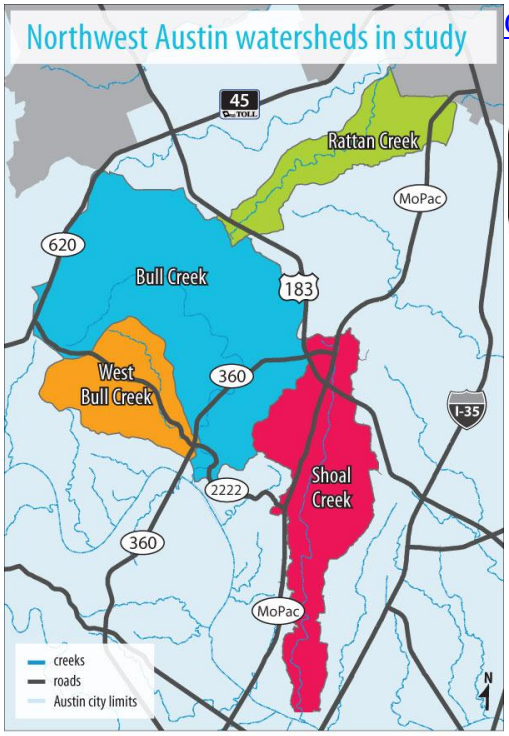
Flood maps to be updated

By Beth Wade – Community Impact Newspaper

15 December 2010

City staff uses grant money to study four Northwest Austin watersheds, total of 12 to be completed throughout city

NORTHWEST AUSTIN — City of Austin surveyors will work to determine the probability of flooding in creeks and waterways as the city updates floodplain maps in 12 of its more than 100 named watersheds. This could mean more houses in need of flood insurance.



Source: City of Austin

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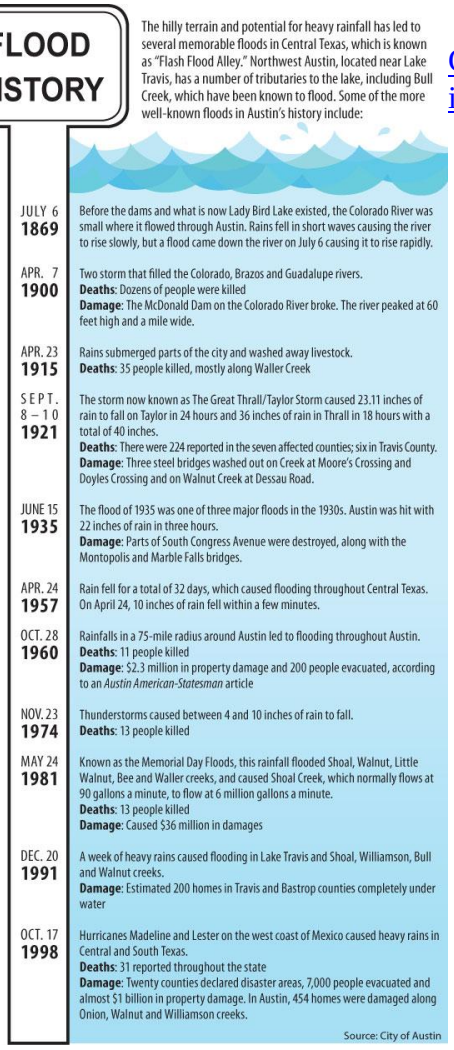

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Austin City Council accepted a grant Nov. 4 for $1.1 million from the Federal Emergency Management Agency's Cooperative Technical Partners program. The money will be used to update aging floodplain maps of watersheds, including Rattan, Shoal, Bull and West Bull creeks in Northwest Austin. The grant will also help fund the study of the Tannehill Branch, Fort Branch, Boggy Creek, Carson Creek, Cottonmouth Creek, North Fork Dry Creek, South Fork Dry Creek and Dry Creek East watersheds.

"[The program] allows us to partner with local communities and stakeholders and leverage the local knowledge and expertise that they have in order to help us develop and maintain our floodplain data and our maps," FEMA Mapping Program Specialist Erin Cobb said. "We can leverage the dollars that they have [and] the local expertise they have, which helps to provide a better floodplain map."

The watersheds studied each year are prioritized on factors, such as when they were last updated and the area's development and population growth, said Kevin Shunk, floodplain management supervising engineer with the city's Watershed Protection Department. The Bull Creek study is about 15 years old and is the oldest in the study, he said.

The study will update the 25-year, 100-year and 500-year floodplain maps, which show what areas have a chance of flooding during any given year. A 100-year flood has a 1 percent chance of happening each year.

"You could have five 100-year floods in a year or you could have none in five years," Shunk said. "But just because you had one doesn't mean you couldn't have one the next day. It's just a statistic. FEMA is trying to transition over to calling them the 1 percent annual chance flood, but that's a mouthful."

Map creation

Redrawing the floodplain maps is a three-year process.

"[Engineers] determine essentially how much water could fall on this watershed and, when that amount of water falls, how high the water gets within the creek," he said. "Then we can determine which homes are in the floodplain."

That data will then be processed and turned into preliminary maps, which will then be available for public input throughout the process. Before the final maps are drawn and printed, there will be a 90-day appeal period for residents.

City staff will complete two studies: one will look at the floodplain using FEMA standards and the other with more stringent standards set by the city, Shunk said. FEMA's floodplain maps consider the topography of the land and development as it is at the time of the surveys. The city study, however, is completed as if the land were developed to its full potential based on its zoning.

The stricter standards by the city are used to regulate development in a floodplain, while FEMA's maps are used to determine flood insurance rates.

"All of our development regulations are based on fully developed floodplains. We do that because we want to go above and beyond the FEMA minimum requirements," Shunk said. "We think it's sound floodplain management to consider a watershed in its fully developed condition."

Shunk said the biggest difference between the two can be seen in more rural or suburban floodplains with less development.

Flood insurance

There are approximately 7,400 houses in the City of Austin's 100-year floodplain, but that figure could change based on the new studies, Shunk said.

A house's placement in the floodplain or near the floodplain can determine how much flood insurance costs and, in the city's case, how it can be developed or redeveloped. All homeowners with federally backed mortgages in the floodplain are required to purchase flood insurance, according to FEMA.

"Anybody in the entire city can buy flood insurance. You do not have to be in a floodplain to buy flood insurance," Shunk said. "We actually recommend people to look at their situation and determine if they need flood insurance because typically your typical home insurance policy does not cover flood damage."

Flood insurance is less expensive for those not living in a floodplain, he said, and can be purchased through FEMA or a private insurer.

Rates for insurance vary and there are a number of caveats considered, including when the home was built, if it is inside or outside of the floodplain, the elevation of the house and if the community has done projects or studies to alleviate flooding.

Generally rates begin at $306 a year and go up from there, said Linda Delamare, FEMA regional insurance specialist.

Delamare said there is an opportunity for individuals not in the floodplain but who will likely be in the floodplain once the maps are redrawn, to purchase flood insurance at the lower, out-of-the-floodplain rate, which will be grandfathered in once the maps are changed.

"If you are not in a floodplain now and you purchase now, you make payments for however long—and you never let it lapse—you can grandfather that zone, which will promise you a reduced rate compared to what your neighbors would pay," she said. "It's a real advantage for homeowners to maintain that, particularly in the future if there is a possibility that they may sell their home because it can be a selling point."

Flood chance

Floodplain intervals show the likelihood of flooding each year. A flood could happen more than once a year or not at all, said Kevin Shunk, floodplain management supervising engineer with the city's Watershed Protection and Development Review Department. The Federal Emergency Management Agency prints 100-year and 500-year maps, but several different flood recurrences are studied.

The city studies two-, five-, 10-, 25-, 50- and 100-year floodplains and uses the information for flood prevention projects and other projects, including bridge construction and bank stabilizations in creeks.

The levels indicate how likely flooding is to occur each year.

- Two-year flood: 50 percent chance
- Five-year flood: 20 percent chance
- 10-year flood: 10 percent chance
- 25-year flood: 4 percent chance
- 50-year flood: 2 percent chance

- 100-year flood: 1 percent chance
- 500-year flood: a 0.2 percent chance

Source: City of Austin

Courtesy of JB Goodwin