

## **PATHS TO THE MOUNTAIN TOP**

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No legitimate home or business owner expects his home or business to flood. Flooding occurs because the homeowner is not aware of the flood threat, does not place it as a high priority, or becomes susceptible to flooding due to changes in the floodplain. To accept the need to build better or to flood proof, we often look at regulations as the first method to solve this problem. Awareness and education of the flood hazard in a democratic society reduces the need for regulations and helps enforcement of regulations which are needed.

Prior to World War II people used the experience of family and neighbors to determine the site of a building. If a building flooded, the owner reassessed the chance of another flood event and took action, which resulted in elevating, moving, or building flood protection. Subsequent generations knew of the flooding and built with that knowledge. The decision to move or stay was determined by whether the expenses caused by the flood were affordable.

Post World War II attitudes and new technology began to ignore the local knowledge, customs, and traditions. This affected how and where we built houses. We began to believe that the American way meant only one way.

That one way found the medium of television to reinforce the new attitudes. Much of the programming of the 50's and 60's helped developers promote slab on grade construction whether it was or was

not appropriate for the local geology and climate.

Houses built in different parts of the country are traditionally different, but conformity was overtly and subconsciously promoted over traditional sensibilities.

Post War Americans succumbed to that conformity as part of the American Dream. In Louisiana prior to World War II, homes were built elevated on the natural ridges adjacent to the bayou. Land was sold with a certain width fronting the bayou and extending 40 arpents (arpent = 192 feet) away from the bayou. Typically the higher land is adjacent to the bayou, and elevation is lost as the distance away from the bayou is increased. The first 200 feet to 1000 feet away from the bayou was dry land. Moving further away from the bayou, the land gradually lost elevation until it became marsh or swamp. Owners of the land built their homes near the bayou with their children eventually building homes behind their parents' homes on slightly lower land, but still on naturally dry land. This resulted in communities developing linearly along the bayou with little depth. The front land was used for homes, businesses, and agriculture with the back land for cattle, trapping, hunting and fishing.

To extend agriculture and cattle operations, agricultural levees were built to expand those activities with marginal success. These levees were built in the back areas in marsh and swamp with pumps installed to remove rainfall.

After World War II and until the present, developers have bought land and began using both the naturally dry land, and the former marsh and swamp. Since most of the higher land was already developed or was expensive, the back lands were developed. Levees and pumps were improved to varying degrees. These developments were constructed in dry but low land, and in places no one would consider before the war.

To increase the chance of flooding, the tradition of building on piles or pillars was replaced with slab-on-ground construction. These changes worked to greatly increase the chance of flooding.

To reduce the chance of flooding we must return to an era when every person asked themselves, "When buying or building a structure, can flood water enter my structure"? In pre-war years most people understood that elevation was the best way to stay above floodwaters. They settled on the highest land and then built above that land. This was a simple concept that was lost.

In a state such as Louisiana, using the facts about the flood threats should be a major educational effort. Forty-one percent of the United States drains through Louisiana. Louisiana receives an average 60 inches of rainfall per year. Louisiana is susceptible to hurricane flooding. These flood facts will help people to think about better building techniques in accommodating for floods.

But the need for levees and pumps will exist for places like

New Orleans. Fishing and oil support dictate that communities will be near the water. These places where extra flood protection is needed will continue to exist as long as resources produced exceed the resources needed to protect.

It is the supposition of this essay that people will better deal with the flood threat with consistent efforts to educate and create awareness to people who live in a particular area. Confronted with historical data and computer generated projections, the majority of the public will respond to a flood hazard properly.

Armed with rediscovered knowledge we will relearn what our grandfathers knew; "elevation is the salvation to inundation".