MINUTES

Region 1

REGIONAL STEERING COMMITTEE MEETING TUESDAY, July 14, 2020

The Region 1 Steering Committee Meeting was held at the Natchitoches City Council Chamber at 10:00 a.m., on Tuesday, July 14, 2020, pursuant to notice duly mailed.

Welcome

- Call to Order
 - The Meeting was called to order by Mr. Jack Skaggs, President and CEO of The Coordinating and Development Corporation (CDC) at 10:06 a.m., who welcomed the attendees who were both in person and on the virtual Zoom call.
- Roll Call: At the request of Mr. Skaggs, Ms. Robin Ramagos, CDC, called the roll of Members present in person.
 - Steering Committee Members present in person were: Vice Chairman, Butch Ford (Bossier Parish) and Mr. Steve Brown (DeSoto Parish).
 - Steering Committee Members present on Zoom were: Chairman, Matt Johns (Rapides Parish), Mr. Rick Nowlin (Natchitoches Parish), Mr. Ali Mustapha (Caddo Parish), Mr. Morgan Briggs (Grant Parish), Mr. Nick Cox (Webster Parish), Ms. Lindsey Gouedy (Member at Large), Mr. Rodney Warren (Bienville Parish), and Mr. Dennis Butcher (Claiborne Parish).
 - Not Present: Mr. Shane Hubbard (Red River Parish), Mr. William Ruffin (Sabine Parish), Mr. Mike Carpenter (Winn Parish), Mr. John Michael Moore (Member at Large), and Ms. Zazell Dudley (Member at Large).
 - Others in attendance in person were: Mr. Tom Fontcuberta, Mr. Ben Wicker, Mr. Mat Sanders, Mr. Robert Tomasek, Mr. German Vilazquez, Mr. John Richmond, Mr. Jack Skaggs, Mr. Austin Vaughn, Ms. Heidi Stewart, Ms. Jenae Arceneaux, and Ms. Robin Ramagos.
 - Others in attendance on Zoom were: Ms. Pam Glorioso, Ms. Jennifer Perkins, Ms. Cindy Singleton, Ms. Ann Guissinger, Ms. Makida Zackery, Ms. Anne Landry, Mr. Bradley Spiegel, Ms. Evelyn Campo, Ms. Alexandra Carter, Ms. Laura Ashley, Mr. Marvin McGraw, and Ms. Randel Elliott.
- Invocation and Pledge of Allegiance
 - o Mr. Austin Vaughn led the invocation
 - Mr. Jack Skaggs led the Pledge of Allegiance.

Regional Flood Risk + Discussion

• Mr. Ben Wicker welcomed everyone to the meeting by saying, "We want to thank everyone for coming here today and joining online. I want to also introduce my associate here, Mr. Mat Sanders, who is a Senior Manager at the Office of Community Development. I, of course, am Ben Wicker and I have been the point of contact for Region 1 for about two years now. I wanted to go through the objectives of the presentation. The primary objection of this presentation is to develop a common understanding of known flood risks, vulnerabilities, and priorities in Region 1. There is also a lot of information from the RSC. We understand that this is not a

perfect tool, but we are going to continue to work on it and, with your input, we hope to develop it into a perfect tool.

- Mr. Wicker discussed some operational notes.
 - O Mr. Wicker said, "We are budgeting around an hour and a half with a break in between. We printed out the entire presentation for you and those are in front of you. Those who are joining online that want a copy of it, we can get it to you. We also have all maps printed out for the mapping exercise and you can mark up and give them to us before we leave or you can take them and mark them up at your leisure and mail them to us by August 2, 2020."
- Mr. Wicker said, "One thing that we did want to emphasize with this presentation is that this is not something that we are starting off on square one. We are developing off of our previous information from Region 1. I have seen many of you at the parish leadership meetings and the listening tour that we conducted two years ago. What is on the screen now is the primary objectives that we gather for Region 1 and what we understand to be the priorities for Region 1 are:
 - Update maps and account for rapid development in mitigation efforts.
 - Establish regional collaboration, such as Regional Steering Committees and the goal of aligning the Regional Planning Districts, so that their programs are working together, which increases the long-term liability of those planning districts.
 - Improve policy consistency and impact across regions. When we are discussing that, policies can become outdated when you see development in the region, and we want to make sure that the policies have long term impacts and do take into account those recent developments.
 - Ensure adequate regional representation, as you know the Regional Steering Committee is made up of individuals throughout the Region. We are not just focusing on high risk areas.
 - Prioritize projects with greatest long-term benefits. You know there is a project part of
 the Watershed Initiative and there is a project funding we want to make sure the
 projects that we fund will have the greatest and longest impact throughout the region.
 We are not trying to do quick projects that will have a temporary benefit. "
- Mr. Wicker said, "Next, we are going to go over the agenda,
 - First, we will go over the actual flood risk assessment for Region 1 and it will take about 30 to 45 minutes.
 - Then, we will take about a ten-minute break because it is a lot of information to digest, so we do not want you to have to soak it all in and immediately dive into a mapping exercise.
 - o Then, there will be a mapping exercise.
 - o Then we will have a recap by Mr. Sanders on everything that has been discussed.
 - o Public Comment will come last."
- Mr. Mat Sanders said, "Thank you, Ben. As Ben said, I am Mat Sanders with the Office of Community Development. First of all I want to tell you all that I am an almost lifelong resident of Louisiana and this is my first trip to Natchitoches and the last day or so we have been here has been quite nice, so thank you for hosting us."
- Mr. Sanders reviewed the Flood Risk Assessment slide.

- O Mr. Sanders said, "This is called an Esri Story Map and what it allow us to do is take all of the data and everything that we can understand at the state level and put it into a geographic portal. The reason why we want to do this and talk about it today, is so we can all get on the same page as to what we are looking at in Region 1. We cannot development good solutions or projects without first understanding the problem itself. So that is really what we would like to hone in onto today. This way we can all leave the room with a good understanding of what we are dealing with in this region. So, to that effect, we are going to hone in on three key themes.
 - 1. Build a common vocabulary so that as we move along in this process, we are all speaking or singing from the same song book, if you will.
 - 2. Consider various risk factors that drive disaster advances, specifically flood advances throughout Region 1.
 - 3. Work with nature and find out how we can take advantage of the natural advantages in Region 1 as we try and find solutions."
- Mr. Sanders reviewed the Parishes in Region 1 slide.
 - Mr. Sanders said, "As you all know, Region 1 includes 12 parishes, extending from the northwest part of the state, through where we are here today in Natchitoches. We would like to take a moment to recognize everyone that has been working with us and we will continue to work together. It is a lot of parishes and a lot of ground to cover. Those of you that may have driven in today, we certainly appreciate your time and effort and look forward to continuing this collaboration moving forward."
- Mr. Sanders reviewed the Region 1 Watersheds slide.
 - O Mr. Sanders said, "There are a few watersheds that drive flood risks throughout this particular region. One is the Red-Saline Watershed and the other is the Big Cypress-Sulphur. Big-Cypress-Sulphur is the one in green and extends into Arkansas and Texas and the Red-Saline is the one in yellow, extending throughout most of the watershed throughout Region 1 and up into Arkansas. One of the things we want to make sure we understand as we talk about hydrology is that when we talk about watershed, we are really talking about how the water flows and that is going to become a lot more important as we talk through the flood risk in this particular region, later in this presentation.
- Mr. Sanders reviewed the Types of Flood Risks slide.
 - Mr. Sanders said, "So in building that common vocabulary, we want to make sure we talk about all types of flood risks and specifically we want to talk about the three main ones which are coastal surge risk, fluvial flooding from rivers, and pluvial flooding that typical happen in more urban areas from flash floods.
 - O Mr. Sanders continued by saying, "So we are going to start at the coast, and we are doing this because, I am guessing that most of you in this room are tired about hearing about the coast and the flooding on the coast. But you have to acknowledge that the State has invested a lot of time and effort in understanding flood risk on the coast. We have as good of a understanding of our coastal surge flood risk, as anyone in the country, through the Coastal Master Plan. We want to start here because this is where we would like to get in the Watershed Initiative and understanding flood risks in a place like Region 1. We know you are not experts but this is the goal and through the models

- that we are investing in and the data we are trying to develop we hope that we will be able to talk about the types of flood risks that you do experience here in Region 1, much the same way that we talk about it along the coast."
- Mr. Sanders said, "Fluvial flooding, so along the Red River, we want to highlight here is the impact of river rain flood. Fluvial flooding is when an excess of rain happens over an extended period of time and causes a river or a body of water to swell.
- Mr. Sanders said, "Pluvial flooding, as I reference early happens in a flash flood, this is the type of flood that happens with a lot of impervious surfaces, this is what happens most often in urban areas, such as Shreveport, which is the biggest metropolitan area within Region 1."
- O Mr. Sanders said, "One of the things we wanted to highlight specifically was backwater flooding. This is something that we have heard from you that is a problem in Region 1. We are looking at that, we are looking at the Cross-Bayou area and this really happened when there is a restriction in a moving channel. So, when there is a buildup of water and a restriction, backwater flooding takes place."
- Mr. Sanders reviewed the Extreme Rainfall and Precipitation slide.
 - Mr. Sanders said, "Next, extreme rainfall, one of the things that we learned as a state and I talked about the Coastal Master Plan and our understanding of coastal surge flooding. And after Hurricanes Katrina and Rita in 2005, we understood as a state that we needed to invest in a better understanding of that problem. Something similar happened in 2016, and we as a state came to recognize that we really need to get a better understanding of riverine flooding and get a better understanding of fluvial flooding that comes with the intense rainfall events that we had in 2016. What you see on screen is a documentation of the rainfall events that took place in 2016. On the map, the areas in gray are the areas that were subject to the most intense rainfall in 2016."
 - o Mr. Sanders said, "Pluvial flooding occurs when excessive rain falls over an extended period of time and causes a river or body of water to exceed its capacity and as we had that intense rainfall in 2016, we experienced a great deal of fluvial flooding in Region 1. What you see on the document is the documented instanced in which a resident flooded out and the severity. The red spots are the most severe, while the orange and yellow were not as catastrophic. One of the things that we do want to point out here is how you can see nearby bodies of water. You can track, visually, which bodies overflowed."
 - O Mr. Sanders said, "With that we do want to take a moment and capture your thoughts and comments at this point and time. Are we kind of on the right track in defining how you all see flood risks in this region? Are there things that we should add to our understanding based on what we discussed about fluvial and pluvial flooding?
 - Mr. Wicker said, "Folks online, feel free to chime in as well."
 - O Mr. Butch Ford said "I have one comment about the rainfall amounts that are shown. I do not know where the rainfall amounts came from, but in Bossier Parish, they told us ten inches of rain, the day before the flood and we received twenty inches of rain. Five days later, they told us four inches of rain and we received another ten inches of rain. So, on that March the 7th through the 14th, we are going to need another chart because they do not have a color for thirty inches of rain. Now that came from the National

Weather Service, who works for the Department of Congress. I questioned them during a flood meeting. Why are you telling us one thing when the totals are actually doubled? They told us that their models are not correct. Their forecasting models are not correct. We had a meeting with of the National Weather Service folks and they explained their modeling and the problems that they are having and suggested that they give us a range of rainfall rather than tie it down to one number. I just wanted to point out that the date right here for that event is not correct for Bossier Parish, the amounts are much higher."

- O Mr. Ford asked, "Where did this data come from?"
- Mr. Wicker and Mr. Sanders said, "This is NOAA data."
- o Mr. Ford said, "This may be what they forecasted, but this is not what occurred."
- Mr. Wicker addressed the people online "What we are hearing is that the NOAA data on the extreme rainfall and precipitation slide, for Bossier and Webster Parish is incorrect."
- o Mr. Sanders said, "We have heard similar complaints about the data across the state and when something like this is brought up, then it counts as homework for him and Ben, which is a good thing." Mr. Sanders went on to express that there is an inability to forecast the rain events so that is why one of the things that they really want to get on is the modeling tools that they are developing. Mr. Sanders said, "We are not going to make any huge advancements in the technology of forecasting but what we should be able to do is understand impacts based on the certain level of rainfall. So if you all have an understanding that the forecast is going to be 20% off about every time it rains more than three or four inches, then you can understand the impacts that you can anticipate based on that type of event."
- o Mr. Wicker asked if anyone online had any input.
- O Mr. Rick Nowlin expressed that he had a question. Mr. Nowlin asked, "It goes back to vocabulary and the difference between fluvial and pluvial floods. We have a situation here in Natchitoches, east of Cane River, which is the strip of land between Cane River and Red River, and when we have a heavy rainfall, we have severe flooding, you normally hope that the water would go down to a gate in the Red River. But when we have area wide flooding, the depth of the river is so high that we must keep the gate closed or the water would be really flooding. Is that a fluvial flooding or pluvial flooding?"
- O Mr. Sanders answered by saying "Technically that would be a fluvial flooding event because it deals with the over swell of the body of water, but you do not have to choose one flood risk over another. You can have multiple types of events take place at the same time. A lot of what we are looking at in the 2016 Floods is a combination of a fluvial and pluvial."
- Mr. Sanders said "One of the other things I wanted to point out for those of you in the room, this is a series of maps that you have and the upshot that we want to get from those maps are your input on where you are experiencing problems and what types. So, if there are specific events in the certain parishes that you want to note, feel free to mark them on the maps as we go along."
- Mr. Steve Brown asked if the close-up maps could be extended to include the part of his parish that was cut off.

- Mr. Sanders expressed that they had not handed out all the maps they had so he went ahead and handed out the other maps. Mr. Sanders said, "We are able to do any type of format that might be helpful and get it back to you."
- Mr. Wicker expressed to the people in the room that there were also big maps for them to use and mark on.
- Mr. Wicker reviewed the Traditional Gaps in Understanding Flood Risk slide.
 - o Mr. Wicker said, "The Federal Emergency Management Agency (FEMA) is responsible for mapping the nation's hazardous flood areas. Now, we do not want to say that FEMA's maps are incomplete or that they do not do a special service to the community. They do provide an important basis for flood insurance rates and floodplain management regulations nationwide. That being said, just because your residence is not within a Special Flood Hazard Area, does not mean that you are not at risk of flooding. We learned that very personally during the 2016 Floods. It is worth noting that 40% of the land in Region 1 is located in a flood zone and is subject to flood."
 - o Mr. Sanders added "I think everyone knows that flood insurance rate maps are somewhat inefficient in dictating a real degree of flood risk in any particular place. And, as Ben mentioned, that is in no way a criticism of FEMA. It is really difficult to maintain a nationwide set of FIRMS and it is expensive, but what we are trying to get out of our modeling is a good indication of what flooding really looks like in the state of Louisiana, now and moving forward that will add to our insurance rate maps."
 - o Mr. Wicker went on saying "We also wanted to cover the two types of flood zones that we have in Louisiana. The first one is "V" Zones, which do not have a direct impact on Region 1 and that is the coastal flood zone. The areas where you see 40% impact in Region 1, is "A" Zone. Unfortunately, our ESRI maps crashed, so we cannot click on the "A" zones right now but what you can see is the area outside of Campti and north of Natchitoches. You can see that a lot of the Region is within the light blue A zones. One thing to understand about "A" zones is that, within a "A" zone you have a 1% chance of flooding annually. So, what that means is within a 30-year mortgage you have a 30% chance of your resident flooding within that 30-year mortgage."
 - Mr. Robert Tomasek said, "So these maps are purely based off FEMA? Because I noticed, like Red River parish does not participate in the FEMA maps, so it is just white. Even though, I know a large chunk of their parish floods."
 - Mr. Sanders and Mr. Wicker answered him, confirming that yes, these maps are based off FEMA maps.
- Mr. Wicker reviewed the Case Study for March and August 2016 Floods slide.
 - o Mr. Wicker stated that "3,700 homes were impacted in Region 1 in the 2016 floods. Only 39% of those structures impacted were located within a flood zone and 61% of structures impacted were located OUTSIDE of a flood zone. We cannot emphasize enough that just because your residence is not located within a flood zone, does not mean it is not at risk of flooding."
 - Mr. Wicker added by saying "It is important to understand that FEMA maps are good in determining insurance rates. The problem we run into is when they are used to communicate flood risks throughout the state. That is not the purpose of these maps."

- o Mr. Sanders added by saying "The Office of Community Development has historically focused on long term disaster recover. All the disasters I have worked on since Katrina and forward, we have always had a huge amount of people that have flooded out that were outside the Special Flood Hazard area. What that means is most likely the people who are living outside the flood hazard areas, do not carry flood hazard insurance because their mortgage does not require them to carry it. Most of the time these are the folks that are really hard up when a flood happens. So, we always emphasize, when we go to areas across the state, that just because your mortgage does not require you to carry flood insurance, does not mean that you are immune to flood risk."
- Mr. Sanders reviewed the FEMA Repetitive and Severe Repetitive Loss Date slide.
 - o Mr. Sanders said "Basically, if a residence floods out over twice in a single decade, that residence is going to be declared a repetitive loss property. So FEMA monitors properties that are designated a repetitive loss and severe repetitive loss and most of the times those are the properties that are subject to the buyout programs that are run through FEMA, in the state of Louisiana through GOHSEP. We point that out because in Region 1 there is really not a high concentration of repetitive loss properties and we want to draw the attention to that before the 2016 Floods because we anticipate having more repetitive loss properties, not only in Region 1, but across the state moving forward. We have a good anticipation that severe rainfall events are going to become more frequent and more intense over time. So, while this is a good outlook for this region as we look at it now, we expect this change moving forward. So, one of the things we want to get ahead of, through the Watershed Initiative, is hopefully laying down some framework and some foundation for projects that will stop this as we can identify it."
- Mr. Wicker reviewed the Best Practice: Working with Nature slide.
 - o Mr. Wicker stated "We want to discuss the best practices that we have available to us within Region 1 and the ability to work with nature. Region 1 has some incredible opportunities to establish some flood storage areas. It is important that we understand that it is not us against nature, but it is us working with nature. We have Caddo Lake, which is a massive natural lake in the northern part of the state. We also have Red River which is a great way to chute water out of these heavy populated areas that continue to flood. We need to understand those areas. Butch, do you understand any of the natural features within Region 1 that you want to point out to us?"
 - o Mr. Butch Ford answered by saying "We have a number of them in Bossier Parish. Along the Red River we have two uncontrolled areas, one is on the northern end along 537, where that area of cropland floods and one the south end, it is a more populated area, that comes toward Barksdale Air Force Base. And of course, we have Bodcau dam that is dry 90% of the time but when it floods, water builds up behind the dam and floods through there. So, we understand the importance of having those types of areas and not wanting to develop them because they will flood at one point in time. They are very beneficial to Bossier Parish."
 - Mr. Sanders asked Mr. Ford, "You talked about some of the farmland that is flooding out more frequently, is that because of the water not running off well?"

- o Mr. Ford replied, "The river tends to rise more frequently than it has in the past and this area just drains into the Red River and because it is low, when the river gets to a certain elevation it floods this farmland. There are some scattered homes in there that are cut off because of the rising water but it is not a high growth area, so it is beneficial because some of the backwater goes into there. The problem is because of it is washing away into the river on the north end and we are having issues with bank stabilization and LA-537 is about to fall off into the river. So, what can you do to save it? I do not think there is anything you can do to save it, but that helps the people south because it diverts some of the water into the farmlands and keeps the river lower."
- o Mr. Sanders asked Mr. Ford, "Do you think there are areas along the river to build out more formalized retention areas that can maximize the volume?"
- o Mr. Ford answered, "That is a great idea but that is complicated because if you take someone's property for the retention, you need to pay them for it. But if you studied it and quantify it, I think you could come up with some areas that you could build some retention area to keep the river lower during certain rain events and help protect the people downstream but that will take a bunch of studies to figure out how big of an area you would need."
- o Mr. Sanders stated, "We are not against a bunch of studying." He went on and asked Mr. Ford, "If you do not mind, could you mark some of those areas on your map that you were referring to and capture that?"
- o Mr. Ford agreed to mark the areas on the map for Mr. Sanders.
- Mr. Wicker asked if anyone online had any feedback regarding natural features within Region 1 that are beneficial and should be look at within Region 1.
- o Mr. Sanders asked, "Apart from specifically the 2016 event, are there places that we should be looking at or events that we should have in mind where flooding has taken place within this region that might be informative to what we are trying to figure out here?"
- o Mr. Butch Ford said, "2015 Flood. June 10th, 2015."
- o Mr. Sanders asked, "Where did that take place?"
- o Mr. Ford said, "It did not rain in northwest Louisiana, it rained in Oklahoma and caused a major flood event on the Red River."
- o Mr. Sanders asked, "Did that impact a number of homes?"
- o Mr. Ford answered, "It did not impact many homes, but it flooded Interstate I-220 in north Bossier, it flooded the new I-49 exchange on Martin Luther King, it flooded Loggy Bayou and Lake Bistineau. The Red River rose to a point where it was interrupting all of our casinos and causing them to have a tough time. It was causing backwater issues along the levees and flooding out sewer plants, water plants, and the War Veterans Retirement Home on Arthur Ray Teague. The Boardwalk had water over one level of their pavement along the river. So, we were having a flood event there for at least a couple of weeks.
- o Mr. Tomasek said, "There were several locations that almost topped over the levee."
- Mr. Sanders asked, "What do you do? Do you just bring in HESCO baskets and just try and push it back?"

- Mr. Ford answered, "The city went in and put in balloons in the outfall structures to keep water from getting higher behind the natural ground
- Mr. Skaggs stated, "We created a reverse flow. The city had to go and put bladders in every outfall to make sure that the water did not come back in."
- Mr. Ford said, "We have a subdivision on the Red River called River Bluff, and we made 250 sandbags and took it to that subdivision for them to try and prevent water from getting into their homes."
- o Mr. John Richmond said, "We did not have that luxury down here. We did not have it as bad, but we definitely saw that in farmlands and camps along the river. It was a big deal here. We were hoping to dodge the bullet because we did not get a big rainfall event come through."
- o Mr. Sanders asked, "Is that a cue for you? If they are having a problem in Bossier, then you know to kind of start gearing up?
- Mr. Richmond answered, "That is absolutely a cue for us. We watch what is going on in Texarkana and through Oklahoma and if it looks like it is not getting any better, then by the time it gets to the border, we are getting ready."
- Mr. Sanders asked, "So over the past year or so have you guys had a problem with buildup coming down the river or was that the last time in 2015?"
- o Mr. Richmond answered, "Our issue in Natchitoches Parish and more specifically to the city area, is it will get so high that we have to close the small gates going into the Red River and then we just hope and pray because there is really no place for that water to go. That is why one of the projects that we submitted was a pumping station. Because when there is no place for the water to go, it only goes to Cane River, and when it goes to Cane River, south of town in the smaller communities like Cloutierville and Natchez, they just get swallowed."
- O Mr. Sanders asked, "What about the, we saw it yesterday when we were walking through town, it looks almost like a forced drainage or a canal with the little river boat. What is that?"
- o Mr. Richmond answered, "That is Cane River."
- o Mr. Sanders asked, "Why does it not have any flow though?"
- o Mr. Richmond answered, "It is actually called Cane River Lake. It is dammed up on both ends. There is a lot of history there but some of it is because of the dynamite blast that rerouted the river about 200 years ago. That made it open ended and so when the Red River drop down happened, Cane River actually sits higher, so when the Red River was down, there would be almost no water in Cane River. So, at the turn of the century they dammed up both ends. So basically, it is sitting there as one big, huge, oxbow lake."
- Mr. Sanders asked, "Are there opportunities there that can be taken advantage of, or is that kind of a set thing?"
- o Mr. Richmond answered, "Anything is possible, but it is kind of a set thing. There is a lot of irrigation that comes out of it for farming and a lot of recreation sort of stuff. But the biggest problem there is that it is a natural watershed and when it cannot drain somewhere, we are in a world of hurt."
- Mr. Tomasek said, "You talk about the use of the natural areas to capture some of this water, we have some great natural areas. The problem is, when you start looking at it

- to collect more water, like say Lake Bistineau, the problem is go 30 miles upstream from where you start collecting the water at because it is so flat and there is no fall in that area people have businesses and home so if you want to raise any of those to accept more water, you are looking at a huge buy out of 500 or more miles of land, coast land, or lake front property. We have plenty of those properties, I just do not see how you could do any of it without spending all of the money at one time."
- o Mr. Steve Brown said, "There may be some opportunities associated with Smith Port and Clear Lake in eastern DeSoto Parish. It is not all grown up. There are some land issues right now, but we are working on that with DOTD but y'all may want to take a look at it. They are fairly shallow lakes, just one follows the other, but still may have some potential."
- o Mr. Wicker asked what the name of the lake was.
- Mr. Brown answered, "It is two lakes, one is called Clear Lake and one is called Smith
 Port and there is just a little levee that goes across separating the two and if you do not
 know where it is, you will not see it."
- Mr. Richmond said, "Going back to the Cane River comment of course it is 28 miles long, not very wide and very shallow. There have been some attempts to get some dredging down there but it hasn't gone anywhere because it is a problem trying to find someone who is willing to take all of that stuff and so we could do some things to help the immediate area if we could dredge it."
- Mr. Butch Ford said, "I just want to mention too, in Bossier Parish the police jury, adopted a detention policy. We follow suit of Shreveport who has a 100-year detention policy. Bossier is now at a 25-year detention policy. We did that back in 2005."
- o Mr. Sanders asked, "Have you seen success with that?"
- o Mr. Ford answered, "I believe it is saving volume in our streams and preventing people who have been there from flooding. We are trying to keep the streams from rising anymore then they have and I believe these detention ponds are collecting the water and discharging it at a later time and so I think it is having a positive impact on the parish as well as the Red River itself."
- Mr. Wicker asked if anyone online wanted to discuss any of the natural features within Region 1.
- Mr. Wicker reviewed the CDC Social Vulnerability Index slide.
 - o Mr. Wicker explained, "There's one more piece of data we want to highlight, related to risk and that is social vulnerability. As we consider how flooding impacts Region 1's residents, we want to spend some time looking at social vulnerability. Essentially, who is at-risk? A quick explanation of what we are looking at. So, bigger tracts are rural areas with fewer people and less density, while smaller tracts represent urban and more densely developed areas containing more people. Which is why you see the area around Shreveport to be much smaller, but you actually see that they are a darker red, which is where you see the higher level of social vulnerability. A quick rundown on the legend, the red indicates a higher risk, the orange indicates a medium risk, and the yellow indicates a lower risk. It is important to take into consideration this index because when you see the areas that are darker red, flood is going to be hard for those areas to recover form a major flood event. What we need to do is take this index and

- overlay it on a flood hazard area so we can understand which areas are at a higher chance of flooding and that are also red are the areas that we need to dedicate majority of our focus."
- O Mr. Sanders said, "We are going to combine this information with the 2016 data in a couple of minutes but a couple things that we use this information during any disaster. We run all the statistic and we report back to HUD and along with what we think is needed and what we think it is going to take to recover. And every single time we always report that our lower income and most vulnerable areas are always disproportionally impacted, and this is because unfortunately most of our lower income areas and most vulnerable areas are located in flood prone areas. We always use this as a data pool, if you will, so we can understand the people that are going to be most disproportionally impacted."
- o Mr. Ben Wicker asked if anyone had any questions about the social vulnerability map and if there were any areas that anyone wanted him to zoom into. There were none.
- Mr. Sanders recapped the meeting.
 - o Mr. Sanders said, "So, we have talked through the different types or flood risks, we have gone through the different types of flood zones and essentially what you would see on a flood insurance rate map. We talked about the Great Floods of 2016 and you all spoke about some other events that we have some more research to do on. We talked about the potential on using some of our information for beneficial effects. We talked about areas for potential detentions alongside of the river. We also talked about how most of the time our most disproportionally impacted areas are our most vulnerable areas. With that we will take a five-minute break."

BREAK (11:14 am to 11:23 am)

- Mr. Wicker explained the mapping exercise.
 - o Mr. Wicker said, "For those of you online, we do have, with us, some physical maps that we are going to have folks mark up. What we will be looking at are four different types of maps. We will be looking at one, which is the entire Region 1. Then we will be looking at cutouts that are one of Shreveport, one of Minden, one of Colfax, and one of Natchitoches. We will start with the map of the entire Region 1.
 - O Mr. Sanders said, "We started working on this in late February and early March and we had this idea that we would have a bunch of people all lined up with this map, who would all be drawing on it and trying to figure out what happened in 2016, but obviously the world had different plans for us. So, we will have to make do. What we wanted to do is highlight the areas that we highlighted based on our best understanding of what happened in 2016. The highlight areas are areas that are of keen interest based on their flood risk profiles and what they experienced in 2016. So, given the fact that we do not have the opportunity to huddle up like we had wanted to do. But what we will do is go over those areas one by one and have a brief discussion on what really happened in those areas in 2016. And discuss if there are areas that we have not highlighted and really just get on the same page on the different types of flooding that we really need to get on for the future."

- O Mr. Wicker explained, "For those of you not in the room, what we have right now is the Shreveport area map with flood zones and then when she slides to the right it will show the social vulnerability index as well."
- Ms. Evelyn Campo explained that all of the maps would be accessible online for people to look around and review.
- Mr. Sanders said, "On the map of Minden, it looks like there were two clusters of water that backed up and overflowed, does anyone know anything about these areas and why there was so much flooding?"
- o Mr. Tomasek answered, "That is part of the Lake Bistineau that I was talking about earlier. It is so flat that Bayou Dorcheat overflows into it."
- o Mr. Wicker explained it to everyone online, saying, "Those clusters you see in Minden is because there is Bayou Dorcheat and it is next to Lake Bistineau and when Dorcheat overflows, it backs up into Lake Bistineau, is that correct?"
- Mr. Tomasek said, "Dorcheat backs up and during the 2016 flood, the gage for the Bayou Dorcheat was not at the highest, but the Lake Bistineau gage was at the highest it has ever seen."
- Mr. Sanders asked, "So would it be accurate to say that there was a ton of rain there
 and the water body could not maintain compacity?"
- Mr. Tomasek answered, "Yes, that is the area that Butch and I were talking about earlier saying received a lot more than 10 inches of rain."
- Mr. Butch Ford said, "The base elevation is 148 and the water elevation went to 150 and we have never seen elevation before. It was two feet over the base elevation."
- o Mr. Wicker said, "So that area during 2016 received two feet of flooding above the base elevation?"
- Mr. Skaggs said, "There is a weird scenario where the river backs up into Bistineau and does not allow it to drain out, so you have a pool with nowhere for it to go."
- O Mr. Austin Vaughn said, "So basically you have Dorcheat that is coming from Arkansas that drains into Lake Bistineau, and then Bistineau flows into Loggy Bayou, which flows into the Red River. So, if the Red River level gets too high, it backs up into Bistineau and Bossier Parish but if you also have a rain event or flood event in Arkansas, it is coming down at the same time."
- Mr. Skaggs added, "Butch and I have video footage from the air where you can see the water backing up, because it is a different color, backing up into Loggy Bayou and Lake Bistineau. I would like to find it."
- o Mr. Sanders said, "Yeah, if you do find it, we would love to get our hands on that."
- Mr. Sanders asked, "What about the elevation in this area? I assume along the bank you
 have high elevation natural levee that slopes down as you go."
- o Mr. Tomasek said, "No, it is pretty flat. There are some natural points but it pretty flat."
- O Mr. Ford said, "The interstate actually flooded and shut down in 2016 but that was a different group. It was further over. So the water came up almost on the Webster Parish and Bossier Parish line, where there is a bayou called Clarks Bayou that drains part of Webster, into Bossier and the interstate actually flooded because we had to much rain and they had to shut the interstate down for a short period of time. So, when y'all mentioned those numbers earlier about not being in the special hazard, Webster

- and Bossier experienced several camps and homes flood that had never flooded before and that were built above the BFE. Now that flood event caused all of our BFEs to be exceeded in Bossier Parish. We had a 1,000-year event, that is what the National Weather Service told us, we had a 1,000-year event and so we had water over the FEMA flood throughout the parish."
- Mr. Vaughn stated, "Just a note also, when you have a flood event on Bistineau, that lake covers three parishes, so you have people that are in Bossier Parish, Webster Parish, and Bienville Parish that are being effected by that."
- O Mr. Ford said, "In Bossier Parish over along Sligo and south, we shut the complete state system down, the railroad system shut down and it stayed over the railroad tracks for three weeks. So, the railroad for the first time, I believe, had to stop service because the water was over the railroad tracks."
- Mr. Sanders asked, "Who is the operator for that railroad?"
- o Mr. Ford said, "This one is KCS. But we have videos, we were on the ground with elevations. We have maps that show all of that. We had a survey crew on the ground marking highway markers."
- o Mr. Wicker explained that the next map was the Colfax map and asked if anyone has any knowledge about the Colfax area and data on the map.
- o No one had any comments about what happened with those clusters on the Colfax map.
- o Mr. Wicker asked Ms. Campo to move to the map of Natchitoches.
- Mr. Sanders commented that there was a lot of damage in the 2016 flood in Natchitoches.
- o Mr. Richmond said, "Basically the town of Natchitoches became an island. People were calling to ask if we were still open for business and there was one way in and one road out and that was Posey Road off of I-49."
- o Mr. Sanders asked, "Is downtown right where that cluster is?"
- o Mr. Richmond answered, "Yes"
- Mr. Sanders asked Ms. Campo to zoom down on the large cluster of dots.
- o Mr. Richmond continued, "Once you came in on Posey Road, which is exit 141 coming from Shreveport. It is high ground and you could get to Natchitoches. Once you got into Natchitoches, you would never know that there was flood water until you crossed Cane River and you went five blocks back into those neighborhoods and then it went to about six to eight inches of water in homes, to down around Natchez, homes having three to four feet. The farmlands were six feet to seven feet deep. All of south Natchitoches and heading toward the southern end of the parish on the eastern side just became a huge detention hole. Everything was flooded with no place for it to go. If you zoom out and look at Cane River and Red River you will see the band of land that was ok, but once it could no longer drain and you got a little east of Cane River, that was it. Until the Red River drained, you were just underwater."
- Mr. Sanders asked, "So, was Natchitoches founded on natural high ground?"
- Mr. Richmond answered, "Yes, we are no different than New Orleans and the French Quarter."
- Mr. Richmond continued by saying, "That is why we went through what we went through, overlaying these about a year or so ago getting whatever data that we could.

The results were as you can see that right at the city property, there is a road called Laird Fletcher Road that leads out to a bunch of acreage that is owned by the parish where we have a waste water treatment facility and there is room out there to put a pumping station. If the Red River does not reach the levee then we could pump it out and save thousands of acres, if not tens of thousands of acres."

- o Mr. Sanders asked, "Is there a natural road boundary? In other words, the areas that are low lying, I assume there are homes in that area that did flood out?"
- Mr. Richmond said, "Yes, the western side of Natchitoches is more rolling hills and timber area and they were not effected as bad at the east side of Natchitoches."
- Mr. Rick Nowlin said, "Hey John, part of the problem is that the land in east Natchitoches is bounded on the east by the Red River and bounded on the west by the Cane River, so it become basically an island that is very low."
- Mr. John Richmond said, "Yes, we were discussing that during our break. But yes, exactly."
- o Mr. Sanders asked, "How do you all handle urban storm water drainage in this area?"
- o Mr. Nowlin answered, "Well, a lot of the city drainage system takes it into Cane River and for about five blocks on either side of the Cane River. But in high water events, the water is trapped, and it becomes a bowl. And that is the reason for the project of pumping over the levee. In the last two years, LSU did a hydraulics and hydrology study for us and during one of the meeting someone said, 'why don't you just open the gates to the Red River?' and I said well that depends on how much water you want. Red River was so high that there was no way we could use the gates, so a pumping station seems to be one solution. There would also need to be some form of canaling system to get the water to the pumping station if one were constructed. But to get back to the original question, we have Sibley Lake on the west side, and it is the water supply for the city. Its normal elevation is a 116 MLS and it has a 122 flood and once it gets to 122, most of the structures around there are in jeopardy. If water is let out on the southeast corner of Sibley Lake, it goes through bayous and just washes out the Village of Natchez. It is just horrible, what happens down there. We have had to send trucks to rescue people in mobile homes and you know how high those are."
- O Mr. Richmond added, "The summary of that is, if Sibley Lake flows out, then if flows to Natchez. The east side of Natchitoches, basically everything is going to go into Cane River, once it gets to Cane River, it makes its way to Bayou Pasaun, where it can go to the Red River, if the Red River is lower enough to open the gates. Anything that looks like this or even 50% of that, the gates must remain closed or we get backwater from Red River and then it is just a chain reaction."
- o Mr. Sanders asked, "So was 2016 the worst-case scenario in that sense?"
- Mr. Richmond answered him, "Yes. With too much rain fall and the Red River coming from Shreveport fast and high, there is nothing to do but close the gates and hope for the best."
- o Mr. Nowlin said, "We monitor the river levels from Shreveport south, on an hour by hour basis when it starts raining because we know it only takes a certain number of hours from the time it crests to get to Natchitoches. Cane River has a limited amount of water capacity on what it can take. If we have a two- or three-inches of rain then it is

- not a problem, but if we get a five or six inches of rain or ten inches or a couple of days, then it is a major problem."
- o Mr. Wicker asked if there was any other input from anyone on the phone regarding Natchitoches flood risk. There was no further input.
- Mr. Sanders recapped the objectives of the mapping exercise.
 - o Mr. Sanders said, "As we get short on time, Ben is going to pass out the envelopes. A couple of things before we adjourn, we talked about maps and we would like for you to use those as a reference but also mark those maps up and let us know what we should be looking at and how we should be looking at it. Anything that should be a further study or intervention on our part, we want to know that also. Ben is handing out address envelopes so you can return the material back to us and we can log them into our system so we can talk about all of the information we got from everybody next time you see us in a couple of months. One of the main things we wanted to accomplish today was getting on the same page, build a common vocabulary, talking about the different types of flood risks, the different drivers of risk that are present in Region 1. And you want to do that so that next time you come to a Steering Committee meeting; we would like to pretty much pivot into a discussion about how we start thinking about solutions. We want everything here to be publicly orientated when we are talking about building the framework. With that in mind, is there anything pertaining to flood risk in Region 1 that we have not talked about today? We want to make sure that we capture as we go do our homework that we are not leaving anyone behind."
- Mr. Wicker asked if there were any public comments.
 - O Mr. Vaughn asked if there were any updates on the Round 1 funding. Mr. Wicker expressed that they had not received the grant agreement from HUD, and that once they did receive the agreement, that everyone would be notified and that there would be a 90 day application process from the date that the grant agreement was received.

Adjourn: Next Steering Committee Meeting: August 11, 2020

Mr. Jack Skaggs asked if there was any further business to come before the Committee, and with there being none, on a motion by Vice Chairman Butch Ford and a second by Mr. Steve Brown, and being put to a vote, the July 14, 2020 meeting was adjourned.

CERTIFICATE

The undersigned, Secretary to the Corporation, certifies that the above and foregoing are the true and correct minutes of the meeting of the Members of the Region 1 Regional Steering Committee held on July 14, 2020 at 10:00 a.m.