

After Hurricane Harvey, Texas County Rethinks Flood-Prevention Efforts

By Dan Frosch

HOUSTON—Long before Hurricane Harvey hit in late August, government engineers were working on an array of projects designed to shield this flood-prone region from high water.

But the record-setting tempest—which swamped the nation’s fifth-largest metro area, killed dozens and caused tens of billions in damages—changed the future of flood prevention in the region.

Officials in Harris County, which includes Houston, are considering a potentially billion-dollar bond issue that could fund more flood-mitigation projects, a new storm-water reservoir and swifter buyouts of flooded homes.

Already, Harris County commissioners last week approved \$20 million in an effort to buy out an initial group of more than 200 homes flooded by Harvey.

County engineers are reassessing flood-prevention projects in the works, to see if they could handle a storm of Harvey’s might.

And the region’s top elected leaders now say that Harvey—along with two other extreme floods that swept through the area since 2015—have forced them to consider that such disasters may not be so rare after all.

“We’ve had three 500-year floods or above in the last two years. So there is a new normal,” said Judge Ed Emmett, Harris County’s chief executive, at a news conference last week.

The term “500-year flood” means there is a 0.2% chance of such an event happening in any given year. Harris County officials said recently that the deluge of rain from Harvey produced a 2,000- to 5,000-year-level event across the county.

Any upgrades to the flood-prevention projects will have a hefty price tag. Mr. Emmett favors putting the bond measure to voters soon—along with a proposed property-tax increase to help pay for it—as opposed to waiting too long, he said.

The bond would be a boon to the Harris County Flood Control District, which has an annual capital-improvement budget of \$60 million.

The money could help speed existing channel-modification and water-detention projects along the region’s network of bayous and allow for new ones, county officials said.

The bond needs to be approved by county commissioners before being placed on the ballot. It isn’t yet clear the rate of any new tax increase. Mr. Emmett,

a Republican, said in an interview that he believed there was enough support for the idea.

“Now is the time to say, if we really want to make our community safe, this is what we have to do,” he said.

Sarah Smaardyk, a local-governments analyst for Standard & Poor’s based in Dallas, said Harris County was economically stable and had the financial capacity to take on a large bond measure and absorb future debt.

First, local officials will have to persuade tax-averse Texans to support such a measure.

Bill Baldwin, who owns Boulevard Realty in Houston and is the president of the Houston Heights Association neighborhood group, said many people here now felt that “enough is enough” with flooding and were willing to pay for more safety measures.

The bond measure “will be a painful pill to swallow,” said Mr. Baldwin, who sits on the city’s planning commission. “But I think the will of the voting population is that we must do something—and we must do something now.”

State Sen. Paul Bettencourt, a conservative who represents a part of Houston hit hard by flooding, said he didn’t think any tax increase should be proposed until the county and city marshaled all other financial resources first.

“I don’t want us to jump out and raise taxes on homeowners in the county without having significant time to have discussions with the major stakeholders,” said Mr. Bettencourt, noting that he recognized there were major flood-prevention projects that needed to be addressed.

Mr. Bettencourt has spoken out against a proposal from Houston Mayor Sylvester Turner to raise property taxes for one year to pay for flood recovery, saying the city had other financial sources it could tap. Last Friday, Mr. Turner scrapped the idea after Gov. Greg Abbott freed up \$50 million in emergency state funds for Houston’s recovery.

With or without the bond issue, local officials said they would push to broaden an existing program to buy out homes that have flooded, trying to get more people and houses out of harm’s way before the next big flood.

Since 1985, when the program started, some 3,065 homes have been bought in Harris County through the program, which is administered by the flood-control

district and paid for with funds from the Federal Emergency Management Agency and local dollars.

Before Harvey, the county had identified an additional 3,360 homes it was interested in buying. And since the storm, at least 3,000 more people have come forward wanting to sell their homes to the county.

But the buyout process can drag on for years and is bound by how much money is available. Stephen Costello, Houston’s chief resilience officer or ‘flood czar,’ said the city is working with FEMA to expedite buyouts and find additional funding to purchase more homes.

“You’ll see a bigger push to do more aggressive buyouts,” said Mr. Costello, noting the city was poised to allocate an additional \$10.6 million to the program.

Local officials also will examine whether the area’s defined floodplains, partly based on rainfall studies by the U.S. Geological Survey, should be updated in light of Harvey, said Matthew Zeve, director of operations for the flood-control district. The floodplains determine flood-insurance requirements and help regulate development, and are a factor in determining the scope of the district’s projects and where it wants to buyout homes, he said.

On Friday, Harris County Engineer John Blount said he would recommend that the county require new homes inside the floodplain be built higher off the ground than current regulations mandate.

A new study conducted by researchers at Rice University and Texas A&M University at Galveston found that FEMA’s 100-year floodplain maps failed to predict 75% of insured flood losses in several Houston suburbs during floods from 1999 to 2009.

According to FEMA, the maps aren’t predictive but rather based on probability, and the agency said where flooding occurs can change dramatically based on a variety of factors.

John Jacob, a watershed scientist and professor at Texas A&M University who lives in Houston, said whatever new flood-prevention measures the city and county pursue, they need to plan for a storm of Harvey’s power to engulf the region again.

“We shouldn’t consider Harvey a one-off flood,” Mr. Jacob said. “It’s not outside the range of what is possible.”

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