Amphibious architecture is presented as an option for residents' homes

By EVELYN CARRIERE news@journal-spectator.com | Posted: Wednesday, December 6, 2017 3:54 pm

Speaking about amphibious architecture
Elizabeth English speaks to Wharton County residents about amphibious architecture.

Amphibious architecture was the topic of discussion at a presentation made to Wharton County residents and representatives in charge of disaster recovery on Sunday. Representatives from the community, Wharton County Recovery Team, Mary Louise Dobson Foundation, Gulf Coast Medical Foundation, Just Do It Now, the city of Wharton and CGI met to hear about amphibious architecture and how it could save the city from flooding.

The city of Wharton has a history with low income and over the past 10 years, every solution to the reoccurring flood problem has had a hefty price tag that hasn't been in the city's budget.

With a Flood Protection System priced at $77 million and the city's portion of the system set to cost $23 million, residents are looking for other ways to save their houses from flooding.

Elizabeth English, who is an associate professor at the University of Waterloo School of Architecture in Cambridge, Ontario, presented the amphibious homes as a low-cost solution to the issues that have been presented during a flood.

English was formerly an associate professor-research at the Louisiana State University Hurricane Center where she studied the effects of Hurricane Katrina and rising waters in the bayous of Louisiana.

While at LSU, English started exploring areas that were prone to flooding and found that residents had pieced together their own solution — amphibious homes. English started her presentation describing what amphibious architecture means.

"Amphibious architecture refers to an alternative flood mitigation strategy that allows an otherwise-ordinary structure to float on the surface of rising floodwater rather than succumb to inundation," said English.

With colorful visuals that showed exactly how homes would float during a flood, English pointed out how cheap the materials are and how most residents would get to keep their existing homes if they chose to make their home float.

“The amphibious foundation retains a home’s connection to the ground by resting firmly on the earth under usual circumstances, yet it allows a house to float as high as necessary when flooding occurs,” said English. “Amphibious foundations make homes resilient; resilient homes are the bases for resilient communities.”

English described mitigation to flood homes on stilts as a process that might not always work, or be effective if flood waters rose past the point of the house elevation.

English has studied buoyancy of homes all over the world, and has implemented her project in other flood prone areas around the world.

“This isn’t a new technology,” said English. “There are people in the bayou that have been buoyant for 40 years. This is something that works and will save so many homes from disaster if utilized in the community.”