louder.
