Two months ago, the remnants of Hurricane Harvey dumped unprecedented amounts of rain on Southeast Texas, including Harris County. People died, homes and businesses flooded, families were displaced and our lives changed.

Harvey was the worst flood in our history, but Harvey was not a singular event. It followed two other major rain events in recent years. This area has seen three of these so-called 500-year rains in the past two years. Either our definition of a 500-year rain needs updating or we can hope that we are safe for the next 1,500 years. Obviously, we cannot assume the latter.

Following Harvey, government officials, academics, private institutions and the general public have all weighed in with ideas of what our area needs to do to protect life and property from future floods. Special committees have been formed, and significant amounts of money have been committed to finding solutions.

However, now is not the time for a piecemeal approach. The sense of urgency created by Harvey will fade, so we must quickly commit ourselves to a comprehensive plan to redefine Harris County and the surrounding region as a global model for living and working in a flood-prone area.

I do not pretend to have all the right answers, nor do I see myself as an expert in flood control. My purpose today is to present a broad vision of what is needed and to challenge those involved in seeking solutions to think boldly. There is a general rule in politics that you should focus on fewer, narrowly defined items, since the more ideas that are presented, the more people will disagree with something. Harvey should make all of us suspend politics as usual and take ownership of flood control.

As county judge, I am the Director of Emergency Management. One thing I know for sure is that the best time to manage an emergency is before it happens. With that in mind, I offer the following suggestions.

Rivers, bayous, creeks and flood mitigation areas should be viewed as positive features and treated as preserves or recreational and tourist areas. We should turn a vulnerability into an asset. That should be our overriding vision. With that vision in mind, there are numerous specific ideas that need to be presented.

- 1. Create a regional flood control/water management organization similar to the Transportation Policy Council at the Houston-Galveston Area Council. This will allow for multi-county coordination of flood control and water management.
- 2. FEMA flood plain maps need to be revised immediately to reflect the impact of Harvey. Development rules should focus on restricting development in the 500-year flood plain instead of the 100-year flood plain -- or the 100 year flood plain needs to be vastly redefined and updated.
- 3. A third reservoir should be built to protect the west and northwest sections of Harris County. Rather than waiting on federal funds, the reservoir should be funded by the State of Texas' "rainy day fund." The reservoir should be part of a larger project to create a state or national park for the Katy Prairie.
- 4. The U.S. Army Corps of Engineers should immediately fund the four Harris County Flood Control District projects that are now ready for completion. Those four are Brays Bayou, White Oak Bayou, Hunting Bayou and Clear Creek. New flood maps showing the impact of these projects should be released so homeowners will know if their property will remain flood prone.
- 5. Old watersheds in developed areas in Harris County should be identified. For example, those areas downstream from Addicks Reservoir need to know where an "uncontrolled release" over the spillway would flow.
- 6. The Harris County Office of Emergency Management, working with municipalities and special districts, should develop a state-of-the-art flood warning system and localized evacuation plans. Such plans should use recognized volunteer organizations to assist first responders. The Harris County Sheriff's Office and the Community Emergency Response Teams should have a defined water rescue effort featuring private boats and high-water vehicles.
- 7. Lake Houston and Lake Conroe should be converted to serve as Flood Control facilities in addition to serving as water supplies. Lake Houston should be restored to maximum storage capacity, and the San Jacinto River Authority should create retention/detention capacity upstream of Lake Houston. And the San Jacinto River Authority should have representation from Harris County.

- 8. The Harris County Emergency Operations Center should be expanded to assist emergency operations for smaller surrounding counties.
- 9. The roles and responsibilities of municipal utility districts and other special districts should be clarified to include flood control and storm water management, in cooperation with the Harris County Flood Control District. Existing districts should be studied for untapped capacity, and new districts developed with flood control in mind. Until a true 100-year flood level is defined, the 500-year level should be used for detention purposes.
- 10. All underpasses that have the potential for drowning should be identified and equipped with automatic barriers or be part of a comprehensive manual plan for closures. In addition, vehicle manufacturers should be encouraged to develop technology to detect high water.
- 11. The Harris County Flood Control District should develop comprehensive plans for every major watershed in Harris County, with immediate attention given to the entire length of Buffalo Bayou and to plans to divert storm water around downtown Houston, either through a canal or tunnel system.
- 12. Federal, state and local governments should implement a buyout and/or elevation program for all homes located in the 100-year flood plain or that have flooded repeatedly. Such a buyout/elevation program should use traditional government funding and private funding, such as social impact bonds.
- 13. The State of Texas should institute clear rules for approval of development plats in unincorporated areas, specifically those areas in the extraterritorial jurisdiction of a city. Additionally, there should be clear requirements for disclosure of flood risk to homebuyers and renters.
- 14. The U.S. Army Corps of Engineers should restore the dams and detention areas of Addicks and Barker reservoirs to first-class condition including, if necessary, removing dirt and vegetation within the reservoirs.
- 15. Given the population of unincorporated Harris County and the restrictions on incorporation and annexation, Harris County should be allowed some ordinance making power and should receive a portion of the sales tax collected in unincorporated areas. To continue to exclusively rely on the property tax is fundamentally unfair and unsustainable.