

City of Bellaire
Flood Hazard Mitigation Task Force
Meeting Notes
December 19, 2017

Mr. Hofmann welcomed everyone to the meeting. He stated that at the last meeting, the members of the Task Force were asked to send staff an idea of what they felt were the overarching goals of the committee. Mr. Hofmann stated that staff has attempted to take all of those comments and summarize, categorize, and use consistent goal oriented language for each of them. He mentioned that part of the agenda will be to review those goals and asked that the members please let staff know if there is anything that was missed. Mr. Hofmann then mentioned that for this meeting they were going to take a step back and take some time to review the term “100 year flood,” which is used very regularly, and try to help the members understand how the phrase is used from a technical standpoint, how it is applied, and where it comes from. He introduced Marcus McRae from ARKK Engineering.

Mr. McRae then gave an overview of the terminology used when discussing base flood elevations and the 100 year floodplain. To view the entire presentation, please click [HERE](#).

Questions and comments that came from the presentation included:

Mayor Friedberg-Mentioned that the term “BFE,” or base flood elevation, specifically refers to a 100 year flood event. He then asked if, in theory, a standard “BFE” could be adopted for a 200 year or 500 year event.

Mr. McRae confirmed that it could.

Millie Hast-Harvey caused a huge flood, but according to the numbers, the amount of flooding from Brays Bayou at South Rice Avenue and Stella Link didn’t reach the 100 year standard?

Mr. McRae & James Andrews, the City’s Engineer, stated that at South Rice Avenue it did not reach the 100 year standard, but it did at Stella Link.

Mr. Hofmann clarified that the point of the presentation is more about allowing for a common understanding of the different ways that the term “100 year event” is used so that everyone is on the same page. He added that it isn’t so much about an analysis of why certain areas flooded. Mr. Hofmann added that once Brays Bayou has been improved to better contain an extreme event, Bellaire’s local storm sewer improvements then have a better chance to do their job.

Michael Ling-Even if Bellaire didn’t have any localized rain, the City could still potentially flood due to the water coming out of the banks of Brays Bayou?

Mr. Andrews confirmed this, and stated that the combination of the localized rain and the overflow of Brays Bayou is what caused Harvey to be so significant.

Millie Hast-What year event corresponds to the point at which Brays Bayou's bank overflows in the areas near Bellaire?

Mr. Andrews stated that they could get this information for the Task Force.

Ms. Hast stated that it would be beneficial to have that information in order to plan for the future because if the BFE requirements within Bellaire change periodically, then homes that were built based upon a previous regulation are no longer protected from flooding.

Mr. Hofmann stated that the truth is that the City of Bellaire doesn't establish what the BFE is and is not in charge of the data that determines what the 100 year event is. He added that less than 2% of the homes that flooded during Harvey were built to the current BFE requirements. Mr. Hofmann mentioned that it all depends on how big of a role the government plays in the matter. He stated that Ms. Hast's concerns are very legitimate, but any changes made to the current regulations will be a policy decision. He also pointed out that there is value in having a standard that the rest of the country follows.

Chris Canonico-Stated that no one is ever fully protected from flood events, regardless of whether their structure is above or below BFE. He added that duration and/or the intensity of storm events will never be perfect.

Council Member Montague-Pointed out that the local geography plays a role as well. He stated that more homes on the north side of Bellaire flooded during Allison, whereas the south side was hit harder during Harvey. Council Member Montague also mentioned that he was surprised by the number of bungalow style homes that were impacted by Harvey, but had never flooded in any other event.

Mayor Friedberg-Mentioned that the government's role is to set the minimum standard for the health, safety, and welfare of both the current and future residents of each home, but there is nothing stopping the resident from going above and beyond those requirements to further protect themselves from potential flooding events.

Robyn Rosenblatt-Mentioned that establishing the correct height that a home should be built above BFE is important, but the most important topic, in her opinion, is what to do to help those residents that are already living in existing structures.

Mr. Hofmann then moved on to the topic of the Task Force's overarching goals. He stated that many of the members did email City staff with their ideas of what those might be, and that they were included in the document that he was about to review. Mr. Hofmann asked that the authors of those goals speak up if staff did not correctly capture the idea.

To view the goal statements, please click [HERE](#).

Questions and comments that came from the presentation were:

Millie Hast- Asked what the City's definition of "unreasonably" is within the first goal statement.

Mr. Hofmann asked for ideas from the Task Force on what would be considered "unreasonable."

Brian Sanford- "Unreasonable" would be for Bellaire residents to assume that the City of Bellaire can control the circumstances that take place outside of its boundaries.

Win Frazier- Felt that the goals need to be specific and time-bound. He questioned whether the term "unreasonable" could be either of those.

Chris Canonico- Adding some language at the end of the statement, such as, "during an event similar in intensity and magnitude of Harvey" gives a value to the term "unreasonable." A level of service needs to be set.

Mr. Hofmann explained that where he thought that the conversation was going during the last meeting was the broad, big picture, long-term overarching goals of what the Task Force is trying to accomplish. He felt that some consensus should be created around the broad concepts prior to whittling those down to include more precise and measurable language. Mr. Hofmann pointed out that he doesn't feel as though a level of service has been established yet. He then asked the members how they felt about that goal statement without the deletion of the word "unreasonable," which would read "Bellaire residents and property owners should not need to worry about flooding."

Millie Hast- Stated that she likes the statement without the use of the word "unreasonable." She added that no Bellaire homeowner should have to worry about their home or their business flooding. Ms. Hast mentioned that the word "unreasonably" opens the door to the idea that it is alright for some of the houses in Bellaire to flood, and that she would like to say that it is not alright for houses in Bellaire to flood.

Chris Canonico, Council Member Pollard- Mentioned that an unplanned disaster of this nature is unable to be 100% protected against. They compared it to a fire or someone getting hit by a drunk driver.

Ms. Hast stated that she didn't feel as though flooding is unplanned because of the fact that the City of Bellaire has had several major flood events and knows to plan for future ones, whereas no one knows if/when a fire is going to take place.

Mr. Hofmann stated that he didn't believe that anyone was arguing with the principal or the ideals, however, if the City does decide to do whatever it takes to prevent all future flooding in Bellaire, it will take a significant amount of time, money, and other resources to accomplish that.

Ms. Hast felt that the terms “worry” and “unreasonable” should be taken out of the statement, and that it should read something along the lines of “prevent flooding of structures in Bellaire.”

Jonathan Reichel-Would love it if no one in Bellaire ever had to worry about flooding again, but felt that it is a very unrealistic goal given what has happened in the past and the fact that the City of Bellaire is relying on outside entities to help in that effort.

Brian Sanford-Pointed out that there are multiple variables that play into flooding, such as, individuals who are buying houses at multiple elevations and in certain locations, and storms that are always changing. He added that there is no right answer, the Task Force just needs to come up with a reasonable plan to try to mitigate as much as possible for future events.

Mayor Friedberg-Agreed with Mr. Hofmann that no one is arguing about the broader objective, but in trying to navigate the individual consideration versus the broader policy objective, it is very difficult, in a compassionate way, to sit down with an affected resident and say “there is a reason that the rule is what it is, and we are sorry that you were negatively impacted by that.” He questioned whether referring to a level of severity would be more beneficial than a level of service.

Millie Hast- stated that if the Task Force is going to develop a level of service that falls short of protecting every home, then something needs to be done about the older houses that are not built above the BFE. She added that the City cannot just assume that they are going to be sold as tear downs.

Council Member Pollard-There needs to be a distinction in the statement between primary residences and garages. Based on the way that it currently reads, one could assume that it means that they will have no flooding to their property at all.

Council Member Montague-He was under the opinion that what the City is attempting to do is design against the 100 year flood. He suggested that language be added to the statement to read “Bellaire residents and property owners should not need to worry about flooding in the event of a 100 year storm.” He agreed with Ms. Hast that the City needs to find some way to address the houses that are more susceptible to flooding within Bellaire.

Mr. Hofmann stated that it is true that the City’s current approach revolves around the 100 year event, but that he would be careful about what that means to residents. He questioned if there was a descriptor or standard around which the City can contain what’s appropriately worrisome.

Robyn Rosenblatt-She doesn’t know if there is a better descriptor to use, but mentioned that it needs to be clear that they are not just talking about street flooding, but also about the fact that the water has nowhere to go.

Win Frazier-Agreed with Mr. Hofmann and stated that this would be a good umbrella for the other goals to fall under.

Mr. Hofmann stated that the elephant in the room is in dealing with the 60 year old homes that just flooded. Does the City build projects sufficient enough to keep that home from ever flooding again when that project is going to cost the taxpayers more than what that house is worth? What is reasonable?

Millie Hast -Stated that she doesn't feel as though you can talk about what is "reasonable" for those 60 year old homes without talking about a buyout.

Mr. Hofmann stated that this was a fair statement. He added however that there are other factors that play into this option. Mr. Hofmann stated that FEMA will supply some funding, but that it will not be 100%, and that there is also the opportunity loss of what could happen on that parcel. He added that those properties can never be developed on, and that not every parcel is well-positioned to be a detention facility or park.

Ms. Hast stated that property owners aren't even able to sell for lot value right now. She added that the City of Dickinson has some sort of grant program that they are taking part in and asked if there are other options such as that, that the City can look into.

Mr. Hofmann agreed that it is a very difficult situation. He confirmed that there are other options to look into.

Chris Canonico-Stated that the goal needs to be applied to a level of service and that the Task Force needs to determine what that level of service is going to be. He added that if the goal is to protect against the 100 year flood then the regulations, elevations, and capital improvement projects that the Task Force recommends will correspond to that level of service.

Mr. Hofmann then moved on to the other goals and asked that the Task Force speak up if they had suggestions on revisions to the wording.

Council Member Montague suggested that "trained" be added to the second bullet point. He stated that a lot of people still do not know to move their cars to higher ground, not to drive down a flooded street, and not to put their trash out when a flood is occurring.

Council Member Pollard asked for examples of what "prepared and equipped to deal with flooding" would include.

Mr. Hofmann stated that being plugged into the City's messaging efforts prior to the event would be the key.

Millie Hast-Felt that the wording of the statement would lead one to think that it is all on the property owners to be prepared and equipped. She stated that it should be revised to explain that the City will take the necessary steps to ensure that everyone is prepared and equipped with the necessary information prior to the flood event.

Mr. Hofmann reiterated that it is meant, at this point, to be a broad goal statement. He added that the City clearly has a role in that. Mr. Hofmann then moved on to the Planning and Implementation goals.

Mr. Frazier mentioned goal #3 on that page and asked that the regional projects be articulated.

Mr. Hofmann stated that obviously the number one project on that list would be the improvement of Brays Bayou. He added that there are some other things that could potentially impact the City's drainage, such as, changes made to the wastewater plant, which would not be a possibility without regional participation, as well as the City of Bellaire's involvement with the City of West University Place regarding the Kilmarnock Ditch.

Council Member Montague stated that the first and fourth bullet points need to say who is in charge of establishing those standards.

Robyn Rosenblatt-What does it take to fully protect the City from the 100 year flood event, and what does that translate to in tax effort?

Mr. Hofmann stated that it will take roughly 50 years and \$350 million. He added that City has and does attempt to quantify those things and will educate the public on that prior to the creation of a bond program. Mr. Hofmann then asked the Task Force if cost benefit is relevant. He questioned whether the cost of the projects compared to the value of the structures that are being protected is relevant.

The Task Force stated that it is relevant.

Mr. Hofmann asked how the level of protection is determined without a more complete analysis. How can that be done by March? What is the Task Force's message to City Council today about the level of protection?

Chris Canonico-Stated that it would be to protect against a certain size storm.

Mr. Hofmann asked what size storm that would be. He questioned what would be a reasonable size to protect against, and how that would be determined without some cost benefit analysis.

Millie Hast-Mentioned that the benefit is more than just financial, it's impacting lives.

Mr. Hofmann explained that it is completely incongruous for the City to hold new construction to a certain standard and ignore what is happening with the existing developments. He asked the Task Force to really think about whether or not cost benefit is relevant and what the level of protection should be. Mr. Hofmann also mentioned that if any members have any more thoughts about the goal statements or the Risk Assessment Matrix to let Shawn Cox know prior to the next meeting.

Public Comments

A member of the public mentioned that there is nothing in writing explaining where the City takes those who have been impacted by the flood. He added that he feels as though that needs to be specified and the appropriate provisions need to be available at that location.

Mr. Hofmann mentioned that some of those logistics are not determined until during the event, and there is also some strategy involved when deciding whether or not to disclose the location of the shelters.

Ronnie Burns-Stated that he lives in Southdale. He felt that due to constant development that is happening, there will always be flooding within the City, especially in Southdale, regardless of the improvements made to Brays Bayou. Mr. Burns pointed out that the reality is that if you live in that area of the City, you should live there with the reality that your property will flood.

Roxanna Ward-Stated that the building code is very important to those property owners who were impacted by Harvey and are now trying to rebuild and/or elevate their homes. She added that there is a limit on the number of feet that a home can be elevated within the City of Bellaire, whereas in other cities there is not. Ms. Ward mentioned that she has some friends that live in Braes Heights, across the railroad tracks from Southdale that are elevating their homes 9 ½ feet so that they can put their garages on the first story. She added that not only does this help alleviate flooding to the primary structure, but it also creates more green space for the water to be absorbed. Ms. Ward added that she felt as though both the local and federal government could do a better job of helping flood victims find resources to help with the rebuilding process.

Mr. Hofmann and Mr. Cox stated that the next meeting will be on January 9th. He added that at the end of that meeting, the Task Force will need to determine whether they will be ready to hold a public meeting on January 29th.

Chris Canonico-Asked that a calendar invite be sent to the Task Force's City email addresses to remind them of the meeting dates.

Mayor Friedberg-Gave kudos to the group for the productive discussion during the meeting.