

VISIONARIES OFFER INSIGHT

For lessons on how to rebuild, look to Mitchell and The Woodlands



FEW things are more exasperating to Houstonians recovering from Hurricane Harvey than hearing outsiders declare that the city's notorious lack of planning is to blame for its inundation.

Harvey dumped an unprecedented amount of water on the Bayou City. No amount of responsible planning could have handled such a deluge. And what do these outsiders know about Houston, anyway? They discount the benefits of

Houston's longstanding aversion to zoning and planning: a city with a broader array of affordable housing and fewer racially and ethnically segregated neighborhoods than other cities its size.

But the planning pundits also have a point. Houston for too long has grown at the whim of individual developers — a free-for-all of sprawl. Anyone could buy a few hundred acres, subdivide it into lots, and put up a for-sale sign. All they had to do was add a municipal utility district to pay for infrastructure, and a retention pond to provide flood control.

As such developments expanded ever outward from the heart of the city, little thought was given for what effect a development in, say, Cypress, had on housing downstream.

The attitude that any development is good development rankled one of the city's most famous developers, George Mitchell. He built his dream home along Buffalo Bayou just off Memorial Drive in the early 1960s. He loved the house, but he groused about development in the area.

Although the homes were attractive, Mitchell felt the developers didn't consider livability. People wanted natural settings that provided a sense of community. He saw too many developments around Houston with arboreal names like "Oaks" and "Pines" in which the developers chopped down all the trees. Clear-cutting each lot made drainage easier for builders because they could slope the land however they wanted, without regard for natural drainage or green spaces that absorbed floodwater.

Mitchell, who died in 2013, believed too many developers in Houston just wanted to sell homes to feed the city's surging demand for housing. When he built The Woodlands, he adopted a different philosophy. He insisted The Woodlands would have woods.

“You have to fight me to cut down a tree or cut the wildflowers,” he said. “And that’s what makes The Woodlands interesting. It’s not just a bunch of lawns.”

He hired Ian McHarg, a University of Pennsylvania landscape architect who believed that building design and engineering should promote harmony between man and nature.

McHarg, who died in 2001, conducted an unprecedented hydrological study that became the basis for flood protection in The Woodlands, and later a model for other environmental impact studies in government-funded developments. Lots — which maintained much of the native trees and vegetation — employed a complicated drainage system that used the natural forest environment to reduce flooding. It was tedious, costlier than clear-cutting and allowed for fewer homes per acre, but it preserved the natural environment.

McHarg also studied the soil and the vegetation, then tried to match land use to the areas best suited for it. Regions with heavier clay soils that absorbed less rainwater were pegged for the densest commercial development. Porous concrete was used for parking lots to reduce rainwater runoff. Areas in which soils were more porous would feature the lighter footprint of residential neighborhoods. Drainage ditches ran through the development, and unlike the bayous in Houston, nobody paved them with cement. Although the land was mostly flat, the few slight ridges were selected for the major roadways. This, too, would help with drainage, because water would flow away from the roads and toward the network of ditches.

The studies also focused on mitigating downstream flooding. Mitchell didn’t want The Woodlands to add to Houston’s problems — he wanted it to be a laboratory for solving them.

The Woodlands has not been immune to flooding, but the flooding impact has been far less severe than in surrounding areas. About 220 people had to be

rescued from the suburb during Harvey's deluge — just 0.2 percent of its population. The hardest-hit areas bordered Spring Creek, which swelled over its banks after the area received as much as 38 inches of rain.

For the most part, McHarg's original designs are working. As frustrating as it is to hear others blame Harvey's devastation on the lack of planning, Mitchell probably would have agreed with much of the criticism. He was no big-government liberal (he established The Woodlands as a corporation, not a municipality), but he believed developers — indeed all businesses — had a responsibility that exceeded mere profit. Making money was important, but so was building something that would improve people's lives.

Today, The Woodlands is one of the most livable cities in the country because of Mitchell's fervent attention to detail and his commitment to a sustainable community that thrived without detracting — or extracting a price — from the areas around it.

Mitchell, of course, had the luxury of building a city from scratch. But as Houston rebuilds, his example provides lessons about sustainability, long-term vision and, yes, planning, that can be incorporated into the effort to ensure Houston is better prepared for the next deluge.

Houstonians don't need outsiders to tell them how to rebuild their city to ward off the next Harvey. One of their own showed them.

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