Region 13. Nueces Flood Planning Group Meeting May 16th, 2022 11:30 A.M. to 1:30PM McMullen County EOC 306 Live Oak Street Tilden, Texas

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Agenda:

- 1. Call to Order & Roll Call
- 2. Prayer
- 3. Public Comment
- 4. Approval of minutes from the March 28th, 2022 Full RFPG Meeting
- 5. TWDB updates/Presentation
- 6. Presentation: USACE Silver Jackets Program Real Time Simulation System Lisa McCracken Mairs
- 7. Presentation: Regional Interim Flood Protection Measures program USFC & Garner ES Brett Spicer US Flood Control
- 8. Discussion and possible action regarding Status of Flood Risk Mapping Update (Tasks 2A &2B)
- Discussion and possible action regarding identification, evaluation and recommendation of Flood Management Evaluations (FMEs) and Flood Management Strategies (FMSs) and associated Flood Management Projects (FMPs) from Stakeholder Outreach and Input on How to Address Gaps (Need Exists with No Sponsored Project Identified) (Tasks 4B and 5)
- 10. Discussion and possible action regarding summary of Flood Response Information and Activities (Task 7)
- 11. Discussion and possible action regarding subcommittee administrative, regulatory, and legislative recommendations (Task 8)
- 12. Discussion and possible action regarding Technical Memorandum content and TWDB Informal Comments received on 4/14/2022
- 13. Discussion and possible action regarding Region 13 Nueces Budget Memo
- 14. Discussion and possible action regarding accepting the resignation of Jeff Pollack Industry Voting Member; removal of Adnan Rajib Public Voting Member and authorizing Nueces River Authority to begin accepting nominations for vacant voting member position
- 15. Update from Planning Group Sponsor Nueces River Authority regarding administrative matters of the Regional Flood Planning Group
 - I. Financial Update
 - II. Update Schedule of 2022: June 27th, **July 18th**, Dec 12th
- 16. Update from Patrick McGinn Liaison to Region 12 San Antonio RFPG and Region 15 Lower Rio Grande RFPG
- 17. RFPG members' comment
- 18. Adjourn

The Region 13 - Nueces Regional Flood Planning Group may announce that it will go into executive session on any item listed on this agenda if the subject matter is permitted by law for a closed session. The open portions of this meeting will be recorded and made available to the public upon request.

If you wish to provide written comments prior to or after the meeting, please email your comments to <u>tpruski@nueces-ra.org</u> and include "**Region 13. Nueces Flood Planning Group Meeting Public Comment**" in the subject line of the email. Additional information may be obtained from: Travis Pruski, Nueces River Authority, 539 HWY 83 South, 830-278-6810, <u>tpruski@nueces-ra.org</u>.

Minutes of the Region 13. Nueces Flood Planning Group Meeting March 28th, 2022 from 11:30 A.M. to 1:30PM McMullen County EOC | 306 Live Oak Street | Tilden, Texas

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Agenda:

1) Call to Order & Roll Call

Chairman, LJ Francis, called the meeting to order at 11:35 p.m.

Voting Members:		
David Baker	Electric Generating Utilities	Present
Debra Barrett	Agricultural	Absent
Larry Dovalina – Vice Chairman	Water Utilities	Present
LJ Francis - Chairman	Municipalities	Present
Sky Lewey	River Authorities	Proxy (Suzanne DiPiazza)
Shanna Owens -Secretary	Counties	Proxy (Ellyn Weimer)
Jeff Pollack	Industries	Absent
JR Ramirez	Water Utilities	Present
Adnan Rajib	Public	Absent
Andrew Rooke	Small Business	Present
Larry Thomas	Flood Districts	Present
Lauren Hutch Williams	Environmental	Present
Guest:		
Ellyn Weimer	CDM Smith	
Stacy Barna	CDM Smith	
David Wright		
Tressa Olsen	TWDB	
Jim Tolan	TPWD	
Britni Van Curan	Atascosa County	911 Rural Addressing/Subdivision
Kennard Bubba Riley	Atascosa County	County Commissioner Pct 4
Robert A Williams	City of Jourdanton	Mayor
Sarah West	Freese & Nichols	Stormwater Engineering
Susan Boutwell	San Patricio County	Flood Plain Management
Luke Whitmire	BCRAGD	Surface Water Science Manager
Travis Pruski	Nueces River Authority	Director of Planning
Kristi Shaw	HDR	
Bryan Martin	HDR	
Suzanne DiPiazza	Nueces River Authority	
Online Attendance	Beatriz Rivera	Jayni Saenz

2) Prayer

Chairman, LJ Francis, led the prayer

3) Public Comment:

Travis Pruski: one person – Lisa McCracken with US Corps of Engineers on Zoom but is having audio difficulty. Will try to chat with her. Would like to do a presentation at the May meeting on the upcoming project that would be beneficial to the Nueces Basin.

4) Approval of minutes from the January 31, 2022 meeting

Motion to approve minutes as presented made by David Baker and seconded by Larry Dovalina. Motion passed unanimously.

5) TWDB updates/presentation

Tressa Olsen:

- a) The Region 13 contract amendment was executed on February 18, 2022. Working with John Byrum of the Nueces River Authority and HDR (Tech Consultants) to amend the subcontract
- b) As far as the Tech Memo, TWDB is still reviewing and will provide comments for the first set of deliverables in April and the second set of comments in May.
- c) On February 15, 2022, TWDB provided a media package to assist any groups in expanding and deepening their outreach in public awareness efforts
- d) Also recently sent out newsletter which included information regarding the 60-day public comment period for the draft plan (which should be built in the cycle)
- e) Also sent out an email with a guidance on FMS voting (reviewed and approved on their own one by one.). You can do batch voting if there is enough time ahead so you may review everything and the opportunity to discuss anything in a meeting. TWDB is deferring to planning groups on how they wish to proceed but wanted to allow for some flexibility. No other discussion or comments
- 6) Discussion and possible action Update of Stakeholder Outreach and Roadshows Bryan Martin:
 - a) This was a two-step process. 1) Reached out to individual stakeholders in Subregion A Upper Basin: Met with Frio County, and plan to meet with Medina County, Subregions B & C Mid Basin: Met with Dimmit County, Webb County, Atascosa County, Live Oak County, Wilson County, Zavala County, and Subregion D Lower Basin: Met with Aransas County. 2) Interviewed floodplain administrators and/or flood management individuals to gather input on missing flood prone areas and any urgent project needs. A draft list of projects and maps were provided in advance of the meeting and used to gather a) any projects that are no longer under consideration; b) any projects missing; and c) funding for projects; Additional information sought on flood plains management standards & policies, and regional coordination. Note: Prior to roadshows, the HDR team worked on contact list to make sure they were reaching out to the right individuals.
 - b) Roadshow meeting: First meeting was in Leakey, Texas on March 21st for Subregion A Upper Basin. The Mid Basin Roadshow was on March 8th in Cotulla for Subregions B & C and Subregion D – Lower Basin was held on March 22nd in Sinton. The Lower Basin meeting was also attended by the National Weather Service, USGS and Texas A&M University. At these roadshows, an update was given on the last year. Had another opportunity to for input (similar questions to Agenda item 6a). There was opportunity for regional collaboration; answering questions 'What can we do together?', 'What are the

local flood emergency responses?', 'What administration and legislation needs would help them to do their job better?'. The information gathered was used to 1) update by adding additional flood prone areas – the new information was given high priority for mapping in our database and 2) identified areas with a lack of drainage study that can identify flooding problems. With all the outreach with different individuals, we were able to work on refining our project list.

- c) We have a total of 345 projects/evaluations/strategies: 220 for Flood Management Projects (FMP), 62 for Flood Management Evaluations (FME)(when you hear the word evaluations, think studies), and 63 for Flood Management Strategies (FMS) (a strategy is something that doesn't quite fit in the projects or studies). [Kristi Shaw: Once we are able to confirm, by April 8th, the additional inputs, some of these can be projects/evaluations/strategies can be combined. By May, the list will be updated with new numbers.]
- d) We also asked for feedback on the goals. Asked what goals resonate the most importance for the communities in the various subregions. In Mid Basin, increase funding for both maintenance and floodplain administrators scored high. Throughout entire basin, improved mapping scored high (70% of basin lacks mapping). Improve regional coordination especially in data sharing and flood warning system. We will make recommendations on additional projects, evaluations, and strategies in high-risk areas.

Kristi Shaw: (Summary of the roadshows and stakeholder engagement interviews) Very successful especially in the Mid Basin where we have historically had very little information. It was great to have the community fill in the gaps and talk about their concerns. There are a few goals that are very important to the flood planning group that were described. Just because it scored low here doesn't mean those goals were off the table. We are expecting to have a updated list at the May meeting. The draft plans are due in August. What we hope to achieve in May is to be able to say this is where we are as far as the flood hazards, here are the areas to prioritize, here are ongoing studies, and opportunities in other areas.

Discussions: For some counties with no information there are aware of issues and challenges, but they lack funding and or staff to be able to implement any of the projects. Some have given us information on their flood prone areas. Information will be pulled into the flood risk map in the next update. Other counties, with 'zero' totals, are in other Flood Planning Groups and we won't have their data. Once we put together updated maps, we will coordinate with other Flood Planning Groups to make sure any projects (that extend to our region where there is a high risk) are identified for those areas. We are working hard to get as much as we can into the draft plan in June. When we initially did the roadshows in May 2021, the process was just being started. For those who are just now getting started, we will have a 'place holder' in the draft plan to revisit for the revised plan in 2023. No further discussion or questions.

7) Discussion and possible action – Presentation: Sabinal/Medina River Flood Warning System

Larry Thomas: PowerPoint presentation Flood Early Warning Systems (FEWS)

- a) What is a Flood Early Warning System (FEWS)? 1) Strategically located hydrological monitoring stations designed to collect continual near real-time data. 2) Data is transmitted via satellite to resources such as websites and social media outlets. 3) Accessible for use as needed before, during and post flooding events.
- b) What is the Importance of having a FEWS? 1) Ability to provide existing potentials and near real-time data of forthcoming hydrologic conditions which may precede significant flooding. 2) Preparedness: Aiding in protection of human life, livestock, reduction of property damage, overall public safety, transportation, emergency response, utilities, post flood catastrophic, and economical impact cost reductions.
- c) What Hydrologic Parameters are typically monitored for the FEWS? 1) Rainfall: Near real-time intensity
 2) Water Surface Stage: Also referred to as Gage-Height (ght) 3) River Water Flow: Also referred to as Discharge and reported in cubic feet per second (cfs)

Rainfall totals and intensity combined with the river state response provides a better presumptive analysis of the river travel times providing an early flood warning scenario.

Describing a rapid rise in water surface stage value from 3.5 to 15+ght is an important component of Flood-Warning-Awareness.

- d) Potential Flood Inundation | Flood Risk Communication: BCRAGD, USGS, and the National Weather Service (NWS) continually monitors all FEWS gages and existing stream gages within the storm's path for all events likely to cause flooding.
 - Resource tools used include:
 - BCRAGD Home Page (bcragd.org)
 - Available USGS internet access (usgstx.gov)
 - Social media access (Facebook, Twitter, etc.)
 - USGS Flood information mapping tools (https://webapps.usgs.gov/infrm/fdst/?region=tx)
 - National Weather Service (NWS.gov)
 - The NWS developed a simplified fast loading radar website called Local Standard Radar (https://www.weather.gov/radar_lite)
 - Independent internet resources (i.e., WindyWeather.com)
- e) In response to feed back for emergency managers, the National Weather Service, NWS has developed a simplified fast loading radar website called 'Local Standard Radar' <u>https://www.weather.gov/radar_lite</u>. Larry had handouts with additional resources.

Comments: 1) For our area, two basic types of flooding which FEWS look at are the large riverine events and urban and small stream floods. In addition, rainfall data is needed to predict those types of floods. Depending on location, two different types of FEWS may be needed and 2) in addition to having these systems, flood response programs should be in place in case of floods are in the area.

No further discussion or questions.

- 8) Discussion and possible action Presentation: Cotulla Water Study (Larry Dovalina) Stacy Barna and Ellyn Weimer with CDM Smith will conduct presentation:
 - a) Larry Dovalina: The City of Cotulla realized the Corps of Engineers had done very little work in mapping; we had to do an additional study. The City of Cotulla, like many cities, is rural and is hard to attract residents. The only residence and the land that is available (or the cheapest) is land next to a creek. They have a flood plain going up a hill.
 - b) Stacy Barna with CDM Smith: Been working with the City of Cotulla for many years now. This is a great success story out of the Flood Infrastructure Fund. This project is one in the initial round of funding. As Mr. Dovalina mentioned, many of the previous maps the City had been using were archaic. The city really needed an updated map to see who does and doesn't belong in the flood area or what should be considered in the flood area. Ellyn will be going through the project itself; she is one of the main water resource engineers who worked on the project.
 - Ellyn Weimer: A little background on the study. It was for the City of Cotulla. We looked at both the c) Mustang Creek and the Nueces River bounded by I-35 and down to where they are confluent. The study limited it focus on the Nueces River and Mustang creek through the city. {Slide showing the effective Floodplain FIRM done in 1976] The study conducted was based on observations that the floodplain was potentially too wide. On the east side of the map, Flood Zone A, takes up half of the city's boundary. Looking at the hydrology (methodology and modeling) how we updated the floodplain. 1) For Mustang Creek, we ended up deleting ~ 18 square miles. The 1% chance flow was about 1,810 cfs 2) For the Nueces River: it was \sim 5,170 squares miles to the confluence with Mustang Creek. We ended up using a gage analysis with USGS in order to determine the drainage as well as the flow area which ended up being about 40,000 cfs. 3) Once we got our hydraulics and flows, we used HEC-RAS where we deleted cross sections developed from DEM and survey data. Survey was conducted on Mustang Creek and did a floodway analysis using high water marks to perform calibration of the models. Issues with access to Nueces River Survey crossings, so moved study to limited detail. 4) Display of 'Proposed Floodplain (County)' Contains extents of flooding for study area both inside City limits and in La Salle County. 5) Proposed FIRM (Flood Insurance Rate Map) i) Firm limited to City boundaries based on existing extents of FIRM and affected properties, ii) greatly reduces the extent of the floodplain from existing

FIRM and iii) potential for La Salle County to submit for entire floodplain, but further coordination is needed to determine impact. 6) The big takeaway is all the affected properties. With the updated studies in the existing FIRM, there is about 763 properties that are under the floodplain. With the proposed, there are 210 within the city limits. So removed 553 properties from the floodplain. It did add about 12 properties due to updated extents of City limits and floodplain study. Properties in proposed floodplain (for the county) is 342. A large portion of those outside the city limits are agricultural and based on aerial observation and do not contain structures within the floodplain.

- d) Larry Dovalina: We did the study in order to reduce the need for individuals building new houses and 'roadmaps' to be forced to purchase flood insurance (which is about \$4,000 to \$5,000 per year). By doing this study, we can use that map to develop the remaining portion of the land that surrounds this area to be able to continue to grow.
- e) Stacy Barna: The study was submitted last week to be reviewed. May have it approve withing next six months. Any questions:

Questions and answers: 1) Have you considered future conditions? Have you built that in to protect people from building in areas that could be possibly in a floodplain in the future? Mr. Dovalina: First thing they needed to do was get an accurate map. In the building standards, we require 'close flow' and 'free flow' to be considered by the property developer. We require you to do an attention or retention basin as you develop. 2) Was this open for public input process and was what were residents thinking about the study and the proposed reduction in the flood plains? Stacy Barna: Maps were posted at city hall and in newspaper; I don't believe there were any public comments on the revise maps to date. Mr. Dovalina: There is a lot of interest from new landowners who had to mortgage their land and the mortgage required them to get flood insurance. No further discussions.

- 9) Discussion and possible action Status of Flood Risk Mapping and Draft Projects for the 2023 Regional Flood Plan
 - a) Kristi Shaw: We had individual interviews at the regional roadshows that went well. Several individuals stated that they had material to provide to us. We are asking for the materials by April 8th so we can have all the identification of the FME/FMS/FMPs to be included in Draft Plan based on ongoing project nailed down. That also gives us a kind of a 'close' on the flood prone area input. We gathered flood prone input from several meetings including roadshows and then publishing a map on Region 13 website for public input. That information rolls into update for Task 2 which is the existing/future flood risk analyses. Updated maps are anticipated to be available by our next meeting. Some of that information receive also includes the Cotulla study that was just discussed. As Brian has mentioned, we assimilated that to the inundation mapping, We are making all of that information consistent holding it into the risk evaluation that we preformed previously and being able to update those maps. We will have to update flood risk maps and the greatest needs maps prepared by May 9th in time for the next meeting on May 16th. We will bring that information to the group. In the meantime, between now and then, we are also looking into areas where there are gaps. We anticipate with that even with the processing of new information by others, if we have identified that need in the past, the need will likely still be there. We are taking advantage of some of the efficiencies in that schedule to be able to refine our areas with current projects and show on the maps, to identify potential projects that might help in those gaps areas where there aren't any identified currently. The schedule also shows the concurrent work we are working on. In fact, we are working on one regarding the admin regulatory legislative recommendations that shows explicitly here on Task 8. We took advantage of the opportunity when we were reaching to these stakeholders and asked some questions that are helping to inform the other tasks; that information will be available to subcommittees and others that dive into the details. After the May meeting, we have a June 27th meeting. We talked about a tentative meeting in July; that will be important. The plan is due in the beginning of August. If we are able to get a firm understanding of the projects that are going to be evaluated and included in the plan at the May 16th meeting, then we will be able to present a summary of the results of that in the June 27th meeting as well as some intern drafts in sections that go to the plan. A July meeting would give the planning group an opportunity to adopt so

that we have time to make any changes necessary to submit to TWDB in August. Once it is submitted in August, there is a timeframe that we are sharing as well. There is a 120-day period for some agencies, some it is 90 days. It is also where we will hold the public comment meeting to get input on the draft plan which will be available on the Region 13 website so people can look at it and formulate questions. We will convene as a group to talk about the comments that have come through and make some decisions as to moving forward in adopting the final plan for submittal. Once we put together that list (the week of May 9th), we will send that out to the flood planning group members and if you notice there are any projects you feel should be included that aren't included and or have agencies interested in sponsoring a project where we might have one, that would be helpful. And we will talk about it as a group at the May 16th meeting (date correction).

b) Bryan Martin: Recommendation of projects – to identify projects to meet 1) greatest needs and 2) goals. (Displaying Map) The areas with the darker tones are the areas of the greatest needs. We also have a list of ten goals. We will be working on those between this meeting and the May 16th meeting. TWDB has specific requirements that must be evaluated for all FMP/FME/FMS during the next month into June. There is a lot of criteria the board must look at (e.g., community need, cost estimate, flood risk reduction, ...). We will have an update at the next meeting.

Discussion regarding flood risk mapping (contribution from roadshows information, categories and other factors producing map), interactive tool on Region 13 website, tide surges, USGS data from storm surges sensors, the Texas General Land Office and their coastal resiliency plan, subsidence impacts, and lack of warning systems in our region. These issues will be taken up with the subcommittee (Agenda item # 11) meetings.

- 10) Discussion and possible action Coastal Rise Scenarios for Future Flood Condition Analysis
 - a) Kristi Shaw: (Introduction) Sarah West has been attending our meetings; she is with Freese & Nichols and is in our team. They have put together this Coastal Rise Analyses presentation and we are wanting to share background information today. Also look at the work that has been done and go home with a recommendation on what assumption to use moving forward.
 - b) Sarah West: we are going to talk about Task 2 specifically. This is Future Conditions Flood Risk Analyses – coastal related is the discussion that we are going to have today. The purpose of this presentation today is to understand the 1) Project Task Scope 2) Available Data Sources that we can utilize 3) Sea Level Rise Projection Scenarios 4) Region 13- Data Sources (specific to our region) to Consider and 4) Path Forward, we would like to get some recommendations.
 - 1) Scope is to perform future conditions flood exposure analysis Task 2B: Future Conditions Flood Risk
 - Identify who and what might be harmed for the 100 year and 500-year flood events, and we will look at existing and future with 'no action' scenario (30-year projection) and we will also need to consider anticipated relative sea level change and subsidence based on existing information.
 - Analyses are based on the use of existing and available data such as: FIRMs or other flood inundation maps, available hydraulic flood modeling results, model-based or other geographic screening tools for identifying flood prone areas and other relevant technical analysis that RFPG determines to be most updated or reliable.
 - Available Data Sources (Previous Studies)
 - (i) In 1987, the National Research Council put together a study called Responding to Changes in Sea Level: Engineering Implications and that developed sea level rise (SLR) / change (SLC) scenarios and the NRC study leverage by USACE & NOAA: This is main resource for all present-day estimates. (This is a historical look at sea level rise)
 - (ii) In 2013, the USAC put together the Incorporating Sea Level Change in the Civil Works Programs to provide design guidelines.
 - (iii)More recently, in 2017, NOAA did the Global and Regional Sea Level Rise Scenarios for the US.

- (iv) In 2021, the GLO published their Costal Texas Protection and Restoration Feasibility Study, and this utilizes the NOAA 2017 data and prepared inundation mapping of the entire coast of Texas.
- (v) NOAA did provide an update in 2022. They put out a Sea Level Rise Technical Report and updated their 2017 report and data.
- Giving a background on sea-level rise projection scenarios and what goes into the change in sealevel
 - (i) Global Sea Level Change (GSLC) and Relative Sea Level Change (RSLC) and certain factors include thermal expansion of ocean water, melting of mountain glaciers, melting of Greenland glaciers, and the possibility that Antarctic glaciers could slide into the ocean. So, those are the global macro factors.
 - (ii) Local Uncertainty factors that contribute to the dynamics which are: regional hydrodynamics, ocean circulation patterns, hydrologic cycles (riverine flow) and subsidence/ uplift. Those are all factors that went into the NOAA studies that they considered when they considered their projects/their work.
- More background on NOAA's work and what goes into the sea level rise projection scenarios. NOAA has developed several different scenarios (in table which correlates with USACE scenarios)). The graph displays the different projections of sea-level rise based on different scenarios. 1) The first scenario is the Low scenario (NOAA and USACE call it the same thing) This scenario assumes that the past trends continue. A linear trend based on past observations. 2) The next scenario is the Intermediate-Low, based on what NOAA description is (and USACE calls it Intermediate). It uses the NRC Curve 1 and is corrected for the local rate of vertical land movement. This starts to include land subsiding or land rise. And it is kind of assuming a low value for the global sea-level change and it does not include glacier melt in this scenario. That is the second level. (This is the one typically used for design.) 3) The next up is the Intermediate. (USACE doesn't have a breakout, they only have three.) Similar to the previous one, but with higher emissions and temperature changes. 4) Next is the intermediate High (USACE calls this one High) and this one, starts taking into consideration some glacier melts 5) and finally the NOAA has High and is similar to the previous one but now assuming higher glacier melts. This is where you see the lines diverge from each other.
- Region 13 specific input on what kind of data sources to consider. As mentioned earlier, part of our scope is to try to utilize sources with information already out there. 1) Existing conditions what we are looking at for the benchmark is the FEMA FIRMs maps. 2) For future conditions, we can utilize the NOAA data, or we can potentially utilize this GLO Coastal Texas Study, and this is what I am going to talk about next.
- The NOAA Data Sea Level Rise Viewer (go to https://coast.noaa.gov/sir/ to view interactive map). The View will show impacts of sea level changes. If it changes one foot, how much would it cause the inundation to change. It is a screen level tool. NOAA Data does not provide the 100-year/500-year info. You could utilize the NOAA data to extrapolate for the 100 year/500 year. Demonstrating how interactive map works.
- More specific into the actual data in the technical report. This is a global project that also looked at regional factors contributing to sea level change. It had a 100-year outlook based on various scenarios (a hundred years into the future). The data they provided can be extrapolated from graphs and applied to a digital terrain model to see what the inundation would be based on sea lever rise. There is a potential we could end up with inconsistencies with other studies (Coastal Texas Study) in this project. But NOAA has 2022 updated values available.
- GLO Coastal Texas Study: 1) Based on NOAA data scenarios 2) Currently available hydraulic flood modeling results 3) Inundation mapping based on various scenarios (Does include the 100-year & 500-year storm events) Does have future conditions with no mitigation: 2035 and 2085 scenarios available. 4) We will be submitting to obtain that data 5) Could use the inundation maps directly. This was for data sources.

- The first table was a comparison chart of the different data sources we have: USACE 2013 data, NOAA 2017 data and the 2022 NOAA data. Highlighted the intermediate low because that is the data for the 30-year outlook. If you look at the 2017 data, it shows that .9-foot rise (the graph I showed you, shows the differential in rise over 30 years). Based on the 2022, it has changed to a 1-foot rise instead. The second table is the Coastal Texas Study. They have a different time event horizon, so it doesn't collate with the 30 years. What we are proposing to do is where their 20/35 data outlook, we could utilize. Instead of the intermediate (which we would normally utilize) we would utilize their high values instead that is at .8-ft. Or we could look forward into the future at the 2085 data and use their low value which is 2.0-ft rise because what we expect the 30-year of the 1-ft rise. That is a way we could utilize the studies already been completed and the data is available without us having to start over and redo that work.
- Our Path Forward Region 13 Recommendation: 1) Utilize existing conditions from FEMA and FIRM maps 2) Future conditions, (we also want to get the groups input today) to utilize the Coastal Texas Study data. They already have the 100-yr/500yr inundation values but utilizing the 2085 low value data or the 2035 high value data.

Discussions: Concerns about using the Texas Coastal Study, proposing a certain design point, multiple modeling, options available, will be able to revisit on a five-year cycle, the sea-level rise can be adjusted and there will be six plans between now and 2055 which we are doing on a five-year planning cycle. Motion to accept the recommendation for a 1.2 sea-level rise for coastal studies in region 13 was made by Andrew Rooke and seconded by Lauren Williams. Motion carries. (Need names of members who made the motion and second.)

11) Discussion and possible action - Form subcommittee to discuss administrative/legislative flood mitigation recommendations:

Kristi Shaw: In this plan, the Texas Water Development Board has requested a special subsection of the plan for each of the 15 regions to include administrative regulatory legislative recommendations. Broken out: 1) What does the region feel is most important from a legislative perspective to help facilitate floodplain management and flood mitigation planning. 2) local or administrative regional recommendations that would be helpful 3) any other recommendations that planning groups desires to achieve goals and 4) recommendations regarding potential, new revenue-raising opportunities and/or regional flood authorities that would fund development, operation, and maintenance of floodplain management. What we have traditionally done, because there is a lot of information there that is being pulled together, is have a subcommittee made up by the members of the flood planning group and we will go through a couple of workshops where we can put together a list of those recommendations and bring it back to the planning group for discussion and consideration. We are asking today for volunteers to serve on the subcommittee and what we will do is first start with what we heard with the regional roadshow meetings. We asked this question: "Where do you need help? We also asked that at the local/individual stakeholder's interviews. We got a few items here that we summarized. So, we would start there as a basis and formulate language regarding those recommendations to the planning group. Input from the three roadshows included 1) a need for accurate inundation mapping and coordination with the Water Development Board and FEMA on the best data verses using old maps 2) Counties sometimes lack the authority to adopt and enforce code and it is a challenge especially in rural areas where often the floodplain administrators wear multiple hats 3) minimum standards and uniformity would help 4) system needs to be fair for both rural and urban areas 5) in upper regions, gravel removal in conflict with TPWD and other regulatory bodies; we heard today too, that it is a real challenge when that semination happens and being able to manage future flooding 6) financing for drainage maintenance programs; support cities and counties purchase lands for flood mitigation along the lines of nature bases solutions 7) normal efficiency, funding, training needed by floodplain administrators/board and 8) creation of a regional flood authority that could help move some of these water/flood projects off the ground. These are several of the items we heard at the roadshow; we can talk about it more as a subcommittee and submit a formal recommendation to the group at the May 16th meeting. Meetings will be held virtually until the May meeting. Motion to form subcommittee by Larry Dovalina and seconded by Laura Williams. Motion passed unanimously.

Subcommittee members: Britni Van Curan, Larry Dovalina, Laura Williams, Andy Rooke, LJ Francis, (cc Larry Thomas and Luke Whitmire)

12) Update from Planning Group Sponsor – Nueces River Authority regarding administrative matters of the Regional Flood Planning Group.

Travis Pruski:

- a) Financial Update: HDR Engineering Amount Due: \$527,005.89, Amount Paid: \$448,705.89 and has a balance of: \$78,300.00. Our contract is \$1.87 million and that leaves is with about \$1.34 million. Tressa and our director of finances at the NRA have been emailing back and forth, and there will be request for payments. The Nueces River Authority hasn't had their portion funded yet. We will hopefully have some updates for the May meeting. LJ Francis: I know last year we had approved all the payments to HDR up to 2021. Tressa, can you clarify what approval does the board need to be making for these money? Is it when we request money from the board or is it money paid out to the consultant? Tressa: I only need board approval for sponsor funds. Travis Pruski: We don't need any action from the board right now.
- b) Update Schedule of 2022: May 16th, June 27th, July 18th (tentative), October (tentative), and December 12th
- c) Update on Webpage: There is a new link (tab) called County Maps. All the technical data is broken down in maps. It will have all the existing flood hazards, highest flood risk, preliminary list of Flood Mitigation Projects (FMP)s, Flood Management Evaluation (FME)s and Flood Management Strategy (FMS)s for each county in our region. LJ Francis: Once the original flood plan is complete, is there a way to make the page more attractive/ appealing?
- 13) Update from Patrick McGinn Liaison to Region 12 San Antonio RFPG and Region 15 Lower Rio Grande RFPG: Patrick McGinn was not in attendance for update. LJ Francis: Will contact Patrick for any updates in Regions 12 and 15.
- 14) RFPG members' comment LJ Francis: About a year ago, I met with colleagues with the US Army Corps of Engineers, and they introduce me to what is called a Silver Jacket Program. This is a collaboration of State, Federal and Local governments (along with the US Army Corps of Engineers and 12 other partners). Our region is going to be participating in 'first in a lifetime real-time simulation' on Nueces River for the Nueces River. Now the funding is only to pay for the modeling which is only going to be done by the US Army Corps of Engineers. We had Ms. Lisa McCracken with the US Army Corps of Engineers, on earlier and has agreed to give us a full presentation at our May meeting. Other partners from other cities will be invited to this presentation. The thought process is that once this is developed, it will go into users' hands; and have users comment on what they want to see in this model. It ties in well with our regional flood planning.

15) Adjourn: Motion to adjourn and seconded. Motion passed unanimously.

Passed and approved on this the _____ day of May, 2022.

LJ Francis, Chairman

USACE Partnership Opportunities

Lisa McCracken Mairs Project Manager USACE, Galveston District





LEAR BULKHEADS CAN BE CKS & DAM

ÉSTRESSED CONCRET UNNION GIRDER ----

"The views, opinions and findings contained in this report are those of the authors(s) and should not be construed as an official Department of the Army position, policy or decision, unless so designated by other official documentation."





SILVER JACKETS

- Team of State, Federal, and Local Agencies that learn from one another and apply their knowledge to reduce the risk of flooding and other natural disasters.
 - Participates include:
 - USACE
 - FEMA
 - USGS
 - EPA
 - GLO
 - TDEM
 - NOAA

- NWS
- TWDB
- TCEQ
- TAMU
- NRCS
- TxDOT







2

SILVER JACKETS PROGRAMS GOALS

- Facilitate strategic life-cycle flood risk reduction.
- Create or supplement a continuous mechanism to collaboratively solve stateprioritized issues and implement or recommend those solutions.
- Improve processes, identifying and resolving gaps and counteractive programs.
- Leverage and optimize resources.
- Improve and increase flood risk communication and present a unified interagency message.
- Establish close relationships to facilitate integrated post-disaster recovery solutions.





FLOOD PLAIN MANAGEMENT SERVICES (FPMS)

- Authority: Section 206 of the 1960 Flood Control Act (PL 86-645), as amended,
- Advises, recommends, educates, informs and provides a range of technical services and planning guidance to state, regional or local goverments; other non-Federal public agencies and Indian tribes.
- Address flood plain and off flood plain use changes, flood risk and flood hazards.
- Project Prioritization:
 - Locales where development pressures are significant
 - Addresses flood related problems





FPMS CONT.

- Full Federal Cost
 - Potential for a non-Federal interest to provide additional voluntary contributions
 - Other Federal agencies and private persons on a cost recovery basis
- Restrictions:
 - USACE does not execute FPMS outputs
 - Scaled response:
 - Excludes detailed planning, design and economic analysis
 - Excludes detailed and extensive mapping
 - Addresses pros, cons and likelihood of success
- Base Program
 - Funded annually
 - General Technical Services
 - General Planning Guidance
 - Special Studies
 - Quick Responses





5

FLOOD PAIN MANAGEMENT SERVICES

Real Time Simulation Develop for the Nueces River





NEXRAD

Observed

Precipitation

GageInterp

Precipitation

We will leverage the existing CWMS model for the Nueces River to develop a Real-time Simulation System (HEC-RTS) for the watershed stakeholders. HEC-RTS is a Windows based version of CWMS without the use of an Oracle database.

This tool will provide more accurate and timely flood level forecasts and projected inundation mapping in the watershed for emergency managers, first responders, public officials, and the public to make better informed decisions in order to reduce the risk to the public and property damage. The training will help ensure that the City and/or Nueces River Authority are able to use and maintain this tool.





FLOOD PAIN MANAGEMENT SERVICES

One of the best features of RTS is RAS Mapper:

The maps will display flood depths and boundaries based on various rainfall scenarios and/or reservoir operations or other alternatives that can affect stages and flow.







STILL QUESTIONS? CONTACT INFO

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US Army Corps of Engineers Galveston District

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8







Opportunity to Lead with Temporary Flood Barriers

Goal:

Establish an Interim Flood Protection Measures (IFPM) program by placing temporary flood barriers in strategic regional locations to enable rapid local deployment. These strategic stockpiles would enable stakeholders and local partners to deploy non-structural flood barriers at any location in the state within 72 hours, thereby increasing resiliency.

Justification:

In the past five years Texas has averaged over \$14B in annual property damage from natural disasters. According to the Texas Floodplain Managers Association, "floods have been, and continue to be the most destructive natural disaster in terms of economic loss to the citizens of Texas with a total coverage of about \$156 billion. More than 12% of the state's land area is subject to flooding."

While considerable flood mitigation efforts have been undertaken, flooding continues to be a major hazard. In 2019, updates to FEMA Flood Insurance Maps added thousands of new Texas homes to floodplains; further complicating the enormous task for flood planning mitigation. Texas simply cannot wait for the construction of traditional structural flood mitigation efforts such as levees to protect high risk areas.

While flooding is a statewide concern, all emergencies are local. The creation of regional stockpiles of temporary flood protection solutions, which are operationally supported by planning, training, and deployment services as part of flood mitigation efforts, will ensure Texas responders have flood control barriers where they are needed, when they are needed.



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Agenda Item No. 8- Status of Flood Risk Mapping Update (Tasks 2A & 2B)

The flood risk maps were updated based on input received during individual county/city stakeholder interviews (February-May 2022) and regional roadshows (March 2022).

How-To-Guide on Interpreting the Regional Flood Risk Map Included in this Package

Current and future flood risk is based on hazard, exposure and vulnerability.



Flood Risk: Each category listed below was weighted in terms of life loss risk and property damage to obtain an overall score for each local sub-watershed (i.e. HUC 12) in the basin based on hazard, exposure and vulnerability. The scores were then normalized such that the highest value (highest flood risk) is equal to 5.

- Life Loss Low Water Crossings (15%) Data as provided by TNRIS.
- Life Loss Dams (10%) Data representing potential hazardous dams that have been identified as either hydraulically inadequate or deficient by the TCEQ.
- Historical Life Loss (15%) Flood fatality and injury data collected by the National Weather Service since 1996.
- Property Damage Exposure (15%) Exposure data representing the number of building structures located within the best available 1% and 0.2% annual chance flood inundation boundaries.
- Property Damage Vulnerability (15%) Vulnerability data representing the number of building structures identified in the 'exposure' layer above within a high vulnerability area (i.e. Social Vulnerability Index > 0.75)
- Property Damage Critical Facilities (15%) Vulnerability data representing critical facilities such as hospitals, schools, fire and police stations, etc. identified in the 'exposure' layer above.
- Historical Property Damage (7.5%) Property damage data provided by the National Weather Service, FEMA, USGS, and local knowledge of flood-prone areas.

• Public Information on Flood Prone Areas (7.5%) – From Nueces River Authority Region 13 flood prone interactive map comments, local stakeholder interviews, and regional roadshows.

Flood Hazard: Data used to evaluate flood hazard includes, but is not limited to:

- 100-year and 500year inundation maps (from Texas Water Development Board). Note: Updated Fathom at 1m digital elevation model level will be performed for the revised plan for coastal, riverine, and local areas to produce 100-year and 500-year inundation maps. Fathom at 30 m level is being used for the draft Plan.
- Low water crossings (from Texas Water Development Board)
- Dams (from Texas Commission on Environmental Quality)
- Historical Flood Data (National Weather Service)
- Public Comments on Flood Prone Areas provided on the <u>on-line interactive map</u>
- Others

Exposure: Considers who and what might be harmed during a flood event including

- Population and residential/non-residential property located in areas where existing levees or dams do not meet FEMA accreditation as inundated by flooding without those structures in place;
- Major industrial and power generation facilities;
- Number and types of critical facilities;
- Number of roadway crossings and length of roadway segments;
- Other public infrastructure; and
- Agricultural area and value of crops exposed.

Vulnerability: Identifies vulnerabilities of communities and critical facilities. It uses the Center for Disease Control/ Agency for Toxic Substances and Disease Registry (CDC/ATSDR) social vulnerability index (SVI) to evaluate the resilience of communities in response to flooding. Areas with critical facilities and SVI structures in the floodplain would be considered highly vulnerable.



Potential Policy Recommendations for Regional Flood Planning Group – Multiple Region Input

Administrative:

- 1. Develop model ordinances for general law cities (e.g., building codes, subdivision regulations, low impact design/development).
- 2. Provide support for ongoing education/training regarding floodplain management in the form of online resources including training modules, webinars, and print resources. Target training for non-technical Floodplain Administrators (e.g., county judges as FPA).
- 3. Assist (funding) smaller jurisdictions in preparing funding applications or make the application process easier. Provide training for COGs to assist cities with funding process.
- 4. Do not score or award funding for projects that benefit agricultural activities based on a traditional benefit-cost ratio; provide guidance on TWDB-preferred methodology to account for benefits to agricultural areas and activities and include consideration of agricultural benefits when ranking projects in the State Flood Plan.
- 5. Do not score or award funding for projects that benefit energy activities based on a traditional benefit-cost ratio; provide guidance on TWDB-preferred methodology to account for benefits to energy activities and include consideration of energy benefits when ranking projects in the State Flood Plan.
- 6. Utilize project scoring that is equitable to project sponsor regardless of their size or population. Scoring metrics should not be included that automatically disadvantage project sponsors because they are large in area or population.
- 7. Develop model floodplain management standards for varied levels of floodplain management practices to encourage increased levels. (low/medium/high)
- 8. Expand consideration and priority for FMEs that establish initial FEMA effective floodplains. Establishing BFEs is a key first step for many communities to consider floodplain management practices and identify FMPs.
- 9. Develop a statewide database and tracking system to document flood-related fatalities that is publicly available. Could be an addition to the Flood Plan Data Hub to capture existing data from TxDOT, NOAA, or others.
- Partner with TFMA to promote public education and outreach about flood awareness and flood safety and provide outreach materials to communities. Partnership with Texas Association of Counties to include dedicated outreach to Floodplain Administrators without a technical flooding background. (e.g., County Judges)
- 11. Use the project list in the State Flood Plan to help connect local communities to federal grant programs that are administered by state agencies (TWDB/TDEM). (One stop application process)
- 12. Expand consideration for projects that do not provide 100-year level of service but can demonstrate substantial benefit during higher frequency events.
- 13. Maintain a flood hazard area map on a public web map platform database, potentially integrated with the existing Water Data interactive site.
- 14. Develop state incentives for local governments to participate in the FEMA National Flood Insurance and Community Rating System program. Develop model process for participation in each program.
- 15. Provide training to state agencies, local governments, engineers, planners in the use of natural floodplain preservation/conservation.

- 16. Develop a model-based future conditions flood hazard data layer using BLE data and provide it for use by RFPGs and the technical consulting teams during the next flood planning cycle.
- 17. Incentivize voluntary buy out programs, turning previously flooded properties/neighborhoods into green space and parkland as an alternative to large-scale construction projects.
- 18. Consider alternate requirements to eliminate barriers that prevent jurisdictions from working together to provide regional flood mitigation solutions. Example, if primary sponsor meets all administrative requirements but additional jurisdictions do not, allow the regional solution to remain in contention for state funding.
- 19. Use consistent HUC reporting requirement throughout the TWDB-required tables.
- 20. Regional flood plans are required to provide an indication of if a flood control solution meets an emergency need. Guidance should be provided on what constitutes an emergency need.
- 21. Regional flood planning process improvements (e.g., streamline data collection requirements, clarify distinction between flood risk and drainage problems).
- 22. Provide funding and/or assistance to develop updated floodplain maps.
- 23. Provide funding to improve safety at low water crossings.
- 24. Increase stream monitoring/flood warning at high-risk flood-prone areas.
- 25. State should consider working with FEMA to increase CRS points for higher building standards.
- 26. Provide training to agencies, governments, engineers, and planners in the use of green. infrastructure (GI).
- 27. Flood Infrastructure Fund (FIF) project selection process should incentivize GI scoring component.

Regulatory:

- 1. Adopt 2015 or 2018 versions of International Building Code and International Residential Code as State building standards. (Improves Texas' BRIC funding eligibility)
- Review TxDOT design criteria to identify opportunities to improve consideration for flood safety. Align with goals and objections of flood planning criteria. Develop funding mechanism for TxDOT to improve facilities flood safety.
- 3. Update TxDOT design criteria to include no adverse impacts requirement for proposed road projects.
- 4. TxDOT design criteria to require all roadways to be above the 100-year floodplain
- 5. Establish a levee safety program similar to the TCEQ dam safety program.
- 6. Recommend (not adopt or require) a statewide building standard of a minimum floor elevation equal to the base flood elevation (BFE) plus freeboard to account for potential changes in future rainfall depths and flood elevations.
- 7. Clarify the process and investment required to take BLE data to 1) regulatory BLE information on a FIRM panel and 2) detailed study on a FIRM panel.
- 8. Encourage FEMA to streamline the CRS application process to make it easier to obtain certification and implement at the local level.
- 9. Encourage FEMA to provide significantly more CRS points for higher standards such as a minimum finished floor elevation equal to the base flood elevation (BFE) plus two feet.
- 10. City and county regulatory authority re: regulation of land use and development in floodplains.
- 11. Provide guidance to manage proposed RV parks.

- 12. Establish guidance standards based on flood risk/region, evaluate variance requests based on this.
- 13. Raise the floodplain protection standard to above the 100-year floodplain (future development too).
- 14. Enforce existing regulations, i.e., Corps of Engineers permit violations.
- 15. Statewide stormwater detention requirement so downstream properties are not affected by new development.
- 16. TxDOT stormwater detention requirements.
- 17. Establish statewide minimum floor elevation based on regional risks/natural environment conditions.

Legislative:

- 1. Provide recurring biennial appropriations to the Flood Infrastructure Fund (FIF) for study, strategy and project implementation.
- 2. Provide State incentives for establishment of dedicated drainage funding (i.e. municipal drainage utilities).
- 3. Provide guidance for use of public funds to improve private properties for flood risk reduction (e.g., elevation of structures in floodplains).
- 4. Provide counties with legislative authority to establish drainage utilities and assess drainage fees.
- 5. Provide counties with expanded regulatory authority to manage new development to reduce future flood risk and benefit water supplies.
- 6. Provide clarity on roles and responsibilities within ETJ areas related to floodplain management activities.
- 7. Develop and allocate State funding to assist privately-owned dam owners and NRCS dams with the costs associated with repair and maintenance of dams.
- 8. Legal impediments to use of public funds to improve private properties for flood risk reduction (e.g., elevation of structures in floodplains).
- 9. Remove barriers that prevent jurisdictions from working together to provide regional flood mitigation.
- 10. Policies that promote consistent land use/drainage regulations within a region (watershed).
- 11. Provide funding for flood early warning systems (rural areas focus).
- 12. Incentivize buy-out programs to convert frequently flooded properties/neighborhoods into parkland.
- 13. Limit/manage breakaway structures placed within the floodway.
- 14. Increase/incentivize conservation easements for land in the 100-year floodplains.

READ ME NOTES FOR REVIEW OF THIS SPREADSHEET

This spreadsheet contains the Preliminary List of Flood Mitigation Projects (FMPs), Flood Mitigation Eva This spreadsheet was informed from stakeholder outreach from March 2022 road shows and individual The objective of this spreadsheet is to document the recommendation of FMPs, FMEs, and FMPs for inc

This spreadsheet is organized by county, except for basin wide tab. Tabs IDs are defined as follows:

N = Nueces U - Upper Basin (Group A) UM - Upper Mid Basin (Group B) LM - Lower Mid Basin (Group C)

L - Lower Basin (Group D)

Each county tab includes all potentially feasible FMPs, FMEs, and FMSs identified by stakeholders Each county tab includes a column to provide the corresponding goal each FMP/E/S contributes toward

Screening of FMPs, FMEs, and FMSs

All FMPs, FMEs, and FMSs were screened for compliance against the TWDB criteria for inclusion in the Columns were added for each county tab to represent the screening criteria A note column was added to capture important notes, especially if a FMP was changed to an FME

A column was added to document if a FME/P/S is being recommended in the regional plan. Recommen FME Recommendations (per TWDB guidance)

Not every conceivable FME will be recommended in the regional plan

The RFPG must decide which FMEs are sensible and make best use of limited resources

FMP/S Recommendations (per TWDB guidance)

Does FMP/S mitigate for 1 percent annucal chance, where feasible? (part of screening criteria) Does FMP/S provide measurable reductions in flood impacts in support of the regionls flood goals? Recommended FMP/Ss may not negatively affect a neighboring area or an entity's water supply (pai Recommended FMP/Ss may not result in an overallocation of a water source based on the water avi

Additional FMP/E/Ss (highlighted in blue) have been suggested by the technical consultant to: address identified high risk flood areas without FMP/E/Ss and to address unmet flood mitigation goals



ailability allocations in the most recently adopted State Water Plan (part of screening criteria)



	RFPG Goal	Goal ID	RFPG	RFPG
Goal ID	ID	Category	No.	Name
13000001	1	LWC	13	Nueces
13000002	1Δ	IWC	13	Νυρέρος
15000002	1/(LWC	15	Nucces
13000003	1B	LWC	13	Nueces
		High		
		Hazard		
13000004	2	Dams	13	Nueces
		High		
		Hazard		
13000005	2A	Dams	13	Nueces
		High		
12000000	25	Hazard	10	Numero
13000006	28	Dams	13	Nueces
		Regional		
		Coordinati		
		on/Flood		
13000007	3	Warning	13	Nueces
		Regional		
		Coordinati		
		on/Flood		
13000008	3A	Warning	13	Nueces
		Regional		
		coordinati		
13000009	2 B	Warning	13	Νυρέρος
13000010	4	Update ma	13	Nueces
		- paare mu	10	
13000011	4A	Update ma	13	Nueces
13000012	4B	Update ma	13	Nueces
		Reduce		
12000042	F	structures	10	Nucces
13000013	5	in 100 yr	13	nueces

Flood Mitigation and Floodplain Management Goals

		Reduce		
		structures		
13000014	5A	in 100 yr	13	Nueces
		Reduce		
		structures		
13000015	5B	in 100 yr	13	Nueces
		Minimum		
13000016	6	standards	13	Nueces
		Minimum		
13000017	6A	standards	13	Nueces
12000018	60	Minimum	12	Nuocos
13000018	OD	stanuarus	15	Nueces
13000019	7	NBS	13	Nueces
13000020	7A	NBS	13	Nueces
13000021	7B	NBS	13	Nueces
		Awarenes		
13000022	8	S	13	Nueces
13000023	80	awarenes s	13	Nueces
13000023		Awarenes	1.7	HULLES
13000024	8B	S	13	Nueces

		Fund		
		drainage		
		maintena		
13000025	9	nce	13	Nueces
		Fund		
		drainage		
		maintena		
13000026	9A	nce	13	Nueces
		Fund		
		drainage		
		maintena		
13000027	9B	nce	13	Nueces
		Fund		
		technical		
		support		
13000028	10	for FPAs	13	Nueces
		Fund		
		technical		
		support		
13000029	10A	for FPAs	13	Nueces
		Fund		
		technical		
		support		
13000030	10B	for FPAs	13	Nueces
-	-	-		

(as of January 2022)

Goal

Improve Safety at Low Water Crossings through Structural Improvements or Warning Systems

Conduct an inventory of low water crossings, characterize risk, and rank low water crossings to prioritize those with high risk. Prepare a large scale public outreach campaign to include "Turn Around Don't Drown" signage at LWCs or roadways aimed at reducing loss of life. Address top 30% of high risk low water crossings through mitigation or warning systems.

Address 80% of high risk LWC identified in the study.

Rehabilitation, Removal or Replacement of Deficient **High Hazard Dams** as Identified by TCEQ Dam Safety Regulation Program

Conduct a comprehensive study to identify all deficient high hazard dams in the 31-county region. Removal or rehabilitation of the top 30% high hazard dams.

Removal or rehabilitation of 100% deficient high hazard dams.

Improve **regional coordination**, data collection/sharing of flood events and impacts, and implementation of flood warning systems

Develop (or expand) a successful flood management program on a regional-scale to cover 20% of the data gap area(s) identified in the 2023 Plan. Prepare large scale public outreach to include "Turn Around Don't Drown" campaigns aimed at reducing loss of life.

Develop (or expand) a successful flood management program on a regional-scale to cover 80% of the data gap area(s) identified in the 2023 Plan.

Perform flood mapping evaluations and update floodplain maps and flood hazard data.

Develop maps to BLE or NFHL level accuracy for 60% of the basin that does not currently have accurate mapping. Identify structures and buildings in the NFHL- Detailed Study Areas with elevations less than 1 ft above BFE. Develop accurate maps to NFHL level accuracy for 100% of the basin. Identify structures and buildings in the NFHL- Detailed Study Areas with elevations less than 1 ft above BFE.

Reduce the number of structures within NFHL-Detailed Study Area and Existing Floodplain with 1% annual chance flood risk.

Identify structures within existing floodplain with 1% annual chance flood risk for 60% of the basin. Prepare a list of high hazard buildings based on function, critical function, repetitive loss, or other community-related importance, summarize, and distribute results to affected floodplain management entities. Reduce the number of high hazard structures within the 1% existing floodplain by 10% for existing structures and identify new structures for targeting with 30-year goal.

Identify structures within existing floodplain with 1% annual chance flood risk for 100% of the basin, including areas that have been updated with more accurate mapping. Prepare a list of high hazard buildings based on function, critical function, repetitive loss, or other community-related importance, summarize, and distribute results to affected floodplain management entities. Reduce the number of high hazard structures within the 1% existing floodplain by 50%.

Prepare **minimum flood management standards**, including identifying operations and maintenance best practices to maintain drainage structures including remove gravel and sediment deposition to mitigate future flooding impacts.

Provide minimum flood standard recommendation(s) adopted by the RFPG for the Nueces Basin to floodplain administrators and community leaders, to include: Finished floor of structures are to be constructed a minimum of 1 foot above base level engineering (BFE) 100 year or based on local ordinances, whichever is more stringent. The standards are based on available data, to be updated with Atlas 14 data when available. Achieve 30% voluntary adoption of the RFPG minimum standards by counties/cities. Define and recommend additional minimum flood standards for regional support towards implementation, as study results become available. Increase the number of communities adopting higher standards beyond National Flood Insurance Program (NFIP) requirements to 50% of counties and 30% of communities (current is 26% counties and 17% communities). Provide advocacy on the regional and state level to ensure that all communities across the region share a baselevel of floodplain management support by 2030.

Achieve 100% voluntary adoption of RFPG minimum standards by counties/cities, including additional minimum flood standards defined during studies conducted through 2033 (10 year). Increase the number of communities adopting higher standards beyond National Flood Insurance Program (NFIP) requirements to 100% of counties and 100% of communities.

Increase nature-based practices through land conservation and restoration programs and participation in landowner incentive programs to encourage voluntary land stewardship practices to manage floodwaters, slow runoff and dissipate flood energy to include riparian, wetland, forest, upland, and other habitat protection Identify existing areas noted for conservation, restoration, and/or habitat protection and develop a strategy for expanding these programs and/or identifying high success areas for riparian/wetland/forest conservation, restoration, and upland protection programs to enhance flood mitigation benefits. Identify preferred areas in Nueces Basin to expand Federal and State land protection programs, and other programs that provide incentives for voluntary land conservation and restoration. Preserve 35% of undeveloped riparian corridor mileage and

Work with local leadership to implement nature-based riparian, wetland, and upland conservation and/or restoration programs for 40% of the high success areas identified. Preserve 80% of undeveloped riparian corridor mileage and protect 50% of acreage within the 100-year floodplain through voluntary, local, state, or federal land conservation programs.

Develop public information campaign to increase community knowledge of rules and regulations, flood-prone areas, and importance of protecting floodplains from encroachment

Identify local, subregional workgroups aligned with flooding issues. Develop public information campaign templates with relevant flood-related communications for 20% of the Region 13 area.

Develop public information plan campaigns with relevant flood-related communications for 80% of the Region 13 area.

Increase dedicated **funding sources to provide maintenance** of drainage and culvert systems (both structural and non-structural solutions) to divert flood flows and identify structural improvements causing flooding issues to remove/rectify.

Dedicated funding sources including state-funding opportunities to support O&M for 20% of the communities and 30% counties in Region 13.

Dedicated funding sources including state-funding opportunities to support O&M for 80% of the communities and 90% counties in Region 13.

Identify **funding**, resources, and technical training for floodplain administrators or designees to **support community outreach** including permitting support to verify new projects meet floodplain development requirements.

Dedicated funding sources including state-funding opportunities for 20% of the communities and 30% counties in Region 13. Develop a strategy for public engagement on flood-related issues including a list of flood mitigation funding programs and potential opportunities for communities to participate in programs to support flood risk reduction (such as FEMA Community Rating System) to serve as a template for rural and underserved communities by 2030.

Dedicated funding sources including state-funding opportunities for 80% of the communities and 90% counties in Region 13.

	Target			
Term of Goal	Year	Applicable To	Overarching Goal	Associated Goal IDs
			Protect against the loss of	
		Entire RFPG	life	13000002, 13000003
	 I			
	I			
Short Term			Protect against the loss of	
(10 year)	2033	Entire RFPG	life	13000001, 13000003
Long Term (30	2052	Cating DEDC	Protect against the loss of	1200001 1200002
year)	2055	Entire Kreg	ine	13000001, 15000002
			Protect against the loss of	
		Entire RFPG	life	13000005. 13000006
				10000000,
Short Term	I		Protect against the loss of	
(10 year)	2033	Entire RFPG	life	13000004, 13000006
Long Term (30	I		Protect against the loss of	
year)	2053	Entire RFPG	life	13000004, 13000005
			Protect against the loss of	42000000 42000000
		Entire REPG	life	13000008, 13000009
	I			
	I			
Short Term	I		Protect against the loss of	
(10 vear)	2033	Entire RFPG	life	13000007. 13000009
(10 ; 00. ;	2000			1000000, 2000000
	I			
	I			
Long Term (30	I		Protect against the loss of	
year)	2053	Entire RFPG	life	13000007, 13000008
		Entire RFPG	Property Damage	13000011, 13000012
Short Term	 I			
(10 year)	2033	Entire RFPG	Property Damage	13000010, 13000012
Long Term (30	I			
year)	2053	Entire RFPG	Property Damage	13000010, 13000011
			Dura rearthy Demogra	12000014 12000015
		Entire REPG	Property Damage	13000014, 13000015

Short Term				
(10 year)	2033	Entire RFPG	Property Damage	13000013, 13000015
Laws Tame (20				
Long Term (30	2052	Entiro REDC	Broporty Domogo	12000012 12000014
year)	2055	Entire KFPG		15000015, 15000014
		Entire RFPG	Floodplain Management	13000017, 13000018
Short Term				
(10 year)	2033	Entire RFPG	Floodplain Management	13000016, 13000018
Long Term (30				
year)	2053	Entire RFPG	Floodplain Management	13000016, 13000017
		Entire RFPG	Floodplain Management	13000020, 13000021
Short Term				
(10 year)	2033	Entire RFPG	Floodplain Management	13000019, 13000021
Long Term (30				
vear)	2053	Entire RFPG	Floodplain Management	13000019, 13000020
, ,				
		Entire RFPG	Floodplain Management	13000023, 13000024
Short Term				
(10 year)	2033	Entire RFPG	Floodplain Management	13000022, 13000024
Long Term (30				
year)	2053	Entire RFPG	Floodplain Management	13000022, 13000023
		Entire RFPG	Funding	13000026, 13000027
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Short Term				
(10 year)	2033	Entire RFPG	Funding	13000025, 13000027
Long Term (30				
year)	2053	Entire RFPG	Funding	13000025, 13000026
		Entire RFPG	Funding	13000029, 13000030
Short Term				
(10 year)	2033	Entire RFPG	Funding	13000028, 13000030
Long Torm (20				
vear)	2053	Entire RFPG	Funding	13000028. 13000029

Unique ID	Type (FMP/FME/ FMS) ¹	ID	Shown on Map?	Name
N1	FME		No	Nueces Basin early flood warning system
N2	FME		No	Nueces Basin low water crossing study and upgrade prioritization
N3	FME		No	Nueces Basin High Hazard Dam identification and risk assessment
N4	FME		No	Nueces Basin Floodplain Map Updates
N5	FMS		No	Nueces Basin Minimum Flood Management Standards
N6	FMS		No	Nueces Basin floodplain restoration and preservation
N7	FMS		No	Nueces Basin flood public information campaign

N8	FME	No	Nueces Basin Assessment of Flood Mitigation and Performance of Nature-based Solutions (NBS)
N9	FME	No	Scaling Up Nature Based Solutions (NBS) in the Nueces Flood Planning Region to support community resilience and enhance flood and hazard mitigation planning

¹ Flood Management Evaluation (FME)- flood study of a specific flood prone area needed to as Flood Mitigation Project (FMP)- structural or non-structural project that when implemented w Flood Management Strategy (FMS)- proposed plan to reduce flood risk or mitigate flood hazar Description

Develop Flood Preparedness Toolsets Using Streamgaging and Flood Inundation Mapping to develop a basin wide early flood warning system.

Conduct an inventory of low water crossings, characterize risk, and rank low water crossings to prioritize those with high risk. Prepare a large scale public outreach campaign to include "Turn Around Don't Drown' signage at LWCs or roadways aimed at reducing loss of life. Address top 30% of high risk low water crossings through mitigation or warning systems.

The basin includes 116 TCEQ regulated dams. Of these 7 are hydraulically inadequate or 'non-funtional' and 9 are in poor condition or 'deficient'. This study would identify all deficient high hazard dams in the 31-county region and recommend the removal or rehabilitation of the most high hazard dams.

Develop floodplain maps to BLE or NFHL level for HUC 12 watershed areas within the basin that have a high flood risk but do not currently have accurate mapping. Accurate mapping is defined as to BLE or NFHL level accuracy. High flood risk HUC 12 watersheds are defined as having a total flood risk score of greater than 1.0 per the Regional Flood Plan.

Promote minimum flood management standards and identify and promote best preactices to maintain drainage structures. Minimum flood management standards to require finish floor of structures to be constructed one foot above 100-year base flood elevations or based on local ordinances, whichever is more stringent. Best practices to include guidance on the removal of gravel and sediment deposits to mitigate future flood impacts.

Identify existing areas noted for conservation, restoration, and/or habitat protection and develop a strategy for expanding these programs and/or identifying high success areas for riparian/wetland/forest conservation, restoration, and upland protection programs to enhance flood mitigation benefits. Identify preferred areas in Nueces Basin to expand Federal and State land protection programs, and other programs that provide incentives for voluntary land conservation and restoration. Goal is to preserve 35% of undeveloped riparian corridor mileage and protect 25% of acreage within the 100-year floodplain through voluntary, local, state, or federal land conservation programs.

Identify local, subregional workgroups aligned with flooding issues. Develop public information campaign templates with relevant flood-related communications.

Basin-wide analysis on the flood mitigation value of select nature-based solutions (NBS) at a variety of scales and land use types; study will include both modeling and real-world site monitoring. Methodologies will be designed with input from key stakeholders, including TWDB, FEMA, USACE, and others, looking for consistent, accurate, and broadly applicable methods to quantify flood mitigation benefits of NBS.

Multi-jurisdictional feasibility analyses (hydraulic modeling, benefit-cost assessment, and stakeholder prioritization) will be performed in targeted areas to identify a prioritized portfolio of NBS flood mitigation projects and strategies that consider both risk reduction and ecological benefits.

sess risk

"ill reduce flood risk, mitigate hazards to life or property. Includes nature-based solutions. 'No negative impact' "ds. Any action that a RFPG would like to evaluate and recommend that does not qualify as FME or FMP.

Cost	Sponsor	Goal	RFPG Goals ID	Goal ID Category	Recommend	1. Completed?
\$ -	Nueces River Authority	13000009	3В	Regional Coordinatio n/Flood Warning	Yes - major issue in Leakey on Frio, Camp Wood on Nueces, Atascosa County, helps meet Goal 3 (flood warning system)	Ν
\$ -	Nueces River Authority	13000002	1A	LWC	Yes - major life safety issue in upper basin due to flash flooding and numerous low water crossings, needed to meet Goal 1 (Low Water Crossings)	Ν
\$ -	Nueces River Authority	13000004	2	High Hazard Dams	Yes - needed to meet Goal 2 (high hazard dams)	Ν
\$ -	Nueces River Authority	13000011	4A	Update maps	Yes - needed to meet Goal 4 (floodplain maps)	Ν
\$ -	Nueces River Authority	13000016	6	Minimum standards	Yes - needed to meet Goal 6 (min. flood standards)	Ν
\$ -	Nueces River Authority	13000020	7A	NBS	Yes - needed to meet Goal 7 (nature- based practices)	Ν
\$-	Nueces River Authority	13000028	10	Fund technical support for FPAs	Yes - needed to meet Goal 8 (flood public information campaign)	Ν

\$ -	The Nature Conservancy	13000019	7	NBS	Yes - needed to meet Goal 7 (nature- based practices)	Ν
\$-	The Nature Conservancy	13000019	7	NBS	Yes - needed to meet Goal 7 (nature- based practices)	Ν

2. Sponsor confirmed? (- if haven't talkedto sponsor yet, N if sponsor says project is no longer feasible)	3. Funding identified ?	4. FME: Reasonable planning-level estimate?	5. FME: Flood knowledge gap in the area?	6. FMS: Reasonable planning level cost estimate?	7. FMS: Estimated flood risk reduction?
-	-	Ν	Y	-	-
N	N	Ν	Y	-	-
Ν	N	Ν	Y	-	-
N	N	N	Y	-	-
Ν	N	Ν	Y	-	-
Ν	Ν	Ν	Y	-	-
N	N	N	Y	-	-

Y	N	Ν	Y	-	-
Ν	N	Ν	Y	-	-

8. FMP: Discrete project, not a set of projects?	9. FMP: An entire capital program or drainage program? (If yes, not eligible or must be split.)	10. FMP: Does it provide mitigation for the 1% annual chance flood event?	11. FMP: Drainage area > 1 mi^2, or involves critical facilities/transportation routes?
-	-	-	-
-	-	-	-
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-	-	-	-
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12.1. FMP: Project area prone to flooding that threatens life and property?	12.2. FMP: Project area meets an emergency need?	12.3. FMP: Project area has historic flooding events?
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13. FMP: Sufficient/reliable data? (If not, consider an FME)	14.1. FMP: Evaluation includes detailed H&H modeling and quantified impacts?	14.2. FMP: An indication regarding the potential use of federal funds, or other sources of funding?
-	-	-
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14.3. FMP: Demonstration for no adverse Impacts?	14.4. FMP: A description of all other potential risks, benefits, and impacts?	15. FMP: Benefit cost ratio > 1.0?	Notes (Note here if project was demoted from FMP to FME, etc.)
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HDR Staff Assignment	HDR Materials to Help GDB Process	HDR Staff Note	Duplicate ?
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Unique ID g	Type FMP/FM E/FMES) ¹	10	ihaws on Map?	Name	Description	Cost Sporeco	Goal	RFPG Goalt ID	Goal ID Category	Recommend	1. Completed?	 Sponsor confirmed?) if haven't takedto sponsor yet, N if sponso says project is no longe feasible) 	2. Funding identifie d?	4. FME: Reasonable planning-level ectimate?	5. FME: Flo knowledg gap in the area?	od Resocrable planning level cost octimate?	7. FMS: Estimated floo risk reduction	8. FMP: Discrete project, not a set of projects?	9. FMP: An entire capital program or drainage program? (If yes, not eligible or must be split.)	10. FMP: Daes it provide mitigation for the 1% annual chance flood event?	11. FMP: Drainage area > 1 mi*2, or involves critical facilities/transportation noutes?	12.1. FMP: Projec area prone to flooding that threatens life and property?	12.2. FMP: Project area meets an emergency need?	12.3. FMP: Project area has historic flooding overts?	13. FMP: Sufficient/reliable data (if est, consider an FME)	54.1. FMP: Svaluation includes: detailed HBH modeling and quartified impacts?	14.2. FMP: An indication regarding the patential use of federal funds, or other sources of funding?	16.3. FMP: Demonstration for no adverse impacts?	14.4. FMP: A description of all other potential risks, benefits, and imports?	15. FMP: Benefit cor ratio > 1.0	Notes (Note here if project was demoted from FMP to FME, etc.)
U1.1	FMP	122000342	No Ec	Potential for field-Material Entrainment in selected Streams of the Edwards Pitteau idwards, Kimble, and Real Counties, Texas, and Vicinity	Issues on the fording of "Potential for lake Material Contrainment in Selendar Streams of the Kalawski. Pitrams—Selendar (Institus, And Mail Contrain, Texas, and Yolding). It is built and the any call to its matchet, in the scorar vehich the Kalawski Pitrama in Central Texas that extrained the material with the capacity to damage Low Whate Crassis, Basel and the the regulating that is changing events. You data pages barefacts and solar way to reface are eliminate the damage that court at the locations of the Low Whate Crassis), Basel and the damage law are uncertained and the regulating that count at the location of the Low Whate Crassis). Basel and the damage law are uncertained to the damage that court at the location of the Low Whate Crassis). Basel and the damage that court at the location of the law Whate Crassis). Basel and the law the low Whate Crassis is a low of the law th	S - Edwards, Kimble and Real	1300013	5	Reduce structures in 100 yr	Yes - one of the major issues identified in upper basin	N								N	-	¥	¥	-	¥	¥	¥	N	N	¥		Screening is on the previous study report.

¹ Pland Monsenser Eviduation (PMI)². Bool study of a superfit fixed array are needed to same, risk Rood Mangare Anaport (PMI)² structure array encourse array encourse and the start and array array (and array arr Array a

Uni	T) Gue IG (FMI E/FI	gpe P/FM MS] ¹		hown on Map?	Name	Description	Cast	Spansor	Goals	RFPG (leals ID C	aal ID Recor Regory	commend 1. Completed?	2. Sponsor confirmed? {- if haven't talkedto sponsor yet, N if sponsor says project is no longer feasible)	2. 4. FM Funding Reasons identifie planning d? estimat	E: S.FM ible kno level gap te? a	E Rood dedge in the sa7 6. RM Reasons planel level co estimat	s: tble 7. FMS g Estimated f set risk reduct se?	L R Disc flood project ion? set proje	P: S. FMP: An er te capital progra not a drainage prog d (if yes, not eligi ts? must be spi	in 10. FMP: Does it or provide mitigation fr the 1% annual change flood event?	11. FMP: Drainage area > 1 miP2, or involves critical facilities/transportation routes?	12.1. FMP: Projec area prone to flooding that threatens life and property?	12.2. FMP: Project area meets an emergency need?	12.1. FMP: Project area has historic flooding events?	11. FMP: Sufficient/reliable data (If not, consider an FME)	14.1. FMP: Evaluation includes detailed H&H modeling and quantified impacts?	14.2. FMP: An indication regarding the potential use of federal funds, or other sources of funding?	E 14.3. FMP: Demonstration for no adverse impacts?	14.4. FMP: A description of all other potential risks, benefits, and impacts?	15. FMP: Benefit cost ratio > 1.0?	(Nob demot
	2.1 FI	ME 1	31000069	No	Camp Wood City-wide Drainage Study	Camp Wood City-wide Drainage Study		City of Camp	13000012	40	pdate need a	es - high ed and no																			

¹ Read Messaement Factation FMRS: Read rades of a carcific Read error area needed to assess tak Read Messaement Factacion FARS: Read rades of a carcific Read error area needed to the read of the second taken to the or property, includes outer-based taaktors. 'No negative impact' Read Messaement Strong FARS: properties for induced for of an originary food tensors, why areas the task for avail take to evaluate and recommend that days in a quely as FAR or ARD. Read Messaement Strong FARS: properties for induced for all are instructed tensors, whereas the task for avail take to evaluate and recommend that days in a quely as FAR or ARD.

Public Com	ments			
Comment		Road		
Opte	Flood Type	Frequency	Most Recent Flood Event	Description
-	Frequently	-	-	
				Recent flash floods /0 Hwy 82/FM 1120 - "Comes as a thief in the nieht"
3/21/2022				Leakey Road Show - Camp Wood flood prone area pointed out by stakeholders 1
3/21/2022				Leakev Road Show - Camp Wood flood prone area pointed out by stakeholders 1
3/21/2022				Laskey Enal Onay - Care Wood Bood sons area minted out by stakeholders 1

Unique	Type (RMP/FM ID E/FMS) ¹	Shawn an Map?	Name	Description	Cost	Spansor	Goals	Recommend	1. Completed	2. Sponsor confirmed? (- if haven't talkedto spansor yet, N if sponsor says project is no longer feasible)	2. Funding identifie d?	4. FMI Reasona planning- estimat	l: S. FM ible kno -level gaj te? /	ME: Flood owledge ap in the area?	6. FMS: Reasonable planning level cost estimate?	7. FMS: Estimated floor risk reduction?	8. FMP: Discrete project, not set of projects?	9. FMP: An entire capital program or a drainage program? (if yes, not eligible o must be split.)	10. FMP: Does it provide mitigation for the 1% annual chance flood event?	11. FMP: Drainage are > 1 mi*2, or involves critical facilities/transportatio routes?	a 12.1. FMP: Project area prone to flooding that threatens life an property?	t 12.2. FMP: Project area meets an emergency need?	12.3. FMP: Project area has historic flooding events?	13. FMP: Sufficient/reliable data? (If not, consider an FME)	SILL FMP: Evaluation includes detailed H&H modeling and quartified impacts?	54.2. FMP: An indication regarding the potential use of federal funds, or other sources of fundion?	14.3. FMP: Demonstration for no advene impacts?	14.4. FMP: A description of all other potential risks, benefits, and impacts?	15. FMP: Benefit cost ratio > 1.07	Notes (Note here if project was demoted from FMP to FME etc.)
U.2.1	1																													

¹ Root Management Sociation FMRI: front index of a userfit front once error needed to assess risk Root Mingation Prijet (FMR): statuard or non-structure project that when represented will end act from millight hazards to He or property. Includes nature-based sociations. This negative impact Root Minagement Printing FMRI: propulsion in trades ploted in a millight from Manach Ave action that a RPM would like to reduce and recomment that does not quality as FMI or HAP.

Unique II	Type (FMP/FM I 5/FMS) ⁴	Showr on Map?	Name	Description	Cost	Sponsor	Goalt RFPG Goalt I	Goal ID D Category	Recommend	1. Completed?	2. Sponsor confirmed? (- if haven't talkedto sponsor yet, N if sponsor says project is no longer feasible)	2. 6. FME: Funding Reasonable identifie d? ectimate?	5. FME: Floc incoviedge of gap in the area?	od Reaconable planning level cost estimate?	2. FMS: Disorder Estimated flood risk reduction? set of projects?	9. FMP: An entire capital program or a drainage program? (yes, not eligible or must be split.)	10. FMP: bass it provide mitigation for the 1% annual chance flood event?	11. FMP: Drainage area > 1 miP2, or involves oritical facilities/transportation noutes?	12.1. FMP: Project area prone to flooding that threatens life and property?	12.2. FMP: Project area meets an emergency need?	12.3. FMP: Project area has historic flooding events?	13. FMP: Sufficient/reliable data? (If eat, consider an FME)	54.1. FMP: Evaluation includes detailed HBH modeling and quantified impacts?	14.2. FMP: An indication regarding the patential use of federal funds, or other sources of fundine?	14.3. FMP: Demonstration for no adverse impacts?	14.4. FMP: A description of all other potential risks, benefits, and impacts?	15. FMP: Benefit cost ratio > 1.0?	
U4.1	FME	Yes	BRIDGE REPLACEMENT -5.208 MILES EAST OF FM 2691	TXDOT Road Project - 085504022	\$ 1,456,894	TKDOT	12000001 1	LWC	No - lack of information on need and benefit			- Y	Y		¥	N												in a
U4.2	FME 13100	1020 Yes	USGS Flood Warning Modeling on the Sabinal River	Developing Flood Preparedness Toolsets Using Streamgaging and Flood inundation Mapping	s -	Randera County, Uvalde County	13000007 2	Regional Coordination/ Dood Warning	No - angoing project																			ī

¹ Paod Monoennert Seclarion (PMID: facel study of a specific faced arrow area needed to surser init Road Milgation Policy (FMP): Structural or non-structural project face who implemented will relace place init, miligate hazards to kje ar property. Includes nature based toketion. You negative Road Millagement Printing (PMIC) property faces in the miligate face structure. Any excitate that a RPR anadit like to evolute and recomment that den not qualify an IRA's rAN.

Unique IC	Type (RMP/YME ID /FMS) ¹	Shown on Map?	Name	Description	iost Spo	nsor Goals	Recommend 1. Complete	2. Sponsor confirmed haven't talkedto spor yet, N if sponsor sa project is no longe feasible)	? (- if noar ys identifie r ?	4. FME: Ressonable planning-leve estimate?	S. FME: FI knowledge in the an	6. FMS: load Reasonabl gap planning lev ea? cost estimate?	7. FMS: Estimated floo risk reduction	8. FMP: Discrete project, not a set of projects?	 FMP: An entire capital program or drainage program? (I yes, not eligible or must be split.) 	10. FMP: Does it provi mitigation for the 15 annual chance flood event?	a 11. FMP: Drainage area > 1 mi ³ 2, or involves critical facilities/transportation routes?	12.1. FMP: Project area prone to flooding that threatens life and property?	12.2. FMP: Project area meets an emergency need?	12.1. FMP: Project area has historic ficoding events? (If not, consider ar	ée data? ME) Qua	RMP: Evaluation includes alled H&H modeling and quantified impacts? f	14.2. FMP: An indication regarding the potential use of referal funds, or other sources of funding?	14.3. FMP: Demonstration for no adverse impacts?	14.4. FMP: A description of 17 all other potential risks, Bee benefits, and impacts? rat	. FMP: (Note h efit cost io > 1.07	Notes here if project was ad from FMP to FME, etc.)
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¹ Road Menament Existing RMP: food sub-of a world: fload more are welled to summ init Road Menament Existing RMP: structure and a new transmerie with reading fload init, religate hausts to the a property. Include nature based solutions. You negative impact Road Menament Resign RMP: structure and reading and regional social and reading RMP. The reliast and examined that dawn will quely a RMP or RMP. Read Menament Resign RMP: structure and read for RMP. Integrate Resign Resign

Type (FMP/FME/ FMS) ¹	ID	Shown on Map?	Name	Description	Cost	Sponsor
FMP	133000003	No	County Wide Early Flood Warning System	Self-Supporting Tower for Early Warning System	\$ 219,000	TWDB FIF, Uvalde County
FME	131000020	Yes	USGS Flood Warning Modeling on the Sabinal River	Flood Preparedness Toolsets Using Streamgaging and Flood Inundati	\$ -	Bandera County, Uvalde County
FME		No	Uvalde City-wide Drainage Study	Uvalde City-wide Drainage study to further define existing flood risk and to recommend flood risk reduction measures.	\$ -	City of Uvalde

¹ Flood Management Evaluation (FME)- flood study of a specific flood prone area needed to assess risk

Flood Mitigation Project (FMP)- structural or non-structural project that when implemented will reduce flood risk, mitigate hazards to life or property. Includes nature-based solutions. 'No negative impact'

Flood Management Strategy (FMS)- proposed plan to reduce flood risk or mitigate flood hazards. Any action that a RFPG would like to evaluate and recommend that does not qualify as FME or FMP.

Public Comments

Comment Date	Flood Type	Flood Frequency	Most Recent Flood Event	Description	
-	-	-	-	in Uvalde. Roads and bridges are damaged above Barksdale to below	w Carrizo Springs. Flow ranges fr
-	-	-	-	od plain from the headwaters to below Concan. Homes are flooded a	and a few washed downstream l

Unique ID	Type (FMP/FM 12 6/FMS) ¹	Showr Map	on Name ?	Description	Cast	Spansar	Gaals	RFPG Goal I Scals ID Catego	D Recomme	nd 1. Comp	2. Sponsor confirmed? (- if hauen't talkedts sponsor yet, N if sponsor says project is no longer feasible)	i. 6. FME: ding Reasonable rtifie planning-level I? extimate?	5. FME: Floor knowledge gap in the area?	6. FMS: Reasonable 7. FB planning Extimate level cost risk redu ectimate?	8. FMP: bicrete d flood project, no action? set of projects	9. FMP: An entire capital program or drainage program? (yes, not eligible or must be split.)	10. FMP: Daes & provide mitigation for the 1% annual chance flood event?	11. FMP: Drainage area > 1 mi^2, or involves oritical facilities/transportation nautes?	12.1. FMP: Project area prone to flooding that threatens life and property?	12.2. FMP: Project area meets an emergency need?	12.3. FMP: Project area has historic flooding overts?	13. FMP: Sufficient/reliable data? (If not, consider an FME)	14.1. FMP: Evaluation includes detailed HBH modeling and quantified impacts?	54.2. MMP: An indication regarding the potential use of federal funds, or other sources of funding?	14.3. FMP: Demonstration for no adverse impacts?	14.4. FMP: A description of all other patential risks, benefits, and impacts?	15. FMP: Renefit cost ratio > 1.0?	Notes (Nate here if project was demoted from FMP to FME, etc.)
u7.1	FME 13300	021 Yes	BRIDGE REPLACEMENT -AT SECCO CREEK	TKBOT Road Project - 059502834	\$ 2,176,000	TREAT	13000001	1 100	No - lack of info on need and b	mation exefit					¥	N												Not much info at hand about the TXDOT projects. Downeraded to FME
u7.2	FME 12200	122 Yes	BRDGE REPLACEMENT AT HONDO CREEK	TKDGT Road Project - 086804049	\$ 2,222,101	TODOT	12000001	1 1000	No - lack of info on need and b	rmation exefit					¥	N												Not much info at hand about the TKDOT projects. Downeraded to FME
u7.3	FME 43300	ess ver	BRIDGE REPLACEMENT -AT SAN FRANCISCO CREEK	THEOT Road Project - 253003015	\$ 861,800	TODOT	12000005	1 UNC	No - lack of info on need and b	rmation ecefit					Y	N						_						Not much info at hand about the TXDOT projects. Downeraded to FMS
u7.4	FME 43300	ese ve	BRIDGE REPLACEMENT -1.52 MI E. OF SH 173	THEOT Road Project - 264903835	\$ 2,784,200	TREAT	13000001	1 1800	No - lack of info on need and b	rmation ecefit					¥	N		_		-	-			-		-		Not much info at hand about the TKDOT projects. Openeraded to FME
u7.5	FME 13100	062 No	City of Hondo Drainage Master Plan and Flood Mitigation plan	City of Hondo Drainage Master Plan and Flood Mitigation plan	s -	City of Hondo	13000013	S structure 100 v	a Is in Yes - high new r w/inerable a	sd. in 1993. N	Y N																	
u7.6	FME 12100	072 No	D'Hanis Rood Study	D'Hanis Flood Study needed from Leakey road show on 3/21/2022		Medina County	13000050	4 Update r	Yes - high nee benefit	d and N	Y N		Y															
u7.7	FME	No	Burnt Boot Creek Drainage Improvement Project	Two-phase project to improve drainage at Burnt Boot Creek in Devine, TX.	\$ 4,980,244	City of Devine	13000013	S structure	e is in Yes - abund information his	ant N	Y N				¥	N	×	Y	w.	N	Y	-				-		
u7.8	FMS	No	Education and Outreach	Grate a public outwark program to educate the community on the benefits of building code enforcement and flood hazard mitigation strategies. Alon, considerate regionally regarding flood early warning systems currently implemented in our region. Prepare handours, web costent, and workhops, Pramote higher floodplain management transdati and flood insurance.	-	City of Hondo	13000034	SR Awaren	ess Yes - high new	id. in	,																	
u7.9	FMS	No	Review and Adoption of Updated Building Codes	Review and Adoption of Updated Building Codes	-	City of Manufa	13000016	6 Minim	am Yes - high new	sd. in	Y N																	
u7.90	FMS	No	Subdivision Ordinance Revision	Create new Subdivision Ordinance and development standards to ensure the city is proactive in our regulatory practices and to ensure that the standards sign with flood hazard miligation strategies. This pojeck would use the data generates from an update Comprehensive Plan, Drainage and Stormwater Plan, and Flood Hazard Mitgation Plan to oreate effective regulatory misusements for American and Flood Hazard Mitgation Plan to oreate effective regulatory misusements for American and most hazard strates are worth.	\$ 100,000	City of Hondo	13000016	6 Minim standa	urn Ids Yes - high nee uurinarahie v	st.in	, N			y N														
u7.11	FME	No	Comprehensive Plan Update	- Control on Functional Control (and production and an end production) all and production and and	\$ 200,000	City of Hondo	12000016	6 Minim standa	um da Yes - high ner vulnerable a	eLin nea N	Y N	v	×															
u7.12	FME	No	Flood mapping updates and hydrologic and hydrauli modeling	Scope would likely include updating the Hydrology and Hydrolic modeling for approximately 5 miles of study stream for the Hondo area. The goal would be to then use this data to apply to FEMA to update the flood mapping within the Gty and immediate area.	\$ 100,000	City of Hondo	13000050	4 Update r	taps Yes - high new winerable a	st. in N	Y N	¥	¥															
u7.13	FME	No	Drainage and Stormwater Master Plan	Scope would include restudy of the Oty's floodpinis and creation of a halistic plan for the Oty's drainage and scorewaster system. This data would then be used as a foundation to update the Oty's fability of ordinance and Building Codes to militate future flood risks.	\$ 150,000	City of Hando	12000013	Reduc S structure 100 y	a Is in Yes - high ner r vulnerable a	nd. in N	Y. N		·															
u7.54	FME	No	Emergency Management Plan and Flood Hazard Mitigation Plan	Constant of a prin to discover proposal constant and a second properties of the second propertie	\$ 150,000	City of Hondo	12000012	Reduc 5 structur 100 y	a is in r Yas - Ngh nee	nd. in		r.	v															
u7.15	FINE	No	Feasibility Study for Regional detention	Create a feasibility study for Regional Detection areas to be incorporated into comprehensive drainage planning projects.		City of Hando	12000013	S structure 100 v	a Is in Yes - high nee 7 vulnership v	nd. in nea. N	, L	n	·					_		_								
U7.56	FMS	No	Update City's Flood Hazard Mitigation Ordinance	Update the City's Flood Hazard Mitigation Ordinance to ensure proper regulation of NFP requirements and to implement higher standards of Boodolain management		City of Hondo	13000016	6 Minim	am Yes - high new ds. vuinerable a	id. In Deal N	Y N			N N														
u7.17	FINE	No	City of Natalia Reedplain Study	City wide flood study to evaluate floodplain.		City of Natalia	12000010	4 Update r	naps Yes - high need f	rom the erview N	Y N		Y.															

¹ Flash Monasement Paulantian (FMF)- flood stude of a surelle flood arcses area sended to assess risk Flash Monasement Paulantian (FMF)- flood stude of a surelle, flood arcses are implemented all index of paula risk, paula flood flood, milliopter hannes's the sendent assess area area and Flash Monagement (FMF)- spaced area index of paula flood flo

Comment	Flood Type	Flood	Most Recent Flood Event	Description
	Channel	Unknown		The UPRR Bridge at this location and the Union Pacific Ralinzad infrastructure that runs East-West through the City of Biodo appears to create a damming effect. This bridge/drainage channel and the one in the user and the second of from her cameric have main-and the one in the user scheme of the one of the cameric have main-and the one in the user scheme of the one her cameric have main-and the one in the user scheme of the one her cameric have main-and the one in the user scheme of the one her cameric have main-and the one in the user scheme of the one her cameric have main-and the one in the user scheme of the one her cameric have been been been been been been been be
1		Unknown		Leakev Road Show - Medina flood prone area pointed out by stakeholders 1
1		Unknown		Leakev Road Show - Medina flood prone area pointed out by stakeholders 1
1		Unknown		Leakev Road Show - Medina flood prone area pointed out by stakeholders 1
******		LINKSOMS.		Lating Boat Show - Medica flood some and pointed out by strabulatory 1

Unique (2	Type MP/FME /FMS] ¹	ID	Shown on Map?	7	Name	Description	Cost	Sponsor	Goals Recom	send 1. Complete	2. Sponsor confirmed? (- if haven't talkedto sponsor yet, N if sponsor says project is no longer feasible)	2. Funding identified ?	4. FME: Reasonable planning-level estimate?	5. FME: Floo knowledge go in the area?	6. FMS: Reasonable planning leve cost estimate?	7. FMS: Estimated fload risk reduction?	B. PMP: Discrete project, not a set of projects?	9. FMP: An entire capital program or drainage program? (if yes, not eligible or must be split.)	10. FMP: Does it provid mitigation for the 1% annual chance flood event?	11. FMP: Drainage area : 1 mP2, or involves critical facilities/transportation routes?	12.1. FMP: Project area prone to flooding that threatens life and property?	12.2. FMP: Project area meets an emergency need?	12.3. FMP: Project area has historic ficoding events?	13. FMP: Sufficient/reliable data? (If not, consider an FME)	54.1. FMP: Evaluation include detailed H&H modeling and quantified impacts?	14.2. FMP: An indication regarding the potential use of federal funds, or other sources of funding?	54.2. FMP: Demonstration for no adverse impacts?	14.4. FMP: A description of all other potential risks, benefits, and impacts?	15. FMP: Benefit cost ratio > 1.0?	Notes (Note here if project was demoted from FMP to FME etc.)
UM1.1																														

¹ Road Measurest Execution IRMP: Nood exact of a service final source area needed to source risk Road Measurest ID (RMP): standard and a raw standard party for the relevance of all relevance (Refs and Refs and Refs

Unique II	Type (FMP/FM K/FMS) ¹	in Shev M	winion tap?	Name	Bascription	Cost	Spansar	Goals	RFPG Goal ID Goals ID Category	Recommend	2. Sponsor carifi if haven't talk 1. Completed? sponsor yet, N if says project is no feasible)	ned? (- 2. i idto Funding Re itonger d? en	I. FME: S scorable ning-level timate?	FME: Flood knowledge gap in the area?	6. FMS: Reasonable planning level cost ectimate?	7. FMS: Estimated flood risk reduction?	8. FMP: Discrete sject, nat a set of projects?	9. FMP: An entire capital program or drainage program? (If yes, nat eligible or muct be split.)	10. FMP: Does it provide mitigation for the 1% annual chance flood event?	11. RMP: Drainage area > 1 mPQ, or involves critical facilities(transportation routes?	12.1. FMP: Project area prone to flooding that threatens life and property?	12.2. FMP: Project area meets an emergency need?	12.3. FMP: Project area has historic flooding events?	13. FMF: Sufficient/veliable data? (If not, consider an FME)	14.1. FMP: Evaluation includes detailed H&H modeling and quantified impacts?	54.2 FMP: An indication regarding the potential use of federal funds, or other sources of funding?	54.3. FMP: Demonstration for no adverse impacts?	54.4. FMP: A description o all other potential ricks, benefits, and impacts?	f 15. FMP: Benefit ca ratio > 1.0	Notes (Note here if project wa demoted from FMP to FM etc.)
UN2.1	FME H		Tes (8005	GE REPLACEMENT - LIRO MUSS SOUTH OF UVALUE COUNTY LINE	TVDOT Server Benjare - AND 200948	< «c.mn.mn	TVOOT	13000001	1 LWC	No - lack of information on need and hereify			¥	¥			×	×			·									Not much info at hand about the TxDOT project Downgraded to FME
UND.2	FME 12	2000000 1	1es 98105	GE REPLACEMENT 'S 208 MILES EAST OF FM 2691	TXD0T Road Project - 193702032	5 6886071	TKDOT	13000001	1 LWC	No - lack of information on need and hereify			¥	¥			×	×			·									Not much info at hand about the TKDOT projects Downgraded to FME
UM2.3	13 FME	1000067	No	Cristal City City-wide Davinans Reuty	Crystal City City-wide Brainaas Study		City of Crystal City	13000010	4 Update maps	Yes - high need in vulnerable area, stakeholder request	N Y	N	-	¥																

¹ Rood Manaament Evaluation (RWF)- fload much of a starklic fload arraw area needed to assess risk Rood Manaament Evaluation (RWF)- fload much of a starklic fload arraw and a stark and a

Public Com	ments			
Comment Date	Flood Type	Fload Frequency	Most Recent Road Event	Description
3/4/2022	Channel	franciantia		Denativies Ecology such of the rise to salable houses Ecologi
2/4/2022	Channel	franciantia		Banatikius Republics Cast of the rins No naishborhoods Rooded
3/9/2022	Channel	frequently		Cotults Road Show - Crustal City flood prone point entered by stakeholder 1

Type (FMP)FM E/FME) ⁴ Unique IC	10	Shown on Map?	Name	Description	Cost Spo	nsar Go	als Recommend	1. Completed?	2. Sponsor confirmed? (- if haven't talkedto sponsor yet, N if sponsor says project is no longer faasbie)	4. FME: Reasonable planning-level extimate?	5. FME: Floo knowledge gap in the area?	d 6. FMS: Reasonabl planning level cost estimate	e 7. FMS: Estimated fload risk reduction?	8. FMP: Discrete project, not a set of projects?	9. FMP: An entire capital program or drainage program? (If yes, not eligible or must be spilt.)	10. FMP: Does it provide mitigation for the 1% annual chance flood event?	11. FMP: Drainage area > 1 mP2; or involves critical facilities/bransportation routes?	12.1. FMP: Project area prone to flooding that threatens life and property?	12.2. FMP: Project area meets an emergency need?	12.3. FMP: Project area has historic flooding events?	12. FMP: Sufficient/reliable data? (If not, consider an FMS)	14.1. FMP: Evaluation includes detailed H&H modeling and quantified impacts?	14.2. FMP: An indication regarding the potential use of federal funds, or other sources of funding?	54.3. FMP: Demonstration for no adverse impacts?	14.4. FMP: A description of all other potential risks, benefits, and impacts?	15. FMP: Benefit cost ratio > 1.0?	Notes (Note here if project was demoted from FMP to FME, etc.)
FME		No	Colorado Street Drainage Improvemento-FH#1	Install series of underground storm water trunk lines and drop structures along Garcia Street and Calorado Street before outfalling in to trapezoidal channel on S. Puerte Street.	\$ 2,803,500.00 Pea	y of rsall 1300	Yes - stakeholder provided, high need area		y N	¥	Y			¥	×			¥	Y	¥		N	×				From SDDN Draft City of Pearcall Drainage Masterplan Report, which will be writed on soon
FME UMB-2		No	Trinity Street & N Cherry Street Drainage Improvements- RH2	Install siniles of underground storm water trunk lines and drop structures sloog NDerry street. Seiving in to the exising 2-81/2" concrete books on W San Amonio Street.	\$ 8,120,200.00 Pea	y of rsall 1300	Yes - stakeholder provided, high need area	N	Y N	v	¥			¥.	N			¥	¥			N	N				From SDDN Draft City of Pearcall Drainage Masterplan Report, which will be voted on soon
FME UMBL3		No	W Consil St & FM 1581 Drainage Channel-FHRR	Install trapecoidal concrete channel and upcice existing culverts at the crossing on W Comal Street and W San Atoxio street at FAI1581 Intersections.	\$ \$74,000.00 Pea	y of rsall 1300	Yes - stakeholder provided, high need area	N	Y N	v	¥			¥.	N			¥	¥				N				From SDDN Draft City of Pearcall Drainage Masterplan Report, which will be voted on soon
FME		No	W Pena St and N Mulberry St Drainage Improvements- FilM	install series of underground storm water trunk lines and drop structures along Pens street and N Willow street tie-ing in to the wising 10'w' concrete bases on N M alberry Screet.	\$ 2,528,600.00 Pea	y of ruali 1300	Yes - stakeholder provided, high need area	N	Y N	¥	×			¥	N	-		¥	Y	¥	-	N	N				From SDDN Draft City of Pearcall Drainage Masterplan Report, which will be voted on soon
FME UMD.5		No	Peanall RV Park on Guadalupe Street Drainage Improvements- RHBS	Install underground storm water truek lines and drop structures at the intersection of Fowerplant Raad and Guadalupe Storet carrying drainage to avoid flooding before outfuling in to earthern scale on Fowerplant Raad.	\$ 2,445,600.00 CR	y of rsall 1300	Yes - stakeholder provided, high need area	N	Y N	Y	×			v	N	-	-	Y	y.	Y	-	N	N				From SDDN Draft City of Pearcall Drainage Masterplan Report, which will be voted on soon
FME UMD.6		No	Westview Apartment Detection Fond Underground Drainage-FHB6	Install series of underground storm water trunk lines and drop structures in the alley running along Calorado Street before Se-ing in to the proposed drainage on Garcia Street.	\$ 1,556,100.00 Pea	y of rsall 1300	Yes - stakeholder provided, high need area	N	Y N	Y	×			v	N	-	-	Y	y.	Y	-	N	N				From SDDN Draft City of Pearcall Drainage Masterplan Report, which will be voted on soon
FME		No	S Roosevelt Street and & Haynes Avenue Drainage Field?	Install series of underground storm water lines and dop structures along \$ Roosevilt Screet and 5 Carter Street acquiring drainage essencest of 37000 \$F south west of \$ Roosevilt Screet tie-ing in to the existing existing earthern-channel on \$ Daix Street.	\$ 5,092,500.00 Pea	y of rsall 1300	Yes - stakeholder provided, high need area		y N	¥.	Y			¥	x			¥	¥	Y		×	N				From SDDN Draft City of Pearcall Drainage Masterplan Report, which will be voted on soon
FME UMD.8		No	N Roosevelt Street and Chapparal Road Drainage Field	Install series of underground storm water lines and drop structures on N Rosevelt Street acquising drainage essenent of 12:000 SF nosth of intersection of 5 Rosevelt Street and Chappanal Read outfailing to existing earthern scale on Nal Road(SE2015).	\$ 4,992,100.00 Pea	y of rsall 1300	Yes - stakeholder provided, high need area		y N	¥	Y			¥	×			¥	¥	¥		N	×				From SDDN Draft City of Pearcall Drainage Masterplan Report, which will be writed on soon
FME UMB-9		No	Gillam Rd Drainage Improvements- Field	Install series of underground storm water lines and drop structure using Lona Vota Closed street and Gilliam road near Sever Treatment Plant tainig in to the existing Channel on FMSSEL.	\$ 1,862,400.00 Pea	y of rsall 1300	Yes - stakeholder provided, high need area	N	Y N	v	¥			¥.	N			¥	¥				N				From SDDN Draft City of Pearcall Drainage Masterplan Report, which will be voted on soon
FME		No	CR001 and I-35 Access Read Drainage-FHIED	Install trapeoidal concrete channel and proposed culvert cossing ut the driveways along south of IV-35 access at CM001 Se-ing in to the existing drainage channel 1700 UF south of the intersection of IV-35 access at CM001.	\$ 2,524,100.00 Pea	y of rsall 1300	Yes - stakeholder provided, high need area	N	y N	v	v			Y	N			Ļ	¥	*		N	N				From SDDN Draft City of Pearcall Drainage Masterplan Report, which will be voted on soon
FME		No	Martin Branch Drainage Study	Martin Branch Drainage Study to evaluate existing flood risk for multiple readway crossings and potential structural flooding along Martin Branch, just north of Dilley	Fr Con	10 atty 1300	1012 1012 (structures in fixed plan)		N N	~	Y																

¹ Fload Moneammer Teolation (FMD- fixed task- of a search fload areas meeted to scarss risk fload Moneammer Teolation (FMD- fixed stars- rescurse) project that when implemented will include fload risk, mitiget hazands to life ar prepert, includes nature-based solutions. You segative impact fload Moneammer Teolation (FMD- fixed stars- rescurse) are implemented assist, key close hot as differ sound list to evolution and resonment that dawn and quality as TRA's aread list to evolution and resonment that dawn and quality as TRA's aread.

Public Come	ments			
Comment Date	Flood Type	Flood	Most Recent Flood Event	Description
********	Road	Frequently	05/15/2021	
********	Road	Frequently	05/15/21	
********	Land.	Crany and	0505231	
********	Land.	Crany and	5.47.34	
********	Land.	Crany and		
	Road	Frequently	Guery time it rains.	One day someone is going to drown. Most of the water from the east side of town ends up down our road and the drainage disch is never materialised
6/3/2021	Land	Frequently		
6/3/2021	Land	Frequently		
6/2/2021	- Road	Cancelland		
6/2/2021	Land	Employeethy		
********	Land	Employeethy	Application was not a lot of rain	Starts on the road and food the side of the brane
********	Land	Employeethy	Last Na raio	Einstad side of house and excess
	Road	Frequently	Last rain	Everytime it rain W Navarro street in Peanall floods. It is an apartment complex so our parking lot floods. We do have elderly that live there.
	Road	Few_Occasio	2970	Carter edition neighbor Pecan, Walnut, Ash and Gross streets
	Land	Frequently	every time it rains period	I get the water off Guadalupe and County Rd, 1001. I have lost trees due to the saturations. My storage units flood every year. Fee been to commissioners court and they are aware of the situation. The engineer Rosanna Rodrieves is familiar and aware
*******	Land	Frequently	every time it rain because I get the runoff from Guadalupe et and CR1001	I have several photos and video but they didn't upload when I did a report on 1800 cr 1801 it's the same address. Our city engineer Rosanna Garcia, Judge Luna and the commissioners know of the problem since I pleaded for help during commissioners court.
*******	Road	Frequently		
*******	Road	Frequently	Svery time it rains	
	Channel	Frequently	S0 years or so. It floods on garcia st and come to our street on s moreno st	work was done on garcia "Eddie and Lika. Street. Since then, water jumps the curb and dosen't run in the drain. Its really unbelievable if u see it. So now it comes down and floads unto our yard on both sides on s Moreno st. Them it messes up our stree
7/6/2021	Building	Frequently	May 1,2021	Flooding of school land and alley ditch causing overflow into Pecan St. Rain runoff from Margo Dr. also flows down Pecan St to be met by school land overflow causine watere water build up. All this water build up comes up into our backvard and can rise
7/7/2021	Land	Frequently	67/05/2021	Street and vards art flooded with water!
7/7/2021	Road	Frequently	67/05/2021	Street floods when it rains
7/7/2021	Road	Frequently	7/6/2021 is most recent	Bridge at CR 2410 and San Miquel creek washes out with every hard rain. Has done so for last 6 years.
7/7/2021	Road	Frequently	7/5/2021	The road sets flooded every time it rains. Our car suffered water damage because of this flood
7/7/2021	Land	Few_Occasio	2021	I know I am on a road that has low water sign, when I bought it they told me it did not flood. The last storm I had water close to ten feet with in the bourse, and my 5 array simpert nam of it under water. These simples
7/7/2021	Building	Few_Occasio ns		Water from Mesquite St. cannot all go into drainage dich behind my house. It comes down the alleyway behind my house instead and floods back yard and water enters my storage building behind my home. I have asked the city to do something about it but the
	Road	Frequently	May 1	The pictures and videos that I have attached does not describe how bad it has actually been. At least 2 foot of water on the road and drains through our appendix Max messed up driveway to set to homes
*******	anut	Emplander	kalu 22 3034	Graats fill with water harvesa undriversite
7/7/2021	Land	Few_Occasio	2021	I know I am on a road that has low water sign, when I bought it they told me it did not flood. The last storm I had water close to ten feet with in the bound and my Samer should have of it under water. These structures
7/7/2021	Building	Few_Occasio ns		Water from Mesquite St. cannot all go into drainage dich behind my house. It comes down the alleyway behind my house instead and floods back yard and water enters my storage building behind my home. I have asked the city to do something about it but the
******	Road	Frequently	May 1	The pictures and videos that I have attached does not describe how bad it has actually been. At least 2 foot of water on the road and drains through our property. Was measured on Alumana: to add to borner.
*******	and	Energentie	kdu 22 2024	Graats 60 with writer harvena metricanble.
				Obstruction causion fixedian
				Electrica in NW nam of treat
				CM 1091 shuts draw divide fronts
				1. V and an a second second with the second
3/4/2022	Owned			When the second se
2/4/2022	Channel			Environmental Environmental Auropations
2/4/2022	And			Newspace Final Section 2
	NU30			

Type (FMP/FME /FMS) ¹ Unique IS	ID	Shown on Map?	Name	Description C	ost Spansor	Gaals Recomm	mend 1. Completed?	2. Sponsor confirmed? (- if haven't talkedto sponsor yet, N If sponsor says project is no longer feasible) ?	4. FME: Reasonable d planning-level estimate?	5. FME: Floor knowledge ga in the area?	6. FMS: Reasonable planning leve cost estimate?	8. 7. FMS: Di Estimated fload risk reduction? s projection	MP: 9. PMP crete capital t, nota drainage t of yes, no jects? must	IP: An entire al program or re program? (If not eligible or at be split.)	12. FMP: Does it provide mitigation for the 1% annual chance flood event?	11. FMP: Drainage area > 1 mPQ, or involves critical facilities/transportation routes?	 12.1. FMP: Project area prone to flooding that threatens life and property? 	12.2. FMP: Project area meets an emergency need?	12.1. RMP: Project area has historic flooding events? [If not, consider an	(data? (d) (d) (d) (d) (d) (d) (d) (d) (d) (d)	34.2. FMP: An indication regarding the potential use of federal funds, or othe sources of funding?	54.3. FMP: Demonstration for no adverse impacts?	14.4. FMP: A description of all other potential risks, benefits, and impacts?	15. FMP: Benefit cost ratio > 1.0?	Notes (Note here if project was demoted from FMP to FME, etc.)
UMI.1									1												/ I / /	4			

¹ Dood Measurement Evolution (RMF): Tood much of a survey): find arrow once weeked to survey risk. Rood Measurement Evolution (RMF): estudies and arrow that where implemented and reduced find alloc, relighter hannes in the development of the development o

Unique II	Туре (FMP/FM E/FMS)*	10	Shown on Map?	Name	Description	Cost	Spansar	Goals	RSIPG Goal I Goals ID Catego	D Recommend	1. Completed	2. Sponsor confirmed? (if haven't talkedto spansor yet, N if spanso says project is no langer feasible)	2. Funding identifie 47	4. FME: Reasonable planning-level estimate?	5. FME: Flood knowledge gap in the area?	6. FMS: Reasonable planning level cost estimate?	7. FMS: Estimated flood risk reduction?	8. FMP: Discrete project, not a set of projects?	9. FMP: An entire capital program or drainage program? () yet, not eligible or must be split.)	10. FMP: Does it provide mitigation for the 1% annual chance fload event?	11. FMP: Drainage area > 1 mP2, or involves critical facilities/transportation routes?	12.1. FMP: Project area proce to flooding that threatens life and property?	12.2. FMP: Project area meets an emergency need?	12.3. FMP: Project area has historic flooding events?	12. FMP: Sufficient/reliable data? (If not, consider an FME)	14.1. FMP: Evaluation includes detailed HRH modeling and quantified impacts?	14.2. FMP: An indication regarding the potential use of federal funds, or other sources of funding?	54.3. FMP: Demonstration for no adverse impacts?	54.4. FMP: A description of all other potential risks, benefits, and impacts?	15. FMP: Benefit cost ratio > 1.07	Notes (Note here if project was demoted from FMP to FME etc.)
UM5.1	FME +		Yes	BRIDGE REPLACEMENT -4.70 MILES SOUTH OF FRO COUNTY LINE	TKDOT Road Project - 001708113	\$ 5,500,000	тирот	12000001	1 EWC	No - lack of information or need and benefit	s ·			¥	¥			٧	N										-	•	Not much info at hand about the TXDOT projects. Downgraded to FME
UM5.2	FME +		Yes	BRIDGE REPLACEMENT -4.70 MILES SOUTH OF FRO COUNTY LINE	TKDOT Road Project - 001708112	\$ 5,500,000	тирот	12000001	1 EWC	No - lack of information or need and benefit	s - St			¥	¥			٧	N										-	•	Not much info at hand about the TXDOT projects. Downgraded to FME
UNS.3	FME 1	1000017	Yes	Others (Flood Prevention/Planning Study, LOMR etc)	Flood Planning Study for LOWR - Cotulia	\$ 149,500	TWOR FF, City o Cotulia	12000050	4 map	No-on-going ansiect	N	¥	N	Y	¥																
UM5.4	FME 1	2000070	No	City of Cotulia Mustang creek LOMR	City of Cotulia Mustang creek LOMR	\$ 150,000	City of Cotulia	12000010	4 Updat	No - on-going	N	¥	N	Y	¥																

¹ Door Macourament Carloriton (BAD). Bood made at a search related recours and related to searce state Road Malgaries Prijer; (FMP): successf or non-structure) prijer; that when imperated will relate fload indi, militget hazards to kip at property. Includes nature-based tocksion. You segarily impact Road Malagaries (Training (FME) property into an endpart of perturbation. Any extent that a KFM would like to evolute as at econome that there nat quality as RFL as RAD.

Public Com	ments			
Comment Date	Flood Type	Flood	Most Recent Flood Event	Description
-			-	Major and massive lowland Boading occurs. Evacuations of livestock and a few residential properties along the river required. Many roads near the river will flood, including FM 3408 from 1-35, Valley Wells Road, the frontage road near mile markies F2

Unique II	Type ISMP/EM E/FMS) ¹	10 Sho ar Ma	vn Same	Description	Cost Spo	nsor Gash	RFPG Goal ID Goak ID Categor	Recommen	nd 1. Completed?	2. Spansor confirmed? (- if haven't talkedto sponsor yet, N if spansor says project is no longer feasible)	3. Funding identifie d?	4. FME: Reasonab planning-la estimate	: S. FME: de knowle evel gap in 17 area	Rood 6. FM Reasons the level o estimat	5: able 7. FMS: ing Estimated floc out risk reduction te?	S. FMP: Discrete project, not: projects?	9. FMP: An entire capital program or drainage program? (If yes, not eligible or must be split.)	10. FMP: Does it provide mitigation for the 1% annual chance fload event?	11. FMP: Drainage area > 1 miP2, or involves critical facilities/transportation routes?	12.1. FMP: Project ama prone to floading that threatens life and property?	12.2. FMP: Project area meets an emergency need?	12.3. FMP: Project area has historic flooding events?	13. FMP: Sufficient/veliable data (If not, consider an FME)	54.1. FMP: Evaluation includes detailed H&H modeling and quantified impacts?	14.2. FMP: An indication regarding the potential use of federal funds, or other sources of funding?	14.3. FMP: Demonstration for no adverse impacts?	54.4. FMP: A description of all other patential risks, benefits, and impacts?	15. FMP: Benefit cost ratio > 1.0?	Note (Note here if p demoted from F etc.)
UM6.1	FME	N	Webb County Becerra Creek Headwater Flood Study	Fixed study to define existing flood risk and potential flood risk reduction projects for subdivisions located in the vicinity of Highway 59.	W Col	1300001	4 SA structure in 100 y	Yes-high need and vulnerable area, helps or with Goal S (structures i Electedelet)	N	N			v																

¹ Road Manazement Faultation FMRF: Road stade of a savelife Road arose area needed to assess take Road Manazement Faultation FMRF: statuard a non-structured project that when implemented will indeed fload inde, militage hazards to life or property, includer nature based stallations. No regative impact Road Management Partiesy FARF: propuls takes to indee factor its an implement for assess the factor and an entry of a FARF or ARR. Road Management Partiesy FARF: propuls takes to indee factor its an implement for assess.

Public Con	ments			
Comment		Fleed		
Date	Flood Type	Frequen	Most Recent Flood Event	Description
		CV fracturent		
3/4/2022	Channel	h		Repetitive flood need flood mitigation

; (FR E/	'ype IP/VM IMS) ⁴	10 S	ihown on Map?	Name	Descolation	Cost	Sponsor	Goals	RFPG Goal ID Gaals ID Category	Recommend	1. Completed?	2. Spansor confirmed? (- if haven't talkedto sponsor yet, N if sponsor says project is no longer feasible)	k. Funding Ro identifie pla d? 0	4. FME: teasonable anning-level estimate?	5. FME: Flood knowledge gap in the area?	6. FMS: Reasonable planning level cost estimate?	7. FMS: Estimated flood risk reduction?	8. FMP: Discrete project, not a set of projects?	8. FMP: An entire capital program or drainage program? (If yes, not eligible or must be split.)	10. FMP: Does it provide mitigation for the 1% annual charce flood event?	11. FMP: Drainage area >1 miP2, or involves official facilities/transportation routes?	12.1. FMP: Project area prone to flooding that threatens life and property?	12.2. FMP: Project area meets an emergency need?	12.3. FMP: Project area has historic flooding exects?	12. FMP: Sufficient/heliable data? [If not, consider an FME]	14.1. FMP: Baskation includes detailed H&H modeling and quantified impacts?	14.2. FMP: An indication regarding the potential use of federal funds, or other sources of funding?	14.3. FMP: Demonstration for no adverse impacts?	14.4. FMF: A description of all other potential risks, benefits, and impacts?	Notes (Note here if project was demoted from FMP to FME, etc.)	
UM5.1	FME 13	1000021	No	Hazard Identification, Risk Assessment and Consequence Analysis	The previous of the shared stands for the stands of the shares and a stand stands with the stand stands of the stand stands and stands are not ensure to the stand county and the Grig of tas Astanis. Nevering threads the stands and a standingly pursue projects that each ta makes or definishing threads this. There could be possible that the stands of the stands and the stands of the stands are stand as a stand stand of the stands. The stands are stand as a stand stand of the stands are stand as a stand stand of the stands are stand as a stand stand stands are stand as a stand stand stand stands are stand to stand as a stand stand stands are stand as a stand stand stands are stands as a stand stand stands are stand as a stand stand stands are stand as a stand stand stand stands are stands as a stand stand stands are stands are stands as a stand stands are stands as a stand stands are s	\$ -	linar County	-		No - lack of information and mostly not in region				-																	

¹ Does Monorannees Evaluation (DME). Root study, of a scarffe Bood resource areas reasonable to a sense risk Bood Milliogenia Pringer (DMP) structured or most rescurating priorite that when implemented will relocar food risk, mitigates hasands to life as property, includes nature-board solutions. You engetine Boad Milliogenees (DMP) structured or most rescuration (areas included or tradinger local taskats, in you can struct a MPC would like to evaluate and recommend that does nat qualify as DME or PAP.

	Type FMP/FM E/FMS) ¹	ID SI	hown on Map?	Name	Description	Cost	Spannar	Gaak	RFPG Go Soals ID Cate	ID Recommend	1. Completed	2. Sponsor confirmed? (- if haven't talkedto sponsor yet, N if sponsor says project is no longer feasible)	2. Funding identifie d?	4. FME Reasonable planning-level ectimate?	5. FME: Flood knowledge gap in the area?	6. FMS: Reasonable planning level cost estimate?	7. FMS: Estimated flood risk reduction?	8. FMP: Discrete project, eat a set of projects?	 FMP: An entire capital program or drainage program? (if yes, not eligible or must be split.) 	10. FMP: Does it provide mitigation for the 1% annual chance flood event?	11. FMP: Orainage area > 1 miP2, or involves official facilities/transportation routes?	12.1. FMP: Project area prone to flooding that threatens life and property?	12.2. FMP: Project area meets an emergency need?	12.3. FMP: Project area has historic flooding events?	13. FMH: Sufficient/reliable data? (If not, consider an FME)	14.1. FMP: Evaluation includes detailed H&H modeling and quantified impacts?	14.2. FMP: An indication regarding the potential use of federal funds, or other cources of	14.3. FMP: Demonstration for no adverse impacts?	14.4. FMP: A description o all other potential risks, benefits, and impacts?	/ 15. FMP: Benefit cost ratio > 1.0?	Notes (Note here if project was demoted from FMP to FMS, etc.)	
01000010	FME		Yes	Drainage Improvements	Jourdanton Main Street Drainage Project	********	TWDB FF, City of	13000090	4 Up	Tes, but duplicate	N	¥	¥	¥	Y			v	N								-					1
1142.2	FME		Yes	BRIDGE REPLACEMENT - AT ATASCOSA RIVER	THDOT Road Project - 007213812	*******	THEOT	13000005	1 13	No - lack of information on need	4 .	-	-	٧				¥	N												DXDOT project - need more infr	da .
	FMS		No	Atascosa McMullen Hazard Mitigation Plan - Atascosa County Action #1	Place flood gauges upstream of flood-prone areas to alert citizens to quickly rising waters.	\$ 200,000	Atascosa County	13000007	a Coor	nal ingi Yes		-				v	N														Used to be FMP	
LN2.3	FMS		No	Atascosa McMullen Hazard Mitigation Plan - Atascosa County Action #5	inventory of all low water crossing in the county and develop a prioritize ansiects in a CP for upgrades or replacement	\$ 60,000	Atascosa County	13000005	1 14	C Yes		+				¥	N														Used to be FMP	-
LN2.5	FMS		No	Atascosa McMullen Hazard Mitigation Plan - Atascosa County Action #8	Develop and implement a river/creek clean out plan.	s -	Atascosa County		-	No - lack of information on need and herafit	4					N	N														Used to be FMP	
140.6	FMS		No	Atascosa McMullen Hazard Mitigation Plan - Atascosa County Action #12	Eastablish and implement a voluntary "acquiction and demo program" to address repetitive loss to floodprone properties.	\$ 600,000	Atascosa County	13000013 13000020	S, 7A In SI	ace untes Dign, Yes G		-				٧	N															
	FMS		No	Ataszosa McMullen Hazard Mitigation Plan - Ataszosa County Action #12	implement alert system to warn community of hazards.	\$ 200,000	Atascosa County	13000007	a Coor an/i	nal Inati information, may no be flood related	a -	-	-			Y	N															
0.00.7	FME		No	Atascosa McMullen Hazard Mitigation Plan - City of Charlotte Action #3	Implement a stormwater plan needing to identify and prioritize projects that will improve drainage in the areas in the city	s 250,000	Gty of Charlotte	13000013	S struc	uce unes Yes		-		Y	v																Used to be FMP	1
100.8	FMS 13	1000071	No	Atascosa McMullen Hazard Mitigation Plan - City	The enforcement of the flood damage prevention ordinance	s .	City of Charlotte	13000016	6 Mini	sum Yes						N	N															-
1002.0	FMS		No	dr Chandite Action #7 Atascosa McMullen Hazard Mitigation Plan - City	Conduct a feasibility study to evaulate size options for a community safe	\$ 250,000	Gty of Charlotte	-		No - not flood	-	-		¥	Y	¥	N														Used to be FMP	1
	FMS		No	Atascosa McMullen Hazard Mitigation Plan - City of Christine Action M	install early warning system for hazands	\$ 150,000	City of Christine	13000007	a Coor an/i	inati nod flood related	e .	-	-			¥	N														Used to be FMP	
LM2.11	EMS 13	1000072	No	Atascosa McMullen Hazard Mitigation Plan - City	Enforcement of fixed domage presention ordinance		Church Investmenten	12000016	6 Mini	ing Nation Kar						N	N															+
LM2.12	FMS		No	of Jourdanton Action #3 Atascosa McMullen Hazard Mitigation Plan - City of Jourdanton Action #4	Maintain Storm Drainage System	\$ 40,000	City of Jourdanton	13000013	S struc	ards ace une Yes						¥	N														Used to be FMP	t
100/14	FMS 13	1000072	No	Atascosa McMullen Hazard Mitigation Plan - City	Install educational signage such as "turn around don't drown" at high risk	s .	City of Jourdanton	13000002	1A LV	C Yes						N	N														Used to be FMP	-
100.14	FMS		No	of Jourdanton Action By Atascosa McMullen Hazard Mitigation Plan - City of Jourdanton Action II9	Install early warning systems for hazards	\$ 100,000	City of Jourdanton	13000007	a Coor	nal Inati No - not enough ood information						¥	N														Used to be FMP	
LM2.15	FMS		No	Atascosa McMulien Hazard Mitigation Plan - City	Conduct a feability study to evaulate site options for a community safe	\$ 250,000	City of Jourdanton		- Wat	No - not flood	-			¥	Y	¥	N														Used to be FMP	+
UM2.16	FMS		No	of Jourdanton Action #10 Atascosa McMullen Hazard Mitigation Plan - City of Lytie Action #1	reem for hazards Public education and outmach programs to education citizens about mitiation against hazards.	\$ 5,000	City of Lytie	13000024	RR Awar	No - too general, no neu: necessarily food	e .					¥	N														Used to be FMP	1
040.17	FME		No	Atascosa McMullen Hazard Mitigation Plan - City of Lytie Action #11	Develop a stormwater management plan and implement the structural and non-structural solutions to mitigate flooding.	\$ 750,000	City of Lytie	13000013	5, 78 Bec	ace units Up; Yes				v	v																Used to be FMP	
LM2.18	FMS		No A	Atascosa McMullen Hazard Mitigation Plan - Lytle	Create and implement a hazard educational enhancement program in which faculty/students can collaborate in indexstanding and communicating	\$ 5,000	City of Lytie	13000034	28 Aug	No - too general, no ness necessarily flood	a .					Y	N														Used to be FMP	t
UND.19	FMS		No	Ataccesa McMullen Hazard Mitigation Plan - City of Inner Artion 40	install early warning systems	\$ 50,000	City of Potent	13000007	Ang Coor	ninted insti and information						¥	N														Used to be FMP	1
LM2.20	FME		No	Atascosa McMullen Hazard Mitigation Plan - City of Research tion #2	Study and implement findings of study to improve local drainage at Betty	\$ 250,000	City of Poteet	13000013	War Rec 5 struc	ing 209 unis Yes				Y	Y																Used to be FMP	+
LM2.21	EMS	-	No	Atascosa McMullen Hazard Mitigation Plan -	Upgrade Schools against all hazards. A detailed study on the cost	6 300 000	Charlenne		in tr	0 vr No - not flood						¥	N														Used to be FMP	+
1.002.22	CMS.		80	Potent SD Action #1 Atascosa McMullen Hazard Mitigation Plan -	effectiveness measures to protect schools amins all hazards. Replace or improve inoperable communication equipment for better county	·	Charlenne			No - not flood						v	~														literation has FMR	
LM2.22			-	Potent SD Action #5 Attaccore McMullen Warrend Mitimation Plant, City	intercontraction between multiplanting, pointing, pointing, and bottle intercency personnels for hispards.	3 30,000	CaparPoint	-		related																				4		
LM2.24	FMS		No	of Potent Action #1	outside asencies	\$ \$0,000	City of Poteet	-	-	miated		-				¥	N													4	Used to be FMP	
LM2.25	FM6 13	000007	Yes	Others (Flood Prevention/Planning Study, LOMR etc)	Atascosa Flood Prevention Project - Pleasanton	\$ 78,500	TWD&FF, City of Pleasanton	13000013	S struction for the	unes Yes Over	-		-	Y	Ŷ																	
182.26	FME 13	000049	No	Ataxcosa McMullen Hazard Mitigation Plan - Ataxcosa County Action 19	Upgrade existing floodplain maps. Add new Atlas 14 rainfall frequency data.	\$ 250,000	Atascosa County	13000013	S struct	ace unes Yes frue			-	Y	Y																	
UN2 27	FME 13	000050	No	Ataszosa McMullen Hazard Mitigation Plan - Ataszosa County Action #10	Develop and implement a new Stormwater Management Plan	\$ 850,000	Atascosa County	13000013 13000021	5,78 thui 5,78 in 10	unes Yes Virt	-	-	+	v	Y																	
LN2.28	FME 13	000051	No	Atascosa McMulien Hazard Mitigation Plan - City of Charlotte Action M	Create and implement a hazard educational enchancement program which faculty/vtudents can collaborate and understand the hazards.	\$ 10,000	City of Charlotte	13000024	RR Awar	No - too general, no neccuarily food minut	e .	-	-	v	v																	
LM2.29	FME 13	000052	No	Atascosa McMullen Hazard Mitigation Plan - City of Christine Action #2	Improve drainage in certain areas of the the city that are subject to flooding, conduct a study to identify deficiencies in current land development code for future developments	s 250,000	City of Christine	13000013	S struction for the structure of the str	uce unes Yes 0 vr	· ·		-	v	Y																	
LN2.30	FME 13	000053	NO	Atascosa McMullen Hazard Mitigation Plan - City of Jourdanton Action #12	idenitfy problem floading areas within an area drainage study and implement a program to reduce citywide and localized flooding.	••••••	City of Jourdanton	13000013	S struction for the structure of the str	ace unes Yes Over		-	-	¥	¥																	
LM2.31	FME 12	000054	No	Atascosa McMullen Hazard Mitigation Plan - City of Lytle Action #4	Enforcement of code and floodplain development is improving with meetings with new businesses.	5 20,000	City of Lytie	13000016	6 Mini	num Yes		-	-	¥	Y																	
1 142 22	FME 13	000055	No A	Atascosa McMullen Hazard Mitigation Plan - Lytle ISD Action #3	Preform a detailed study of cost effective measures to protect and harden schools against all hazards	\$ 200,000	City of Lytie	I	-	No - too general, no necessarily flood	· ·	-	-	v	v																	1
LM2.22	FM5 13	\$20000	No	Atascosa McMullen Hazard Mitigation Plan - City of Potest Action #2	increase local enforcement of the flood damage prevention ordinance by biring a more full time staff	\$ \$30,000	City of Poteet	13000016	6 Mini	nam Yes			1.1			¥	N															
INO 2H	FM5 13	000063	No	Atascosa McMullen Hazard Mitigation Plan - City of Christine Action #5	Public education and outreach programs to education citizens about mitigation against hazards	\$ 5,000	City of Christine	13000034	RR Awar	No - too general, no necessarily food related	e .	-				¥	N															
140.25	FMS 12	000064	No	Atascosa McMullen Hazard Mitigation Plan - Poteet SD Action M	Create and implement a hazard educational enhancement program in which faculty/students can collaborate in indexstanding and communicating however, of ensurements of ensurements of ensurements of the state of ensurements of ensur	\$ 5,000	City of Poteet	13000034	88 Awar	No - too general, no necessarily food	· ·					¥	N															1
LNO.36	FME 13	000257	No	Jourdanton Drainage Improvements and Detention/Recention Fonds	Multiple detention ponds, drainage channel, box culverts improvements near Main St and Terrel Ave, Jourdanton	· ·····	City of Jourdanton	13000013	S struct	LCP LLTRE THES	N	¥	N					٧	N	-	¥	¥										

¹ Fload Monaammer Evaluation (FMI)- fload study of a specific fload errors area enseled to assess site. Road Mingation Project (FMP) structured on non-structural project that when implemented will reduce fload risk, mitigate hazanits to life as property, includes nature-based solutions. You engative impact Road Management Strategy (FME) spaced plans in reduce fload risk on religions (plan status), kny celsion that a RPM would like to evaluate and recommend that does not qualify as FME or FMP.

Public Come	nents			
Comment Date	Flood Type	Flood Frequency	Most Recent Flood Event	Description
				Water back up in creek due to overgrown vegetation
3/4/2022	Land			a mobile houses washed out completely.
3/4/2022	Road	-		Hannon Rd submerged. People potentially died.
3/4/2022	Land	-		mobile homes and park were submerged
2/4/2022	Land			(rinne secoli

Unique	Type (FMP/FM E/FMS) ¹	ø	Shown on Map?	Name	Description	Cast	Sponser	Goak	Recommend	1. Completed	2. Sponsor confirmed? (- if haven't talkedto sponsor yet, N if sponsor says project is no longer feasible)	4. FME: Reasonable planning-level estimate?	5. FME: Flood knowledge gap in the area?	6. FMS: Reasonable planning level cost estimate?	7. FMS: Estimated flood risk reduction?	8. FMP: Discrete project, not a set of projects?	9. PMP: An entire capital program or drainage program? (If yes, not eligible or must be split.)	10. FMP: Does it provide mitigation for the 1% annual chance flood event?	11. FMP: Drainage area > 1 mi ^A 2, or involves offical facilities/transportation soutes?	12.1. FMP: Project area prone to flooding that threatens life and property?	12.2. FMP: Project area meets an emergency need?	12.3. FMP: Project area has historic flooding events? (if not, con	cient/reliable data? nsider an FME) m	14.1. FMP: Evaluation includes detailed H&H modeling and quantified impacts?	14.2. FMP: An indication regarding the potential use of federal funds, or other sources of fundine?	14.3. FMP: Demonstration for no adverse impacts?	14.4. FMP: A description of all other potential risks, benefits, and impacts?	15. FMP: Benefit cost ratio > 1.0?	Notes (Note here if project was emoted from FMP to FMD etc.)

¹ Door Management Existing EMES. Boot induced a search free of ensure area manded in many skill Root Management (RMP). Subcoder of non-structural paragement that when implemented will indeed freed this, mitigate hazards in Bifer aproperty, includer notater-shared staktores. The negative impact Root Management Description of the structural paragement of the structural state of the RMP would be be valuate and recomment back does not avoid ju in RMP or RMP.

Comment Date	Flood Type	Fload Frequency	Most Recent Flood Event	Description
				FM 2505 Roadway
				FM 541 Roadway
				EM 347 Brockene
3/8/2022			-	Cotulla Road Show - Wilson flood prone area pointed out by stakeholders 1
3/8/2022	-			Cotulia Road Show - Wilson flood prone area pointed out by stakeholders 2
3/8/2022	-			Cotulia Road Show - Wilson flood prone area pointed out by stakeholden 3
3/8/2022	-			Cotulia Road Show - Wilson flood prone area pointed out by strakeholders 4
3/8/2022	-			Cotulia Road Show - Wilson flood prone area pointed out by stakeholden 5
3/8/2022	-			Cotulia Road Show - Wilson flood prone area pointed out by stakeholden 6
3/8/2022	-			Cotulia Road Show - Wilson flood prone area pointed out by stakeholden 7
3/8/2022	-			Cotulia Road Show - Wilson flood prone area pointed out by stakeholders 8
3/8/2022	-			Cotulia Road Show - Wilson flood prone area pointed out by introduction 0

Type (FMP/S E/FMS Unique II	M 10	Showr on Map?	Name	Description	Cost Spon	or Goal	BSPG Goals ID	Gaal ID Recommend Category	1. Completed	 Spansor confirmed? (- if haven't talkedto sponsor yet, N if sponsor says project is no longer feasibile) 	3. Funding Re identifie plan d? e	4. FME: S ascrable tring-level timate?	5. FME: Flood knowledge gap in the area?	6. FMS: rasonable 7. planning Estima evel cost risk re stimate?	RMS: Di ted flood proje duction? s pro	LFMP: 9. FMP: A iscrete capital pro ect, not a set of tojects? must be	n entire Igram or rogram? P eligible or split.]	10. FMP: Does it provide mitigation for the 1% annual chance fload event?	11. FMP: Drainage area >1 miP2, or involves critical facilities/transportation routes?	12.1. FMP: Project area prote to floading that threatens life and property?	12.2. FMP: Project area meets an emergency need?	12.3. FMP: Project area has historic flooding events?	12. FMP: Sufficient/reliable data? (If not, consider an FME)	54.1. FMP: Evaluation includes detailed H&H modeling and quantified impacts?	14.2. FMP: An indication regarding the potential use of federal funds, or other sources of funding?	54.3. FMP: Demonstration for no adverse impacts?	14.4. FMP: A description of all other patential risks, benefits, and impacts?	15. FMP: Benefit cast ratio > 1.0?	Notes here if project was d from FMP to FME, etc.)
FME	1310000	005 Yes	County Wide Flood Planning/Prevention Study	Road Planning/Prevention Study	\$ 618,750 TWDB FIF, Kar	ves County 130000	10 4	Update maps No - Funding Identified	N	-	¥	Y	v																

¹ Roof Manazement Evaluation RMD- Rood indue of a savelle flood arone area needed to assess risk Roof Manazement Evaluation RMD- Rood indue of a savelle flood arone area needed to Beford risk, mitigate hoards to Befor a property, includes notane-based saledores. No negative Impact Rood Management Restring (RAE), propulsion in Andra Egiod et an indupert (Rod Indue), was parties in the RDP would like to evaluate and recommend to the daws and quality as RAE or MAR.
Unique	Type (RMP/FI E/FMS)	M ID	Shown on Map?	Name	Description	Cost	Spansor	Goals 85Pd Goals	G Goal ID ID Category	Recommend y	1. Completed?	2. Sponsor confirmed? (- if haven't talkedto sponsor yet, N if sponsor says project is no longer feasible)	2. Funding identifie d?	4. FME: Reasonable planning-level estimate?	S. FME: Flood knowledge gap in the area?	6. FMS: Reasonable planning level cost estimate?	7. FMS: Estimated flood risk induction?	B. FMP: Discrete project, not a set of projects?	9. FMP: An entire capital program or drainage program? (If yes, not eligible or must be split.)	10. FMP: Does it provide mitigation for the 1% annual chance flood event?	11. FMP: Drainage area 1 > 1 mP2; or involves oritical facilities/transportation routes?	12.1. FMP: Project area prone to flooding that threatens life and property?	12.2. FMP: Project area meets an emergency need?	12.3. FMP: Project area has historic flooding events?	13. FMP: Sufficient/reliable data? (If not, consider an FME)	14.1. FMP: Evaluation includes detailed HBH modeling and quantified impacts?	14.2. PMP: An indication regarding the potential use of federal funds, or other sources of fundine?	14.3. FMP: Demonstration for no adverse impacts?	14.4. FMP: A description of all other potential risks, benefits, and impacts?	15. FMP: Benefit cost ratio > 1.07	Notes (Note here if project was demoted from RMP to FME, etc.)
LM5.1	FMS	133000185	No	Atascosa McMullen Hazard Mitigation Plan - McMullen County Action #4	Public awareness and education on all hazards	\$ 300,000	McMullen County	13000024 gg	Awarene	No - too general, not necessary floor related	d					Y	N	Y	N	N	N .				_	N	N	N	-		Education project - many attributes are hard to quantify
1.05.2	FMS	133000186	No	Atascosa McMullen Hazard Mitigation Plan - City of Pleasanton Action #5	Education homeowners on all types of hazards	\$ 10,000	City of Pleasanton	13000024 82	Awarene	No - too general, not necessary floor	d					v		¥	N	N								N			Education project - many attributes are hard to countify
LM5.1	FMS	132000074	No	Atascosa McMullen Hazard Mitigation Plan - City of Pleasanton Action #G	New emergency communication infrastructure.	s -	McMullen County	1.1		No - not necessarily flood related							N														
LM5.4	FINE		No	Atascosa McMullen Hazard Mitigation Plan - City of Pleasanton Action #10	reduce flooding and poor drainage by increasing maintenance of existing storm water system.	\$ 21,000,000	City of Pleasanton	12000013 5	Reduce structure in 100 vt	Yes			- Y		Y																Onternally FMP
LMS.S	FINE	131000056	No	Atascosa McMullen Hazard Mitigation Plan - McMullen County Action #2	Conduct a countywide floodplain study and mapping to undertand the limits of the 1% annual chance and 0.2% annual chance floodplain boundaries and their effects on the community infrastructure and critical facilities.	\$ 450,000	McMullen County	12000011 4A	Update maps	Yes			- Y		Y																
LMS.6	FME	131000057	No	Atascosa McMullen Hazard Mitigation Plan - McMullen County Action #3	Study and prioritize low water crossing improvments	\$ 50,000	McMullen County	13000003 12	LWC	Yes		-			Y																
145.7	FME	131000058	No	Atascosa NcMullen Hazard Mitigation Plan - McMullen County Action #5	Provide FEMA review of floodplain management criteria by ensuring that the community correct NFP program deficiences and enforces existing ordinanaces that review review and endowment.	\$ 10,000	McMullen County	13000016 6	Minimum standard	Yes					¥.																

¹ Door Monourment Exclusion IEME: front mutual in reardier front minus area manded to minus site Rood Milliopetion Project (PMP)- instrumed or non-structured project that when implemented will reduce Rood risk, milligate hazands to Byle or property, includes nature-based solutions. Yos negative impact² Rood Milliopetion Project (PMP)- instrume and an instrument of the or instrument based on the instrument based and instrument of the down not availity as PME or PMP.

Comment Date	Flood Type	Flood	Most Recent Flood Event	Description
5/21/2021	Road	Few_Occasions	5/1/21	Overtop the roadway in both directions of traffic
				Moderate flooding occurs. The flow is to the slab elevation of the lowest businesses and homes in Tiden. Numerous roads and low bridges flood and become very dangerous to motorists. Hundreds of livestock are trapped and potentially drowned.
				Major flooding occurs. Disastness flooding of commercial and residential buildings in Tilden. Restaurant on the right bank of the Frio River had 3 to 4 feet of water in it.
3/9/2022				Cotulla Road Show - McMullen flood prone area pointed out by stakeholders 1. Flooding on FM 791 - 1
3/9/2022				Cotulia Road Show - McMullen flood prone area pointed out by stakeholders 2. Flooding on FM 791 - 2.
3/9/2022				Cotulia Road Show - McMullen flood prone area pointed out by stakeholders 3.
3/9/2022				Cotulia Road Show - McMullen flood prone area pointed out by stakeholders 4. Old Environ 04
3/9/2022				Cotalla Road Show - McMullen flood prone area pointed out by stakeholders 5.
3/9/2022				Cotulia Road Show - McMullen flood prone area pointed out by stakeholders 6. FM1962
3/9/2022				Cotulia Road Show - McMullen flood prone area pointed out by stakeholders 7 - Rhode Ranch 1
				Cotulia Road Show - McMullen flood prone area pointed out by stakeholders 8 -

Unique ID	Type (FMP/FME /FMS) ¹	ID	Shown on Map?	Name	Description	Cost	Sponsor	Goals	RFPG Goals ID	Goal ID Category	Recommend
LM6.1	FME	133000025 -	Yes	BRIDGE REPLACEMENT -SALT BRANCH STR 2 ON FM 1358	TXDOT Road Project - 120601020	\$ 519,596	TXDOT	13000001	1	LWC	No - lack of information on need and benefit
LM6.2	FME	133000026 -	Yes	BRIDGE REPLACEMENT -ON FM 882 STR3 SAN CHRISTOVAL CREEK	TXDOT Road Project - 099103013	\$ 260,900	тхрот	13000001	1	LWC	No - lack of information on need and benefit
LM6.3	FME	133000030	Yes	BRIDGE REPLACEMENT -SULPHUR CREEK STR 1 ON FM 1358	TXDOT Road Project - 120601019	\$ 905,442	TXDOT	13000001	1	LWC	No - lack of information on need and benefit
LM6.4	FMS	133000060	No	COASTAL BEND MITIGATION ACTION PLAN - LO - 10	Augment the outdoor warning system for the City of George West with the purchase and installation of two additional sirens. The City of George West has one 10 hp siren located at the fire station, which is not adequate. The city needs at least two more sirens to warn most of the city. A study by Texas A&M during the late 1970's indicated that at least three-sirens were needed within the City to warn at least 95% of the public.	\$ 16,000	City of George West	13000007	3	Regional Coordinatio n/Flood Warning	No - lack of clear flood benefit
LM6.1	FMS	133000061	No	COASTAL BEND MITIGATION ACTION PLAN - LO - 12	Enhance the City of Three Rivers outdoor warning system to include voice capability. A large refinery, currently owned and operated by Valero, is situated within the City of Three Rivers, where a multi-purpose, outdoor warning siren system is currently implemented. Enhancing the system to include voice capability would permit broadcasting of specific messages, such as public protective actions.	\$ 10,000	City of Three Rivers	13000007	3	Regional Coordinatio n/Flood Warning	No - lack of clear flood benefit
LM6.6	FME	131000024	No	Live Oak County Airport Drainage Improvements	Improved drainage to reduce disruptions due to flooding in the vicinity of the Live Oak County Airport. The area surrounding the airport is subject to flood inundation, thereby cutting off access to the airport and also on the future runway extension.	\$ 10,000	Live Oak County	13000013	5	Reduce structures in 100 yr	Yes - flood benefit to critical infrastructure
LM6.7	FMS	132000004	No	COASTAL BEND MITIGATION ACTION PLAN - RG-02	Implement 'All Hazards' NOAA Weather Radio (NWR) procedures for dissemination of emergency messages originating with local jurisdictions. The National Weather Service (NWS) will implement a new, centraled point of collection for non-weather related emergency messages broadcast over NWS systems. NWS expects to deploy the All-Hazards Emergency Message Collection System, HazCollect, in the summer and fall of 2005. HazCollect will provide an information technology interface between state and local systems, and the NWS Advanced Weather Interactive Processing System (AWIPS). HazCollect will provide a fast, reliable way to inject messagesinto the Emergency Alert System (EAS) and NOAA Weather Radio.	Low cost activity	Kleberg County, Live Oak County	13000007	3	Regional Coordinatio n/Flood Warning	No - may not be flood related; may already be complete
<u>LM6.8</u>	FMS	132000005	No	COASTAL BEND MITIGATION ACTION PLAN - RG-04	Promote public awareness and use of NOAA Weather Radio (NWR) to receive 'All Hazards' warnings by distributing NWR literature, posting information on jurisdiction Web sites, hosting special events, and taking advantage of other opportunities as they arise. The National Weather Service provides weather-related hazards warnings to citizens, both through feeds to commercial media via the Emergency Alert System (EAS), and directly into homes, businesses, schools and other locationsthrough NOAA Weather Radio (NWR). Through the efforts of the Emergency Management programs in both Kleberg and Live Oak counties, broadcast coverage has recently been completed for the Coastal Bend region through installation of transmitters near the communities of Riviera and Three Rivers. These transmitters will also enhance reception of the NWR signals in Jim Wells and Bee counties.	Low cost activity	Kleberg County, Live Oak County	1300007	3	Regional Coordinatio n/Flood Warning	No - all hazard related
LM6.2	FME		No	City of Three Rivers City-Wide Drainage Study	City of Three Rivers City-Wide Drainage Study. Study to specifically focus on flood riks in the Hackberry Creek and Frio River watershed.		City of Three Rivers	13000011	4A	Update maps	Yes - high need area, helps with Goal 5 (structures in floodplain)

Public

¹ Flood Management Evaluation (FME)- flood study of a specific flood prone area needed to assess risk Flood Mitigation Project (FMP)- structural or non-structural project that when implemented will reduce flood risk, mitigate hazards to life or property. Includes nature-based solutions. 'No negative impact' Flood Management Strategy (FMS)- proposed plan to reduce flood risk or mitigate flood hazards. Any action that a RFPG would like to evaluate and recommend that does not qualify as FME or FMP.

Comments				
Comment Date	Flood Type	Flood Frequency	Most Recent Flood Event	Description
6/3/2021	Building	Frequently		
6/3/2021	Building	Frequently	3 weeks ago May 20 2021	Water entered house
6/3/2021	Land	Frequently	May 20, 2021	
6/3/2021	Channel	Frequently	May 21, 2020	Drainage area next to Railroad that drains slow
-	-	-	-	Flood study needed for Tipps Park in Three Rivers
-	-	-	-	Three River - Needs some type of Flood Pump Project for Levee System
-	-	-	-	Some type of Flood Diversion from Nueces to Choke Canyon Reservoir to reduce flooding
-	-	-	-	River floods Airport Road
-	-	-	-	Five families flood in the vicinity of CR 101/CR 151
-	-	-	-	CR 101 Roadway Flooding
-	-	-	-	Boats needed in downtown area of Three Rivers. Water is over the County Road 151 bridge south of George West.

Need Funding? (Y/N)	Note	Note ente	1. Completed?	2. Sponsor confirmed? (- if haven't talkedto sponsor yet, N if sponsor says project is no longer feasible)	3. Funding identified ?	4. FME: Reasonable planning-level estimate?	5. FME: Flood knowledge gap in the area?	6. FMS: Reasonable planning level cost estimate?	7. FMS: Estimated flood risk reduction?	8. FMP: Discrete project, not a set of projects?	9. FMP: An entire capital program or drainage program? (If yes, not eligible or must be split.)	10. FMP: Does it provide mitigation for the 1% annual chance flood event?	11. FMP: Drainage area > 1 mi^2, or involves critical facilities/transportation routes?	12.1. FMP: Project area prone to flooding that threatens life and property?
	Bridge Replacement on Salt Branch on FM 1358 - Tina noted the County has not received TxDOT permits - no jot forms submitted - interviewee did not have information on the project	DDP	-	-	-	N	Y							
	Bridge replacement - Sulphur Creek on FM 1358 - Tina noted the County has not received TxDOT permits - no jot forms submitted - No jot forms submitted - interviewee did not have information on the project	DDP	-	-	-	N	Y							
	Bridge Replacement on 852 - Tina noted the County has not received TxDOT permits - jot forms not submitted - interviewee did not have information on the project	DDP	-	-	-	N	Y							
	Correct Sponsor. Contact - Bobby Joe Stewart (361-362-8254) - Former, Zach Durham (502/689-0385) - no jot form submitted - person resoonsible for project was not present in initial meetine	DDP	-	-	-	N	Y							
	Correct Sponsor. Contact - Bobby Joe Stewart (361-362-8254) - Former, Zach Durham (502/689-0385) - no jot form submitted - person responsible for project was not present in intial meeting	DDP	-	-	-	N	Y							
Y	Lindated name	DDP	N	Y	N	N	Y							
	Correct Sponsor. Contact - Bobby Joe Stewart (361-362-8254) - Former, Zach Durham (502/689-0385) - no jot form submitted - person responsible for project was not present in initial meeting	DDP	-	-	-			N	N					
	Correct Sponsor. Contact - Bobby Joe Stewart (361-362-8254) - Former, Zach Durham (502/689-0385) - no jot form submitted -	•	-	-	-									
	person responsible for project was not present in initial meeting	DDP		N	-		Y	N	N					

No flooding that Tina is aware of

Maybe a low laying area

12.2. FMP: Project are meets an emergency need?	a 12.3. FMP: Project area has historic flooding events?	: 13. FMP: Sufficient/reliable data? (If not, consider an FME)	14.1. FMP: Evaluation includes detailed H&H modeling and quantified impacts?	14.2. FMP: An indication regarding the potential use of federal funds, or other sources of funding?	14.3. FMP: Demonstration for no adverse Impacts?	14.4. FMP: A description of all other potential risks, benefits, and impacts?	15. FMP: Benefit cost ratio > 1.0?	Notes (Note here if project was demoted from FMP to FME, etc.)
								Originally FMP
								Originally FMP
								Originally FMP
								Originally FMP
								Originally FMP

Unique	Type (FMP/FM £/FMS) ¹	10	Shown on Map?	Name	Description	Cost	Spansar	Gaals	RFPG Goal ID Goals ID Category	Recommen	^d 1. Completed	2. Sponsor confirmed? (- if haven't talkedto sponsor yet, N if sponsor says project is no longer feasible)	2. Funding identifie d?	4. FME: Reasonable planning-level estimate?	5. FME: Flood knowledge gap in the area?	6. FMS: Reasonable planning level cost ectimate?	7. FMS: Estimated flood risk reduction?	8. FMP: Discrete project, not a set of projects?	9. FMP: An entire capital program or drainage program? (If yes, not eligible or must be split.)	20. FMP: Does it provide mitigation for the 1% annual chance flood event?	11. FMP: Drainage area > 1 mPQ, or involves critical facilities/transportation routee?	12.1. FMP: Project area proce to flooding that threatens life and property?	12.2. FMP: Project area meets an emergency need?	12.3. FMP: Project area has historic flooding events?	13. FMP: Sufficient/tvilable data? ()f not, consider an FMS)	14.1. FMP: Evaluation includes detailed H&H modeling and quantified impacts?	14.2. FMP: An indication regarding the potential use of federal funds, or other sources of funding?	54.3. FMP: Demonstration for no advense impacts?	56.4. FMP: A description of all other potential risks, benefits, and impacts?	15. FMP: Benefit cost ratio > 1.07	Notes (Note here if project was demoted from FNP to FME, etc.)
UN7.1	FME	123000217	Yes	Las Animas Conveyance Infrastructure	Channel Improvements to system near Las Animas Creek to Improve conveyance: - Upsize culverts on Palacios St and S Benavides St - Improve conveyance capacity under bridges on HWP 25B and HWP 25P - Procurement of easements and nights- aflamme	s -	Gty of Benavides, Duval County	13000013	Reduce S structure In 100 y	r Yes	N	Y	N					÷		×		v					-			-	More into peopling
100.2	FME	123000218	No	Becavidet Main City Network	Improvements to the Drainage System in Central Benuides: Increase capacity to inless and pipes on Depth Sig. 5 Relational Ave. Clink Sig. 5 Menaget Sig. 8 Peters Sig. Update pipes concernant of the lattice on Highway 2016. Dapade network to Sama S Ross de Lina Street. Improvements to cocorrels chancel on Peters Street. Improvements to audit literatures. Procurement of adult laterements and the street store of the street. The street of adult assessments where the store of the street store of the street of adult assessments and the street store of the street. The store of adult assessments and the store of the store	s .	City of Renavides, Duval County	12000012	Feduce 5 structure in 100 y	r Yes	N	×	N					v	N	¥		v			-	-		-		-	Duval County sent Shapefile
LN7.3	FME	123000219	No	Upsize Burch St Crossing	Improvements to Earthen Channel System: Increase culvert capacity on Burch St and other undersized crossings. Channel improvements along the main earthen channel	s -	City of Freer, Duval County	12000013	Feduce 5 structure in 100 u	Yes	N	Y	N					¥	N	¥		¥									More info pending
LM7.4	FME	123000220	No	Northern San Diego Street Conveyance Improvement	Improvements to street overland disinage system: Curb and gutter replacement. Improve conveyance by road paving and regrading of prioritized streets	ş .	City of San Diego, Duval County	13000013	Feduce 5 structure in 100 v	is Yes	N	Y	N					¥	N	¥		¥									More info pending
LM7.5	FME	133000221	No	Northern San Diego Drainage Improvement Project	Drainage improvements to subsurface drainage systems. Installation of new underground drainage infrastructure along Luby street. Supansion and improvementers to Nix-Grout Context.	s -	City of San Diego, Duval County	12000013	S structure	Yes	N	Y	N					v	N	¥		v									Duval County sent Shapefile
LM7.6	FME	122000222	No	Improvements to Drainage Connectivity along Rainoad	Improvement to underground drainage system to increase capacity and improve conveyonce on railroad under crossings and on sections of Highway 64 to improve toornwater drainage from north to south	s -	City of San Diego, Duval County	12000012	Feduce 5 structure in 100 y	rs Yas	N	¥	N					¥		¥	-	¥	-	-			_		-		More info pending
LM7.7	FME	122000222	No	Southern San Diego Drainage Improvement Project	New underground stormwater collection system along Collins Street, including interconnections between existing and new infrastruture.	s -	City of San Diego, Duval County	12000012	Feduce 5 structure in 100 v	Yes	N	Y	N					¥		¥	_	w.	-				_				Duval County sent Stapefile
LM7.8	FME	123000224	No	improvements to San Diego Levee Outfall System	improvements to outfall structures and appurtenances along San Diego levee System	s .	City of San Diego, Duval County	13000013	Feduce S structure in 100 v	is Yes	N	Y	N					¥	N			Y									More into pending
LM7.9	FME	133000225	No	Realitos Drainage improvements	Improvements to surface and subsurface infrastructure of Realitos Drainage System	s -	Duval County	12000012	Feduce 5 structure in 100 v	Yes	N	¥	N					¥	N	¥		¥									Duval County sent Shapefile
LM7.10	FME	133000226	No	Conception Drainage Improvements	Improvements to drainage infrastructure in Concepcion	s -	Duval County	12000012	S structure	Yes	N	¥	N					Y	N	¥		Y		-					-		Duval County sent Stapefile
LM7.11	FME	121000002	No	County Wide Drainage Master Plan Study	Drainage Master Planning Study - Duval County S	s .	Daval County	12000011	4A Update	Yes	N	¥	N		Υ																

¹ Fload Monammer Faultation (RMF- fload stade of a search fload eroor area needed to starses risk Fload Mingaton Fuject (RMF) stockstud or non-structural project that when implemented wit relocad fload risk, mitigate haarshit to life as prayers, includes nature-based solutions. No segrelse impact Fload Management Structure (RMF) spaced parts to interfood Rais in a structure (RMF) exact Ref would like to enclose and encounced that bein and quality as RMF or RMF.

Public Com	ments			
Comment Date	Flood Type	Flood Frequency	Most Recent Flood Event	Description
6/9/2021	Building	Frequently	june 3, 2021	heavy mins cause floading in basement my office contains three parts including a nuclear shelter which drips don to elections storage room also compounded with the damaged roof in elections storage adds to water coming in
				Channel maintainance needed
				Drainage needed for soads. Roodwaters have nowhere to ap
				Flooding - 1' water at the intersection of SH 66 and SH 16 after rains.

Unique ID	Type (mar/max /max)*	10 Shawn Map?	. Same	Desidytion	Ceel	Spower Gasts	1075.0m	in Guilit) Cilegory	Recommend?	1. Completed?	2. Spansar confirmed?) - if haven't talkedba sponsor yet, N if spansor says projezt is na langer feasible)	t i handing file investigat	L FME: associable ming-level dimate?	5. FME Flood knowledge gap in the area?	6. PME Reasonable planning level card ectimate?	7. PML Islimated Based risk reduction?	& PMP. Discrete project, not set of projects?	8. FMP. An extine capital program or dissinage program? (If yes, not eligible or must be split.)	20.1987: Does it provide mitigation for the 2% annual chance flood event?	11. MMP: Drainage area > 1 mirQ, or involves offical facilities/transportation reades?	22.1. PMP: Project area prime to fluoding that threaters life and property?	12.2. FMP. Payed area meets an emergency need?	11.1. MP. Projectanos hac historic fixeding events?	23. FMP: Sufficient/veliable data? (If not, consider an FME)	36.3. MVP. Realization includes detailed MER modeling and quantified impacts?	34.2. FMP. An induction regarding the potential use of federal funds, or other sources of funding?	14.3. PMP: Demonstration for no adverte Impacts?	35.4. PMP: A description of all other patential risks, benefits, and impacts?	15. PMP: level1.cost (udo > 1.0?	Notes (Note here If project was demoted from MMP to MME, etc.)
UNIX.1	PME	tanona. Tes	Jan Wells County, Kancha Alegre and Alor Aces Dranage and Detection Project	doo disaster Molgalaa Proprit	\$ 1,650,276	TX GLD, JIM WHILE County 1303000	a 5	Reduce shuchares in 130yr	No-Set of Projectuand unable to break down			v					~	v											•	bet of projects - taskie to break down with correct orfo in hard. Not an PMP. Downgraded to PME
UM8.2	PM8		City of Premost Domage Improvements and Hood Mitigation Propert		\$ 18,128,000	TX GLD, City of Premiert 1300000		Reduce shuchares in 120yr	No-Set of Projects and unable to break down			v					~	v										-	•	Set of projects - Unable to break down with correct orfor inhand. Not as PMP. Downgraded to PME
UM8.3	PME	1000028 104	Dramage Mader Plan Study	Drainage Mader Plantbady - Alice	\$ 265,500	TWOB RP, City of Abox 1300000	4	up title		N	*	Y	v	Ŧ															-	Euriestly registrating contract with engineering consultant
unit-4	PMS	70	City of Alice Educational Outwards	The Lation will contro a pergram to educate City of Alice employees and eventures of the publications specific emplotion actions for all bacards, inclusing to a national termination reliation Provide Reduction, Tomado Talensons, Structural Hodereng, trajencione Saint, Calentration Stechnigers etc	\$30,000 per hacard	City of Alice 130000		Amareness	No - Natspectically field related		-																		ź	trum the latest update from City of lice / Jim Wells County (City of Alice & Jim Wells County/Multi-Housed Miligation Flan)
unes	PME	10	Construct Stern Dranage Schootwatere (City of Alice)	This addies proposes constructing new starm downage infloativesture to reduce the potential impacts of future fload events.	Mare than \$1,000,000	City of Alice 130000		Reduce shuctures in 100yr	Tes				Ŧ	~															ź	Fram the latest update from City of line / Inn Wells Caurity (City of Alice & Inn Wells Courty Multi-Hazard Mitigation Flan)
unit a	PM5	~	City of Alian Buyout Program for Repetitive Loss Properties	The action will develop and implement a program to looped any petitive loss properties to explaid drivings fortune.	Secution \$20,000 to ectablish program. Boyout.cods will say by clockers	City of Alice 180800		Reduce structures in 120yr	Tri			•				,													2	trum the latest splate from City of tice J an Wells County (Dity of Alice & an Wells County Mato-Haland Mitigation Plan)
UNE 7	PM8	70	City of Alice Disorage Matter Plan	This action will develop and implement a matter distinge plants limit merice existion is the participating justisations.	\$10,300- \$200,000	City of Alice 230200	a 5	Reduce shuctures in 130pl	No-na specific flood benefit, erusion benefit				v	N															-	trum the latest update from City of lice / Jim Wels County (City of Alice & Jim Wels County Multi-Nocard Mitigation Flan)
unes	PME	10	City of Alice Dam/ Sever Failure Mudies	The City of Alice will with local daw/ lower awaren to canduct minuted cludies to identify peak flow rates and expected mundations in the event of local daw failures	\$30,000 p+r ctudy	City of Alice 230200	. 2	High Hocard Dams	The				v	~															2	From the latest update from City of Size / Jim Wells County (City of Alice & Jim Wells County Multi-Housed Mitigation Plan)
unte a	PMS	10	Restrict development in high-hazard areas (Etty of Alliae)	The City of Alors will re-evolution all exciting floodplan construction extinctions to intentify strengths and weaknesses in order to produce a standation floodplan development excitation and masses, update its exciting flood-damage prevention estimation, and / or update its sourcegoode.	test/than \$10,000	City of Alice 230000		Misinan candarás	The						۲	*													2	From the latest update from City of Size / Jim Wells County (City of Alice & Jim Wells County Multi-Housed Mitigation Plan)
UME 30	PME	10	Gondruid New Levess and Improve Existing System (Oby of Alice)	This action propose constructing new Invest and improving existing does to reduce the patiential impacts of future fload events by inducing the Machinoid of Invest failure.	Mare than \$1,000,000	City of Alice 230200	. 2	High Hocard Dams	The				v	~															2	tran the latest update from City of lice / Jim Wells County (City of Alice & Jim Wells County Multi-Hazard Mitigation Flan)
UM8.15	PMS	10	Jim Melic Caunty Educational Outwach	This action will invest a program to educate the public about specific integration actions for all hazards, including but not hinted to participation in Utilithe Parks Medication, Tomado Sale-science, Structural Netdening, etc	test/than \$20,000-per hazard	Jim Wells Courty 130000		Amareness	No - Nutspecifically fluod related						*														ź	Fram the latest update from City of line / Inn Wells Caurity (City of Alice & Inn Wells Courty Multi-Hazard Mitigation Flan)
UME.12	PMS	10	Jim Melli Caurty Candination Onlinance Updates	tim the lit Caurty with the evaluate all notified floodplate construction including to laterally group(to-laterate wateraces is index to produce a new architector, public to evolving flood damage prevention enforces, and/or updates transmission and constructions to reduce flooding damage and net mitst development in high haard area.	test/than \$10,000	Jes Wells Coardy 230000		Misinan candarás	The						۲	*													2	From the latest update from City of Nov / Jon Wells County (City of Alice & Jon Wells County Multi-Hazard Mitigation Plan)
UME 20	PME	10	Condinal New Storm Doznage Infrastructure (Jim Wells Country)	This action proposes candiducting new starm dramage inflastivulture to reduce the potential impacts of future flood events.	Mare than \$1,000,000	Jes Wells Coardy 230000		Reduce shuthers in 120pt	The				v	~															2	From the latest update from City of Nov / Jon Wells County (City of Alice & Jon Wells County Multi-Hazard Mitigation Plan)
UME SE	PME	10	Portable Stame Water Pumps [3m Wells Gourty]	This action proposes purchasing portable pumps that can be deployed as needed to reduce the potential impairs of future fload events.	\$ 290,000	Jes Wells Coardy 230000		Reduce shuthers in 120pt	The				v	~															2	From the latest update from City of Nov / Jon Wells County (City of Alice & Jon Wells County Multi-Hazard Mitigation Plan)
UME 25	PME	70	In Wells County Ease / Seven Rature Studies	In their county will work with local daw/levels owners to conduct relevant counters to identify peak from roles and expected invadations in the event of local damfatures.	\$10,000 per chudy	Jim Wells County 130000	. 2	High Histard Danis	Tesi		-		Ŧ	N															ź	tran the latest splate from City of lice / Jim Wels County (City of Alice & Jim Wels County Multi-Housed Mitigation Plan)
UME 38	PMS	10	Jon Wells County Mream Tage Installation	Install driven gages throughout the county.		Jim Wells County 180000		Regional Coordinati on/Flood Working	No - Information IX INSefficient	*																			~	Added from the GLO Western Region Properties: Will likely be an initial cert plus annal costs.
UMK 17	PMS	10	Jan Wells Caunty Fixed Warning System	A county water flood warrang cyttern		Im Wells County 180000		Regional Coordinats on/Flood Working	Tes	~		N				N													~	Added from the GLO Western Region Project list.
UM8.18	PME	70	Lattac Creek Improvements	Constructions Lattice Greek to improved distinger capacity.		City of Alice 180805		Reduce structures in 100vr	Teri		-		N	-															~	Added from the GLO Western Region Project List.

(PMD)- fixed study of a sample fixed aroun area meded to accross

Need Milipators Project (MMY)- discussive cross structured project that where exploremented will reduce flood risk, entrypics houseds to by or property. Inducts nature based statuture. 'No explore repart'

Divergey (MUS): proposed pilor to reduce fload rais or mitigate fload balands. Any action that a MPS would like to evaluate and recommend that does not qualify as (MH ar FMP).

Pabli Consumi <u>Baline</u> <u>Fearly</u> <u>Paul</u> <u>Baline</u> <u>and</u> <u>Neuril Paul Real Fearl Fearly Constraints</u> <u>And Fearly The Paul Constraints</u> <u>And Fearly The Paul Constraints</u>

Type (RMP/FM /FMS) ¹ Unique IS	£ 10	Shown on Map?	2 Name	Description	Cost Spon	sar Gaals	Recommend?	1. Completed?	2. Sponsor confirmed? (- if haven't talkedto sponsor yet, N if sponsor says project is no longer feasible)	2. Funding Identified ?	4. FME: Reasonable planning-level estimate?	6. 5. FME: Flood Rea knowledge gap plane in the area? ett	FMS: sonable sing level Est cost ris imate?	7. FMS: timated flood ak reduction?	8. FMP: Discrete project, not a set of projects?	9. FMP: An entire capital program or drainage program? (if yes, not eligible or must be split.)	10. FMP: Does it provide mitigation for the 1% annual chance flood event?	11. FMP: Drainage area > 1 miP2, or involves critical facilities/transportation routes?	12.1. FMP: Project area prone to floading that threatens life and property?	12.2. FMP: Project an mosts an emergency need?	a 12.3. FMP: Project area has historie flooding events?	13. FMP: Sufficient/reliable data7 (If not, consider an FME)	14.1. FMP: Evaluation include detailed HBH modeling and quantified impacts?	S4.2, FMP: An indication regarding the potential use of federal funds, or othe sources of funding?	34.3. FMP: Demonstration for no adverse impacts?	34.4. FMP: A description of all other potential risks, benefits, and impacts?	15. FMP: Benefit cost ratio > 1.0?	Notes (Note here if project was demoted from FMP to FME, etc.)
LM9.1																												4

¹ Road Menament Existing RMP: food sub-of a world: fload more are welled to summ init Road Menament Existing RMP: structure and a new transmerie with reading fload init, religate hausts to the a property. Include nature based solutions. You register impact Road Menament Resp. RMP: structure and reading religite the area reading reading religite to the area RMP would list to trackate and areasment that dawn will quely a RMF or RMP. Read Menament Resp. RMP: structure and read food are missing religitations. A property and read read reading read RMF or RMP.

Type (FMP/FM E/FMS) ⁴ Unique IS	8	Shawn an Map?	Name	Description	Cost Spi	ensar Go	als RFPG Goals	á Goal II ID Catego	D Recomment	di 1. Completer	2. Sponsor confirmed? [- if haven't talkedto sponsor yet, N if sponsor says project is no longer feasible)	٦ Funding identifie D	4. RME: Reasonable planning-level estimate?	5. FME: Rook knowledge gap in the area?	6. FMS: Reasonable planning level cost estimate?	e 7. FMS: Estimated floor dsk reduction?	8. FMP: Discrete project, not a set of projects?	9. FMP: An entire capital program or drainage program? (If yes, not eligible or must be split.)	10. FMP: Does it provide mitigation for the 1% annual chance flood event?	11. FMP: Drainage area : > 1 mi*2, or involves critical facilities/transportation routes?	12.1. PMP: Project area prone to ficoding that threatens life and property?	12.2. PMP: Project area meets an emergency need?	12.3. FMP: Project area has historic flooding events?	13. FMP: Sufficient/reliable data? (If not, consider an FME)	14.1. FMP: Evaluation includes detailed H&H modeling and quantified impacts?	14.2. FMP: An indication regarding the potential use of federal funds, or other sources of funding?	14.3. FMP: Demonstration for no advene impacts?	14.4. FMP: A description o all other potential risks, benefits, and impacts?	f 15. FMP: Benefit cost ratio > 1.07	Notes (Note here if project was demoted from FMP to FME, etc.)
LM10.1 FME		N C	City of Fallurias City-Wilde Rood Study	City with flood study to determine relating flood baseds and to recommend flood nik reduction improvements and/or strategies	Ci Fait	13001 funta s	0012 48	Updat mapr	te A Goal S (structures i ficodolain)	n N	N	N	N	¥																

⁴ Flood Management Solution FMO: Flood index of a superfit flood once area needed to assess the Road Management Solution (FMO): Exclusion or inscurate approprint that when implemented will refue plan that, intigate houseds to bly ar property, includes nature-based solutions. No negative impact Road Management Solution (FMO): Flood and and and an antigent flood housed, Approximation that the robuster and recomment that then one quelly as TME or ABN. Road Management Solution (FMO): Flood and and antigent flood housed, Approximation (Approximation and and Flood and and and and antigent flood housed antigent flood housed and antigent flood housed and antigent flood housed antigent flood

Galipue IC (7584 MP(FME (FME) [*]	10 Shown on May	r Name	Description	Ceel	Spansar	a a	NPPG Goulit Guils 10 Catego	Recommend	Need Funding? (10)N(Nates	Notes entered by	5. Campleted?	2. Sponsor confirmed? (- If haven't talked to sponsor yet, N If sponsor says project is no longer feasible)	L Pandrag Ra Salentific gla	E PME E. PME secondation uning for set climation 7 are	1.7 load fedge fedge sa7 edinuts edinuts	a 7.9505 Butimated flac risk reduction	K. FMEP. Discosta project, est a projecto?	E. PMP: An entire capital program or drainage program? (d yes, not eligible or much be split.)	12. PMP: Does it provide willightus for the 1% annual chance fixed event?	11. PMP: Drainage area > 1 mir4; or involves official facilities;braneportation nucles?	12.1. MP: Popel arrayment to flooding that Devates the and property?	12.1. MIP: Projectarea meets accomposity accel?	II.1.1499 Project area has historic ficading events?	18. PMP: Sufficient, (which is dota? (If eat, uses der an PME)	36.1.PMP: Evaluation includes detailed NEM modeling and quantified impacts?	SEZ. PRP: An indication-regarding the potential use of federial funds, or other sources of funding?	34.3. FMP: Demonstration for no adverse topatte?	31.4 PMP: Advectigition of all other potential risks, benefits, and impacts?	15. MAP: Recefit cost ratio>1.0P	Nation (Natio how if project was demoted from PRP to PRP, etc.)	1
	MR 13	000002 No	County Wide Drainage Improvements	Media Creek Road Control Improvements	\$ 1,471,323	TWDEPP, Bee Caurily	1800004	SA Stracture 100vi	Nu-already funded	*	TWDB FIF funded (approved 8/12/2020)			~	×																	Point and a state	1
	PMI 13	000006 No	County Wide Early Flood Warring System	Plood Early Warning Sydaws - Place 1	\$ 487,900	TWDB/FIP, Bee Caustly	1800008	34. Region Coordina a/Yiao Warsin	d Io Na-alwady L funded	~	TRUE FIF funded (approved 9/17/2000)			~																		Distaily TWP	1
	PAP 13	000023 Wes	City of Beeulite Law Water Crossings Replacene Project	GID Disader Mitigation Properties episor three low water orosings (1. Tyler & Poeda, 1, Tyler & Unstaned Dish, and 3. Jackson & Poesta Creek)	\$1,844,010	City of Beevelie	1800003	18 1.990	No-on-going project	~	ONSONS South Tyler- South Lackson. Funded, in decign. See linit file for 8 lacaboric of law water origines	007																				1	1
114	PMI 13	000067 No	COASTAL BEND MITIGATION ACTION PLAN - BE DB	Silver Creek raad, Build a 200 foot bridge, 26 feet wide with a 45 degree daws. The low wider crossing at Shore Creek food, across often creek, foods during and after heavy rains, Stopping accounterfeet 92 aeade in the indexect.	\$ 250,000	Ree County	1800001	1 196	165																							Contraction and	1
	ME 13	000048 No	CDASTAL BEND MITIGATION ACTION PLAN - BE DE	Build abox culvert with pacified wings on C.R. KDI, sow water crossing wadres out during heavy cares, causing eroscon to read surface.	\$ 70,200	Bee County	18000053	S Strature 100v	in 16																							Distaily FMF	1
11.6	PMS 13	0000d9 No	COASTAL BEND MITIGATION ACTION PLAN - BE DS	Emergency Warring and Public Information System, Bee County and Die City of Beeutle Nave na Capability, other Data a sizes in the City Instit of Beeutle, to communicate warrings and emergency institute of Beeutles, to communicate warrings and emergency	\$20,000	Ree County, City of Recvile	1800007	Neglan Coordina 1 A/Viao	d Tes-High risk no area conside regional		Community need and need funding. Potential PML or	00P		×				~														Parameter BAR descendes B	
	PMI 13	1000030 185	Paeda Greik Drainage Improvements	Partilactersk dramage project. Complete concerts inning af dramage disk fram 51: Mary 10 May 101. A postane of the project has been completed from Adams street to South Tackson.	\$405,000	City of Beeville	1800003	Reduci 5 cloubure 100yi	14 No.		Poesta Concrete Orient Disanage Improvements. CHIMIE NAME, from 16 Marys to 281. Interds in Imp	009	×																				1
11.8	PME 13	000004 No	County White Dramage Mixter Plan Study	Distinge Mader Planning Mudy - Bee Gautty	\$ 2,000,000	TWORPP, Bee Caurily	1800001	di Updan maps	WG-FP funding withdown					-																		1	1
11.9	MI 18	No. No.	Beewile City-wide Drainage 13udy	Benulle City-wide Drainage Study		City of Beeville	1800001	44 (1944) 64 (1944)	36		Not started yet. City limits as boundary far study. Includer	2	N	Ŧ	N																		ī I
11.30	me		Madisan Millow Water Cruciang Replacement Project	Madison 31 Low Water grouping replacement		City of Beeville	1800003	18 LWC	396		Low water costing draws in line file	007	N	*	N																		1

¹/Bod Manasement Fuduction (PUF) - Road Cube of a cancel, Bod a conce and sended to assess cat. Field Management (PUF) - Road Cube of a categories and the sensement of the devise management of the available of the sensement management of the sensement of the sensement management of the sensement management of the sensement of the sensement management of the sensement management of the sensement management of the sensement management of the sensement of the sensement management of the sensement management of the sensement of t

Unio	Type (FMP/VM E/FMS) ⁴	10	Shown ee Name Map7	Decoliption	Gast	Spansor	Gaals	RFPG Goal ID Goals ID Category	Recommend	1. Completed	2. Sponsor confirmed? (- if haven't talkedto sponsor yet, N if sponsor says project is no longer feasible)	4. FME: Reasonable planning-level ectimate?	S. FME: Fi knowled; of gap in th area?	lood dge the level.com extinute	ie 7. FMS: Estimated floo risk reduction ?	8. FMP: Discrete d project, not a set of projects?	9. FMP: An entire capital program or drainage program? (I yes, not eligible or must be split.)	10. FMP: Daes it provide mitigation for the 1% annual chance flood event?	11. RMP: Drainage area > 1 miR2, or involves critical floading facilitien/transportation routes? prope	Project ne to 12.2. FMP: Projec that area meets an life and emergency need ty?	1 12.3. FMP: Project area has historic flooding overts?	13. FMP: Sufficient/veliable data (If not, consider an FME)	14.1. PMP: Evoluation includes detailed H&H modeling and quantified impacts?	54.2. FMP: An indication regarding the patential use of federal funds, or other sources of funding?	14.3. FMF: Demonstration for no adverse impacts?	14.4. FMP: A description of all other patential risks, benefits, and impacts? ratio > 1.1	Notes (Note here if project was demoted from FMP to FM etc.)
-			na Char (Stool Exaction, Number 5 of a 1048	CERT man of Unigeties Flor Includion	- <u>5 - 70,000</u>	Table 14, Amerika Instance South Colleges Galact Samuel Colleges Instance South	-		Alter an going project, alteredy funded	-		N	v														Flotfaiks: We are removing this item from the list sino it is not an FMX

¹ Fload Monoammer Exclusion IPMD-fload stade of a surefit fload ocean area needed to source risk Fload Molganies Project (FMP) surscurat or non-structured project that when imperented will recear fload risk, micigate hazards to life a gragery, includes nature-board clusters. We engetive impact Fload Molganeers (Future (FME) proposed into interface fload hazards. Any ecition that a AFV would like to evolute and recommend that does not quality as FME or FMP.

Type (FMP/FME /FMS) ¹	ID	Shown on Map?	Name	Description	Cost	Sponsor
FMS	133000233	No	Citywide Drainage System Improvements	Cleaning and restorating ditches throughout the city. Funding to be used on equipment. Maintenance of existing curbs, gutters, and inlets	\$-	Aransas Pass
FME	133000234	No	Citywide Stormwater Drainage Improvements	Improving drainage on ditches along TXDOT roads Improving conveyance on railroads undercrossings Lining of ditch crossing US-181 and I-35 (South of city) Cleaning and restorating ditches throughout the city Expanding the current stormwater network to unserved residential areas Maintenance of existing curbs, gutters, and inlets	\$ -	Gregory
EMP	133000235	No	Citywide Drainage System Improvements	Improvementing outfall stuctures Cleaning and restorating ditches throughout the city Maintenance of existing curbs, gutters, and inlets (especially along Woodhaven Dr. and N- Sandpiper St)	\$	- Ingleside on the Bay-
FMP	133000236	No	Expanding Drainage System to Southern Eastern-	Expanding and improving drainage network to the neighborhood bounded by Ave A, Ave G, Tiner-	<u>\$</u>	- Ingleside-
EMP	133000237	No	Expanding Drainage System to Ingleside HS Area	Expanding and improving drainage network to Ingleside HS area with possibility of constructing a-	\$	-City of Ingleside-
EMP	133000238	No	Citywide Drainage System Improvements	Improvements to outfall structures Cleaning and restorating ditches throughout the city Maintenance of existing curbs, gutters, and inlets	<u>\$</u>	-City of Ingleside-
FME	133000239	No	Citywide Drainage System Improvements	Cleaning and restorating ditches throughout the city Maintenance of existing curbs, gutters, and inlets	\$-	Lake City
FME	133000240	No	Citywide Drainage System Improvements	Improvements to outfall stuctures Cleaning and restorating ditches throughout the city Maintenance of existing curbs, gutters, and inlets	\$-	Lakeside
FME	133000241	No	Mitigating Impact of Seale Dam Outflow	Improving conveyance infrastructure capacity Construction of detention pond Procurement of easements and right-of-ways	\$-	Mathis
FMP	133000242	No	Citywide Drainage System Improvements	Cleaning and restorating ditches throughout the city Maintenance of existing curbs, gutters, and inlets	\$-	City of Mathis
FME	133000243	No	Citywide Stormwater Drainage Improvements	Improving drainage on ditches along TXDOT roads and conveyance on railroads undercrossings Cleaning and restorating ditches throughout the city Maintenance of existing curbs, gutters, and inlets	\$-	City of Odem
FME	133000244	No	Expanding Drainage System to Odem HS Area	Expanding and improving drainage network to Odem HS area and constructioning a detention basin	\$-	City of Odem
FME	133000245	No	Citywide Drainage System Improvements	Cleaning and restorating ditches throughout the city Maintenance of existing curbs, gutters, and inlets	\$-	Portland
FME	133000246	No	Improvements to Doyle Drainage Basin	Improvement to outfall into Nueces bay Construction of a new detention basin to serve newly developments Increase conveyance capacity of ditches	\$ -	City of Portland
FMP	133000247	No	Citywide Drainage System Improvements	Cleaning and restorating ditches throughout the city Maintenance of existing curbs, gutters, and inlets	\$-	San patricio
FME	133000248	No	Channel outfall Drainage Improvement Project	Improvementing outfall structures to Chiltipin Creek	\$ -	Sinton

Type (FMP/FME /FMS) ¹	ID	Shown on Map?	Name	Description	Cost	Sponsor
FME	133000249	No	Citywide Stormwater Drainage Improvements	Improving drainage on ditches along TXDOT roads and conveyance on railroads undercrossings Cleaning and restorating ditches throughout the city Maintenance of existing curbs, gutters, and inlets Expanding current stormwater network in residential areas	\$ -	City of Sinton
FME	133000250	No	Expanding Drainage System to Newly Developed Areas	Expanding the citywide drainage system to include the newly developed residential areas	\$-	City of Sinton
FME	133000251	No	Citywide Stormwater Drainage Improvements	Expanding the current stormwater network in residential areas Reconstructing/regrading the roads to allow water to flow in the natural drainage direction instead of ponding Maintenance of existing curbs, gutters, and inlets	\$ -	Taft
FMP	133000001	No	County Wide Drainage Improvements	Green Lake Outfall System and Gregory Diversion Ditch	\$ 11,841,990	-TWDB FIF, San Patricio County, San- Patricio County Drainage District-
FME	131000066	No	Others (Flood Prevention/Planning Study, LOMR etc)	GBRA Hazard Mitigation Plan Jurisdiction	\$ 78,500	TWDB FIF, Aransas, Bandera, Bexar, Calhoun, Goliad, Karnes, Kerr, Refugio, San Patricio, Wilson
FME	133000010	Yes	Euclid Stormwater Pump Station Improvements	The existing pump house enclosure is at risk of being significantly damaged due to hurricane wind loads and flooding of equipment during large rain events. The existing capacity is also severely undersized for anticipated peak flood flows. Pump house improvements are needed to improve maintenance access, hurricane resiliency, flood protection, and to facilitate new pumps for additional hydraulic capacity.	\$ 5,470,000	Aransas Pass
FMP	133000022	Yes	San Patricio County Channel Outfall Drainage- Improvement Project	Channel Outfall Drainage Improvement Project Location 1 Taft Site	\$ 7,717,591	-TX GLO, City of Taft-
FMP	133000023	¥es	San Patricio County Channel Outfall Drainage- Improvement Project	Channel Outfall Drainage Improvement Project Location 2 Sinton Site	\$ 7,717,591	-TX GLO, City of Sinton-
FME	133000041	No	Redfish Bay Protection and Enhancement	Coastal Texas Protection and Restoration Feasibility Study - SP1: This ER measure involves shoreline protection and restoration consisting of 7.4 miles of rock breakwater, at a crest height of 7 ft (NAVD88) with 2H:1V side slopes and a base width of 46 ft, 391.4 acres of island restoration, and 1.4 miles of oyster reef creation. A total of 3,500.5 AAHU would be created. The measure provides for the restoration of the Dagger, Ransom, and Stedman Island complex in Redfish Bay through the construction of breakwater along the unprotected GIWW shoreline along the backside of Redfish Bay and on the bayside of the restored islands. Additional protection is provided to the island complex through the placement of reef balls between the breakwater and island complex to create 1.4 miles of oyster reef. The breakwater and islands would protect submerged aquatic vegetation (e.g., seagrass) within Redfish Bay, and it is assumed that additional submerged aquatic vegetation will form between the breakwater and the islands and support coastal water birds.	\$ 344,084,000	TX GLO

Type (FMP/FME /FMS) ¹	ID	Shown on Map?	Name	Description	Cost	Sponsor
FME	133000080	No	COASTAL BEND MITIGATION ACTION PLAN - SP-02	Refurbish, flood proof repetitive loss homes damaged by declared disasters. San Patricio County obtained monies to complete 40 home rebuilds and has approximately 60 homes which are qualified but has no funding at this time.Many residential structures were damaged by storms in 2002. Insurance was non-existent, or coverage was not provided for by the homeowner, who were either elderly, low-income, or unaware that coverage on normal homeowner's insurance does not provide for flood or wind storm damage.	\$ 4,500,000	San Patricio County
FME	133000081	No	COASTAL BEND MITIGATION ACTION PLAN - SP-03	The Nueces River has had three major flood events, two Presidential declarations in 2002, and a non-declared event in 2003. The property is located in the 100 year floodplain, with portions in the floodway. San Patricio County has procured nine properties in the area, 6 in River Estates and 3 in Peaceful Valley through FEMA & ORCA Grants. We are in the process of purchasing one 600 acre parcel through the Coastal Bays and Estuary Program, and 13 tracts through a Texas General Land Office Grant (GLO) in the La Fruita Subdivision on the Nueces River.	\$ 20,000,000	San Patricio County
FMP	133000082	No	COASTAL BEND MITIGATION ACTION PLAN SP 04	The City of Ingleside currently has a warning siren that is out of service. This project is to replace- that equipment for the purpose of alerting residents to impending natural and manmade hazards-	\$ 75,000	-City of Ingleside
FME	133000083	Yes	Ave A 4th Street Extension	Secure drainage right of ways along Avenue A in the area near 4th to south of 6th Street. Design underground and/or open channel system to drain this area. This section of Avenue A has historically been inundated by heavy rain events due to poor drainage, cutting off access to area residences.	\$-	City of Ingleside
FMP	133000084	No	COASTAL BEND MITIGATION ACTION PLAN-SP-06	Conduct Engineering drainage study along California Street from West Main to the Kenney Bayou Secure drainage right of ways to include possible property acquisition and utility relocation. This- section of town has historically been inundated by heavy rain events due to poor drainage, cutting- off access to area residences.	\$	- City of Ingleside
FME	133000085	No	Nopal Street Bridge	COASTAL BEND MITIGATION ACTION PLAN - SP-26: Elevate roadway/construct bridge in city of San Patricio on Nopal street and county road 60A. City has had multiple floods from the Nueces river due to releases from choke canyon and Lake Corpus Christi dams due to tropical storms and heavy rain events.	\$ 1,000,000	City of San Patricio, San Patricio County
FME	133000086	No	COASTAL BEND MITIGATION ACTION PLAN - SP-29	Elevate roadway/construct bridge in city of San Patricio on Nopal street and county road 60B. City has had multiple floods from the Nueces river due to releases from choke canyon and Lake Corpus Christi dams due to tropical storms and heavy rain events.	\$ 1,000,000	City of Lake City
FME	133000087	Yes	Pelican Cove Sea Gate Replacement	Improve the Pelican Cove sea gates for easier installment & removal. To prevent rising water into the City, existing huge metal gates are lowered into concrete frames with a 10 ton crane at two railroad track openings. Once the storm surge is over, it is difficult to remove the gates when the water is still high.	\$ 250,000	City of Aransas Pass
FMP	133000088	No	San Patricio County Hazard Mitigation Action Plan - San Patricio County, Action #3	Clean and clear out drainage ditches, culverts and easements; Upgrade drainage system to increase capacity and reduce flooding; Utilize Next Door app to encourage area residents to maintain culverts and ditches on private property.	\$ 250,000	San Patricio County
FMS	133000089	No	San Patricio County Hazard Mitigation Action Plan - City of Gregory, Action #3	Survey and remove hazardous trees and brush from drainage system.	\$ 10,000	City of Gregory
FME	133000090	No	San Patricio County Hazard Mitigation Action Plan - City of Gregory, Action #5	Clean and clear out drainage ditches, culverts and easements; Upgrade drainage system to increase capacity and reduce flooding; Utilize Next Door app to encourage area residents to maintain culverts and ditches on private property	\$ 450,000	City of Gregory

Type (FMP/FME /FMS) ¹	ID	Shown on Map?	Name	Description	Cost	Sponsor
FMP	133000091	No	San Patricio County Hazard Mitigation Action Plan City of Gregory, Action #6	"Adopt/update disaster resistant building codes, ordinances and / or subdivision regulations (see- comments). (Heat resistant roofing, elevate utilities and equipment/appliances, hail resistant roofing, shatter- proof windows, lightning rods, roof strapping, drought tolerant landscaping ,low flow toilets , sprinkler system, fire resistant building materials, insulated pipes, etc.}"	\$ 2,000	-City of Gregory-
FMS	133000092	No	Emergency Notification System for Ingleside	Obtain and implement an AM Emergency Advisory Radio System for emergency notifications to citi zens during extreme events; Purchase and distribute NOAA all hazard radios to critical facilities for early warning.	\$ 20,000	City of Ingleside
FMP	133000093	No	San Patricio County Hazard Mitigation Action Plan – City of Ingleside, Action #2	Improve drainage, implement drainage right of way on California Street.	\$ 250,000	-City of Ingleside-
FMP	133000094	No	S an Patricio County Hazard Mitigation Action Plan City of Ingleside, Action #6	Adopt and implement a program to regularly clean and repair storm water drains; Upgrade undersi- zed storm- water drains to improve drainage and reduce flooding	\$ <u>1,000,000</u>	-City of Ingleside-
EMP	133000095	No	San Patricio County Hazard Mitigation Action Plan	Develop a hazard resistant municipal complex that will facilitate City Hall functions, Police –	\$ 8,000,000	-City of Ingleside-
FMP	133000096	No	San Patricio County Hazard Mitigation Action Plan City of Ingleside, Action #12	Implement Avenue B drainage project improvements	\$ 3,700,000	-City of Ingleside-
FMP	133000097	No	San Patricio County Hazard Mitigation Action Plan City of Ingleside, Action #13	Purchase emergency heavy equipment to facilitate recovery after a significant event.	\$ 650,000	-City of Ingleside-
FMP	133000098	No	San Patricio County Hazard Mitigation Action Plan – City of Ingleside, Action #14	Upgrade and harden critical communication infrastructure and equipment.	\$ 500,000	-City of Ingleside-
FMS	133000099	No	San Patricio County Hazard Mitigation Action Plan - City of Ingleside on the Bay, Action #9	Survey and remove hazardous trees and brush from drainage system.	\$ 10,000	Ingleside on the Bay
FMS	133000100	No	San Patricio County Hazard Mitigation Action Plan - City of Ingleside on the Bay, Action #9	Purchase NOAA "All Hazards" radios for early warning and post-event information and place in area schools/businesses/critical facilities.	\$ 10,000	Ingleside on the Bay
FMP	133000101	No	San Patricio County Hazard Mitigation Action Plan – City of Mathis, Action #1	Install generators with hard wired quick connections at critical facilities, including lift and pump – stations,- as deemed necessary; Harden/retrofit critical facilities to protect against hazards (see comments)	\$ 	-City of Mathis-
FME	133000102	No	San Patricio County Hazard Mitigation Action Plan - City of Mathis, Action #9	Equip sewer manholes with water tight covers and inflow guards; Raise electrical components of sewage lift stations above BFE; Floodproof sewage treatment plants in flood hazard/lowlying areas; Increase capacity/add stormwater detention /retention basins; Increase dimensions of drainage cul verts in areas prone to flooding and/or with drainage problems (specify locations).	\$ 3,000,000	City of Mathis
FMP	133000103	No	S an Patricio County Hazard Mitigation Action Plan ~ City of Odem, Action #3	Harden/retrofit critical facilities, including fire, police, and EMS facilities, to protect against - hazards (see comments)	\$ <u>1,000,000</u>	-City of Odem-
FMS	133000104	No	San Patricio County Hazard Mitigation Action Plan - City of Odem, Action #19	Install city-wide warning system as well as phone notification system for all critical facilities including schools.	\$ 20,000	City of Odem
FMP	133000105	No	San Patricio County Hazard Mitigation Action Plan - City of Portland, Action #1	Install generators with hard-wired quick connections at critical facilities, including lift and pump stations, as deemed necessary.	\$ 275,000	City of Portland

Type (FMP/FME /FMS) ¹	ID	Shown on Map?	Name	Description	Cost	Sponsor
FMP	133000106	No	San Patricio County Hazard Mitigation Action Plan	Retrofit police, fire, EMS facilities to hazard resistant levels (see comments); Install generators-	\$ 1,000,000	-City of Sinton-
FME	133000107	No	San Patricio County Hazard Mitigation Action Plan - City of Sinton, Action #12	Floodproof sewage treatment plants in flood hazard/lowlying areas; Raise electrical components of sewage lift stations above BFE; Equip s ewer manholes with watertight covers and inflow guards.	\$ 500,000	City of Sinton
FME	133000108	No	San Patricio County Hazard Mitigation Action Plan - City of Sinton, Action #15	Clean and repair stormwater drains. Upgrade undersized stormwater drains.	\$ 3,000,000	City of Sinton
FMP	133000109	No	San Patricio County Hazard Mitigation Action Plan City of Taft, Action #5	Harden/retrofit critical facilities to protect - against hazards (see comments). Install generators with hard wired quick connections	\$ <u>1,000,000</u>	-City of Taft-
FME	133000110	No	San Patricio County Hazard Mitigation Action Plan - City of Taft, Action #7	Adopt and implement a program for clearing debris from bridges, drains and culverts. Clean and repair stormwater drains. Upgrade undersized stormwater drains.	\$ 1,000,000	City of Taft
FME	133000111	No	San Patricio County Hazard Mitigation Action Plan - City of Taft, Action #9	Equip sewer manholes with watertight covers and inflow guards; Raise electrical components of sewage lift stations above BFE.	\$ 100,000	City of Taft
FME	133000200	No	Texas Coastal Resiliency Master Plan - R3-15	The project would include the construction of breakwaters along approximately 3,900 linear feet of shoreline at the Nueces River Delta to dissipate wave energy that is causing estuarine wetland loss. This project was permitted by the U.S. Army Corps of Engineers in October 2016 and the project is considered shovel-ready. Coordination is ongoing with the Port of Corpus Christi regarding the possibility of beneficially using dredged material in this area.	\$ 3,500,000	Coastal Bend Bays and Estuaries Program, Texas General Land Office
FME	133000206	No	Nueces Delta Shoreline Erosion Protection	This project will construct 3,900 linear feet of breakwater to protect 650 acres of marsh habitat along the face of the Nueces Delta shoreline. The Nueces Delta is currently undergoing rapid erosion that is causing the loss of significant marsh habitat for a variety of estuarine species that were injured by the Deepwater Horizon Oil Spill, including juvenile fishes, shrimp, and crabs that support important commercial and recreational fisheries. The Nueces Delta is also important habitat for many bird species impacted by the spill, such as white pelicans, brown pelicans, reddish egrets, black skimmers, least terns, snowy plovers, and piping plovers. Construction of a living shoreline will enhance the bay and estuarine habitat and contribute to the protection and restoration of a large contiguous area of salt marsh which will benefit these estuarine species. The proposed breakwater system will improve the area's resilience against sea level rise, storm surge, and flooding, and also protect nearby conservation management plans, including the Texas General Land Office's Texas Coastal Resiliency Master Plan and Texas Parks and Wildlife's Texas Wetlands Conservation Plan.	\$ 3,328,000	National Fish and Wildlife Foundation
FME	133000216	No	Dagger Island Restoration Project	This project will construct a half-mile, nearshore breakwater and beneficially use dredged material to restore an island in order to protect approximately 5,236 acres of coastal habitat, including 2,630 acres of seagrass in Redfish Bay, an area adjacent to Corpus Christi Bay. Additionally, this project will restore approximately 28 acres of coastal wetland habitat and create oyster, invertebrate and fisheries habitat.	\$ 3,824,000	Texas Parks and Wildlife Department
FME	131000003	No	County Wide Drainage Master Plan Study	Drainage Master Planning Study - San Patricio County	\$ 896,176	TDEM, San Patricio County

Type (FMP/FME /FMS) ¹	ID	Shown on Map?	Name	Description	Cost	Sponsor
FME	131000030	No	San Patricio County Hazard Mitigation Action Plan	Undertake a comprehensive study of flood risk and flood reduction alternatives with the assistance	\$ 1,000,000	-City of Ingleside-
FMS	131000031	No	San Patricio County Hazard Mitigation Action Plan - City of Sinton, Action #13	Identify and implement feasible actions to reduce risk for repetitive loss properties.	\$ 1,000,000	City of Sinton
FME	131000032	No	San Patricio County Hazard Mitigation Action Plan - City of Taft, Action #6	Complete a comprehensive flood study. Submit data to FEMA for flood mapping. Adopt higher floodplain development standards, above the minimum required based on the results of the flood study.	\$ 1,000,000	City of Taft
FME	131000033	No	San Patricio County Hazard Mitigation Action Plan - City of Taft, Action #13	Assess and map City of Taft hazard vulnerability.	\$ 50,000	City of Taft
FME	131000059	No	Texas Coastal Resiliency Master Plan - R2-20	An adaptive management hydrologic restoration study would look at the interactions of the physical systems that afect the hydrology in Nueces County, as well as the stakeholder interactions in the region. Work has been conducted on Nueces Bay freshwater infows via adaptive management plans of the Senate Bill 3 (80th Texas Legislature, 2007) Environmental Flows Process. Two current studies include: Using Comparative Long-Term Benthic Data for Adaptive Management of Freshwater Infow to Three Estuaries (Colorado-Lavaca, Guadalupe, and Nueces) and Infuence of Freshwater Infow Gradients on Estuarine Nutrient-Phytoplankton Dynamics in the Three Estuaries (Guadalupe, Nueces, and Upper Laguna Madre).	\$ 200,000	Coastal Bend Bays and Estuaries Program, Texas Commission on Environmental Quality, Texas A&M University-Corpus Christi, Nueces River Authority, City of Corpus Christi, Port of Corpus Christi Authority
EMS.	132000004	No	COASTAL BEND MITIGATION ACTION PLAN - RG-02	Implement 'All Hazards' NOAA Weather Radio (NWR) procedures for dissemination of emergency- messages originating with local jurisdictions. The National Weather Service (NWS) will implement- a new, centralized point of collection for non weather related emergency messages broadcast over NWS systems. NWS expects to deploy the All Hazards Emergency Message Collection System, HazCollect, in the summer and fall of 2005. HazCollect will provide an information technology interface between state and local systems, and the NWS Advanced Weather Interactive Processing System (AWIPS). HazCollect will provide a fast, reliable way to inject messagesinto the Emergency Alert System (EAS) and NOAA Weather Radio.	Low cost activity	Kleberg County, Live Oak County-
FMS	132000005	No	COASTAL BEND MITIGATION ACTION PLAN-RG-04	Promote public awareness and use of NOAA Weather Radio (NWR) to receive 'All Hazards'- warnings by distributing NWR literature, posting information on jurisdiction Web sites, hosting special events, and taking advantage of other opportunities as they arise. The National Weather- Service provides weather related hazards warnings to citizens, both through feeds to commercial- media via the Emergency Alert System (EAS), and directly into homes, businesses, schools and other locationsthrough NOAA Weather Radio (NWR). Through the efforts of the Emergency- Management programs in both Kleberg and Live Oak counties, broadcast coverage has recently- been completed for the Coastal Bend region through installation of transmitters near the- communities of Riviera and Three Rivers. These transmitters will also enhance reception of the NWR signals in Jim Wells and Bee counties.	Low cost activity	-Kleberg County, Live Oak County-
FME	132000015	No	COASTAL BEND MITIGATION ACTION PLAN - SP-13	The City of Portland has no Master Drainage Plan that would guide future development, and prevent new developments from compounding existing drainage problems. This project would develop a Master Drainage Plan for the City of Portland.	\$ 40,000	City of Portland
FMS	132000016	No	COASTAL BEND MITIGATION ACTION PLAN SP 32	Public needs to know what to expect during a disaster. The city of Aransas Pass will need to- promote public awareness by distributing literature, posting information on jurisdiction websites, hosting events and taking advantage of other opportunities as they arise to keep the community- informed to save lives.	\$ 2,000	-City of Aransas Pass-

Type (FMP/FME /FMS) ¹	ID	Shown on Map?	Name	Description	Cost	Sponsor
FMS	132000017	No	San Patricio County Hazard Mitigation Action Plan - San Patricio County, County Wide, Action #1	Identify and implement feasible actions to reduce risk for repetitive loss properties including actions such as flood proofing, elevation, acquisition, relocation, and retrofitting.	\$ 5,000,000	San Patricio County
FMS	132000018	No	San Patricio County Hazard Mitigation Action Plan - San Patricio County, County Wide, Action #2	Develop and implement an all hazards education program. Utilize Facebook, city webpage and distribution of brochures to provide information on all hazards that co uld impact the community. Provide mitigation measures to reduce risk of damage, injury or illness.	\$ 2,000	San Patricio County
FMS	132000019	No	San Patricio County Hazard Mitigation Action Plan San Patricio County, County Wide, Action #3	Adopt/update disaster resistant building codes, ordinances and / or subdivision regulations (see comments). (Heat resistant roofing, elevate utilities and equipment/appliances, hail resistant roofing, shatter proof windows, lightning rods, roof strapping, drought tolerant landscaping ,low flow toilets , sprinkler system, fire resistant building materials, insulated pipes, etc.)	\$2,000	-San Patricio County-
FMS	132000020	No	San Patricio County Hazard Mitigation Action Plan - San Patricio County, County Wide, Action #4	Participate in the Community Rating System.	\$ 5,000	San Patricio County
FMS	132000021	No	San Patricio County Hazard Mitigation Action Plan - San Patricio County, Action #5	Develop and implement a dam failure hazard education program. Utilize Facebook, city/county webpages and distribution of brochures to provide informat ion on the potential for dam failure and the areas at greatest risk. Provide mitigation measures to reduce risk of damages, injury or illness.	\$ 2,000	San Patricio County
FMS	132000022	No	San Patricio County Hazard Mitigation Action Plan - City of Gregory, Action #1	Develop and implement an all hazards education program. Utilize Facebook, city webpage and distribution of brochures to provide information on all hazards that co uld impact the community. Provide mitigation measures to reduce risk of damage, injury or illness.	\$ 2,000	City of Gregory
FMS	132000023	No	San Patricio County Hazard Mitigation Action Plan - City of Ingleside on the Bay, Action #1	Develop and implement an all hazards education program. Utilize Facebook, city webpage and distribution of brochures to provide information on all hazards that co uld impact the community. Provide mitigation measures to reduce risk of damage, injury or illness.	\$ 2,000	City of Ingleside on the Bay
FMS	132000024	No	San Patricio County Hazard Mitigation Action Plan - City of Ingleside on the Bay, Action #11	Adopt ASFPM's "No Adverse Impact" policy to mitigate local flooding.	\$ 2,000	City of Ingleside on the Bay
FMS	132000025	No	San Patricio County Hazard Mitigation Action Plan - City of Mathis, Action #6	Develop and implement an all hazards education program. Utilize Facebook, city webpage and distribution of brochures to provide information on all hazards that co uld impact the community. Provide mitigation measures to reduce risk of damage, injury or illness.	\$ 2,000	City of Mathis
FMS	132000026	No	San Patricio County Hazard Mitigation Action Plan - City of Mathis, Action #7	Obtain certification by the National Weather Service as "Storm Ready" community; improve emergency management radio coverage and reception; Implement and enhance an area-wide telephone Emergency Notification System ("Reverse 911").	\$ 50,000	City of Mathis

Type (FMP/FME /FMS) ¹	ID	Shown on Map?	Name	Description	Cost	Sponsor
FMS	132000027	No	San Patricio County Hazard Mitigation Action Plan - City of Mathis, Action #10	Install signs prohibiting dumping in streams, ditches, waterways and floodplain areas.	\$ 2,000	City of Mathis
FMS	132000028	No	San Patricio County Hazard Mitigation Action Plan - City of Odem, Action #1	Develop and implement an all hazards education program. Utilize Facebook, city webpage and distribution of brochures to provide information on all hazards that co uld impact the community. Provide mitigation measures to reduce risk of damage, injury or illness.	\$ 2,000	City of Odem
FMS	132000029	No	San Patricio County Hazard Mitigation Action Plan - City of Odem, Action #4	Improve emergency management radio coverage and reception; Implement and enhance an area-wide telephone Emergency Notification System ("Reverse 911"); Develop alternative evacuation routes/plans and d esignate emergency thoroughfares, particularly in areas with limited capacity; Educate citizens on e vacuation routes and procedures.	\$ 10,000	City of Odem
FMS	132000030	No	San Patricio County Hazard Mitigation Action Plan - City of Odem, Action #5	Adopt higher floodplain standards above the minimum requirements to provide additional flood pr otection to new development.	\$ 1,000	City of Odem
FMS	132000031	No	San Patricio County Hazard Mitigation Action Plan - City of Odem, Action #12	Update public community facilities to include severe weather action plans and designated tornado shelter areas. Educate public on plans and shelter locations.	\$ 2,500	City of Odem
FMS	132000032	No	San Patricio County Hazard Mitigation Action Plan - City of Odem, Action #15	Relocate books, manuals, permits, and other critical government records to the upper floors and/or on shelves above the base flood elevation of the library and records building.	\$ 2,500	City of Odem
FMS	132000033	No	San Patricio County Hazard Mitigation Action Plan - City of Odem, Action #15	Implement a flood awareness program by providing FEMA/NFIP materials to mortgage lenders, real estate agents and insurance agents and p lace them in local libraries.	\$ 2,500	City of Odem
FMS	132000034	No	San Patricio County Hazard Mitigation Action Plan - City of Odem, Action #18	Educate city employees on risks associated with natural hazards and measures to prevent injury or loss of life.	\$ 2,000	City of Odem
FMS	132000035	No	San Patricio County Hazard Mitigation Action Plan - City of Portland, Action #4	Adopt higher floodplain standards above the minimum requirements to provide additional flood pr otection to new development.	\$ 1,000	City of Portland
FMS	132000036	No	San Patricio County Hazard Mitigation Action Plan - City of Portland, Action #5	Identify and install stream and rain gauges at critical sites, upgrade gauges at established sites where necessary, coordinate installation requests.	\$ 10,000	City of Portland
FMS	132000037	No	San Patricio County Hazard Mitigation Action Plan - City of Portland, Action #7	Develop and implement an all hazards education program. Utilize Facebook, city webpage and distribution of brochures to provide information on all hazards that co uld impact the community. Provide mitigation measures to reduce risk of damage, injury or illness.	\$ 2,000	City of Portland
FMS	132000038	No	San Patricio County Hazard Mitigation Action Plan - City of Sinton, Action #2	Adopt higher floodplain standards above the minimum requirements to provide additional flood pr otection to new development.	\$ 2,000	City of Sinton
FMS	132000039	No	San Patricio County Hazard Mitigation Action Plan - City of Sinton, Action #3	Develop and implement an all hazards education program. Utilize Facebook, city webpage and distribution of brochures to provide information on all hazards that co uld impact the community. Provide mitigation measures to reduce risk of damage, injury or illness.	\$ 2,000	City of Sinton

Type (FMP/FME /FMS) ¹	ID	Shown on Map?	Name	Description	Cost	Sponsor
FMS	132000040	No	San Patricio County Hazard Mitigation Action Plan - City of Sinton, Action #6	Limit development and increase density requirements within hazard areas; Incorporate higher stan dards for hazard resistance in local application of the building code.	\$ 3,000	City of Sinton
FMS	132000041	No	San Patricio County Hazard Mitigation Action Plan - City of Sinton, Action #7	Obtain certification by the National Weather Service as a "Storm Ready" community.	\$ 2,000	City of Sinton
FMS	132000042	No	San Patricio County Hazard Mitigation Action Plan - City of Sinton, Action #14	Cross-train building inspectors in floodplain management requirements.	\$ 2,000	City of Sinton
FMS	132000043	No	San Patricio County Hazard Mitigation Action Plan - City of Taft, Action #1	Develop and implement an all hazards education program. Utilize Facebook, city webpage and distribution of brochures to provide information on all hazards that co uld impact the community. Provide mitigation measures to reduce risk of damage, injury or illness.	\$ 2,000	City of Taft
FMS	132000044	No	San Patricio County Hazard Mitigation Action Plan - City of Taft, Action #8	Install signs prohibiting dumping in streams, ditches, waterways and floodplain areas.	\$ 2,000	City of Taft
FMS	132000045	No	San Patricio County Hazard Mitigation Action Plan - City of Taft, Action #10	Advertise and promote the availability of flood insurance and availability of the Preferred Risk Policy (PRP); Distribute flood insurance handouts with all permit applications.	\$ 2,000	City of Taft
FMS	132000046	No	San Patricio County Hazard Mitigation Action Plan - City of Taft, Action #11	Educate community on the dangers of low water crossings through the installation of warning signs and promotion of "Turn Around, Don' t Drown" program	\$ 1,000	City of Taft
FMS	132000065	No	Texas Coastal Resiliency Master Plan - R3-26	Under this project, locations in the Coastal Bend area that have been identifed through existing habitat suitability index models would be selected to restore degraded oyster reefs. The project would include data collection and monitoring activities to assess the viability of future oyster reefrestoration efforts in the Coastal Bend bays.	\$ 700,000	Texas Parks & Wildlife Department Coastal Bend Bays and Estuaries Program
FMS	132000067	No	Flood Proof Repetitive Loss Homes in San Patricio County	Re-Furbish, Flood proof Repetitive Loss Homes damaged by Declared Disasters. San Patricio County obtained monies to complete 40 home rebuilds and has approximately 60 homes which are qualified but has no funding at this time. Many residential structures were damaged by storms in 2002. Insurance was non-existent, or coverage was not provided for by the homeowner, who were either elderly, low-income, or unaware that coverage on normal homeowner's insurance does not provide for flood or wind storm damage.	\$ 4,500,000	Office of Community and Rural Areas

Type (FMP/FME /FMS) ¹	ID	Shown on Map?	Name	Description	Cost	Sponsor
FMS	132000068	No	Buyout Program in Peaceful Valley	The Nueces River has had three major flood events, two Presidential declarations in 2002, and a non-declared event in 2003. The property is located in the 100 year floodplain,with portions in the floodway. San Patricio County has procured nine properties in the area, 6 in River Estates and 3 in Peaceful Valley through FEMA & ORCA Grants. We are in the process of purchasing one 600 acre parcel through the Coastal Bays and Estuary Program, and 13 tracts through a Texas General Land Office Grant (GLO) in the La Fruita Subdivision on the Nueces River.	\$ 20,000,000	Potential funding sources include FEMA, ORCA, and GLO
FMP	133000256	No	Green Lake Outfall Channel Extension	Minimize existing flooding problems and reduce flooded areas for the Cities of Gregory and Portland. This project would include acquisition of new drainage easements; new channel excavation; new multiple box culvert crossing with headwalls and concrete plating at FM 893 and CR 72A and concrete plating sharp bends in alignment which may be subject to erosion.	\$ 12,000,000	San Patricio County Drainage District
FME	133000257	No	Humble Channel Drainage Improvements & Ditch Extension	Eliminate flooding and reduce flooded area in the residential area of Ingleside that is located to the east of Emory Bellard Drive. This project would include acquiring new drainage easement for a new ditch lateral from Emory Bellard Drive to the intersection of the existing Humble ditch; excavating a new outfall channel that would connect to the existing humble Channel Outfall; widening and deepening the existing Huble Channel Outfall; installing new multiple box culvert crossings below Emory Bellard Drive and concrete plating the ditch intersection area and sharp bends in the ditch alignment which may be subject to erosion.	\$ 1,767,000	San Patricio County Drainage District
FME	133000258	No	Sinton South Ditch Channel Improvements	Primary purpose of project is to increase the outfall capacity of the existing Sinton South Ditch. Project would include widening and deepening the existing Sinton South Ditch; widening the existing railroad crossing adjacent to US HWY 181; concrete plating the existing ditch section through US HWY 181; construction a new widened, low water crossing that serves as access to the local farming community and concrete plating the ditch intersection area which may be subject to erosion.	\$ 7,500,000	San Patricio County Drainage District
FME	133000259	No	Drainage Improvements to Outfall Channel - Lateral AN	Primary purpose for this project is to reduce flooding footprint for the northeast part of Taft. The project will widen and deepen the existing Main Lateral AN; replace the existing bridge crossings at FM 631, CR 102, CR 77, and CR 81; and concrete plating the critical ditch section between FM 693 and CR 102 to increase the runoff rate through this section of ditch.	\$ 4,782,000	San Patricio County Drainage District
FME	133000260	No	Drainage Improvements to Outfall Channel - Lateral AJ	Primary purpose is to reduce the flooding footprint for the western half of Taft. The project proposes to widen and deepen the existing Main Lateral AJ; widen the existing railroad trestle at US HWY 181; concrete plate the ditch section through the US 181 bridge crossings; replace the existing bridge crossings at CR 71, FM 1360, Pyron Farm Road and CR 98; and concrete plating sharp bends in alignment which may be subject to erosion.	\$ 8,262,000	San Patricio County Drainage District

Type (FMP/FME /FMS) ¹	ID	Shown on Map?	Name	Description	Cost	Sponsor
FME	133000261	No	Channel Drainage Improvements & Ditch Extension for Outfall Channel - Lateral AS, Northwest Gregory, Texas	The primary purpose is to reduce flooding footprint for the northern half of the residential area of Gregory. The project includes acquiring new drainage easements upstream and downstream of existing drainage easement; new ditch excavation; installing new multiple box culverts at FM 3284, CR 106 and FM 136; widen and deepen the existing Main Lateral AS; concrete plating the critical ditch section that is behind Orchid Circle at the north end of Gregory and sharp bends that may be subject to erosion.	\$ 5,475,000	San Patricio County Drainage District
FME		Yes	Avenue B Drainage Channel Extension and Outfall Improvements	2,500 LF of stormwater utility replacement between Humble Avenue and Mustang Avenue, and 1,200 LF of stormwater utility replacement between Mustang Avenue and the Avenue B concrete lined channel. Additionally, this project would include improvements from 5th Street, 6th Street, 7th Street, and 8th Street into the improved Avenue B channel, and downstream channel widening/cleaning. This project could also include land acquisition.	\$ 5,000,000	City of Ingleside
FME		Yes	Wright Avenue Drainage Improvements	Easement Acquisition and constrution of two 700 LF earthern drainage channels between Wright Avenue and McCampbell Slough along with 2500 LF of channel widening from the north side of the existing hotel properties to the west and tie-in with McCampbell slough. Addresses the flood prone Nystrom Property area.	\$ 400,000	City of Ingleside
FMP		Yes	Drainage Improvements - FM 1069 to McCampbell Slough	Easement Acquisition and the design and construction of 10,000 LF of drainage channels along FM 1069 and from Morgan Lane and Mooney Lane to McCampbell Slough. Addresses the flood prone Mooney-Vickery area.	\$ 750,000	City of Ingleside
FMP		Yes	Morgan Avenue & Mooney Avenue Drainage Improvements	2,500 LF of drainage improvements, including improved channels and belowground concrete boxes. The project would also include easement acquisition and the crossing of both SH 361 and the UP Railroad and concrete outfall. Addresses the flood prone Mooney-Morgan area.	\$ 3,500,000	City of Ingleside
FME		Yes	Ingleside Drainage Master Plan	Ingleside Drainage Master Plan	\$ 521,181	City of Ingleside
FMS	133000148	No	Higher Floodplain Management Standards for Aransas Pass	Incorporate higher floodplain management standards into City of Aransas Pass comprehensive plan update.	\$ 76,754	City of Aransas Pass
EMS	132000070	No	Aransas County Multi Jurisdictional Floodplain- Managment Plan - Action 1.3.c	Investigate whether CRS is viable for the City of Aransas Pass.	\$	- City of Aransas Pass-
FME	133000232	No	Rehabilitation of Ditch at County Road 14F	Topographic and hydrological study for improvement and regrading of Drainage ditch.	\$	Taft
FMP		Yes	Houghton Subdivision Drainage Improvements	Construct underground and surface drainage improvements throughout the subdivision, including a trunk line along San Antonio Ave from Humble Street to the outfall into the existing Ave B Channel. Concrete line the Ave B Channel from the upstream end to the confluence with the existing concrete lined section of the channel.	\$ 3,900,000	City of Ingleside
FMP		Yes	4th Street Drainage Improvements (Ave A to Ave G/D)	Construction underground and surface drainage improvements along 4th Street from Avenue A to Avenue G. Improvements may extend as far as Avenue D.	\$ 2,500,000	City of Ingleside

Type (FMP/FME /FMS) ¹	ID	Shown on Map?	Name	Description	Cost	Sponsor
FME		Yes	Ave A & 8th Street Drainage Improvements	Drainage improvements along Avenue A from south of 6th Street, south to 8th Street, and west along 8th Street to the existing drainage channel.		City of Ingleside
FME		Yes	Stormwater Master Plan #1 - North of Parkview between Starlight and Sunset Outfall Pipe	Better connection with outfall pipe	\$ 76,776	City of Ingleside on the Bay
FME		Yes	Stormwater Master Plan #2 - North of Parkview between Sunset and Woodhaven Outfall Pipe	Better connection with outfall pipe	\$ 47,250	City of Ingleside on the Bay
FME		Yes	Stormwater Master Plan #3 - North of Post Oak between Starlight and Sunset Outfall	Better Connection from midpoint of Alley with the Outfall	\$ 29,400	City of Ingleside on the Bay
FME		Yes	Stormwater Master Plan #4 - North of Post Oak between Sunset and Woodhaven Outfall	Better connection with outfall pipe	\$ 79,450	City of Ingleside on the Bay
FME		Yes	Stormwater Master Plan #5 - North of Ebony between Starlight and Sunset Outfall	Better connection with the outfall pipe and extension down Ebony	\$ 87,325	City of Ingleside on the Bay
FME		Yes	Stormwater Master Plan #6 - LiveOak/Ebony and Woodhaven Improvements and Outfall	Better connections, inlet improvements, and new outfall	\$ 322,720	City of Ingleside on the Bay
FME		Yes	Stormwater Master Plan #7 - Bayshore East Channel and Culvert Improvements	Roadside channel improvements and driveway culvert replacements	\$ 329,000	City of Ingleside on the Bay
FME		Yes	Stormwater Master Plan #8 - Bayshore East Outfall	Additional outfall	\$ 110,550	City of Ingleside on the Bay
FME		Yes	Stormwater Master Plan #9 - Bayshore Court Outfall	Additional outfall	\$ 110,550	City of Ingleside on the Bay
FMP		Yes	CDBG DR Hurricane Harvey Recovery Drainage Improvements	This project consists of the installation of drainage improvements to include 900 lf of concrete- lined channel, 963 lf of 8'x3' concrete box culvert, 1,656 lf of existing 42" RCP storm sewer line rehabilitation, asphalt pavement reconstruction, curb & gutter, junction boxes, inlets, removal of 900 lf of existing 42" CMP storm sewer line removal, 925 lf of existing 48" storm sewer line removal, and appurtenances. Improvements are along the following streets: McCampbell St, Stapp Ave, & Rife St.	\$ 2,032,335	Aransas Pass

Type (FMP/FME /FMS) ¹	ID	Shown on Map?	Name	Description	Cost	Sponsor
FMP		Yes	Deberry, Saunders, and Greenwood Drainage Project	The existing 54-inch CMP ws observed to have failures at the joints, significant corrosion and collapsing at segments resulting in sediment blockage in the storm system that are obstructing conveyance of runoff. Also, the condition of ht econnecting pie system downstream was unable to be verified and is suspected to have blockages that may be further rcontributing to a decrease in hydraulic capacity. Backflow and surface flooding are the main issues in this area. Proposed improvements include replacing the collabpsed pipe with an earthen channel and larger underground infrastructure.	\$ 2,199,892	Aransas Pass
FMP		Yes	13th Street, W. Wilson Avenue and W. Nelson Avenue Drainage Improvements	This project consists of approximately 2,150 LF of 18", 24", and 42" RCP replacement, area drains, safety end treatments and full depth pavement repair.	\$ 475,167	Aransas Pass
FMP		Yes	Highland and Johnson Drainage Improvements	Localized street flooding due to an undersized pipe system and pavement falures due to the collapse of the storm drain pipe are the primary concerns, as well as the lack of storm drainage infrastructure upstream of South Saunders Street. Runoff is collected by curb inlets into a 42-inch corrugated metal pipe trunk line that discharges into a wet pond located near the Aransas Pass Baseball Park. Failure at the pipe joints allows roadway base material to be washed away during storm events resulting in sinkhole formations and dangerous hazards to vehicles and pedestrians. This project consists of 8,000 LF of ditch re-grading, driveway culvert crossings, 1,800 LF of 48" RCP replacement, inlets, and full depth pavement repair	\$ 787,595	Aransas Pass
FME		Yes	Bayshore Drive Surge Protection Project	Nueces County and the Port of Corpus Christi is willing to help protect the homes on the north end of Bayshore. Ingleside on the Bay Coastal Watch Association (IOBCWA), a local non-proift organization, is investing in a flood, air, and drainage monitoiring system. The funding was secured for the model.		Ingleside on the Bay
FME		No	Lang Road Drainage Ditch and Outfall	This is the location of a future project: a drainage ditch is needed to alleviate flooding created by increased development. The ditch would run south from Lang Road to the bay.		Portland

¹ Flood Management Evaluation (FME)- flood study of a specific flood prone area needed to assess risk

Flood Mitigation Project (FMP)- structural or non-structural project that when implemented will reduce flood risk, mitigate hazards to life or property. Includes nature-based solutions. 'No negative impact' Flood Management Strategy (FMS)- proposed plan to reduce flood risk or mitigate flood hazards. Any action that a RFPG would like to evaluate and recommend that does not qualify as FME or FMP.

Information Confirmed with Community

Public Comments

Comment Date	Flood Type	Flood Frequency	Most Recent Flood Event	Description
5/24/2021	Road	Few_Occasions	May 19, 2021	Spur 202, poor drainage with heavy rain,
5/24/2021	Land	Frequently	5.19.2021	Flooding in the ditches, yards all over the Las Palmas property. The water went up to the units.

Type (FMP/FME /FMS) ¹	ID	Shown on Map?	Name	Description	Cost
5/25/2021	Land	Frequently	5.19.2021	Flooding all over the property, water came super close to the units doors.	
5/25/2021	Land	Frequently	5.19.2021	flooding all over the property. The water was almost to the doors.	
5/25/2021	Land	Frequently	5.19.2021	Flooding all over property. Almost came up to the doors of the units.	
5/25/2021	Land	Frequently	5.19.2021	Flooding all over property, almost to the doors	
5/25/2021	Land	Frequently	5.19.2021	Flooding all over property, almost to the doors	
6/7/2021	Land	Few_Occasions	May 25,2021	See photos	
6/9/2021	Road	Frequently	Floods FM 1069 whenever rains total over about 2-3 inches	Road becomes impassable, cutting off responders from residents	
6/9/2021	Road	Few_Occasions	When heavy rains occur	The bridge is old and gets covered by water when the creek fills up	
-	-	-	-	Issues with RR - Flood Prone	1
-	-	-	-	Low water crossing - Flood Prone	
-	-	-	-	Green Lake outfall - Flood Prone	
-	-	-	-	Algodon Colonia - Flood Prone	
-	-	-	-	Rancho Chico High School - Flood Prone	
-	-	-	-	Tradewinds area - Flood Prone	
7/9/2021	Land	Frequently	when level of rain exceeds 5" in 24 hr period	flooding occurs on all surrounding properties from Ave A to Saunders on Mooney Lane	
7/12/2021	Road	Frequently		-	
7/12/2021	Road	Frequently		-	
7/12/2021	Road	Frequently		-	
7/12/2021	Channel	Frequently		-	
7/12/2021	Channel	Few_Occasions		-	
7/13/2021	Road	Few_Occasions	July 7, 2021	TX-35 E access road just pass Whataburger, prior to Pecos Dr.	
7/13/2021	Road	Few_Occasions	July 7, 2021	US-181 S access road between Buddy Ganem Dr and Peps Restaurant	
5/25/2021	Land	Frequently	5.19.2021	Flooding all over the property, water came super close to the units doors.	l

Unique	Type (FMP/FME /FMS) ¹	ID	Shown on Map?	Name	Description	Cost	Sponsor	Goals	RFPG Goals ID	Goal ID Category	Recommend	Need Funding? (Y/N)	Notes	Notes ent	1. Completed?	2. Sponsor confirmed? (- if haven't talkedto sponsor yet, N if sponsor says project is no longer feasible)	3. Funding identified ?	4. FME: Reasonable planning-level estimate?	5. FME: Flood knowledge gap in the area?	6. FMS: Reasonable planning level cost estimate?
14.3	FME	131000055	No	Others (Flood Prevention/Planning Study, LOMR- etc)	GBRA Hazard Mitigation Flan Jurisdiction	\$ 78,500	-TWD2 RF, Aranzar, Bandera, Bewar, Calhoun, Goliad, Karner, Kerr, Refugio, San Patricio, Wilkon	-		-	No - not well defined and potentially funded		Potentially funded. Halley to get us POCs for these projects.	GDF/DDP				N	Y	
L4.2	FMP	133000020	Yes	Citywide Wastewater Treatment Plant and Drainage Project	Improvements to the town's drainage system are stated to include the following: • Building a new wastmaster transmission of the single system of the follogian • Bondinship detecting and the single system of the single system of the single system • Detecting of the single generators at the wastmaster transmert giant • Excluding generators at the wastmaster transmert giant • Constructing drainage provements at Withow Addition • Installing concrete pawement and underground storm drains on Commerce 9.3 by the railineal tracks.	\$ 12,112,636	Town of Refugio	13000014	SA	Reduce structures in 100 yr	No - on-going project; already funded	N	ONGOING project. TX GLO funded; cost shown is funding the community received from GLO. (Approx location noted; used approx city limits since whole city benefits from elevated WWTP - kmz file)	SLW		N	¥	N	Y	
14.3	FMP	133000021	Yes	Refugio County Hazard Mitigation Improvements Project	This project improvements to the dramage protom and increases water system relifiency in Woodbore. The project increases water dramage on iter str 54 mon Discoil 35 to M1 136 dbth, including line its at strent interactions • Subtweet dramage improvements to include dbth registrations dramage in the strent interactions • Subtweet dramage improvements to include dbth registrations registration dramage include strent interactions • Subtweet dramage improvements to include dbth registrations registrational interactions • Subtweet dramage improvements on M1 130 (clasm call, subtweet dramage) • New water will add transmittations and the strength on the strengt interactions • Rever unal the offense of the strengt interactions • Rever unal the offense water plant to existing locators dramage task • Leads strengt intergrammer from formal strengt Stre M1 330.	\$ 6,910,131	Refugio County	13000014	SA	Reduce structures in 100 yr	No - on-going project; already funded	N	ONGOING project. TX GLO funded; cost shown is funding the community received from GLD. Located in Woodsboro, TX. (Approx location noted - kmz file)	5.W		N	¥	N	Y	
L4.4	me	132000252	210	Culvert improvement on Hatch St in Tivoli	The bridge on Match Street in Theil was replaced with a subject which drains dow and causes the water to breach the lower.	<u>.</u>		-				Y	THIS PROJECT IS IN REGION 12. Received from phone calls and emails from the county. These areas are flooding issues the community wants addressed. Halley to follow up on sponsor information from client. (Location noted - kmz file)	GDF/DDP	N	Ÿ	N	N	Y	
L4.5	-	122000352	***	Culvert improvement on Highway 220 in Twell	Some colverts on Highway 220 in Tirvii are too small causing water to get in house.	*		-				¥	THIS PROJECT IS IN REGION 12. Received from phone calls and emails from the county. These areas are flooding issues the community wants addressed. Halley to follow up on sponsor information from clinet. (Locations undetermined)	GDF/DDP	N	Ÿ	N	N	¥	
L4.6	int.	122000354	No	Miller-Greek on the Smoly-Greek Ranch Drainage- Improvements	Allier Creek on the Smoky Creek Ranch drain. That and the currounding area which is washing out property where helpin attifacts wave found.			-				¥	THIS PROJECT IS IN REGION 12. Received from phone calls and emails from the county. These areas are flooding issues the community wants addressed. Halley to follow up on sponsor information from client. (Locations undetermined)	GDF/DDP	N	¥	N	N	¥	
L4.7	rme	133000255	No	J.W.Johnson-in-Tivoli Bridge Replacement	The bridge on J.WJohnson in Tindi is in bad shape and needs to be replaced.	*		-				¥	THIS PROJECT IS IN REGION 12. Received from phone calls and emails from the county. These areas are flooding issues the community wants addressed. Halley to follow up on sponsor information from client. (Location undetermined)	GDF/DDP	N	Ÿ	N	N	¥	
14.8	FME		Yes	Drainage Improvements at Mission River Park in Refugio	Flooding at Mission River Park in Refugio.	#N/A	Town of Refugio	13000014	5A	Reduce structures in 100 yr	Yes	¥	Received from phone calls and emails from the county. These areas are flooding issues the community wants addressed. Hailey to follow up on sponsor information from client. (Approximate location added as kmz)	GDF/DDP	N	Ŷ	N	N	Y	
14.8	-	122000074	No	Underground Drain Maintenance in Tivoli	Underground datans in Theil on Higherry 200, William Street and William Street need cleaning. The blockage causes water to drain slow and enable potential Reading Assards.	mu/A		-	-			Y	THIS PROJECT IS IN REGION 12. Received from phone calls and emails from the county. These areas are flooding issues the community wants addressed. Halley to follow up on sponsor information from client. (Locations undetermined)	GDF/DDP	N	¥	N			N
	1345	122000075	240	Ditches and culverts Maintenance in Tiveli	Bitabas and subverts in Theol need obsering an Acat Street, Device Rood, Maurit Rood, Okazador Anarow. Gases Devek, Villaured Rood, Lee Devek, Eugen Lane and Raymond Lane, Laylon Lane, and Richford Rood.	204/A		-		-			THIS PROJECT IS IN REGION 12. Received from phone calls and emails from the county. These areas are flooding issues the community wants addressed. Hailey to follow up on sponsor information from client.		N	Ŷ	N			

¹ Flood Management Ivaluation (FME), flood study, ef a specific flood prone area needed to assess risk Rood Management Product (FMP), structural or non-structural project that when mplemented will reduce flood risk, mitigate hazards to life or property, includes nature-based solutions. No negative impact Rood Management (FME) project and its marker flood natural, marker flood natural, was ration that a KPR would list to reduce and a reason and quality as TARs or FMP.

Public Comr	ments			
Comment Date	Flood Type	Flood Frequency	Most Recent Flood Event	Description
6/4/2021	Land	Frequently	Every time it rains more than an inch	No drainage at all. water sits in culverts, yards and ditches
6/5/2021	Channel	Frequently	Last week of May 2021	There is a retaining wall made of concrete bags on my property. It looks like 1970's technology. This last flood moved several bags of concrete into my yard. I don't think the wall will hold another heavy rain.
6/5/2021	Land	Frequently	May 2021	Flooding caused from west to east towards bay. Even with improvements water still is not able to be diverted due to grade in surrounding area. Road flooding from third street direct water to second and first streets.
6/5/2021	Land	Frequently	June 4, 2021	Drainage is not very good
6/5/2021	Land	Frequently	May 1st, May 17th June 4th 2021 are the last times.	The water is backing up into our property which causes water to go into my shop and flood under my house.
6/5/2021	Road	Frequently	05/31/2021	The city does not have adequate ditches or culverts in place to direct flood waters to Copano Bay via the natural drains. The water rushes through our property under and around our house damaging the yard.
6/5/2021	Land	Frequently	Every time it rains hard	We have bad drainage system at the roads. It stays too long so the mosquitoes have a chance to breed
6/5/2021	Land	Frequently	5/24/21.6/3/21	The lot next to our house fills completely then spills over into the road.
6/5/2021	Land	Frequently	Мау	Our yard keeps flossing and the drainage ditch does not drain pff so there is a lot of standing water
6/5/2021	Channel	Frequently	May, 2021	Few of any of the drainage ditches in town are in good repair have not been graded for many years so water stands until it evanorates
6/5/2021	Land	Frequently	May 2021	Drainage limitations, soil erosion, stagnant, standing water, mosquitoes,
6/6/2021	Land	Frequently		Erosion, standing water, floods some streets, mospitoes
6/6/2021	Land	Few Occasions		Erosion of fields, roads, runoff creating channels toward Mullins Bayou and Slough.
6/7/2021	Land	Frequently	From May 1st to June 3rd.	Yard. adjacent vards. ditches. fields. and roads
6/8/2021	Land	Frequently	Started on May 1, 2021, occurred multiple times in May and June	Rain runoff comes across Third St from open fields. Drainage culverts and drainage ditches along 3rd St and Seaguil St are filled in with dirt andcan not handle the water. Water backs up into property causing serious flooding of the neighborhood. Water h
6/9/2021	Land	Few Occasions	May 2021	City wide drainage issue needs repairing
	-			Tivoli RCP Main, Drains - Flood Prone
				Austwell - Bar ditch west of town within City Limits - Flood Prone
				Whitlow - Mission River - Flood Prone
				Eagle Creek - Flood Prone
				Froggy Bottom - Flood Prone
				Bar Ditches - Flood Prone
6/28/2021	Building	Frequently	We experience flooding into our garage when we have significant rainfall.	The streets have been repaved at a higher elevation than our drive way and garage. When it rains significantly we can not stop the rain from flooding our garage. We have recently installed a sub pump and dirth to true to militeate.

7. FMS: Estimated flood risk reduction?	8. FMP: Discrete project, not a set of projects?	9. FMP: An entire capital program or drainage program? (If yes, not eligible or must be split.)	10. FMP: Does it provide mitigation for the 1% annual chance flood event?	11. FMP: Drainage area > 1 mi^2, or involves critical facilities/transportation routes?	12.1. FMP: Project area prone to flooding that threatens life and property?	12.2. FMP: Project area meets an emergency need?	12.3. FMP: Project area has historic flooding events?	13. FMP: Sufficient/reliable data? (If not, consider an FME)	14.1. FMP: Evaluation includes detailed H&H modeling and quantified impacts?	14.2. FMP: An indication regarding the potential use of federal funds, or other sources of funding?	14.3. FMP: Demonstration for no adverse Impacts?	14.4. FMP: A description of all other potential risks, benefits, and impacts?	15. FMP: Benefit cost ratio > 1.0?	Notes (Note here if project was demoted from FMP to FME, etc.)
														FNI folks: We are removing this item from the list since it is not an FMX
														Originally FMP
														Originally FMP
v														

Type (FMP/FM8 /FMS) ¹	E ID	Shown on Map?	Name	Description	Cost	Sponsor	Goals	RFPG Goals ID	Goal ID Category	Recommend	Need Funding? (Y/N)	Notes
FME	133000252	Yes	Bahia Bay Drainage Improvements	Construct outfall to canal, construct drainage structure under HWY 35 BUS at Bahia Bay	\$ -	Aransas County	13000014	5A	Reduce structures in 100 yr	No - on-going project; already funded	N	ONGOING. Engineering complete and construction funded through ARPA
FME	133000253	Yes	Upper Tule Stormwater System	Design Stormwater System for Future Demand at Upper Tule	\$ 2,000,000	Aransas County	13000014	5A	Reduce structures in 100 yr	Yes - high need from the stakeholder interview	Y	Not FMP, FME - additional study needed, continuation of original Tule Creek watershed drainage project. Cost est given by County 4/19/22
FMP	133000254	Yes	SE Lamar Buyout	Acquire easements in Lamar golf course (in discussion with new property owners)	\$ 1,500,000	Aransas County	13000020	7A	NBS	Yes - high need from the stakeholder interview	Y	Purchase in progress; part of 2011 CIP. Cost est given by County 4/19/22
FME	133000255	Yes	Racine Stormwater Improvements	Use wetland to catch stormwater by acquiring easements and constructing outfalls	\$ 500,000	Aransas County	13000020	7A	NBS	Yes - high need from the stakeholder interview	Ŷ	Lot owned by County qualifies as wetlands; study and plan needed to determine best method to utilize lot for stormwater detention while preserving wetland. Cost est given by County 4/19/22
FME	133000256	Yes	Club Lake Drainage Channel	Construct drainage channel from Club Lake to FM 1069; most easements have been acquired -initial negotiations with one property owner, likely seller at right price, but condemnation likely required for one property owner	\$ 2,000,000	Aransas County	13000014	5A	Reduce structures in 100 yr	Yes - high need from the stakeholder interview	Y	Cost est given by County 4/19/22
FME	133000257	Yes	Holiday Beach East Outfall Construction	Construct outfall east to Aransas Wildlife Refuge and construct outfall west to HWY 35 Bypass. Construct culvert under HWY 35 Bypass. Improve drainage channel to from HWY 35 Bypass to Copano Bay	\$ 2,000,000	Aransas County	13000014	5A	Reduce structures in 100 yr	Yes - high need from the stakeholder interview	Y	Cost est given by County 4/19/22
FMP	133000258	Yes	SC Lamar Easement Acquisition	Acquire easements for surface stormwater conveyance system from Southcentral Lamar (Bee Tree Circle) to HWY 35 Bypass	\$ 1,000,000	Aransas County	13000013	5	Reduce structures in 100 yr	Yes - high need from the stakeholder interview	Y	Cost est given by County 4/19/22
FMP	133000259	Yes	12TH Street (Lamar) Drainage Channel Construction	Construct drainage channel from 12th St. to Bee Tree Circle	\$ 1,000,000	Aransas County	13000014	5A	Reduce structures in 100 yr	Yes - high need from the stakeholder interview	Y	H&H study underway. H&H study underway
FME	133000260	Yes	Sparks Colony Channel Construction	Construct channel from Rattlesnake Point Road to Bailey Ranch (project partially complete); easements still needed from two property owners (one owner has an out-oftown address and has been so far unreachable)	\$ 1,500,000	Aransas County	13000014	5A	Reduce structures in 100 yr	Yes - high need from the stakeholder interview	Y	Cost est given by County 4/19/22
FME	133000261	Yes	Lee Road Drainage Channel Construction	Constructdrainage channel from Lee Road to HWY 35-BUS	\$ 1,000,000	Aransas County	13000014	5A	Reduce structures in 100 yr	Yes - high need from the stakeholder interview	Y	Cost est given by County 4/19/22
FME	133000262	Yes	Mohawk Drainage Channel Construction	Construct drainage channel toconnect existing ponds (property owner is supportive)	\$ 2,000,000	Aransas County	13000014	5A	Reduce structures in 100 yr	Yes - high need from the stakeholder interview	Y	FME. Cost est given by County 4/19/22
FME	133000263	Yes	Nell Road Channel Construction	Construct drainage channel from Nell Road to outfall, route undefined	\$ 1,000,000	Aransas County	13000014	5A	Reduce structures in 100 yr	Yes - high need from the stakeholder interview	Y	Cost est given by County 4/19/22
FME	133000264	Yes	Bee Road Drainage Channel Construction	Construct drainage channel from HWY 35 Bypass to Port Bay; easements needed from three property owners, two are contentious	\$ 1,500,000	Aransas County	13000014	5A	Reduce structures in 100 yr	Yes - high need from the stakeholder interview	Y	Cost est given by County 4/19/22
FME	133000265	Yes	Mack Road Drainage Channel Construction	Construct drainage channel from Mack/Walker intersection to HWY 35 BUS; route undefined	\$ 2,000,000	Aransas County	13000014	5A	Reduce structures in 100 yr	Yes - high need from the stakeholder interview	Y	Cost est given by County 4/19/22
FMP	133000266	Yes	Holiday Beach West Drainage Improvements	Revise road cross-section, adjust vertical alignment, and increase surface outfalls	\$ 4,181,786	Aransas County	13000014	5A	Reduce structures in 100 yr	No - on-going project; already funded	N	ONGOING. Funded through CDBG(\$4,181,786)
FME	131000066	No	Others (Flood Prevention/Planning Study, LOMR- etc)	GBRA-Hazard Mitigation Plan Jurisdiction	- \$ 78,500	-TWDB FIF, Aransas, Bandera, Bexar, Calhoun,- Goliad, Karnes, Kerr, Refugio, San Patricio, Wilson	-	-	-	No - on-going project; already funded	N	TPWD - TX CMP Project ID R3-18
FMP	133000010	¥es	Drainage Improvements	Stormwater Pump Station #3 (Euclid) - Aransas Pass	\$ 6,000,000	-Aransas Pass-	-	-	-		N	Duplicate of project in San Patricio List
FMP	133000044	No	COASTAL BEND MITIGATION ACTION PLAN - AR-02	Proceed with acquisition of easements to permit implementation of Drainage Master Plan. Six- priority drainage projects have been identified in the Drainage Master Plan to reduce repeated- flooding in poorly drained areas of the county. Funding Needed.	ş	Aransas County-	-	-	-		N	Take off list: updated more recently
FMP	133000045	No	COASTAL BEND MITIGATION ACTION PLAN - AR-03	The City of Rockport recently completed a Master Drainage Plan for the Live Oak Peninsula, which has also been adopted by the Town of Futton. The City of Rockport has also recently completed a 25.7 million drainage improvement project in south Rockport. As new street- projects arise in the future, they will be built in accordance with the requirements of the Master- Plan. The onsure that Rocking is more with the requirements of the Master- Plan.	\$	-Town of Fulton, City of Rockport-	-	-	-		N	Take off list: updated more recently
FMP	133000046	No	COASTAL BEND MITIGATION ACTION PLAN - AR-04	Coastal erosion along the shoreline of Arancas Bay is threatening to undermine local roadway- and recreational areas. A strategic plan to address this issue has been developed and adopted by the participating jurisdictions. The success of this project is only limited by availability of funding. There is a need to raise the grade of the road is norme areas. There are miles of public bay access and the potential to develop this area in a very nice fashion is quite great. The affected shoreline has been divided into 6 critical areas and prioritized. Priority 1: Broadway along Little Bay (City of Receptor/Priority 2: Fulion Beach Road, south of Fulion Harbor (City of Rockport/Priority 2: Fulion Beach Road, north of Fulion Tarbor (City of Rockport/Priority 4: Water- Street (City of Rockport)Priority 2: Saychne Orive new Ney Mege taland (City of Rockport)Priority 6: Shell Ridge Road (Aransas County)	-500000 2500000 -	Aransas County, Town of Fulton, City of Rockport-	-	-			N	Take off list; updated more recently
FMP	133000112	No	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #13	St. Charles Bay Shoreline/Lamar Beach Road - the creation of a new habitat will provide erosion protection improvements	\$ 3,426,000	Aransas County	13000020	7A	NBS	No - on-going project; already funded	N	ONGOING. Follow up with John Strothman. HMGP Project, in FEMAs hands as of 2020 and waiting for Phase 2 construction phase, design is complete. Cost is estimated to be 5.8M 6-8 months

Type (FMP/FME /FMS) ¹	ID	Shown on Map?	Name	Description	Cost	Sponsor	Goals	RFPG Goal ID	s Goal ID Category	Recommend	Need Funding? (Y/N)	Notes
FMP	133000113	No	Aransas County Texas Multi-Jurisdictional Hazard-	Precinct 1/1A-Pinciana/Weeping Willow-Projects 1,2: Surface stormwater conveyance-	-\$605,880-	Aransas County	13000001	1	LWC		N	Notes
EMP	133000114	No	Mitigation Action Plan - Action #14 Aransas County Texas Multi-Jurisdictional Hazard- Mitigation Action Plan - Action #15	Precinct 4 Tule Creek Mesquite Bypase Project 1: Substrate drainage system from 12th St (Fulton) to Aransas Bay Reduces the threat of flooding to new and existing buildings and	\$ 1,769,900	-City of Rockport-	13000014	5A	Reduce structures in		N	Completed August 2017 Not claimed by Fulton, Rockport or
FMP	133000115	No	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #16	Annactive by manage proposed and the second seco	\$ 160,380	Aransas County	13000014	5A	Reduce structures in 100 yr	No - on-going project; already funded	N	Aransas County ONGOING. Follow up with John Strothman. HMPG Project, submitted for funding and waiting approval. Funding will cover design and construction
FMP	133000116	No	Arnasas County Griffith Street Drainage Improvements	Precinct 1/2 - Griffith St. projects 1,2,3: Surface storwater conveyance system improvements. Reduces the threat of flooding to new and existing buildings and infrastructure by making improvements to the County drainage system	\$ 591,030	Aransas County	13000014	5A	Reduce structures in 100 yr	Yes	Y	County confirmed. County project
FMP	133000117	No	Aransas County Texas Multi-Jurisdictional Hazard- Mitigation Action Plan - Action #18	Precinct 1/1A - Palm Harbor - Project 1: Create outfail to Aransas Bay, improvements to surface to subsurface conveyance system, drainage structures under SH35 business. Reduces the threat of flooding to new and existing buildings and infrastructure by making improvments to the <u>County drainage system</u> .	\$ 400,895	Aransas County	13000014	5A	Reduce structures in 100 yr		N	Completed in 2016
FMP	133000118	No	Aransas County Texas Multi-Jurisdictional Hazard- Mitigation Action Plan - Action #19	Precinct 4 – Southeast Lamar – Projects 1,2,3: Subsurface conveyance system. Reduces the threat of flooding to new and existing buildings and infrastructure by making improvments to the County drainage system.	\$ 239,030	Aransas County-	13000014	5A	Reduce structures in 100 yr		N	Complete; 2011 CIP Project; pre-cursor
FMP	133000119	No	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #20	Precinct 2 - Copano Heights - Projects 1,2,3: Surface SW conveyance system imrpovements from Copano Heights through Bailey Ranch with drainage structures under FM1781 at two locations. Reduces the threat of flooding to new and existing buildings and infrastructure by making improvments to the County drainage system	\$ 2,090,550	Aransas County	13000014	5A	Reduce structures in 100 yr	No - on-going project; already funded	N	ONGOING. Follow up with John Strothman. Funded by CDBG-DR administered through GLO.
FMP	133000120	No	Aransas County Texas Multi Jurisdictional Hazard- Mitigation Action Plan - Action #21	Precinct 4 – Spanish-woods – Projects 1, 2, 3: Surface conveyance system and drainage structures under Sanctuary Drive and Spanish Woods Drive. Reduces the threast of flooding to new and existing buildings and infrastructure by making improvments to the County drainage system	\$ 692,120	Aransas County	13000014	5A	Reduce structures in 100 yr		N	Completed 5 years ago
FMP	133000121	No	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #22	Precinct 1/1A - Southwest 1069 - Projects 2, 3: Improve upon inadequate right-of-way width on County roads in this watershed, improve upon undersized structures under FM1069, create an outfall channel from FM1069 to Port Bay. Reduces the threat of flooding to new and existing buildings and infrastructure by making improvments to the County drainage system	\$ 1,323,476	Aransas County	13000014	5A	Reduce structures in 100 yr	No - on-going project; already funded	N	ONGOING. Follow up with John Strothman. Funded by CDBG-DR administered through GLO.
FMP	133000122	No	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #23	Precinct 1/1A - Northeast AP - Project 1. Reduces the threat of flooding to new and existing buildings and infrastructure by making improvments to the County drainage system	\$ 2,125,200	Aransas County	13000014	5A	Reduce structures in 100 yr	Yes		Check with David Reid.
FME	133000123	No	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #24	Precinct 4 - Lowering of Picton/Sorenson - Project 5. Reduces the threat of flooding to new and existing buildings and infrastructure by making improvments to the County drainage system	\$ 114,400	City of Rockport	13000014	5A	Reduce structures in 100 yr	Yes	Y	County moved sponsor to Rockport
FMP	133000124	No	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #25	Precinct 1/1A - Southeast 35 - Project 2. Reduces the threat of flooding to new and existing buildings and infrastructure by making improvments to the County drainage system	\$ 167,200	Aransas County	13000014	5A	Reduce structures in 100 yr	Yes		Follow up with John Strothman. Check with David Reid. May be funded by CDBG- DR
FMP	133000125	No	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #26	Precinct 1/1A - Southeast 35 - Project 1. Reduces the threat of flooding to new and existing buildings and infrastructure by making improvments to the County drainage system	\$ 246,510	Aransas County	13000014	5A	Reduce structures in 100 yr	Yes		Follow up with John Strothman. Check with David Reid. May be funded by CDBG- DR
FMP	133000126	No	Aransas County Texas Multi-Jurisdictional Hazard- Mitigation Action Plan - Action #27-	Precinct 3 - West Tule - Pond/Channel Widening - Projects 2, 3. Reduces the threat of flooding to new and existing buildings and infrastructure by making improvments to the County drainage system	\$ 979,000	Aransas County-	13000014	5A	Reduce structures in 100 yr		Ν	Complete; 2011 CIP Project, pre-cursor to 253
FME	133000127	No	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #28	Precinct 3 - Henderson Street Property - Project 4. Reduces the threat of flooding to new and existing buildings and infrastructure by making improvments to the County drainage system	\$ 1,074,150	Aransas County	13000014	5A	Reduce structures in 100 yr	Yes	Y	County discussed with City - County will be sponsor since County is property owner
FMP	133000128	No	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #31	Shell Ridge Road - the construction of new habitat will provide erosion protection improvements. Reduces the threat of flooding to new and existing buildings and infrastructure by making improvments to the County drainage system	\$ 2,375,700	Aransas County	13000020	7A	NBS	No - on-going project; already funded	N	ONGOING. Follow up with John Strothman. HMGP Project, in FEMAs hands as of 2020 and waiting for Phase 2 construction phase, design is complete. Cost is estimated to be 5.8M 6-8 months ago
FMP	133000129	No	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #32	Newcomb's Point - the construction of new habitat will provide erosion protection improvements. Reduces the threat of flooding to new and existing buildings and infrastructure by making improvments to the County drainage system	\$ 3,028,500	Aransas County	13000020	7A	NBS	No - on-going project; already funded	N	ONGOING. Follow up with John Strothman. TPWD is sponsor for this project. County is contributing 50,000 of funds to match for engineering for this project. GLO CPRA grant
FME	133000130	Yes	Conn Brown Harbor Buikhead Improvements	Install bulkheads at Conn Brown Harbor to protect new and existing buildings and infrastructure.	\$ 1,000,000	Aransas Pass	13000016, 13000021	5A, 7B	Reduce structures in 100 yr, NBS	Yes - high need from the stakeholder interview	Y	CHANGE TO FME. Work in progress, Goal is to intall bulkheads throughout Conn Brown Harbor. See kmc file for exact locations. Some work being done - area damaged bc Harvey but want to do more. FEMA funded 10% of work. Original information from Aransas County Texas Multi-JuriSdictional Hazard Mitigation Action Plan - Action Plan. Budget: \$1,000,000 - Regular Department Budget; Future Bond, USACE Continuing Authorities
FMP	133000131	No	Aransas County Texas Multi-Jurisdictional Hazard- Mitigation Action Plan - Action #40	Develop and adopt a stormwater master plan	\$ 2,500	Aransas Pass	-	-	-		N	Remove from list - Already have Drainage plan / Drainage study

Type (FMP/FMI /FMS) ¹	ID	Shown on Map?	Name	Description	Cost	Sponsor	Goals	RFPG Goals ID	Goal ID Category	Recommend	Need Funding? (Y/N)	Notes
FMS	133000132	Yes	Purchase Land Behind Aransas Pass Levees	Purchase land behind leeves to prevent people from building in a floodplain area. This will allow the City to use this land for preventing further flooding.	\$ 500,000	Aransas Pass	13000020	74	NBS	Yes - high need from the stakeholder interview	Y	CHANGE TO FMS. From conn brown harbor to pelican cove to euclid ditch area. Land behind the leveve that runs between 361 and stapo. See kmz file. Purpose is to prevent people from building in the floodplain area, will allow the city to use this land for preventing from Aransas County Texas Multi- Jurisdictional Hazard Mitigation Action Plan - Action #41. Budget: S500,000- HMGP; Regular Department Budget; FMA; USACE terregrency Response
FMS	133000133	No	Aransas Pass Homeowner Buyout Program	Develop and implement a buyout program. The purpose is to buy out land owners in areas that have had repeated monetary lose due to storm flooding.	\$ 500,000	Aransas Pass	13000015, 13000021	5, 7B	Reduce structures in 100 yr, NBS	Yes - high need from the stakeholder interview	Y	CHANGE TO FMS. The purpose is to buy out land owners in area that have had repeated monetary loss due to storm flooding. Original information from Aransas County Texas Multi- Jurisdictional Hazard Mitigation Action Plan - Action #42. Budget: \$500,000 - Regular Department Budget, HMGP, FMA
FMP	13300013 4	No	Aransas County Texas Multi Jurkdictional Hazard- Mitigation Action Plan – Action #50	Update and improve sea gates that protect the city and harbor-	\$ 1,000,000	- Aransas Pass-	-	-	-		N	City of Aransas Pass, See seagate locations on kmz file. 2 city is responsible for: Pelican cove, stapp, euclid. Stapp and Euclid is functioning properly. project not needed
FMP	133000135	No	Aransas County Texas Multi-Jurisdictional Hazard- Mitigation Action Plan - Action #53	Design and implement a coastal erosion study to identify projects	\$ 2,500	Aransas Pass	-	-	-		N	Remove from list. Combined with pelican cove project.
FME	133000136	Yes	Fulton Drainage Master Plan	New stormwater master plan that includes a capital improvement plan	\$150,000	Town of Fulton	13000014, 13000016	5A, 6	Reduce structures in 100 yr, minimum standards	Yes - high need and no existing plan	Y	UPDATE NAME AND CHANGE TO FME. Updated cost estimate. Limits are Town of Fulton, currently utilize Aransas County SW Management Plan. Need Storgwater Master Plan for the City
FME	133000137	No	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #58	Cove Harbor Bulkheads - bulkhead construction will provide erosion protection improvements	\$ 1,000,000	Aransas County Navigation District	13000016, 13000021	6, 7B	Minimum standards, NBS	Yes - pending confirmation by sponsor		Not complete, Sponsor should be Aransas County Navigation District
FMP	133000138	No	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #59	Stormwater Crossing at FM 1781 - Upgrade/replacement of box culverts to accommodate growth	\$ 171,248	Aransas County	13000014	5A	Reduce structures in 100 yr	No - on-going project; already funded	N	ONGOING. Project funded
FMP	133000139	No	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #60	Master Plan - Drainage Improvements - Project 1 - SH 35 BUS - Traylor Ave & Tule Park Dr.	\$ 996,175	City of Rockport	13000014	5A	Reduce structures in 100 yr	No - on-going project; already funded	N	ONGOING. Funded by GLO. City to follow up with alignment
FMP	133000140	No	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #61	Master Plan - Drainage Improvements - Project 2 - SH 35 BUS - Enterprise & Maple	\$ 540,798	Aransas County	13000014	5A	Reduce structures in 100 yr	No - on-going project; already funded	N	ONGOING. FUnded by FEMA Disaster relief fund. City to follow up with additional information
FMP	133000141	No	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #62	Master Plan - Drainage Improvements - Project 3 - Market St (FM1069) at SH 35 Bypass, Hickory & Steart	\$ 1,411,411	Aransas County	13000014	5A	structures in 100 yr	Yes	Y	County confirmed with Rockport, County will be sponsor
FMP	133000142	No	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #63	Master Plan - Drainage Improvements - Project 4 - Market St (FM1069) at SH 35 BUS	\$ 791,725	City of Rockport	13000014	5A	structures in 100 yr	Yes		May be funded, city to follow up with updated cost and description
FMP	133000143	No	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #64	Master Plan - Drainage Improvements - Project 5 - Market St (FM1069) at Burton & Kossuth	\$ 3,135,881	Aransas County	13000014	5A	structures in 100 yr	No - on-going project; already funded	N	ONGOING. Funded
EMP	133000144	No	Aransas County Texas Multi Jurisdictional Hazard- Mitigation Action Plan - Action #65-	Master Plan – Drainage Improvements – Project 7 – Market St (FM1069) at Church St (Loop 70)	\$ 349,414	City of Rockport	13000014	5A	structures in 100 yr		N	Funded and completed
EMP	133000145	No	Aransas County Texas Multi-Jurisdictional Hazard- Mitigation Action Plan - Action #66	Master Plan – Drainage Improvements – Project & – Pearl St. (FM2165) at Orleans & Laure	\$ 2,813,827	City of Rockport-	13000014	5A	structures in 100 yr		N	Funded and completed
FME	133000146	No	Rockport County Club Lakes	RCC Lakes - Upgrade drainage system and increase the capacity of the lakes within the Rockport County Club	\$ 376,800	City of Rockport	13000014	5A	Reduce structures in 100 yr	Yes - high need from the stakeholder interview	Y	UPDATED NAME AND DESCRIPTION. Aransas County MJHMAP #68 CHANGE TO FME. City to follow up with cost
FME	133000147	No	Modify Pump Station Outfalls	Modify outfails of pump station that pump into Aransas Bay at Murray, Morgan, Lamar, Courpus Christi and 1st St. Raise outfail so above sea level to reduce backwater effect on the system.	\$ 2,000,000	City of Rockport	13000014	5A	Reduce structures in 100 yr	Yes - high need from the stakeholder interview	Y	CHANGE TO FME. South corridor is below sea level, City would like to raise outfall. 5/6 Outfalls - Murray, Morgan, Lamar, Corpus Christi, and 1st St. City to follow up with cost
FMP	133000149	No	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 1.1.e	Incorporate higher floodplain management standards into City of Rockport comprehensive plan update.	\$	City of Rockport	13000016	6	Minimum standards		N	Complete
FMS	133000150	No	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 1.1.f	Incorporate higher floodplain management standards into Aransas County hazard Mitigation Action plan update	\$ -	Aransas County	13000016	6	Minimum standards		Y	HMAP update needed; planning assistance needed
FMP	133000151	No	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 3.1.b	Develop a joint floodplain management and awareness website with all jurisdictions.	\$ -	Aransas County	13000007	3	Regional Coordination /Flood Warning	No - already in progress		Led by Coastal Bend COG working with TAMU-CC Hart Institute; in progress.

Type (FMP/FME /FMS) ¹	ID	Shown on Map?	Name	Description	Cost	Sponsor	Goals	RFPG Goals ID	Goal ID Category	Recommend	Need Funding? (Y/N)	Notes
FMP	133000152	No	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 3.1.c	Publish informational flood articles in city and county newsletters	\$ -	Aransas County	13000007	3	Regional Coordination /Flood Warning	No - on-going project; already funded	N	ONGOING. To be incorporated into Aransas County's floodplain management program as part of CRS
FMP	133000153	No	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 3.1.f	A flood response plan that will identify outreach projects that can be utilized to give the public information on flood protection, rebuilding after a flood event, grant information, etc.	\$-	Aransas County	13000024	8B	Awareness	Yes - consider regional approach	Y	Aransas County; in progress
FMP	133000154	No	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 3.1.h	Send informational mailers to repetitive loss property owners about buyouts and other mitigation options.	\$-	Aransas County	13000024	8B	Awareness	No - on-going project; already funded	N	ONGOING
FMP	133000155	No	Aransas County Multi Jurisdictional Floodplain- Managment Plan – Action 4.1-b	Each jurkdiction will continue ongoing maintenance of drainage pipes, cuiverts, and swales until the county wide master plan is approved and implementation can begin.	\$	Aransas County-	13000025	9	Fund drainage maintenance		N	Not a need by county
FME	133000195	No	Aransas National Wildlife Refuge Dagger Point Shoreline Preservation	Texas Coastal Resiliency Master Plan - R3-3: Project would install a living shoreline using rock breakwaters to preserve this area. The Coastal Bend Bays and Estuary Program is working with U.S. Fish and Wildlife Service to conduct an alternatives analysis and complete the preliminary engineering, alternatives analysis, final design and permitting for protection of 1.5 miles of shoreline at Dagger Point. Stakeholders are seeking funding for construction of the shoreline restoration and protection. This project would help preserve the shoreline along Dagger Point and protect nearby critical habitat and public infrastructure.	\$ 2,600,000	Coastal Bend Bays and Estuaries Program, U.S. Fish and Wildlife Service, Aransas National Wildlife Refuge, U.S. Department of the Interior	13000020	74	NBS	Yes - Nature based solution		Coastal Bend Bays & Estuaries; Nature Conservency if not CBBE
FMS	133000196	No	Shell Point Ranch Wetlands Protection	Texas Coastal Resillency Master Plan. R3-5: Project would acquire approx 400 acres of coastal habitats that support coastal prairie, freshwater and estuarine wetlands, and the southernmost extents of mina mounds at Shell Point Ranch. The acquisition also would mitigate flooding and storm surge damage to the area. Undeveloped coastal lands can provide benefits to water quality by filtering stormwater runoff from developed areas before it reaches Texas bays.	\$ 5,000,000	TPWD	13000020	7A	NBS	Yes - Nature based solution; may already be funded		Coastal Bend Bays & Estuaries; Nature Conservency if not CBBE. Document notes "acquisition pending"; may not need funding; confirm with sponsor
FMP	133000197	No	Texas Coastal Resiliency Master Plan - R3-6	Under this project, approximately 1 mile of breakwaters would be installed along Lamar Beach Road, from Main Street to 12th Street in Aransas County. The project also would include regrading and filing along the shoreline, and marsh planting to establish a living shoreline system	\$ 3,500,000	Aransas County, Aransas County Navigation District	13000020	7A	NBS	No - on-going project; already funded	N	ONGOING. Aransas County; plans are ready; needs funding (get information from John Strothman). HMGP Project, in FEMAs hands as of 2020 and waiting for Phase 2 construction phase, design is complete.
FMP	133000198	No	Newcomb's Point Shoreline Stabilization	Texas Cosstal Resiliency Master Plan - R-38: This project would place shoreline stabilization at Newcom's Point to help protect the valuable habitat from threas for dersoin. Potential solutions could include creating a living shoreline that would protect the shoreline from erosion, such as a semi-submerged breakwater with vegetation behind it to allow the shoreline to accrete and stabilize natural	\$ 2,700,000	Texas Parks & Wildlife Department	13000020	7A	NBS	No - not necessarily flood related		TPWD; this is primarily whooping crane habitat protection. Project description does not provide flooding benefits.
FMP	133000201	No	Guadalupe River and Delta Wildlife Management- Area Acquisition-	Texas Coastal Resiliency Master Plan. R3-18: This project would acquire additional land within the Guadalupe River and Delta Wildlife Management Area corridor to connect tidal mash from the upper reaches of Hynes Bay to the Wildlife Management Area Refugio County. Acquisition of this property also would improve the water quality of surface runoff that outfalls into the bay.	\$ 3,000,000	- Texas Parks & Wildlife Department -	13000020	7A	NBS	No - This is in Region 12		TPWD; Located in Region 12; remove from list
FMP	133000207	No	Tule Creek Watershed Project Report - 7.1.1 Area 1: Mesquite By pass	The mesquite by pass project is primarily a drainage and flood control plan that will divert 25- percent of the total Tule Creek Watershed area to a new Aransas Bay Outfall. This project will require approx. 3,200 feet of 5x5 box culvert to be installed within the Mesquite Street ROW.	\$ 1,600,000	TCEQ	-	-	-		N	Complete
FMP	133000208	No	Tule Creek Watershed Project Report – 7.1.2 Area 2: Tule Creek West Sediment pond and habitat Enhancement	This project is located in a position that will enable capture of most flows and sediment from the watershed before discharge into Little Bay. The pond will emphasize sediment control should be placed more or less on line but so as to avoid changes to flood and drainage control.	\$ <u>650,000</u>	-TCEQ	-	-	-		N	Complete
FMP	133000209	No	Tule Creek Watershed Project Report - 7.1.3 Area 3: Upper Tule Creek West Widening and slope- Protection	This project will help significantly reduce one of the leading stormwater pollutants within the Tube Creek Watershed and discharge to little Bay. The vegetative slope protection will help control erosion and sedimentation downstream when combined with a maintenance projgram designed to also control erosion. It's expected that approx. 100 feed additiona ROW is needed to be dedicated and cleared to accommodate the widening.	\$ <u>650,000</u>	-TCEQ.	-	-	-		Ν	Complete
FMP	133000210	No	Tule Creek Watershed Project Report - 7.1.4 Area 4: Tule Creek north Retention Pond and Habitat Enhancement	An on-line pond, up to 5 acres, capturing frequent flows from the Railroad ROW tributary as well as the lands to the west should be designed at this location. It is also recommended that an additional 42 ^m pipe be placed adjacent to the existing 42 ^m outfall from the golf course-	\$ 1,325,000	TCEQ	-	-	-		N	Complete
FMP	133000211	No	Tule Creek Watershed Project Report - 7.1.5 Area 5: Tule Creek East Detention Pond and Marsh Enhancement	This area i-located near the downstream part of the watershed, which maker it ideally located from the perspective of providing capture of contaminants before discharge into the Bay. Due to the requirement of constructing a weir and overflow device, this project is hydraulically sensitive and will neeed careful planing to develop an effective project design and avoid obvious potential risk:	\$ <u>925,000</u>	TCEQ	-	-	-		N	Complete
FMS	131000034	No	Flood Mitigation Public Education	Design and implement a program for public education. The program will educate citizens on methods of hazard mitigation and risk reduction. To be incorporated into Aransas County's floodplain management program as part of CRS.	\$ 2,500	Aransas County	13000022	8	Awareness	Yes -Consider regional approach	Y	To be incorporated into Aransas County's floodplain management program as part of CRS, could use assistance
FME	131000035	No	Downtown Rockport Drainage Study	Design and conduct an engineering study to address flooding in downtown Rockport	\$ 1,000,000	City of Rockport	13000010	4	Update maps	Yes	Ŷ	ICL Rockport (County was originally going to partner on project for public outreach opportunity regarding non-residential floodplain compliance, remove for clarity)
FME	131000036	No	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 1.1.a	Evaluate current floodplain management regulations in other coastal towns, cities, and counties in order to identify potential areas of improvment for Aransas County jurisdictions.	\$	Aransas County	-	-	-		N	Country Residentia and the second
FME	131000037	No	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 1.1.b	Using the information collected in Action 1.1.a, create a plan for how, and when, to integrate- potential improvements into existing county and municipality regulations-	\$	Aransas County	-	-	-		N	Local action required

Type (FMP/FME /FMS) ¹	ID	Shown on Map?	Name	Description	Cost	Sponsor	Goals	RFPG Goals ID	Goal ID Category	Recommend	Need Funding? (Y/N)	Notes
FMS	131000038	No	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 1.1.c	Create a coordinated development flow-chart for Arasas County, the Town of Fulton, and the City of Rockport floodplain managers.	\$ -	Aransas County, City of Rockport, Town of Fulton	13000007	3	Regional Coordination /Flood Warning	No - on-going project; already funded	N	ONGOING. Local action required
FMS	131000039	No	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 2.1.a	Evaluate list of repetivitive loss propoerties for opportunities to parnter with property owners regarding potential mitigation actions.	\$-	Aransas County	13000014	5A	Reduce structures in 100 yr	No - on-going project	N	ONGOING. ETJ development agreement updates pending
FME	131000040	No	Aransas County Multi-Jurisdictional Floodplain- Managment Plan - Action 2.1.b	Evaluate areas in the floodplain viaable for open space preservation.	<u>\$</u>	Aransas County-	-	-	-		N	Completed for CRS application
FME	131000041	No	Aransas County Multi-Jurisdictional Floodplain- Managment Plan - Action 2.1.c	Investigate grant opportunities for property buyouts, open space preservations or other flood- mitigation measures.	\$	Aransas County-	_	-	-		N	Broad goal; removed because areas identified included in other projects
FME	131000042	No	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 2.1.d	Investigate potential partnerships with local non-profits to purchase high priority areas for public parkland/open space preservation.	\$ -	Aransas County	13000020	7A	NBS	No - on-going project	N	ONGOING.
FME	131000059	No	Texas Coastal Resiliency Master Plan - R2-20	An adaptive management hydrologic restoration study would look at the interactions of the physical systems that afect the hydrology in Nueces County, as well as the stakeholder interactions in the region. Work has been conducted on Nueces Bay Freshwater infows via adaptive management plans of the Senate Bill 3 (BM) Treas Legislature, 2007) Environmental Flows Process. Two current studies include: Using Comparative Long-Term Benthic Data for Adaptive Management of Freshwater infow to Three Estuaries (Colorado-Lavaca, Guadalupe, and Nueces) and Inducence of Freshwater Infow Cardiates to Estuarine Nutrient-Phytoplankton Dynamics in the Three Estuaries (Guadalupe, Nueces, and Upper Laguna Madre).	\$ 200,000	Coastal Bend Bays and Estuaries Program, Texas Commission on Environmental Quality, Texas A&M University- Corpus Christi, Nueces River Authority, City of Corpus Christi, Port of Corpus Christi Authority, City of Corpus	13000020	7A	NBS	No - not necessarily flood related		Courts Band Bare & Ertuniar
FMS	13200000 4	No	COASTAL BEND MITIGATION ACTION PLAN-RG-02	Implement 'All Hazards' NOAA Weather Radio (NWR) procedures for dissemination of emergency message originating with local jurisdictions. The National Weather Service (NWS) will implement a new, centralized point of collection for non-weather related emergency message broadcast over NWS systems. NWS expects to deploy the All Hazards Emergency Message Collection System, HazCollect, in the summer and fall of 2005. HazCollect will provide an information technology interface between state and local systems, and the NWS Advanced Weather interactive Processing System (NWS)-InterCollect will provide a fast, reliable way to inject messagesinto the Emergency Alert System (EAS) and NOAA Weather Radio.	Low cost activity	Kleberg County, Live Oak- County	-	-	-			Remove from this County's sheet; already in Kleberg and Live Oak County sheets.
FMS	13200005	No	COASTAL BEND MITIGATION ACTION PLAN- RG-04	Promote public awareness and use of NOAA Weather Radio (NWR) to receive 'All Haards' warnings by distributing NWR Interature, posting information on jurisdiction Web sites, hosting pecial events, and Laing advantage of other opportunities as they area. The National Weather Service provides weather-related haards warnings to citizens, both through feeds to commercial media via the Imergency Alert System (KA2), and directly into homes, businesses, schools and other-locationsthrough NOAA Weather Radio (NWR). Through the efforts of the Emergency Management programs. In both Kloberg and Lice Ock counties, broadsact coverage has recently been completed for the Caastal Bend region through installation of transmitters near the communities of Rivies and Three Rivers. These transmitters will also enhance reception of the NWR efforts.	Low cost activity	Kleberg County, Live Oak- County	_	-	-			Remove from this County's sheet; already in Kleberg and Live Oak County sheet.
FMS	132000006	No	COASTAL BEND MITIGATION ACTION PLAN - AR 05	Aransas County is in the process of developing the Intergrated Stormwater Management Plan (ISWMP). Aransas County has historically experienced flooding problems due to its coastal- location and topography. The ISWMP will identify problem areas and recommend improvement projects.	- \$ 900,000	-Aransas County, Town of Fulton, City of Rockport-	-	-	-		N	Remove; adopted by county; in progress
FMS	132000047	No	Aransas County Texas Multi-Jurisdisctinal Hazard Mitigation Action Plan - Action #4	Create a county-wide wetlands preservation plan	\$ 2,500	Aransas County	13000008, 13000020	3A, 7A	Regional Coordination /Flood Warning, NBS	Yes - Nature Based Solution	Y	Not started
FMS	132000048	No	Aransas County Texas Multi-Jurisdisctinal Hazard-	Design and implement a debris removal program in local drainage systems	\$ 2,500	Aransas County-	-	-	-		N	Complete
FMS	132000049	No	Aransas County Texas Multi-Jurisdisctinal Hazard- Mitigation Action Plan - Action #6	Buyouts of RL Properties	\$ 500,000	Aransas County-	-	-	-		N	Remove: not feasible for area
FMS	132000050	No	Aransas County Coastal Erosion Response Plan	Aransas County Texas Multi-Jurisdisctinal Hazard Mitigation Action Plan - Action #9: Create an erosion response plan. New and existing buildings and infrastructure will benefit from coastal erosion protection	\$ 2,500	Aransas County	13000016	6	Minimum standards	Yes - priority based on stakeholder interview	Y	In progress; shoreline erosion is a priority for the county
FMS	132000051	No	Aransas County Multi-Jurisdictional Floodplain- Managment Plan - Action 1.3.a	Complete process of entry into the Community Rating System (CRS) to incentivize higher- floodplain management standards for the City of Rockport.	\$ 60,000	-City of Rockport, Aransas- County-	-	-	-		N	Completed; on CRS; remove from list
FMS	132000052	No	Aransas County Multi-Jurisdictional Floodplain- Managment Plan - Action 1.3.b	Complete process of entry into the Community Rating System (CRS) to incentivize higher- floodplain management standards for Aransas County.	\$ 45,000	Aransas County	+	-	-	No - on-going project	N	ONGOING. In progress; remove from list
FMS	132000053	No	Town of Fulton CRS Investigation	Investigate whether Community Rating System (CRS) is viable for the Town of Fulton.	\$ -	Town of Fulton	13000016	6	Minimum standards	No - not enough information on intended flood risk reduction benefit	Y	Not complete. Aransas County Multi- Jurisdictional Floodplain Managment Plan - Action 1.3.c
FMS	132000055	No	Aransas County Multi-Jurisdictional Floodplain- Managment Plan - Action 3.2.a	Determine whether any lift stations and pump stations will need generators.	<u>\$</u>	-Aransas County-	-	-	-		N	
FMS	132000056	No	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 4.1.a	Work across jurisdictions to coordinate drainage/stormwater projects that impact the same watersheed or sub-watersheds while working to create a county-wide prioritized, master plan of all flood related projects.	\$ -	Aransas County	13000022	8	Awareness	No - on-going project	N	ONGOING, In progress; Have a multi- juris storm water advisory committee; remove from list; local coordination needed
FMS	132000057	No	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 4.1.c	Continue to use county resiliency group to investigate potential funding options for erosion protection and habitat restoration.	\$ -	Aransas County	13000020	7A	NBS	No - not directly flood related	Y	In progress; could use assistance
FMP	133000266	Yes	Town of Fulton Palmetto Outfall Improvements	New storm drain pipes, inlets, and channel improvements with new outfall structure to Aransas Bay. Reduce frequency of roadway flooding, reduce risk of property flooding in the southern half of Fulton, northern part of Rockport, and Rockport CC/Tuile Creek area	\$ 10,000,000	Town of Fulton	13000014	5A	Reduce structures in 100 yr	Yes - priority based on stakeholder interview	Y	Hanson to follow up on report and inundation maps before and after project. Current shapefile is DA for project. Under Palmetto Ave from 35 to the Bay. Hanson working on ELR/Design right now. Preliminary engineering. Needs R74

Type (FMP/FME /FMS) ¹	ID	Shown on Map?	Name	Description	Cost	Sponsor	Goals	RFPG Goals ID	Goal ID Category	Recommend	Need Funding? (Y/N)	
FMP	133000267	No	City of Fulton Drainage Improvements	RCP storm drain pipes, constructed drainage ditches, inlet improvements throughout the City of Fulton. Reduce frequency of roadway flooding, increase capacity of existing stormwater system	- \$ 3,000,000	- Town of Fulton-	_		-		N	Notes Hanson emailed location shapefiles. Contact Anna Aldridge (Hanson) if more information needed. Break out into specific projects
FMS	132000054	No	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 3.1.e	Develop and install educatinal signage regarding flood safety to located along low areas of roadways likey to flood.	\$ 7,000	Aransas County	13000001	1	LWC	Yes -Consider regional approach	Y	In progress; could use assistance
FME	-	No	601 Racine Street Easement & Outfall Project	Acquire drainage easements in natural wetlands and construct new outfalls.	-	City of Rockport, Aransas- County	-	-	-	No - Appears to be aduplicate of L5.4	Y	On GIS. City to follow up with cost
FME		Yes	Easement Outfall Loop 70 & Shell Ridge Rd	Purchase Drainage easement and construct outfall ditch south of Church St		City of Rockport	13000014	5A	Reduce structures in 100 yr	Yes - priority based on stakeholder interview	Y	on kmz. City to follow up with cost
FMP		Yes	Fulton East Drainage Improvements	Collection system improvements include collection swales, inlets, drain pipes, manholes or junction boxes, and collection of the system to existing major drainage outfalls or the construction of new outfalls.	\$6,000,000	Town of Fulton	13000014	5A	Reduce structures in 100 yr	Yes - priority based on stakeholder interview	Y	Hanson to send additional information, report, and shapefiles. Planning stage, no engineering study, only preliminary H&H.
FMP		Yes	Fulton West Drainage Improvements	Collection System Improvements include inlets, drain pipes, manholes or junction boxes, collection swales, and connection of the system to existing major drainage outfalls.	\$3,000,000	Town of Fulton	13000014	5A	Reduce structures in 100 yr	Yes - priority based on stakeholder interview	Y	Hanson to send additional information, report, and shapefiles. Planning stage, no engineering study, only preliminary H&H
FMS		Yes	Aransas County Flood Warning System	The county needs flood warning systems throughout the region.		Aransas County	13000007	3	Regional Coordination /Flood Warning	Yes -Consider regional approach	Y	Project communicated to GLO West

¹ Fload Management Evaluation (FME)- fload study of a specific fload prone area needed to assess risk Fload Mitigation Project (FMP)- structural or non-structural project that when implemented will reduce fload risk, mitigate hazards to life or property. Includes nature-based solutions. 'No negative impact' Fload Management Strategy (FMS)- proposed plan to reduce fload risk or mitigate fload hazards. Any action that a RFPG would like to evaluate and recommend that does not qualify as FME or FMP.

Public Comments

Comment Date	Flood Type	Flood Frequency	Most Recent Flood Event	Description
-	-	-	-	McCambell Slough - Flood Prone

Public Comments

Comment Date	Flood Type	Flood Frequency	Most Recent Flood Event	Description
-		-	-	guna Shores Road. Constant flooding. Current road reconstruction project will fix some drainage issues. Not all - Flood Pro
-	-	-	-	Ayers Street at Tarlton Street
-		-		Lipan Street at Coke Street
-	-	-		Caranchua Street at Coopers Alley
		-	-	Baldwin Boulevard at Agnes Street
		-	-	2600 Block of Morgan Avenue
-	-	-		Haven Drive at McKinzie Road
-	-	-	-	IH 37 at Carbon Plant Road
-	-	-		SH 286 at Holly Road
-		-	-	Rodd Field Road from South Padre Island Drive to Holly Road
-	- Duallation -	-	-	Las Colonias Subdivision
7/13/2021	Building	rew_occasions		
7/13/2021	Building	Few Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
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7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
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7/13/2021	Building	Few_Occasions		
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7/13/2021	Building	Few Occasions		
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7/13/2021	Building	Few Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Once		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few Occasions	May 19th	This area had heavy flooding and both creek beds were full to capacity. In the town we had water in some of our
,, 13/2021	ounung	.cm_occasions	1107 1501	residents homes and the city had 2 collapsed manholes and six collapsed sewer lines.
-	-	-	-	Widespread long-lived residential flooding of hundreds of homes above Calallen occurs. This requires residents to be evacuated. Roads into the flood prone areas flood for miles, cutting off large residential areas for weeks.

Type (FMP/FME /FMS) ¹	ID	Shown on Map?	Name	Description	Cost	Sponsor
FME	133000057	No	COASTAL BEND MITIGATION ACTION PLAN - KL - 11	Coastal erosion at Riviera Park on Baffin Bay is threatening to undermine recreational facilities. This is a fairly well-used winter Texan recreation area. The scope would include an offshore breakwater to protect the beach and a fishing pier extension.	500000 - 1000000	Kleberg County
FME	133000059	No	COASTAL BEND MITIGATION ACTION PLAN - KL - 13	Improve water drainage to county roads, Pcts 1 and 3,historically heavy rains will produce county road flooding and standing water to ditches. The overflow of storm and rain water has also produced some flooding to residential homes and properties.	\$ 260,000	Kleberg County
FMS	132000004	No	COASTAL BEND MITIGATION ACTION PLAN - RG-02	Implement 'All Hazards' NOAA Weather Radio (NWR) procedures for dissemination of emergency messages originating with local jurisdictions. The National Weather Service (NWS) will implement a new, centralized point of collection for non-weather related emergency messages broadcast over NWS systems. NWS expects to deploy the All-Hazards Emergency Message Collection System, HazCollect, in the summer and fall of 2005. HazCollect will provide an information technology interface between state and local systems, and the NWS Advanced Weather Interactive Processing System (AWIPS). HazCollect will provide a fast, reliable way to inject messagesinto the Emergency Alert System (EAS) and NOAA Weather Radio.	Low cost activity	Kleberg County, Live Oak County
FMS	13200005	No	COASTAL BEND MITIGATION ACTION PLAN - RG-04	Promote public awareness and use of NOAA Weather Radio (NWR) to receive 'All Hazards' warnings by distributing NWR literature, posting information on jurisdiction Web sites, hosting special events, and taking advantage of other opportunities as they arise. The National Weather Service provides weather-related hazards warnings to citizens, both through feeds to commercial media via the Emergency Alert System (EAS), and directly into homes, businesses, schools and other locationsthrough NOAA Weather Radio (NWR). Through the efforts of the Emergency Management programs in both Kleberg and Live Oak counties, broadcast coverage has recently been completed for the Coastal Bend region through installation of transmitters near the communities of Riviera and Three Rivers. These transmitters will also enhance reception of the NWR signals in Jim Wells and Bee counties.	Low cost activity	Kleberg County, Live Oak County
FMS	132000009	No	COASTAL BEND MITIGATION ACTION PLAN - KL - 04	There are no independent drainage districts currently existing within the county addressing drainage issues in a comprehensive manner. A county-wide approach can facilitate coordination for the development of a Drainage Master Plan. A specially appointed Task Force could be charged with examining alternative frameworks and reporting their recommendations to the participating governing bodies for evaluation and action to reduce losses from flooding.	\$ 20,000	Kleberg County, City of Kingsville

Unique ID	Type (FMP/YM E/YMS) ¹	10	Shown on Map?	Name	Description	Cost	Spansar	Gaak	RFPG Goals ID	Goal ID Category	Recommend	1. Completed?	2. Spansor confirmed? (- if haven't talkedto spansor yet, N if spansor says project is no langer feasible)	3. Funding identifie d?	4. FME: 5. Reasonable planning-level ectimate?	FME: Flood incuriedge gap in the area?	6. FMS: Reasonable planning level cost ectimate?	7. FMS: Ectimated fload risk reduction?	8. FMP: Discrete project, not a set of projects?	 FMP: An entire capital program or drainage program? (If yes, not eligible or must be spilt.) 	10. FMP: Does it provide mitigation for the 1% annual chance flood event?	11. FMP: Drainage area > 1 mP2, or involves otical f facilities/transportation routes?	1. FMP: Project weaprone to flooding that waters life and property?	12.2. FMP: Project area meets an emergency need?	12.3. FMP: Project area has historic flooding events?	13. FMP: Sufficient/reliable data? (If not, consider an FME)	14.1. FMP: Evaluation includes detailed H&H modeling and quantified impacts?	14.2. FMP: An indication regarding the potential use of federal funds, or other sources of funding?	54.3. FMP: Demonstration for no adverse impacts?	14.4. PMP: A description of all other potential risks, benefits, and impacts?	5. FMP: eefit cost tio > 1.07 dem	Notes te bere if project was sted from FMP to FME, etc.)
81	FME	121000061	No	Texas Caastal Resiliency Master Plan - Rd-13	This project would create a program to in order long term buildence and used in a to the signal Mater. While the create of tabulaters are understand is general, they have not been identified for indical ansatral amountains. This project would load as assessing combinations of reparated benchmark (COSS), studying the gauged data, and analying interformantic Synthet: Aperture Nach (Studyi Gran. The project would raise data publicly consolide to all accession amountains publicly consolide to all accession amountains	\$ 500,000	Teas General Land Office	13000022	â	Awareness	No - Not specifically fload related.				Y	N																

¹ Does Monorannees Evaluation (DME). Root study, of a scarffe flood reason areas ranked to a sense risk Flood Milliogenia Prijeg (DMP) study and a scarffer flood reason areas ranked to a sense risk Flood Milliogenia Prijeg (DMP) study and a scarffer flood reason areas ranked to a sense risk Flood Milliogenia Prijeg (DMP) study and a scarffer flood reason areas ranked to a sense risk Flood Milliogenia Prijeg (DMP) study and a scarffer flood reason areas ranked to a study and reason and the scalar and reasonment that does not qualify and Flood rAMP.

ID	Name
133000268	FM624 Improvments
133000269	La Branch St Improvments
133000270	McBurnett Dr Improvments
133000271	Princess Dr Improvments
133000272	North Beach Area Improvments
133000273	McCamplbell Rd. Improvments
133000274	Tanglewood Neighborhood Improvments
133000275	Williams Dr. Ditch Improvements
133000276	Glenoak Dr. and Caribbean Dr. Improvements
133000267	City of Fulton Drainage Improvements
133000266	City of Fulton Palmetto Outfall Improvements
133000265	Morgan Avenue & Mooney Avenue Drainage Improvements
133000264	Drainage Improvements - FM 1069 to McCampbell Slough
133000263	Wright Avenue Drainage Improvements
133000262	Avenue B Drainage Channel Extension and Outfall Improvements
133000261	Channel Drainage Improvements & Ditch Extension for Outfall Channel - Lateral AS, Northwest Gregory, Texas
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133000260	Drainage Improvements to Outfall Channel - Lateral AJ, Northwest of Taft, Texas
133000259	Drainage Improvements to Outfall Channel - Lateral AN, Northeast of Taft, Texas
133000258	Sinton South Ditch Channel Improvements, Sinton, Texas
133000257	Humble Channel Drainage Improvements & Ditch Extension, Ingleside, Texas
133000256	Green Lake Outfall Channel Extension between Portland & Gregory, Texas

133000255	Morgan Avenue & Mooney Avenue Drainage Improvements
133000254	Drainage Improvements - FM 1069 to McCampbell Slough
133000253	Wright Avenue Drainage Improvements
133000252	Avenue B Drainage Channel Extension and Outfall Improvements
133000251	Cituwida Starmwatar Drainaga Improvomento
133000250	Expanding Drainage System to Newly Developed Areas
133000249	
	Citywide Stormwater Drainage Improvements
133000248	Channel outfall Drainage Improvement Project
133000247	Citywide Drainage System Improvements
133000246	Improvements to Dovle Drainage Basin
133000245	Citywide Drainage System Improvements
133000244	Expanding Drainage System to Odem HS Area
133000243	
	Citywide Stormwater Drainage Improvements
133000242	Citywide Drainage System Improvements

133000241	Mitigating Impact of Seale Dam Outflow
133000240	Citywide Drainage System Improvements
133000239	Citywide Drainage System Improvements
133000238	Citywide Drainage System Improvements
133000237	Expanding Drainage System to Ingleside HS Area
133000236	Expanding Drainage System to Southern Eastern Neighborhood
133000235	Citywide Drainage System Improvements
133000234	Citywide Stormwater Drainage Improvements
133000233	Citywide Drainage System Improvements
133000232	Rehabilitation of Ditch at County Road 14F
133000231	Belk Lane Street and Drainage Improvements
133000230	County Road 6- North Carreta Creek Drainage Improvements
133000229	Tributary No. 5
133000228	Upper Oso Creek
133000227	Upper Oso Creek/Channel A Robstown-Calallen area
133000226	Concepcion Drainage Improvements
133000225	Realitos Drainage Improvements
133000224	Improvements to San Diego Levee Outfall System
133000223	Southern San Diego Drainage Improvement Project

133000222	Improvements to Drainage Connectivity along Railroad
133000221	Northern San Diego Drainage Improvement Project
133000220	Northern San Diego Street Conveyance Improvement
133000219	Upsize Burch St Crossing
133000218	
	Benavides Main City Network
133000217	Las Animas Conveyance Infrastructure
133000216	
	Dagger island restoration Project
133000215	
	Nueces County Living Breakwater project
133000214	Greenwood Plant Flood Mitigation Project

133000213	
10000210	Oso Creek Channel Bottom Rectification and Bank Stabilization
	Project
	Nueces Delta Preserve Project - Building an educational Estuary Learing Center and Visitor Center
133000212	
	Tule Creek Watershed Project Report - 7.1.5 Area 5: Tule Creek East Detention Pond and Marsh Enhancement
133000211	
133000210	Tule Creek Watershed Project Report - 7.1.4 Area 4: Tule Creek north Retention Pond and Habitat Enhancement
	Tule Creek Watershed Project Report - 713 Area 3: Upper Tule
	Creek West Widening and slope Protection
133000209	



133000203	Texas Coastal Resiliency Master Plan - R3-23
133000202	Texas Coastal Resiliency Master Plan - R3-19
133000201	Texas Coastal Resiliency Master Plan - R3-18
133000200	Texas Coastal Resiliency Master Plan - R3-15

	Texas Coastal Resiliency Master Plan - R3-12
133000199	
	Texas Coastal Resiliency Master Plan - R3-8
133000198	
	Texas Coastal Resiliency Master Plan - R3-6
133000197	
	Texas Coastal Resiliency Master Plan - R3-5
133000196	
	Texas Coastal Resiliency Master Plan - R3-3
133000195	
133000194	Margie, Commissioner Precinct 1- to San Diego
133000193	Atascosa McMullen Hazard Mitigation Plan - City of Pleasanton Action #10
133000192	Atascosa McMullen Hazard Mitigation Plan - City of Poteet Action #1
122022404	Atascosa McMullen Hazard Mitigation Plan - Poteet ISD Action
133000191	#6
133000190	Atascosa McMullen Hazard Mitigation Plan - Poteet ISD Action #1

133000189	Atascosa McMullen Hazard Mitigation Plan - City of Poteet Action #7
133000188	Atascosa McMullen Hazard Mitigation Plan - City of Poteet Action #3
133000187	Atascosa McMullen Hazard Mitigation Plan - City of Pleasanton Action #6
133000186	Atascosa McMullen Hazard Mitigation Plan - City of Pleasanton Action #5
133000185	Atascosa McMullen Hazard Mitigation Plan - McMullen County Action #4
133000184	Atascosa McMullen Hazard Mitigation Plan - Lytle ISD Action #6
133000183	Atascosa McMullen Hazard Mitigation Plan - City of Lytle Action #11
133000182	Atascosa McMullen Hazard Mitigation Plan - City of Lytle Action #1
133000181	Atascosa McMullen Hazard Mitigation Plan - City of Jourdanton Action #10
133000180	Atascosa McMullen Hazard Mitigation Plan - City of Jourdanton Action #9
133000179	Atascosa McMullen Hazard Mitigation Plan - City of Jourdanton Action #6
133000178	Atascosa McMullen Hazard Mitigation Plan - City of Jourdanton Action #4
133000177	Atascosa McMullen Hazard Mitigation Plan - City of Jourdanton Action #3
133000176	Atascosa McMullen Hazard Mitigation Plan - City of Christine Action #4
133000175	Atascosa McMullen Hazard Mitigation Plan - City of Charlotte Action #8
133000174	Atascosa McMullen Hazard Mitigation Plan - City of Charlotte Action #7
133000173	Atascosa McMullen Hazard Mitigation Plan - City of Charlotte Action #3
133000172	Atascosa McMullen Hazard Mitigation Plan - Atascosa County Action #13
133000171	Atascosa McMullen Hazard Mitigation Plan - Atascosa County Action #12
133000170	Atascosa McMullen Hazard Mitigation Plan - Atascosa County Action #8
133000169	Atascosa McMullen Hazard Mitigation Plan - Atascosa County Action #5
133000168	Atascosa McMullen Hazard Mitigation Plan - Atascosa County Action #1
133000167	Nueces County Hazard Mitigation - Corpus Christi Action #24

133000166	Nueces County Hazard Mitigation - Corpus Christi Action #17
133000165	Nueces County Hazard Mitigation - Corpus Christi Action #16
133000164	Nueces County Hazard Mitigation - Corpus Christi Action #15
133000163	Nueces County Hazard Mitigation - Corpus Christi Action #13
133000162	Nueces County Hazard Mitigation - Corpus Christi Action #8

133000161	Nueces County Hazard Mitigation - Corpus Christi Action #7
133000160	Nueces County Hazard Mitigation - Corpus Christi Action #6
133000159	Nueces County Hazard Mitigation - Corpus Christi Action #4
133000158	Nueces County Hazard Mitigation - Corpus Christi Action #3
133000157	Nueces County Hazard Mitigation - Corpus Christi Action #2
133000156	Nueces County Hazard Mitigation - Corpus Christi Action #1
133000155	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 4.1.b
133000154	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 3.1.h
133000153	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 3.1.f
133000152	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 3.1.c
133000151	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 3.1.b
133000150	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 1.1.f
133000149	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 1.1.e

133000148	Aransas County Multi-Jurisdictional Floodplain Managment
	Pidil - Action 1.1.0 Arapsas County Toyas Multi Jurisdictional Hazard Mitigation
133000147	Action Plan - Action #73
133000146	Aransas County Texas Multi-Jurisdictional Hazard Mitigation
	Action Plan - Action #68
122000145	Aransas County Texas Multi-Jurisdictional Hazard Mitigation
133000143	Action Plan - Action #66
122000144	Aransas County Texas Multi-Jurisdictional Hazard Mitigation
155000144	Action Plan - Action #65
122000142	Aransas County Texas Multi-Jurisdictional Hazard Mitigation
155000145	Action Plan - Action #64
122000142	Aransas County Texas Multi-Jurisdictional Hazard Mitigation
155000142	Action Plan - Action #63
122000141	Aransas County Texas Multi-Jurisdictional Hazard Mitigation
155000141	Action Plan - Action #62
122000140	Aransas County Texas Multi-Jurisdictional Hazard Mitigation
133000140	Action Plan - Action #61
122000120	Aransas County Texas Multi-Jurisdictional Hazard Mitigation
133000139	Action Plan - Action #60
	Aransas County Texas Multi-Jurisdictional Hazard Mitigation
122000129	Action Plan - Action #59
155000158	
122000127	Aransas County Texas Multi-Jurisdictional Hazard Mitigation
155000157	Action Plan - Action #58
122000126	Aransas County Texas Multi-Jurisdictional Hazard Mitigation
155000150	Action Plan - Action #55
	Aransas County Texas Multi-Jurisdictional Hazard Mitigation
133000135	Action Plan - Action #53
122000124	Aransas County Texas Multi-Jurisdictional Hazard Mitigation
155000154	Action Plan - Action #50
	Aransas County Texas Multi-Jurisdictional Hazard Mitigation
122000122	Action Plan - Action #42
133000133	
133000132	Aransas County Texas Multi-Jurisdictional Hazard Mitigation
133000132	Action Plan - Action #41
133000131	Aransas County Texas Multi-Jurisdictional Hazard Mitigation
10000101	Action Plan - Action #40
133000130	Aransas County Texas Multi-Jurisdictional Hazard Mitigation
10000100	Action Plan - Action #38

133000129	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #32
133000128	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #31
133000127	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #28
133000126	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #27
133000125	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #26
133000124	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #25
133000123	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #24
133000122	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #23
133000121	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #22
133000120	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #21
133000119	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #20
133000118	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #19

	Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan - Action #18
133000117	
	Aransas County Texas Multi-Jurisdictional Hazard Mitigation
133000116	Action Plan - Action #17
	Aransas County Texas Multi-Jurisdictional Hazard Mitigation
	Action Plan - Action #16
133000115	
	Aransas County Texas Multi-Jurisdictional Hazard Mitigation
133000114	Action Plan - Action #15
	Aransas County Texas Multi-Jurisdictional Hazard Mitigation
133000113	Action Plan - Action #14
133000112	Aransas County Texas Multi-Jurisdictional Hazard Mitigation
135000112	Action Plan - Action #13
133000111	San Patricio County Hazard Mitigation Action Plan - City of Taft, Action #9
	San Patricio County Hazard Mitigation Action Plan - City of Taft,
133000110	Action #7
	San Patricio County Hazard Mitigation Action Plan - City of Taft,
133000109	Action #5
	San Patricio County Hazard Mitigation Action Plan - City of
133000108	Sinton, Action #15
	San Patricio County Hazard Mitigation Action Plan - City of
133000107	Sinton, Action #12
133000106	San Patricio County Hazard Mitigation Action Plan - City of
122000105	San Patricio County Hazard Mitigation Action Plan - City of
133000105	Portland, Action #1
133000104	San Patricio County Hazard Mitigation Action Plan - City of Odem. Action #19
	San Patricio County Hazard Mitigation Action Plan - City of
133000103	Odem, Action #3

133000102	San Patricio County Hazard Mitigation Action Plan - City of Mathis, Action #9
133000101	San Patricio County Hazard Mitigation Action Plan - City of Mathis, Action #1
133000100	San Patricio County Hazard Mitigation Action Plan - City of Ingleside on the Bay, Action #9
133000099	San Patricio County Hazard Mitigation Action Plan - City of Ingleside on the Bay, Action #9
133000098	San Patricio County Hazard Mitigation Action Plan - City of Ingleside, Action #14
133000097	San Patricio County Hazard Mitigation Action Plan - City of Ingleside, Action #13
133000096	San Patricio County Hazard Mitigation Action Plan - City of Ingleside, Action #12
133000095	San Patricio County Hazard Mitigation Action Plan - City of Ingleside, Action #8
133000094	San Patricio County Hazard Mitigation Action Plan - City of Ingleside, Action #6
133000093	San Patricio County Hazard Mitigation Action Plan - City of Ingleside, Action #2
133000092	San Patricio County Hazard Mitigation Action Plan - City of Ingleside, Action #1
133000091	San Patricio County Hazard Mitigation Action Plan - City of Gregory, Action #6
133000090	San Patricio County Hazard Mitigation Action Plan - City of Gregory, Action #5
133000089	San Patricio County Hazard Mitigation Action Plan - City of Gregory, Action #3

	San Patricio County Hazard Mitigation Action Plan - San Patricio
133000088	County, Action #3
	COASTAL BEND MITIGATION ACTION PLAN - SP-30
133000087	
	COASTAL BEND MITIGATION ACTION PLAN - SP-29
133000086	
	COASTAL BEND MITIGATION ACTION PLAN - SP-26
133000085	
	COASTAL BEND MITIGATION ACTION PLAN - SP-06
133000084	
122000082	COASTAL BEND MITIGATION ACTION PLAN - SP-05
155000085	
133000082	COASTAL BEND MITIGATION ACTION PLAN - SP-04
	COASTAL BEND MITIGATION ACTION PLAN - SP-03
133000081	
	COASTAL BEND MITIGATION ACTION PLAN - SP-02
133000080	

133000079	COASTAL BEND MITIGATION ACTION PLAN - NO - 66
133000078	COASTAL BEND MITIGATION ACTION PLAN - NU - 65

	COASTAL BEND MITIGATION ACTION PLAN - NU - 55
133000077	

133000076	COASTAL BEND MITIGATION ACTION PLAN - NU - 53
	COASTAL BEND MITIGATION ACTION PLAN - NU - 50
133000075	
133000074	COASTAL BEND MITIGATION ACTION PLAN - NU - 49
133000073	COASTAL BEND MITIGATION ACTION PLAN - NU - 41
133000072	COASTAL BEND MITIGATION ACTION PLAN - NU - 33

133000071	COASTAL BEND MITIGATION ACTION PLAN - NU - 29
133000070	COASTAL BEND MITIGATION ACTION PLAN - NU - 28
133000069	COASTAL BEND MITIGATION ACTION PLAN - NU - 27
133000068	COASTAL BEND MITIGATION ACTION PLAN - NU - 22

133000067	COASTAL BEND MITIGATION ACTION PLAN - NU - 21
133000066	COASTAL BEND MITIGATION ACTION PLAN - NU - 20
133000065	COASTAL BEND MITIGATION ACTION PLAN - NU - 19
133000064	COASTAL BEND MITIGATION ACTION PLAN - NU - 18
133000063	COASTAL BEND MITIGATION ACTION PLAN - NU - 08

133000062	COASTAL BEND MITIGATION ACTION PLAN - NU - 07
133000061	COASTAL BEND MITIGATION ACTION PLAN - LO - 12
133000060	COASTAL BEND MITIGATION ACTION PLAN - LO - 10
133000059	COASTAL BEND MITIGATION ACTION PLAN - KL - 13
133000058	COASTAL BEND MITIGATION ACTION PLAN - KL - 12
133000057	COASTAL BEND MITIGATION ACTION PLAN - KL - 11
133000056	COASTAL BEND MITIGATION ACTION PLAN - KL - 07

133000055	COASTAL BEND MITIGATION ACTION PLAN - JW - 18
133000054	COASTAL BEND MITIGATION ACTION PLAN - JW - 17
133000053	COASTAL BEND MITIGATION ACTION PLAN - JW - 16
133000052	COASTAL BEND MITIGATION ACTION PLAN - JW - 12
133000051	COASTAL BEND MITIGATION ACTION PLAN - JW - 03
133000050	COASTAL BEND MITIGATION ACTION PLAN - BE - 06
133000049	COASTAL BEND MITIGATION ACTION PLAN - BE - 05
133000048	COASTAL BEND MITIGATION ACTION PLAN - BE - 04
133000047	COASTAL BEND MITIGATION ACTION PLAN - BE - 03

	COASTAL BEND MITIGATION ACTION PLAN - AR-04
133000046	
	COASTAL BEND MITIGATION ACTION PLAN - AR-03
133000045	
	COASTAL BEND MITIGATION ACTION PLAN - AR-02
133000044	
	A Joint Erosion Response Plan for Nueces County and the City of Corpus Christi
133000043	
	Potential for Bed-Material Entrainment in selected Streams of the Edwards PlateauEdwards, Kimble, and Real Counties, Texas, and Vicinity
400000015	
133000042	

133000041 133000040 TXDOT Road Projects 133000039 TXDOT Road Projects 133000038 TXDOT Road Projects 133000037 TXDOT Road Projects 133000036 TXDOT Road Projects 133000037 TXDOT Road Projects 133000036 TXDOT Road Projects 133000037 TXDOT Road Projects 133000038 TXDOT Road Projects 133000039 TXDOT Road Projects 133000031 TXDOT Road Projects 133000023 TXDOT Road Projects 133000029 TXDOT Road Projects 133000029 TXDOT Road Projects 133000029 TXDOT Road Projects 133000029 TXDOT Road Projects 133000020 TXDOT Road Projects 133000021 Downtown Drainage Improvements Project A (Hughes Street Pump Station) 133000023 San Patricio County Channel Outfall Drainage Improvement Project 133000021 Refugio County Hazard Mitigation Improvements Project 133000020 Town of Refugio Wastewater Treatment and Drainage Project 133000019 Drainage Improvements Project 133000019 Drainage Improvements Project </th <th></th> <th>Coastal Texas Protection and Restoration Feasibility Study - SP1 – Redfish Bay Protection and Enhancement</th>		Coastal Texas Protection and Restoration Feasibility Study - SP1 – Redfish Bay Protection and Enhancement
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133000017 Drainage Improvements Project	133000018	Drainage Improvements Proiect
	133000017	Drainage Improvements Proiect

133000016	City of Premont Drainage Improvements and Flood Mitigation Project
133000015	City of Beeville Low Water Crossings Replacement Project
133000014	Jim Wells County: Rancho Alegre and Alice Acres Drainage and Detention Project
133000013	City of Alice: Virginia St. Area Drainage Project
133000012	Drainage Improvements
133000011	Drainage Improvements
133000010	Drainage Improvements
133000009	County Wide Drainage Improvements
133000008	County Wide Drainage Improvements
133000007	County Wide Drainage Improvements
133000006	Flood Warning System
133000005	Others (Flood Prevention/Planning Study, LOMR etc)
133000004	County Wide Early Flood Warning System
133000003	County Wide Early Flood Warning System
133000002	County Wide Drainage Improvements
133000001	County Wide Drainage Improvements
132000069	County Road 18 Drainage Improvements
	Buyout Program in Peaceful Valley
132000068	
132000067	Flood Proof Repetitive Loss Homes in San Patricio County

	Nueces Delta Preserve Project - Land Acquisition
132000066	
	Texas Coastal Resiliency Master Plan - R3-26
132000065	
132000064	Atascosa McMullen Hazard Mitigation Plan - Poteet ISD Action #4
132000063	Atascosa McMullen Hazard Mitigation Plan - City of Christine Action #5
132000062	Nueces County Hazard Mitigation - Corpus Christi Action #22
132000061	Nueces County Hazard Mitigation - Corpus Christi Action #21
132000060	Nueces County Hazard Mitigation - Corpus Christi Action #18

132000059	Nueces County Hazard Mitigation - Corpus Christi Action #10
13200058	Nueces County Hazard Mitigation - Corpus Christi Action #5
132000057	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 4.1.c
132000056	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 4.1.a
132000055	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 3.2.a

132000054	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 3.1.e
132000070	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 1.3.c
132000053	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 1.3.c
132000052	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 1.3.b
132000051	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 1.3.a
132000050	Aransas County Texas Multi-Jurisdisctinal Hazard Mitigation Action Plan - Action #9
132000049	Aransas County Texas Multi-Jurisdisctinal Hazard Mitigation Action Plan - Action #6
132000048	Aransas County Texas Multi-Jurisdisctinal Hazard Mitigation Action Plan - Action #7
132000047	Aransas County Texas Multi-Jurisdisctinal Hazard Mitigation Action Plan - Action #4
132000046	San Patricio County Hazard Mitigation Action Plan - City of Taft, Action #11
132000045	San Patricio County Hazard Mitigation Action Plan - City of Taft, Action #10
132000044	San Patricio County Hazard Mitigation Action Plan - City of Taft, Action #8
132000043	San Patricio County Hazard Mitigation Action Plan - City of Taft, Action #1
132000042	San Patricio County Hazard Mitigation Action Plan - City of Sinton, Action #14
132000041	San Patricio County Hazard Mitigation Action Plan - City of Sinton, Action #7
132000040	San Patricio County Hazard Mitigation Action Plan - City of Sinton, Action #6
132000039	San Patricio County Hazard Mitigation Action Plan - City of Sinton, Action #3
132000038	San Patricio County Hazard Mitigation Action Plan - City of Sinton, Action #2

132000037	San Patricio County Hazard Mitigation Action Plan - City of Portland, Action #7
132000036	San Patricio County Hazard Mitigation Action Plan - City of Portland, Action #5
132000035	San Patricio County Hazard Mitigation Action Plan - City of Portland, Action #4
132000034	San Patricio County Hazard Mitigation Action Plan - City of Odem, Action #18
132000033	San Patricio County Hazard Mitigation Action Plan - City of Odem, Action #15
132000032	San Patricio County Hazard Mitigation Action Plan - City of Odem, Action #15
132000031	San Patricio County Hazard Mitigation Action Plan - City of Odem, Action #12
132000030	San Patricio County Hazard Mitigation Action Plan - City of Odem, Action #5
132000029	San Patricio County Hazard Mitigation Action Plan - City of Odem, Action #4
132000028	San Patricio County Hazard Mitigation Action Plan - City of Odem, Action #1
132000027	San Patricio County Hazard Mitigation Action Plan - City of Mathis, Action #10
132000026	San Patricio County Hazard Mitigation Action Plan - City of Mathis, Action #7
132000025	San Patricio County Hazard Mitigation Action Plan - City of Mathis, Action #6
132000024	San Patricio County Hazard Mitigation Action Plan - City of Ingleside on the Bay, Action #11

132000023	San Patricio County Hazard Mitigation Action Plan - City of Ingleside on the Bay, Action #1
132000022	San Patricio County Hazard Mitigation Action Plan - City of Gregory, Action #1
132000021	San Patricio County Hazard Mitigation Action Plan - San Patricio County, Action #5
132000020	San Patricio County Hazard Mitigation Action Plan - San Patricio County, County Wide, Action #4
132000019	San Patricio County Hazard Mitigation Action Plan - San Patricio County, County Wide, Action #3
132000018	San Patricio County Hazard Mitigation Action Plan - San Patricio County, County Wide, Action #2
132000017	San Patricio County Hazard Mitigation Action Plan - San Patricio County, County Wide, Action #1
132000016	COASTAL BEND MITIGATION ACTION PLAN - SP-32
132000015	COASTAL BEND MITIGATION ACTION PLAN - SP-13
132000014	COASTAL BEND MITIGATION ACTION PLAN - NU - 40

132000013	
132000012	COASTAL BEND MITIGATION ACTION PLAN - NU - 24
132000011	COASTAL BEND MITIGATION ACTION PLAN - NU - 11

132000010	COASTAL BEND MITIGATION ACTION PLAN - KL - 05
132000009	COASTAL BEND MITIGATION ACTION PLAN - KL - 04
132000008	COASTAL BEND MITIGATION ACTION PLAN - JW - 08
132000007	COASTAL BEND MITIGATION ACTION PLAN - JW - 01
132000006	COASTAL BEND MITIGATION ACTION PLAN - AR-05

132000005	COASTAL BEND MITIGATION ACTION PLAN - RG-04
13200004	COASTAL BEND MITIGATION ACTION PLAN - RG-02
132000003	Atascosa McMullen Hazard Mitigation Plan - City of Poteet Action #2
132000002	Riparian Buffers
132000001	Improving Stormwater Management in Port Aransas
131000065	Tierra Grande Subdivision Drainage Improvements [®] Feasibility Study

131000064	Petropila Drainage Improvements Feasibility Study
131000063	City of Hondo Drainage Master Plan and Flood Mitigation plan
131000062	Indian Point Shoreline Erosion Project
131000061	Texas Coastal Resiliency Master Plan - R4-13
131000060	Texas Coastal Resiliency Master Plan - R3-25
131000059	Texas Coastal Resiliency Master Plan - R2-20
131000058	Atascosa McMullen Hazard Mitigation Plan - McMullen County Action #5
131000057	Atascosa McMullen Hazard Mitigation Plan - McMullen County Action #3

131000056	Atascosa McMullen Hazard Mitigation Plan - McMullen County Action #2
131000055	Atascosa McMullen Hazard Mitigation Plan - Lytle ISD Action #3
131000054	Atascosa McMullen Hazard Mitigation Plan - City of Lytle Action #4
131000053	Atascosa McMullen Hazard Mitigation Plan - City of Jourdanton Action #12
131000052	Atascosa McMullen Hazard Mitigation Plan - City of Christine Action #2
131000051	Atascosa McMullen Hazard Mitigation Plan - City of Charlotte Action #4
131000050	Atascosa McMullen Hazard Mitigation Plan - Atascosa County Action #10
131000049	Atascosa McMullen Hazard Mitigation Plan - Atascosa County Action #9
131000048	Nueces County Hazard Mitigation - Corpus Christi Action #27
131000047	Nueces County Hazard Mitigation - Corpus Christi Action #23
131000046	Nueces County Hazard Mitigation - Corpus Christi Action #20
131000045	Nueces County Hazard Mitigation - Corpus Christi Action #19
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131000044	Nueces County Hazard Mitigation - Corous Christi Action #11
131000043	Nueces County Hazard Mitigation - Cornus Christi Action #9
131000042	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 2.1.d

131000041	Aransas County Multi-Jurisdictional Floodplain Managment Plan - Action 2.1 c	
	Aransas County Multi Jurisdictional Elopdalain Managment	
131000040	Aransas County Multi-Junsuictional Floodplain Managment	
	Plan - Action 2.1.b	
131000039	Aransas County Multi-Jurisdictional Floodplain Managment	
	Plan - Action 2.1.a	
131000038	Aransas County Multi-Jurisdictional Floodplain Managment	
131000030	Plan - Action 1.1.c	
131000037	Aransas County Multi-Jurisdictional Floodplain Managment	
	Plan - Action 1.1.b	
131000036	Aransas County Multi-Jurisdictional Floodplain Managment	
	Plan - Action 1.1.a	
40400005	Aransas County Texas Multi-Jurisdisctinal Hazard Mitigation	
131000035	Action Plan - Action #70	
	Aransas County Texas Multi-Jurisdisctinal Hazard Mitigation	
131000034	Action Plan - Action #1	
	San Patricio County Hazard Mitigation Action Plan - City of Taft,	
131000033	Action #13	
131000032	San Patricio County Hazard Mitigation Action Plan - City of Taft	
	Action #6	
	San Patricio County Hazard Mitigation Action Plan - City of	
131000031	Sinton Action #12	
121000020	San Datricia County Hazard Mitigation Action Dian. City of	
13100030	San Patricio County Hazard Wiltigation Action Plan - City of	
	Ingleside, Action #7	

131000029	
	COASTAL BEND MITIGATION ACTION PLAN - NU - 64
131000028	COASTAL BEND MITIGATION ACTION PLAN - NU - 23

13100027	
131000026	COASTAL BEND MITIGATION ACTION PLAN - NU - 13

131000025	COASTAL BEND MITIGATION ACTION PLAN - NU - 12
131000024	COASTAL BEND MITIGATION ACTION PLAN - LO - 06
131000023	COASTAL BEND MITIGATION ACTION PLAN - JW - 11
131000022	COASTAL BEND MITIGATION ACTION PLAN - JW - 05
131000021	Hazard Identification, Risk Assessment and Consequence Analysis

131000020	USGS Flood Warning Modeling on the Sabinal River
131000019	Drainage Master Plan Study
131000018	Drainage Master Plan Study
131000017	Others (Flood Prevention/Planning Study, LOMR etc)
131000016	Drainage Master Plan Study
131000015	Drainage Master Plan Study
131000014	Drainage Master Plan Study
131000013	Drainage Master Plan Study
131000012	Drainage Master Plan Study
131000011	Drainage Master Plan Study
131000010	Drainage Master Plan Study
131000009	Drainage Master Plan Study
131000008	Drainage Master Plan Study
13100007	Others (Flood Prevention/Planning Study, LOMR etc)
131000006	County Wide Drainage Master Plan Study
131000005	County Wide Flood Planning/Prevention Study
131000004	County Wide Drainage Master Plan Study
13100003	County Wide Drainage Master Plan Study
13100002	County Wide Drainage Master Plan Study
131000001	County Wide Drainage Master Plan Study
131000071	Ingleside Drainage Master Plan

Description

Project in the planning and design phase, consultant has been selected.	
Project is under design and preparations are being made for construction	
Road improvement project to help better redirect roadside drainage. Project is in	
the planning phase and has been added to IDIQ.	
Improvement project to mitigate neighborhood flooding from nearby farm. Project	
is in the planning phase and has been added to IDIQ.	
Critical transportation improvement project. \$5M in CARES act funding received.	
Consultants have already been selected.	
drainage studies and proposed improvements have been completed	
This neighborhood is a repetitive loss area. There are already plans for a project in	
this area and it will be going into the IDIQ soon.	
This is a three stage project. The first is Ennis to S Padre Island Dr, the second is Lexington to Joslin, the third and largest is from Broadfield to Lexington	
Improvmenets include putting in boxes and redoing the crossing at Glenoak/Flower Blueff. This project is ongoing. Construction began summer of 2022.	
RCP storm drain pipes, constructed drainage ditches, inlet improvements	
throughout the City of Fulton	
New storm drain pipes, inlets, and channel improvements with new outfall	
structure to Aransas Bay	
2,500 LF of drainage improvements,	
including improved channels and belowground concrete boxes. The project would	
also include easment acquisition and the crossing of both SH 361 and the UP	
Railroad and concrete outfall	
Easement Acquisition and the design and construction of 10,000 LF of drainage channels along FM 1069 and from Morgan Lane and Mooney Lane to McCambell Slough.	
Easement Acquisition and constrution of two 700 LF eathern drainage channels	
between Wright Avenue and McCampbell Slough along with 2500 LF of channel	
widening from the north side of the existing hotel properties to the west and tie-in	
with McCampbell slough.	
2,500 LF of stormwater utility replacement between Humble Avenue and Mustang Avenue, and 1,200 LF of stormwater utility replacmeent between Mustang Avenue and the Avenue B concrete lined channel. Additionally, this project would include improvements from 5th Street, 6th Street, 7th Street, and 8th Street into the improved Avenue B channel, and downstream channel widening/cleaning. This project could also include land acquisition.	

The primary purpose is to reduce flooding footprint for the northern half of the residential area of Gregory. The project includes acquiring new drainage easements upstream and downstream of existing drainage easement; new ditch excavation; installing new multiple box culverts at FM 3284, CR 106 and FM 136; widen and deepen the existing Main Lateral AS; concrete plating the critical ditch section that is behind Orchid Circle at the north end of Gregory and sharp bends that may be subject to erosion.	
Primary purpose is to reduce the flooding footprint for the western half of Taft. The project proposes to widen and deepen the existing Main Lateral AJ; widen the existing railroad trestle at US HWY 181; concrete plate the ditch section through the US 181 bridge crossings; replace the existing bridge crossings at CR 71, FM 1360, Pyron Farm Road and CR 98; and concrete plating sharp bends in alignment which may be subject to erosion.	
Primary purpose for this project is to reduce flooding footprint for the northeast part of Taft. The project will widen and deepen the existing Main Lateral AN; replace the existing bridge crossings at FM 631, CR 102, CR 77, and CR 81; and concrete plating the critical ditch section between FM 693 and CR 102 to increase the runoff rate through this section of ditch.	
Primary purpose of project is to increase the outfall capacity of the existing Sinton South Ditch. Project would include widening and deepening the existing Sinton South Ditch; widening the existing railroad crossing adjacent to US HWY 181; concrete plating the existing ditch section through US HWY 181; construction a new widened, low water crossing that serves as access to the local farming community and concrete plating the ditch intersection area which may be subject to erosion.	
Eliminate flooding and reduce flooded area in the residential area of Ingleside that is located to the east of Emory Bellard Drive. This project would include acquiring new drainage easement for a new ditch lateral from Emory Bellard Drive to the intersection of the existing Humble ditch; excavating a new outfall channel that would connect to the existing humble Channel Outfall; widening and deepening the existing Huble Channel Outfall; installing new multiple box culvert crossings below Emory Bellard Drive and concrete plating the ditch intersection area and sharp bends in the ditch alignment which may be subject to erosion.	
Minimize existing flooding problems and reduce flooded areas for the Cities of Gregory and Portland. This project would include acquisition of new drainage easements; new channel excavation; new multiple box culvert crossing with headwalls and concrete plating at FM 893 and CR 72A and concrete plating sharp bends in alignment which may be subject to erosion.	

2,500 LF of drainage improvements,	
including improved channels and belowground concrete boxes. The project would	
also include easment acquisition and the crossing of both SH 361 and the UP	
Railroad and concrete outfall	
Easement Acquisition and the design and construction of 10,000 LF of drainage	
channels along FM 1069 and from Morgan Lane and Mooney Lane to McCambell	
Slough.	
Easement Acquisition and constrution of two 700 LF eathern drainage channels	
between Wright Avenue and McCampbell Slough along with 2500 LF of channel	
widening from the north side of the existing hotel properties to the west and tie-in	
with McCampbell slough.	
2 500 LE of stormwater utility replacement between Humble Avenue and Mustang	
Avenue, and 1, 200 LE of stormwater utility replacement between Mustang Avenue	
and the Avenue B concrete lined channel. Additionally, this project would include	
improvements from 5th Street, 6th Street, 7th Street, and 8th Street into the	
improved Avenue B channel and downstream channel widening/cleaning. This	
nroject could also include land acquisition	
Expanding the current stormwater network in residential areas	
Reconstructing/regrading the roads to allow water to flow in the natural drainage	
direction instead of ponding	
Maintenance of existing curbs, gutters, and inlets	
Expanding the citywide drainage system to include the newly developed residential	
areas	
Improving drainage on ditches along TXDOT roads and conveyance on railroads	
undercrossings	
Cleaning and restorating ditches throughout the city	
Maintenance of existing curbs, gutters, and inlets	
Expanding current stormwater network in residential areas	
Improvementing outfall structures to Chiltipin Creek	
Cleaning and restorating ditches throughout the city	
Maintenance of existing curbs, gutters, and inlets	
Improvement to outfall into Nueces bay	
Construction of a new detention basin to serve newly developments	
Increase conveyance capacity of ditches	
Cleaning and restorating ditches throughout the city	
Maintenance of existing curbs, gutters, and inlets	
Expanding and improving drainage network to Odem HS area and constructioning a	
detention basin	
Improving drainage on ditches along TXDOT roads and conveyance on railroads	
undercrossings	
Cleaning and restorating ditches throughout the city	
Maintenance of existing curbs, gutters, and inlets	
Cleaning and restorating ditches throughout the city	
Maintenance of existing curbs, gutters, and inlets	

Improving conveyance infrastructure capacity
Construction of detention pond
Procurement of easements and right-of-ways
Improvements to outfall stuctures
Cleaning and restorating ditches throughout the city
Maintenance of existing curbs, gutters, and inlets
Cleaning and restorating ditches throughout the city
Maintenance of existing curbs, gutters, and inlets
Improvements to outfall stuctures
Cleaning and restorating ditches throughout the city
Maintenance of existing curbs, gutters, and inlets
Expanding and improving drainage network to Ingelside HS area with possibility of
constructing a detention basin
Expanding and improving drainage network to the neighborhood bounded by Ave
A, Ave G, Tiner Ln, and 8th St.
Improvementing outfall stuctures
Cleaning and restorating ditches throughout the city
Maintenance of existing curbs, gutters, and inlets (especially along Woodhaven Dr.
and N Sandpiper St)
Improving drainage on ditches along TXDOT roads
Improving conveyance on railroads undercrossings
Lining of ditch crossing US-181 and I-35 (South of city)
Cleaning and restorating ditches throughout the city
Expanding the current stormwater network to unserved residential areas
Maintenance of existing curbs, gutters, and inlets
Cleaning and restorating ditches throughout the city
Maintenance of existing curbs, gutters, and inlets
Topographic and hydrological study for improvement and regrading of Drainage
ditch.
Road reconstruction and drainage improvements consisting of driveway culvert
replacement and road side ditch regrading.
Restoration project to bring this section of North Carreta creek (located between
CR6 and Meadowbrook Road) back to its original elevation as built by USDA Soil
Conservation Service in 1960.
Acquire right of way to improve the flow of flood waters in the London Area.
Acquire right of way to improve the flow of flood waters from the Robstown/
Calallen Area.
Acquire right of way to widen & deepen existing drainage ditches.
Improvements to drainage infrastructure in Concepcion
Improvements to surface and subsurface infrastructure of Realitos Drainage
System
Improvements to outfall structures and appurtenances along San Diego Levee
System
New underground stormwater collection system along Collins Street, including
interconnections between existing and new infrastruture.

Improvement to underground drainage system to increase capacity and improve	
conveyance on railroad under-crossings and on sections of Highway 44 to improve	
stormwater drainage from north to south	
Drainage improvements to subsurface drainage systems	
- Installation of new underground drainage infrastructure along Luby street	
- Expansion and improvements to Dix Street System	
Improvements to street overland drainage system:	
- Curb and gutter replacement	
- Improve conveyance by road paving and regrading of prioritized streets	
Improvements to Earthen Channel System:	
- Increase culvert capacity on Burch St and other undersized crossings	
- Channel improvements along the main earthen channel	
Improvements to the Drainage System in Central Benavides:	
- Increase capacity to inlets and pipes on Depot St, E Railroad Ave, Clark St, E	
Mesquite St, & Peters St.	
- Upsize pipes downstream of the inlet on Highway 339	
- Expand network to Santa Rosa de Lima Street	
- Improvements to concrete channel on Peters Street.	
- Improvements to outfall structures	
- Procurement of outfall easements	
Channel improvements to system near Las Animas Creek to improve conveyance: - Upsize culverts on Palacios St and S Benavides St - Improve conveyance capacity under bridges on HWY 359 and HWY 339 - Procurement of easements and rights-of-ways	
This project will construct a half-mile, nearshore breakwater and beneficially use	
dredged material to restore an island in order to protect approximately 5,236 acres of coastal habitat, including 2,630 acres of seagrass in Redfish Bay, an area adjacent to Corpus Christi Bay. Additionally, this project will restore approximately 28 acres of coastal wetland habitat and create oyster, invertebrate and fisheries habitat.	
The proposed project will improve the resiliency of the County and surrounding	
communities that sustained damage Hurricane Harvey. Select, key mitigation	
interventions are needed around the Bay to augment and leverage the range of	
shoreline stabilization and erosion control projects that have been constructed	
throughout the Corpus Christi Bay area to protect the communities from storm-	
related hazards. (This includes budget justification for North Beach, Port Aransas	
and Ingleside on the Bay).	
Greenwood Plant consistently floods and is in need of repairs. The proposed	
project would improve the infrastructure in and around the plant to prevent	
furture floods from impacting the plant.	

The Oso Creek Channel Bottom Rectification and Green Infrastructure Project would address a 12-mile section of Oso Creek channel from Greenwood Drive to Cayo del Oso including channel modifications to remove peaks and valleys, and implement bank stabilization, revegetation, and other green infrastructure techniques. It will advance long term resilience by enhancing capacity of stormwater system and improving water quality.	
While the first priority of the Nueces Delta Preserve is habitat conservation, this unique location provides South Texas an important opportunity for pubic education and better understanding of the delta's role as the transition zone at the water's edge.This vision includes an Estuary Learning Center and Visitor Center to be built on the Rincon Unit's highest ground near the Union Pacific Railroad and overlooking the delta. An observation tower and hillside amphitheater will be next to the existing classroom. A bunkhouse for visiting researchers will be nearby along with maintenance and support facilities. Hiking trails with improved rest areas and interpretive signage will allow visitors to venture deep into the varied delta habitats.	
This area is located near the downstream part of the watershed, which makes it ideally located from the perspective of providing capture of contaminants before discharge into the Bay. Due to the requiement of constructing a weir and overflow device, this project is hydraulically sensitive and will neeed carefull planing to develop an effective project design and avoid obvious potential risk.	
An on-line pond, up to 5 acres, capturing frequent flows from the Railroad ROW tributary as well as the lands to the west should be designed at this location. It is also recommended that an additional 42" pipe be placed adjacent to the existing 42" outfall from the golf course.	
This project will help significantly reduceone of the leading stormwater pollutants within the Tule Creek Watershed and discharge to little Bay. The vegetative slope protection will help control erosion and sedimentation downstream when combined with a maintenance projgram designed to also control erosion. It is expected that approx. 100 feet of additinal ROW is needed to be dedicated and cleared to accommodate the widening.	

This project is located in a position that will enable capture of most flows and	
sediment from the watershed before discharge into Little Bay. The pond will	
emphasize sediment control should be placed more or less op-line but so as to	
avoid changes to flood and drainage control	
The merguite by pass project is primarily a drainage and flood control plan that	
the mesquite by-pass project is primarily a drainage and nood control plan that	
will divert 25 percent of the total Tule Creek Watershed area to a new Aransas Bay	
Outfall. This project will require approx. 3,200 feet of 5x5 box culvert to be	
installed within the Mesquite Street ROW.	
This project will construct 3,900 linear feet of breakwater to protect 650 acres of	
marsh habitat along the face of the Nueces Delta shoreline. The Nueces Delta is	
currently undergoing rapid erosion that is causing the loss of significant marsh	
habitat for a variety of estuarine species that were injured by the Deepwater	
Horizon Oil Spill, including juvenile fishes, shrimp, and crabs that support important	
commercial and recreational fisheries. The Nueces Delta is also important habitat	
for many bird species impacted by the spill, such as white pelicans, brown pelicans,	
reddish egrets, black skimmers, least	
terns, snowy ployers, and piping ployers. Construction of a living shoreline will	
enhance the bay and estuarine babitat and contribute to the protection and	
restoration of a large contiguous area of salt marsh which will benefit these	
octuaring enories	
The proposed breakwater system will improve the great's resilience against see	
The proposed breakwater system will improve the area's resilience against sea	
level rise, storm surge, and flooding, and also protect nearby conservation	
properties. Outcomes from this project contribute to goals in several regional	
conservation management plans, including the Texas General Land Office's Texas	
Coastal Resiliency Master Plan and Texas Parks and Wildlife's Texas Wetlands	
Conservation Plan.	
Acquisitions of Conservation Easements (approximately 970 acres)	
Purchase of Properties	

The recommended improvements under this project include:	
 Repairing breaches in the ship channel revetment on northern Mustang Island; Constructing living shorelines coming of the ship channel near existing rock revetments to protect mangrove habitat; Rebuilding marsh and wetland habitat; Repairing the Charlie's Pasture bulkhead that was damaged during Hurricane Harvey; 	
 Repairing public access; and Permitting this site for beneficial use of dredged material to elevate the land. There is a potential to leverage Federal Emergency Management Agency-Public Assistance funding for this project. The engineering work has been initiated 	
In 2015, Nueces County acquired property on North Padre Island approximately 4 miles southwest of the causeway. There are several ongoing restoration eforts at the site, including eradicating approximately 12 acres of invasive Brazilian Pepper Trees, implementing a prescribed burn management plan, and re-purposing an old impacted well pad site to establish burrowing owl habitat. Nueces County completed a Habitat Land Use Management Plan for the property to guide future conservation eforts that included input received during public meetings from regulatory agencies, non-governmental organizations and the general public. The acquired property has three immediate needs: 1. Repairing a large blow out in the dune system. During and after the dune restoration process, data will be collected to inform future repairs. 2. Restoring damaged wetlands from human use activities, such as driving through jurisdictional wetlands. 3. Invasive species control and post-control monitoring and removal. This include Brazilian Pepper Trees and Chinese Tallow Trees	
This project would acquire additional land within the Guadalupe River and Delta Wildlife Management Area corridor to connect tidal marsh from the upper reaches of Hynes Bay to the Wildlife Management Area in Refugio County.	
The project would include the construction of breakwaters along approximately 3,900 linear feet of shoreline at the Nueces River Delta to dissipate wave energy that is causing estuarine wetland loss. This project was permitted by the U.S. Army Corps of Engineers in October 2016 and the project is considered shovel-ready. Coordination is ongoing with the Port of Corpus Christi regarding the possibility of beneficially using dredged material in this area.	

This project would protect two rookery islands, Tern Island and Triangle Tree Island, in the Upper Laguna Madre from erosion by constructing protective structures, such as shoreline armoring for each island. This project would be considered Phase 1 and would include feasibility, preliminary engineering, alternatives analysis, fnal design and permitting. Phase 2 would cover the construction phase. Opportunities to include beneficial use of dredged material during the construction would be pursued	
Newcomb's Point is located northeast of Copano Bay. This project would place shoreline stabilization at Newcomb's Point to help protect the valuable habitat from threats of erosion. Potential solutions could include creating a living shoreline that would protect the shoreline from erosion, such as a semi-submerged breakwater with vegetation behind it to allow the shoreline to accrete and stabilize natural	
Under this project, approximately 1 mile of breakwaters would be installed along Lamar Beach Road, from Main Street to 12th Street in Aransas County. The project also would include regrading and flling along the shoreline, and marsh planting to establish a living shoreline system	
This project would acquire approximately 400 acres of coastal habitats that support coastal prairie, freshwater and estuarine wetlands, and the southernmost extents of mima mounds at Shell Point Ranch. After successful completion of this project, it would be optimal to protect additional areas north and east of Shell Point through acquisitions or conservation easements to provide a contiguous wildlife corridor to beneft whooping cranes and increase coastal land preservation.	
The project is located along the San Antonio Bay shoreline side of the Aransas National Wildlife Refuge (ANWR) in an area known as Dagger Point. This project would install a living shoreline using rock breakwaters to preserve this area. The Coastal Bend Bays and Estuary Program is working with U.S. Fish and Wildlife Service to conduct an alternatives analysis and complete the preliminary engineering, alternatives analysis, fnal design and permitting for protection of 1.5 miles of shoreline at Dagger Point. Stakeholders are seeking funding for construction of the shoreline restoration and protection	
Drainage in Colonias: K-Bar, Alice Acres, and Rancho Allegre (GLO)	
reduce flooding and poor drainage by increasing maintenance of existing storm water system.	
Improve or replace inoperable communications in city departements and outside agencies	
Replace or improve inoperable communication equipment for better county wide coordination between municipalicies, police, EMTs, and other emergency personnels for hazards.	
Upgrade Schools against all hazards. A detailed study on the cost effectiveness measures to protect schools agains all hazards	

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Study and implement findings of study to improve local drainage at Betty Louis and school drive	
Install early warning systems	
New emergency communication infrastructure.	
Education homeowners on all types of hazards	
Public awareness and education on all hazards	
Create and implement a hazard educational enhancement program in which faculty/students can collaborate in inderstanding and communicating hazards of concern.	
Develop a stormwater management plan and implement the structural and non- structural solutions to mitigate flooding.	
Public education and outreach programs to education citizens about mitigation against hazards	
Conduct a feaibility study to evaulate site options for a community safe room for hazards	
Install early warning systems for hazards	
Install educational signage such as "turn around don't drown" at high risk low water crossings	
Maintain Storm Drainage System	
Enforcement of flood damage prevention ordinance	
Install early warning system for hazards	
Conduct a feasibilty study to evaulate size options for a community safe room	
The enforcement of the flood damage prevention ordinance	
Implement a stormwater pain needing to identify and prioritize projects that will improve drainage in the areas in the city	
Implement alert system to warn community of hazards.	
Eastablish and implement a voluntary "acquistion and demo program" to address repetitive loss to floodprone properties.	
Develop and implement a revier/creek clean out plan.	
Inventory of all low water crossing in the county and develop a prioritize projects in a COP for upgrades or replacement.	
Place flood gauges upstream of flood-prone areas to alert citizens to quickly rising waters.	
Coastal Erosion Cole Park: Installation of groins and/or breakwaters to the areas behind the bulkhead to retrofit the areas that are eroding.	

Make improvements to the erosion on sides and bottom of Drainage Master Channel 31.	
Master Channel 31 was constructed in various phases in conjunction with the development in the area. The side slopes and bottom are severely eroded resulting in poor drainage and encroachment of ditch outside of the City right-of-way. This project will provide critical improvements to restore and improve the drainage profile and include erosion control measures such as side slope stabilization, soil treatment, vegetative cover and other best management practices. This project is planned in multiple phases as funding allows.	
Build a floodwall along Corpus Christi Bay at the Science and Natural History Museum.	
Recommendation to construct a new floodwall (or a coastal structure) that would follow a "hypotenuse" alignment between the existing Promenade and the USACE Bulkhead. The project would also backfill the triangle to make it function more like a coastal structure. This would also provide additional land area for future use.	
Make improvements to the side seals on the Wesley Seale Dam Spillway to maintain the spillway's integrity.	
The Wesley Seals Dam has 60 crest gates located in two separate spillways: the south spillway includes 27 gates and the north spillway includes 33 gates. Over the years, leakage from the side seals has increased and it has become significant at several of the gates. The water flow from the excessive leakage damages the concrete and encourages algae and other vegetative growth and leads to corrosion issues on the gates, metal appurtenances and reinforcing steel. This project provides for the necessary improvements including seal replacement, miscellaneous structural repairs and application of a protective coating system for the Dam.	
Make improvements to the instrumentation system at Wesley Seale Dam.	
This project provides for improvements to the original instrumentation system including annual safety inspection, integration with O.N. Stevens WTP process controls, The Howell-Bunger Valve, the downstream sluice gates, and the dewatering system, in response to previous inspections and priority investment recommendations into the system. This project will protect the integrity of the Wesley Seale Dam system (1957), to provide for proper inspection and updated regulatory reports per TCEQ.	
This project will involve the improvement of La Volla Creek that crosses SH 357 (Saratoga Blvd). The project will provide 100-year capacity for conveyance to the Oso Creek. Phase 1 Channel improvements include the removal of vegetation from the channel North of Saratoga Boulevard and channel widening South of Saratoga Boulevard.	

Improvements to side slopes on Schanen Ditch to eliminate erosion problems.	
The existing profile of Schanen Ditch exceeds the recommended slope of 4:1 and maximum of 3:1. This is resulting in major slope stabilization failure in multiple areas near the Yorktown Bridge. Work to improve this ditch will include excavation/backfill to widen and create 3:1 side slopes with stabilization matting, new culvert and outfalls, riprap and ditch bottom improvements, seeding, irrigation adjustments, traffic controls, dewatering and other miscellaneous items. Construction of Phase 1 of this project has been recently completed and future phases will be completed to the extent that funding allows.	
Excavate silt and debris in Drainage Master Channel 31 caused by the erosion on sides and bottom of the Drainage Master Channel 31.	
Master Channel 31 was constructed in various phases in conjunction with the development in the area. The side slopes and bottom are severely eroded resulting in poor drainage and encroachment of ditch outside of the City right-of-way. This project will provide critical improvements to restore and improve the drainage profile and include erosion control measures such as side slope stabilization, soil treatment, vegetative cover and other best management practices. This project is planned in multiple phases as funding allows.	
Make improvements to Power Street Pump Station	
Make improvements to the Salt Flat Levee System	
Construction of a new bulkhead in Corpus Christi Bay along the south side shoreline of Corpus Christi.	
Seawall capital Imrpovement Project for routine maintenance and restoration.	
Each jurisdiction will continue ongoing maintenance of drainage pipes, culverts, and swales until the county-wide master plan is approved and implementation can begin.	
Send informational mailers to repetitive loss property owners about buyouts and other mitigation options.	
A flood response plan that will identify outreach projects that can be utilized to	
give the public infomration on flood protection, rebuilding after a flood event,	
grant information, etc.	
Publish informational flood articles in city and county newsletters	
Develop a joint floodplain management and awareness website with all jurisdictions.	
Incorporate higher floodplain management standards into Aransas County hazard Mitigation Action plan update	
Incorporate higher floodplain management standards into City of Rockport	
comprehensive plan update.	

Incorporate higher floodplain management standards into City of Aransas Pass comprehensive plan update.	
Repair outfalls of pump station that pump into Aransas Bay	
RCC Lakes - removal of sediment for drainage improvements	
Master Plan - Drainage Improvements - Project 8 - Pearl St (FM2165) at Orleans & Laure	
Master Plan - Drainage Improvements - Project 7 - Market St (FM1069) at Church St (Loop 70)	
Master Plan - Drainage Improvements - Project 5 - Market St (FM1069) at Burton & Kossuth	
Master Plan - Drainage Improvements - Project 4 - Market St (FM1069) at SH 35 BUS	
Master Plan - Drainage Improvements - Project 3 - Market St (FM1069) at SH 35 Bypass, Hickory & Steart	
Master Plan - Drainage Improvements - Project 2 - SH 35 BUS - Enterprise & Maple	
Master Plan - Drainage Improvements - Project 1 - SH 35 BUS - Traylor Ave & Tule Park Dr.	
Stormwater Crossing at FM 1781 - Upgrade/replacement of box culverts to accommodate growth	
Cove Harbor Bulkheads - bulkhead construction will provide erosion protection	
Update stormwater master plan	
Design and implement a coastal erosion study to identify projects	
Update and improve sea gates that protect the city and harbor	
Develop and implement a buyout program	
Purchase land behind leeves	
Develop and adopt a stormwater master plan	
Install bulkheads at Conn Brown Harbor.	

Newcomb's Point - the construction of new habitat will provide erosion protection improvements. Reduces the threat of flooding to new and existing buildings and infrastructure by making improvments to the County drainage system	
Shell Ridge Road - the construction of new habitat will provide erosion protection improvements. Reduces the threat of flooding to new and existing buildings and infrastructure by making improvments to the County drainage system	
Precinct 3 - Henderson Street Property - Project 4. Reduces the threat of flooding to new and existing buildings and infrastructure by making improvments to the County drainage system	
Precinct 3 - West Tule - Pond/Channel Widening - Projects 2, 3. Reduces the threat of flooding to new and existing buildings and infrastructure by making improvments to the County drainage system	
Precinct 1/1A - Southeast 35 - Project 1. Reduces the threat of flooding to new and existing buildings and infrastructure by making improvments to the County drainage system	
Precinct 1/1A - Southeast 35 - Project 2. Reduces the threat of flooding to new and existing buildings and infrastructure by making improvments to the County drainage system	
Precinct 4 - Lowering of Picton/Sorenson - Project 5. Reduces the threat of flooding to new and existing buildings and infrastructure by making improvments to the County drainage system	
Precinct 1/1A - Northeast AP - Project 1. Reduces the threat of flooding to new and existing buildings and infrastructure by making improvments to the County drainage system	
Precinct 1/1A - Southwest 1069 - Projects 2, 3: Improve upon inadequate right-of- way width on County roads in this watershed, improve upon undersized structures under FM1069, create an outfall channel from FM1069 to Port Bay. Reduces the threat of flooding to new and existing buildings and infrastructure by making improvments to the County drainage system	
Precinct 4 - Spanish woods - Projects 1, 2, 3: Surface conveyance system and drainage structures under Sanctuary Drive and Spanish Woods Drive. Reduces the threat of flooding to new and existing buildings and infrastructure by making improvments to the County drainage system	
Precinct 2 - Copano Heights - Projects 1,2,3: Surface SW conveyance system imrpovements from Copano Heights through Bailey Ranch with drainage structures under FM1781 at two locations. Reduces the threat of flooding to new and existing buildings and infrastructure by making improvments to the County drainage system	
Precinct 4 - Southeast Lamar - Projects 1,2,3: Subsurface conveyance system. Reduces the threat of flooding to new and existing buildings and infrastructure by making improvments to the County drainage system	

Precinct 1/1A - Palm Harbor - Project 1: Create outfall to Aransas Bay, improvements to surface to subsurface conveyance system, draiange structures under SH35 business. Reduces the threat of flooding to new and existing buildings and infrastructure by making improvments to the County drainage system	
Precinct 1/2 - Griffith St. projects 1,2,3: Surface storwater conveyance system improvements. Reduces the threat of flooding to new and existing buildings and infrastructure by making improvments to the County drainage system	
Precinct 4 - South Central Lamar Project 1: Surface stormwater conveyance system from Bee tree Circle to Copano Bay with 6-ac stormwater management pond west of SH35. Reduces the threat of flooding to new and existing buildings and infrastructure by making improvments to the County drainage system	
Precinct 4 - Tule Creek- Mesquite Bypass - Project 1: Subsurface drainage system from 12th St (Fulton) to Aransas Bay Reduces the threat of flooding to new and existing buildings and infrastructure by making improvments to the County drainage system	
Precinct 1/1A- Pinciana/Weeping Willow- Projects 1,2: Surface stormwater conveyance imrpovements from Weeping Willow Rd to FM1069	
St. Charles Bay Shoreline/Lamar Beach Road - the creation of a new habitat will	
Equip sewer manholes with watertight covers and inflow guards; Raise electrical	
components of sewage lift stations above BFE.	
Adopt and implement a program for clearing debris from bridges, drains and	
stormwater drains. Opgrade undersized	
Harden/retrofit critical facilities to protect	
against hazards (see comments). Install generators with hard-wired quick connecti ons.	
Clean and repair stormwater drains. Upgrade undersized stormwater drains.	
Floodproof sewage treatment plants in flood hazard/lowlying areas; Raise electrical components of sewage lift stations ab ove BFE; Equip sewer manholes with watertight covers and inflow guards.	
Retrofit police, fire, EMS facilities to hazard-resistant levels (see comments);	
Install generators with hardwired quick connections.	
Install generators with hard-wired quick connections at critical facilities, including	
lift and pump stations, as deemed necessary.	
Install city-wide warning system as well as phone notification system for all	
critical facilities including schools.	
Harden/retrofit critical facilities, including fire, police, and EMS facilities, to	
protect against hazards (see	
comments).	

Equip sewer manholes with water tight covers	
and inflow guards; Raise electrical components of sewage lift stations above BFE;	
Floodproof sewage treatment plants in flood hazard/lowlying areas;	
Increase capacity/add stormwater detention /retention basins; Increase dimension	
s of drainage culverts in areas prone to flooding and/or with drainage problems	
(specify locations).	
Install generators with hard-wired quick connections at critical facilities, including	
lift and pump stations,	
as deemed necessary; Harden/retrofit critical facilities to protect against hazards (s	
ee comments).	
Purchase NOAA "All Hazards" radios for early warning	
and post-event information and place in area	
schools/businesses/critical facilities.	
Survey and remove hazardous trees and brush from drainage system.	
Upgrade and harden critical communication infrastructure and equipment.	
Purchase emergency heavy equipment to	
facilitate recovery after a significant event.	
Implement Avenue B drainage project improvements	
Develop a hazard resistant municipal complex that will facilitate City Hall	
functions, Police	
Department, Municipal Court and an Emergency Operations Center	
Adopt and implement a program to regularly clean and repair storm water drains;	
Upgrade undersized storm	
water drains to improve drainage and reduce flooding	
Improve drainage, implement drainage right-of-way on California Street.	
Obtain and implement an AM Emergency Advisory Radio System for emergency no	
tifications to citizens during extreme events; Purchase and distribute NOAA	
all hazard radios to critical facilities for early warning.	
"Adopt/update disaster resistant building codes, ordinances and / or subdivision	
regulations (see comments).	
(Heat resistant roofing, elevate utilities and equipment/appliances, hail resistant	
roofing, shatter proof windows, lightning rods, roof strapping, drought tolerant	
landscaping , low flow toilets , sprinkler system, fire resistant building materials,	
insulated pipes, etc.)"	
Clean and clear out drainage ditches, culverts and easements; Upgrade	
drainage system to	
increase capacity and reduce flooding; Utilize Next Door app to encourage area	
residents to maintain culverts and ditches on private property	
Survey and remove hazardous trees and brush from drainage system.	

Clean and clear out drainage ditches culverts and easements: Ungrade	
drainage system to	
increase canacity and reduce flooding: Litilize Next Door ann to encourage area	
residents to maintain culverts and ditches on private property	
To provent flood every (and pates) at policer across by lowering by a potel actor	
To prevent flood surge (sea gates) at pelican cove by lowering huge metal gates	
into concrete frames with a 10 ton crane. To prevent rising water into city, sea	
gates will be placed into these frames at two railroad track openings.	
elevate roadway/construct bridge in city of San Patricio on Nopal street and county	
road 60B. City has had multiple floods from the Nueces river due to releases from	
choke canyon and Lake Corpus Christi dams due to tropical storms and heavy rain	
events.	
Elevate roadway/construct bridge in city of San Patricio on Nopal street and county	
road 60A. City has had multiple floods from the Nueces river due to releases from	
choke canyon and Lake Corpus Christi dams due to tropical storms and heavy rain	
events.	
Conduct Engineering drainage study along California Street from West Main to the	
Kenney Bayou. Secure drainage right of ways to include possible property	
acquisition and utility relocation. This section of town has historically been	
inundated by heavy rain events due to poor drainage, cutting offaccess to area	
residences	
Secure drainage right of ways along Avenue A in the area near 4th to 8th Street.	
This section of Avenue A has historically been inundated by heavy rain events due	
to noor drainage, cutting off access to area residences	
The City of Ingleside currently has a warning siren that is out of service. This	
project is to replace that equipment for the purpose of alerting residents to	
impending natural and manmade hazards.	
The Nueces River has had three major flood events, two Presidential declarations	
in 2002 and a non-declared event in 2003. The property is located in the 100 year	
floodplain with portions in the floodway. San Patricio County has procured nine	
properties in the area 6 in River Estates and 3 in Reaceful Valley through EEMA 8	
ORCA Grants. We are in the process of purchasing one 600 acre parcel through the	
Coastal Pays and Estuary Program, and 12 tracts through a Toyas Conoral Land	
Office Creat (CLO) in the La Fruite Subdivision on the Nucces Diver	
Office Grant (GLO) in the La Fruita Subdivision on the Nueces River.	
Re-Eurlish Elood proof Repetitive Loss Homes damaged by Declared Disasters	
San Datricio County obtained monios to complete 40 home rebuilds and has	
an ratio County obtained momes to complete 40 nome rebuilds and has	
approximately of nomes which are qualified but has no funding at this time. Many	
residential structures were damaged by storms in 2002. Insurance was non-	
existent, or coverage was not provided for by the homeowner, who were either	
elderly, low-income, or unaware that coverage on normal homeowner's insurance	
does not provide for flood or wind storm damage.	
	1

Conduct debris removal operations and incorporate drainage enhancements that	
will reduce the incidence of flooding. This will include upgrades to culverts and	
leveraging City and private maintenance of construction projects. This project will	
further be enhanced by the road elevation and re-grade project. The City of	
Driscoll was first formed as a community in 1904 and was later incorporated as a	
Class C City in 1951. The City's infrastructure and buildings are very old and is	
located in an area that is very flat, causing it to be prone to flash floods. Aggressive	
debris control and flood-proofing is essential to mitigate against flooding and	
hurricane winds. All citizens and business owners remain concerned about their	
health and public safety due to continuous flooding. Over the past several years,	
there have been numerous flood events that have directly affected the City. The	
Coastal Bend will continue to be susceptible to very heavy rainfall and tropical	
weather events putting the City in a continuous battle to stay accessible and safe	
for its citizens. In addition to the already mentioned issues, travel near and	
through the community is limited on a regular basis including a very heavily	
highway that is also a critical hurricane evacuation route.	
Elevate and re-grade dilapidated roads. Many of the City's roads have sunk	
significantly and are a contributing factor to many of flood issues throughout the	
community. Repetitive flood damages have caused maintenance costs to be	
burdensome on the City. Upgrades from caliche to a more standard road surface	
would greatly enhance the ability of the road system to tolerate nuisance and	
reoccurring flooding. The City of Driscoll was first formed as a community in 1904	
and was later incorporated as a Class C City in 1951. The City's infrastructure and	
buildings are very old and is located in an area that is very flat, causing it to be	
prone to flash floods. Aggressive debris control and flood-proofing is essential to	
mitigate against flooding and hurricane winds. All citizens and business owners	
remain concerned about their health and public safety due to continuous flooding.	
Over the past several years, there have been numerous flood events that have	
directly affected the City. The Coastal Bend will continue to be susceptible to very	
heavy rainfall and tropical weather events putting the City in a continuous battle to	
stay accessible and safe for its citizens. In addition to the alreadymentioned issues,	
travel near and through the community is limited on a regular basis including a	
very heavily highway that is also a critical hurricane evacuation route.	

Residential flood buyout along Nueces River to reduce repetitive losses and potential loss of life attributed to a major flood event or dam failure. Residential development along the river in the unincorporated areas is a patchwork of substandard homes and development well below recommended base elevation for the 100 year floodplain. Most of the property owners are not insured and have had numerous repetitive loses. Additionally, this project will leverage existing partnerships with an interest in maintaining a clean, safe and reliable water supply for the City of Corpus Christi as part of the Nueces River Watershed Protection Plan. The Nueces River Authority, City of Corpus Christi, Texas Commission on Environmental Quality and Coastal Bend Bays and Estuaries Foundation support continued buyouts along the river to maintain open green space and to aid in removing environmentally undesirable structures responsible for runoff pollutants and raw sewage discharges. This program will be multi year and will leverage multiple funding sources and partners. There are currently 66 eligible properties in Nueces County for the Repetitive Flood Claims Grant. Approximately 15 residential properties are located within the unincorporated areas of the county and would be thefirst targeted for participation. Additional properties will be targeted as part of the less restrictive Hazard Mitigation Grant Program. The City of Corpus Christi failed to meet state water quality standards in November 2009 attributed to high levels of pollutants caused by runoff from heavy rain. As part of the necessary corrective actions, the City partnered to develop the Nueces River Watershed Protection Plan. This project will support the established mission and goals set forth in the plan to createenvironmentally friendly open space.

I NUECES COUNTY TINISPED A COUNTYWIDE MASTER Drainage Plan Study and developed	
the Master Drainage Implementation Dian as a guide for prioriting and	
implementing the improvements identified as part of the study. The priorities	
autilized in the implementation plan are items which will have an immediate	
impact on storm water management for areas experiencing flooding	
ninpact on storm water management for areas experiencing nooding	
drainage ways and creeks are constricted by inadequate shapped capacities man	
drainage ways and creeks are constricted by inadequate channel capacities, man-	
made barners such as road and rainoad embankments, imgation canais, and	
because its hat topography and low soil permeability create poor drainage and	
December 2000 identifies major improvements which will be required throughout	
the county area future development accurs. The recommendations in the study	
ne county once future development occurs. The recommendations in the study	
demages through both structural and non-structural measures. Structural	
uamages infough both structural and non-structural measures. Structural	
Intersures include enlarging existing channels, constructing new channels, enlarging	
include fleedulein regulation, fleed proceeding, fleed forecasting, on site detention of	
storm water, clearing existing streams, and haven't and/or releasts structures in	
storm water, cleaning existing streams, and buyout and/or relocate structures in	
Prevention of further erosion of shoreline at Cole Park on Cornus Christi Bay	
through installation of groins and/or breakwaters. Cole Park is a high use park in	
Corpus Christi. The area behind the hulkhead is eroding and needs to be	
retrofitted	
Project is permitted and ready to go –just needs funding. Coastal erosion in Corpus	
Christi Bay is very high and if the project is not done soon, the entire island may	
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Lake Corpus Christi, which stores 242,241 acre-feet of water, was dedicated April	
26, 1958 with the construction of Wesley Seale Dam. The Lower Nueces River	
Water Supply District built and owned the reservoir until the bonds were paid off	
in 1986 and the City of Corpus Christi assumed ownership. Wesley Seale Dam is	
located approximately 35 miles from Corpus Christi, Texas. This facility is used to	
store raw water that flows down the Nueces River from the northern part of the	
watershed. DuringMarch 2001, the Wesley Seale Dam north and south spillway	
stabilization project was completed. This \$22 million project included the	
installation of special equipment to monitor the stability of the dam structure. This	
equipment is presently being utilized as part of the City's overall dam monitoring	
plan. Information included in the program is obtained from equipment and flow	
measurements from piezometers, extensometers, relief wells, and sand drains.	
Inspections are conducted on a daily and monthly basis by Water Department	
staff, with extra inspections occurring during crest gate operation. In addition,	
formal inspections are conducted annually by an independent engineering firm,	
and a highly detailed inspection is scheduled for every three years.	
Portions of the Greenwood wastewater treatment plant are located immediately	
adiacent to the La Volla Creek floodplain. Recent flood events have inundated	
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various process units at the plant. Flood waters have come very close to damaging	
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Having adequate and available drainage ROW is critical to developing drainage	
infrastructure to meet the demand for orderly growth and development within the	
City. Adequate ROW helps to prevent/minimize flooding, helps to facilitate	
maintenance, and allows potential for improving quality of storm water runoff. The	
purpose of this project is to provide funding for acquiring right-of-way (ROW)	
where needed in order to implement drainage problem solutions, such as ditch	
widening, erosion control, extending storm sewers, providing easements, etc.	
During design, it is often required that additional ROW be provided for	
implementation of the project.	
The purpose of this project is to repair erosion and other damages to major	
drainage channels as a result of a heavy rain or other severe weather. A number	
of earthen ditches throughout the City have steep side slope (2:1) which makes	
them more prone to erosion of stream beds and slopes during a prolong and	
intense rain event. In order to make improvements which will stabilize the slopes	
and stream beds of major channels, an allocation of funds is earmarked for this	
project to be utilized on a priority basis on those ditches where erosion and slope	
failures becomes a serious and critical problem. The project will generally includes	
shaping, grading, flattening side slopes, seeding, adding concrete flumes or lined	
channels, adding storm water appurtenances such as inlets, pipes, and some minor	
right-of-way acquisitions as necessary.	
A periodic inspection of over 71,400 linear feet (13.5 miles) of storm waterrunoff	
conveyance lines during mid-2003 indicated that that two of the eight major	
outfalls needed replacement. The structural integrity and functionality of these	
outfall lines are critical in preventing flooding and in improving water quality. The	
purpose of this project is to replace the two outfalls: Brawner Proctor, and	
Gollihar.	
A periodic inspection of over 71,400 linear feet (13.5 miles) of storm water runoff	
conveyance lines during mid-2003 indicated that some sections of the lines needed	
repairs. The structural integrity and functionality of these outfall lines are critical in	
preventing flooding and in improving water quality. There are eight major storm	
water outfalls that convey storm water runoff into Corpus Christi Bay. The purpose	
of this project is to perform needed repairs along sections of the major outfalls.	
Typical repairs will include: headwalls, wing walls, isolated structural repairs,	
damaged lateral lines that penetrate outfall, holes, joints, and spalls.	
Evaluate cost/benefit of implementing an outdoor warning siren system and	
present recommendations to local officials.No outdoor warningsiren system is	
currently available within the City of Bishop to alert residents to rapid onset	
natural hazards such as tornadoes, or other hazardous situation.	

Formalize procedures to gain authorized access to an existing regional Call Down	
system through City of Kingsville/Kleberg. The City of Bishop is located close to the	
border of Nueces and Kleberg Counties, near the City of Kingsville. Natural and	
other hazards impacting Bishop are likely to impact Kingsville, and vice versa.	
Kleberg County has recently entered into an Inter-local Cooperation Agreement	
with the City of Corpus Christi and Nueces County, operators of the METROCOM	
center, to obtain authorized access to various warning tools, including a Call Down	
system. Some expense is involved with maintenance and activation of the system,	
including long distance telephone charges. The parties have agreed in principle to	
provide access to the City of Bishop through the Kingsville/Kleberg County	
agreement. Formal agreement as to who is authorized to activate the system on	
behalf of Bishop, the specific procedures to be used, and what costs will be	
incurred remains to be finalized.	
Enhance the City of Three Rivers outdoor warning system to include voice	
capability. A large refinery, currently owned and operated by Valero, is situated	
within the City of Three Rivers, where a multi-purpose, outdoor warning siren	
system is currently implemented. Enhancing the system to include voice capability	
would permit broadcasting of specific messages, such as public protective actions.	
Augment the outdoor warning system for the City of George West with the	
purchase and installation of two additional sirens. The City of George West has	
one 10 hp siren located at the fire station, which is not adequate. The city needs at	
least two more sirens to warn most of the city. A study by Texas A&M during the	
late 1970's indicated that at least three-sirens were needed within the City to warn	
at least 95% of the public.	
Improve water drainage to county roads, Pcts 1 and 3, historically heavy rains will	
produce county road flooding and standing water to ditches. The overflow of	
storm and rain water has also produced some flooding to residential homes and	
properties.	
This project will allow public works employees to provide more sandbags to the	
community faster and with less employees.	
Coastal erosion at Riviera Park on Baffin Bay is threatening to undermine	
recreational facilities. This is a fairly well-used winter Texan recreation area. The	
scope would include an offshore breakwater to protect the beach and a fishing pier	
extension.	
Purchase and install two outdoor warning sirens. There is currently no outdoor	
warning siren to alert the public to rapid onset hazards, such as tornadoes or	
hazardous materials.	

Purchase or lease emergency warning call down system (reverse 911), a call down	
warning system can alert residents directly by calling their homes or places of	
business. This capability is especially useful during daylight business hours when	
individuals may not have access to warning broadcast via television or radio.	
Although telephonic messages must be concise, they can provide additional	
instructions as to recommended response actions for all hazardous situations.	
Acquire and install outdoor warning system for the City of Orange Grove, residents	
of this city do not have a means of being warned of imminent hazards.	
Acquire and install outdoor warning system for the Tecolote Subdivision, residents	
in this subdivision do not have a means of being warned of imminent hazards.	
Lake Findley is the primary source of water for the city of Alice. The dam requires	
routine maintenance to ensure it stays in compliance with TCEQ standards for such	
structures to prevent dam failure and resulting downstream flooding. This project	
also includes an Operations and Maintenance Manual that is in development.	
Annual maintenance of flood prevention system, including dams, associated levees	
and stream channels. The dams, levees, and stream channels maintained by Jim	
Wells county are part of a larger flood prevention system spanning four counties,	
including Duval to the west, and Nueces and Kleberg to the east. Federally	
constructed beginning in the early Sixties, responsibility for annual maintenance	
has been assumed by local authorities. This system is designed to mitigate	
flooding across large portions of central Jim Wells County, as well as other	
downstream communities in neighboring counties.	
Poesta and Medio creek drainage project. Complete concrete drainage ditch from	
east city limits to west city limits. A portion of the project has been completed	
from Adams street to South Jackson.	
Emergency Warning and Public Information System, Bee County and the City of	
Beeville have no capability, other than a siren in the city limits of Beeville, to	
communicate warnings and emergency information to residents.	
Build a box culvert with parallel wings on C.R. 628, Low water crossing washes out	
during heavy rains, causing erosion to road surface.	
Silver Creek road. Build a 100 foot bridge, 26 feet wide with a 45 degree skew. The	
low water crossing at Silver Creek road, across silver creek, floods during and after	
heavy rains, trapping approximately 30 people in the residences.	

Coastal erosion along the shoreline of Aransas Bay is threatening to undermine local roadways and recreational areas. A strategic plan to address this issue has been developed and adopted by the participating jurisdictions. The success of this project is only limited by availability of funding. There is a need to raise the grade of the roads in some areas. There are miles of public bay access and the potential to develop this area in a very nice fashion is quite great. The affected shoreline has been divided into 6 critical areas and prioritized. Priority 1: Broadway along Little Bay (City of Rockport) Priority 2: Fulton Beach Road, south of Fulton Harbor (City of Rockport) Priority 3: Fulton Beach Road, north of Fulton Harbor (Town of Fulton, Aransas County) Priority 4: Water Street (City of Rockport) Priority 5: Bayshore Drive on Key Allegro Island (City of Rockport) Priority 6: Shell Ridge Road (Aransas County)	
The City of Rockport recently completed a Master Drainage Plan for the Live Oak Peninsula, which has also been adopted by the Town of Fulton. The City of Rockport has also recently completed a \$2.7 million drainage improvement project in south Rockport. As new street projects arise in the future, they will be built in accordance with the requirements of the Master Plan, to ensure that flooding is minimized. Proceed with acquisition of easements to permit implementation of Drainage Master Plan. Six priority drainage projects have been identified in the Drainage Master Plan to reduce repeated flooding in poorly drained areas of the county.	
Funding Needed. The study "A Joint Erosion Response Plan for Nueces County and for the City of Corpus Christi 2012" lays out goals and approaches for erosion control, beach maintenance, improvement of safety, access and enjoyment of beaches, and increased education of residents and visitors about the beaches, it's dangers, and the importance of its maintenance. It would be beneficial to work towards determining a holistic solution to satisfy the goals of erosion control, beach maintenance, and improved beach access, while also providing funding solutions to enable the community to pursue as many of these goals as possible.	
Based on the findings of "Potential for Bed-Material Entrainment in Selected Streams of the Edwards Plateau—Edwards, Kimble, and Real Counties, Texas, and Vicinity", it is found that every 12 to 18 months, a flow occurs within the Edwards Plateua in Central Texas that entrains bed material with the capacity to damage Low Water Crossings. Based on the regularity pf this damaging event, it would appear beneficial to find a way to reduce or eliminate the damage that occurs at the locations of the Low Water Crossings. Could also be of benefit to assist in securement of funding for this prohject if applicable.	

This ER measure involves shoreline protection and restoration consisting of 7.4 miles of rock breakwater, at a crest height of 7 ft (NAVD88) with 2H:1V side slopes and a base width of 46 ft, 391.4 acres of island restoration, and 1.4 miles of oyster reef creation. A total of 3,500.5 AAHU would be created. The measure provides for the restoration of the Dagger, Ransom, and Stedman Island complex in Redfish Bay through the construction of breakwater along the unprotected GIWW shoreline along the backside of Redfish Bay and on the bayside of the restored islands. Additional protection is provided to the island complex through the placement of reef balls between the breakwater and island complex to create 1.4 miles of oyster reef. The breakwater and islands would protect submerged aquatic vegetation (e.g., seagrass) within Redfish Bay, and it is assumed that additional submerged aquatic vegetation will form between the breakwater and the islands and support coastal water birds.	
TXDOT Road Project - 193702032	
TXDOT Road Project - 003702060	
TXDOT Road Project - 204901035	
TXDOT Road Project - 001708112	
TXDOT Road Project - 001708115	
TXDOT Road Project - 085504032	
TXDOT Road Project - 083504052	
TXDOT Road Project - 007313012	
TXDOT Road Project - 05950302	
TXDOT Road Project - 059502024	
TXDOT Road Project - 120801019	
TXDOT Road Project - 037310008	
TXDOT Road Project - 010106095	
TXDOT Road Project - 03/310009	
TXDOT Road Project - 099103013	
CaCC Deventering Study	
COCC DOwntown Study	
Channel Outfall Drainage Improvement Project - Location 2 - Sinton Site	
Channel Outfall Drainage Improvement Project - Location 1 - Taft Site	
Hazard Mitigation Improvements Project	
Citywide Wastewater Treatment Plant and Drainage Project	
Drainage Improvements Project - Location 3 - Johnston Street, Kingsville	
Drainage Improvements Project - Location 2 - Kenedy Street, Kingsville	
Drainage Improvements Project - Location 1 - Corral Street, Kingsville	

GLO Disaster Mitigation Project	
GLO Disaster Mitigation Project	
GLO Disaster Mitigation Project	
GLO Disaster Mitigation Project	
Jourdanton Main Street Drainage Project	
Pintas Creek at Sunset Dr. & Virginia St. Drainage Improvements - Alice	
Stormwater Pump Station #3 (Euclid) - Aransas Pass	
Nueces County Drainage & Conservation District 2 - Ditch "A" and Bluebonnet	
Drainage Improvements	
Nueces County Drainage & Conservation District 2 - Bosquez Rd. / Avenue J	
Drainage Improvements	
Nueces County Drainage & Conservation District 2 - Casa Blanca Drainage	
Improvements	
Nueces County Drainage & Conservation District 2	
GBRA Hazard Mitigation Plan Jurisdiction	
Flood Early Warning System – Phase I	
Self-Supporting Tower for Early Warning System	
Medio Creek Flood Control Improvements	
Green Lake Outfall System and Gregory Diversion Ditch	
Inspection and Assessment of CR18 Drainage Ditch to evaluate the physical and operational conditions of the drainage system by conducting on-site visual and drone scanning inspections. Generate a report based on these inspections to provide Nueces County with a preliminary assessment report and recommendations that can be utilized to make an informed decision regarding plans and advancements for the improvement of the drainage ditch system. The Nueces River has had three major flood events, two Presidential declarations in 2002, and a non-declared event in 2003. The property is located in the 100 year floodplain, with portions in the floodway. San Patricio County has procured nine properties in the area, 6 in River Estates and 3 in Peaceful Valley through FEMA & ORCA Grants. We are in the process of purchasing one 600 acre parcel through the Coastal Bays and Estuary Program, and 13 tracts through a Texas General Land Office Grant (GLO) in the La Fruita Subdivision on the Nueces	
Texas General Land Office Grant (GLO) in the La Fruita Subdivision on the Nueces River.	
Re-Furbish, Flood proof Repetitive Loss Homes damaged by Declared Disasters. San Patricio County obtained monies to complete 40 home rebuilds and has approximately 60 homes which are qualified but has no funding at this time. Many residential structures were damaged by storms in 2002. Insurance was non- existent, or coverage was not provided for by the homeowner, who were either elderly, low-income, or unaware that coverage on normal homeowner's insurance does not provide for flood or wind storm damage.	

This master plan envisions that eventually most or all of the delta land identified	
here will be part of the Nueces Delta Preserve. This effort will follow the Texas	
tradition of working voluntarily with private landowners and other organizations to	
achieve a common conservation goal. This will be done over time through a	
combination of strategies to meet the individual needs of specific landowners.	
Under this project, locations in the Coastal Bend area that have been identifed	
through existing habitat suitability index models would be selected to restore	
degraded ovster reefs. The project would include data collection and monitoring	
activities to assess the viability of future ovster reefrestoration efforts in the	
Coastal Bend bays.	
Create and implement a hazard educational enhancement program in which	
faculty/students can collaborate in inderstanding and communicating hazards of	
concern.	
Public education and outreach programs to education citizens about mitigation	
against hazards	
The City of Corpus Christi has seen multiple hazards occur within the years past.	
Most residents are heavily informed of what to do during heavy rains, tropical	
storms and hurricanes. However, there are multiple hazards that are not as	
frequent. The City will be working towards creating and disseminating a	
pamphlet(s) that will cover what todo before, during and after the following	
hazards: Extreme Heat, Lighting, Hailstorm, Hurricane and Tropical Storms	
Windstorms Tornados Drought Flood Dam/Levee Failure Coastal Frosion	
Expansive Soils, Land Subsidence and Wildfires	
Insurance Services Office, Inc. (ISO) is an independent organization that	
administers the Building Code Effectiveness Grading Schedule (BECGS) to assess	
"the building codes in effect in a particular community and how the community	
enforces its building codes with special emphasis on mitigation of losses from	
natural bazards "The grading can influence the cost of insurance coverage in the	
community. Since its last assessment, the City of Corpus Christiance coverage in the	
2015 International Building Code and the 2016 International Desidential Code for	
2015 International Building Code and the 2016 International Residential Code for	
One and Two Family Dweilings, among others, and should be eligible for an	
improved grade. This activity includes scheduling a re-assessment and compiling	
the necessary documentation.	
Utilize the city adopted "Developer Agreement" that the cap use with developers	
to hold cover the cost of installing over sized starmwater drainage	
to help cover the cost of installing over-sized stormwater drainage.	
Under the platting ordinance, the City of Corpus Christi participates with	
developers on utility construction for over-sized main stormwater lines. These	
funds may also be used to address development drainage concerns. This project	
will provide for the City's share of such projects, as personary, up to the approved	
will provide for the city's share of such projects, as necessary, up to the approved	
jamount.	

Corpus Christi has participated in the CRS program since 1991 and is currently rated as a Class 7 community, entitling its residents to a 15% discount on flood insurance premiums. This project is intended to improve its rating to a Class 5, thereby increasing the premium discount by an additional 10% for Special Flood Hazard Areas (SFHAs). Other actions identified in this Mitigation Plan will have a direct bearing on fulfilling CRS requirements to qualify for the higher classification. This activity includes a comprehensive review of eligible activity requirements, identification of additional potential actions, monitoring completionof previously identified actions, and completing the application process.	
The Corpus Christi City Council approved the Storm Water Capital Improvement Program (CIP) for FY99-00 on July 20, 1999 (Ordinance No. 023703). Included were separate projects for drainage studies in specific areas of the City. Theneed to integrate these individual drainage studies into a consistent, uniform analysis became evident and was approved in Storm Water CIP for FY00-01, (Ordinance No. 024130). The City's use of master plans that date back to 1946, 1961, 1970, 1982, and 1988 resulted in the use of inconsistent criteria without an adopted level of protection policy. The separate projects are integrated into the FY00-01 Storm Water CIP as a Storm Water Master Plan Project. The Development of a comprehensive, updated, consistent Storm Water Master Plan based on an adopted Storm Water Criteria and Design Manual is necessary to respond to development, environmental issues and to better define and prioritize on going and futuredrainage capital improvement projects. The purposes of this project is as follows: a. Establish drainage criteria that reflects input from the different segments of the community (elected officials, developers, engineers, citizens, planning and zoning) and in the consensus process identify a "level of protection" for the City to be adopted as a standard for the City b. Adopt a drainage criteria and design procedure for designers to use in capital improvement projects and in the subdivision platting process ofresidential and commercial development c. Establish policy statements or guidelines that are responsive to storm water quality, storm water pollution prevention requirements, development issues for use in future street and drainage project design d. Develop a master plan to implement the drainage criteria established to include updates ofthe existing areas and production of new master plan for other areas. The master plan will include the inventory of all outfalls and data necessary for the design process and will utilize criteria and reflects the characteristics of each master pla	
Continue to use county resiliency group to investigate potential funding options for	
erosion protection and habitat restoration.	
Work across jurisdictions to coordinate drainage/stormwater projects that impact the same watersheed or sub-watersheds while working to create a county-wide prioritized, master plan of all flood related projects.	
Determine whether any lift stations and pump stations will need generators.	

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Develop and install educatinal signage regarding flood safety to be located along	
low areas of roadways likely to flood.	
Investigate whether CRS is viable for the City of Aransas Pass.	
Investigate whether CRS is viable for the Town of Fulton.	
Complete process of entry into the Community Rating System (CRS) to incentivize	
higher floodplain management standards for Aransas County.	
Complete process of entry into the Community Rating System (CRS) to incentivize	
higher floodplain management standards for the City of Rockport.	
Create an erection recognice plan	
Buyouts of RL Properties	
Design and implement a debris removal program in local drainage systems	
Create a county-wide wetlands preservation plan	
Educate community on the dangers of	
low water crossings through the installation of warning signs and promotion of "Tu	
rn Around, Don't Drown" program	
Advertise and promote the availability	
of flood insurance and availability of the Preferred Risk Policy (PRP); Distribute	
flood insurance handouts with all permit applications.	
Install signs prohibiting dumping in streams,	
ditches, waterways and floodplain areas.	
Develop and implement an all hazards education program. Utilize	
Facebook, city webpage and distribution of brochures to provide information on all	
hazards that could impact the community. Provide mitigation measures to reduce	
risk of damage, injury or illness.	
Construction have been in flooded by an and a second second	
Cross-train building inspectors in floodplain management requirements.	
Obtain certification by the National Weather Service as a Storm Ready communit	
y. Limit development and increase density requirements within hazard areas: Incorno	
rate higher standards for hazard resistance in local application of the	
huilding code	
Develop and implement an all hazards education program. Litilize	
Eacebook city webpage and distribution of brochures to provide information on all	
hazards that could impact the community. Provide mitigation measures to reduce	
risk of damage injury or illness	
Adopt higher floodplain standards above the minimum requirements to provide ad	
ditional flood protection to new development.	
Develop and implement an all hazards education program. Utilize	
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Facebook, city webpage and distribution of brochures to provide information on all	
hazards that could impact the community. Provide mitigation measures to reduce	
risk of damage, injury or illness.	
Identify and install stream and rain gauges at critical sites, upgrade gauges at	
established sites where necessary coordinate installation requests.	
Adopt higher floodplain standards above the minimum requirements to provide ad	
ditional flood protection to new development.	
Educate city employees on risks associated with natural hazards and measures to p	
revent injury or loss of life.	
Implement a flood awareness program by	
providing EEMA/NEIP materials to mortgage lenders, real estate agents and insura	
Ince agents and place them in local libraries	
Relocate books manuals permits and other critical government records to	
the upper floors and/or	
on shelves above the base flood elevation of the library and records building	
Undate public community facilities to	
include severe weather action plans and designated tornado shelter areas. Educat	
a nublic on plans and shelter locations	
Adapt higher floodplain standards above the minimum requirements to provide ad	
Adopt higher hoodplain standards above the minimum requirements to provide ad	
ditional nood protection to new development.	
Improve emergency management radio coverage and reception; Implement and	
enhance an area-wide telephone	
Emergency Notification System ("Reverse 911"); Develop alternative evacuation ro	
lutes/plans and designate emergency thorough areas, particularly in areas with limit	
ed capacity; Educate citizens on evacuation routes and procedures.	
Develop and implement an all hazards education program. Utilize	
Facebook, city webpage and distribution of brochures to provide information on all	
hazards that could impact the community. Provide mitigation measures to reduce	
risk of damage, injury or illness.	
Install signs prohibiting dumping in streams,	
ditches, waterways and floodplain areas.	
Obtain certification by the National Weather Service as "Storm Ready"	
community; improve	
emergency management radio coverage and reception; Implement and enhance	
an area-wide telephone Emergency Notification System ("Reverse 911").	
Develop and implement an all hazards education program. Utilize	
Facebook, city webpage and distribution of brochures to provide information on all	
hazards that could impact the community. Provide mitigation measures to reduce	
risk of damage, injury or illness.	
Adopt ASFPM's "No Adverse Impact" policy to mitigate local flooding.	

Develop and implement an all hazards education program. Utilize	
Facebook, city webpage and distribution of brochures to provide information on all	
hazards that could impact the community. Provide mitigation measures to reduce	
risk of damage, injury or illness.	
Develop and implement an all hazards education program. Utilize	
Facebook, city webpage and distribution of brochures to provide information on all	
hazards that could impact the community. Provide mitigation measures to reduce	
risk of damage, injury or illness.	
Develop and implement a dam failure hazard education	
program. Utilize Facebook, city/county webpages and distribution of brochures to	
provide information on the potential for dam failure and the areas at greatest risk.	
Provide mitigation measuresto reduce risk of damages, injury or illness.	
Participate in the Community Rating System.	
Adopt/update disaster resistant building codes, ordinances and / or subdivision	
regulations (see comments).	
(Heat resistant roofing, elevate utilities and equipment/appliances, hail resistant	
roofing, shatter proof windows, lightning rods, roof strapping, drought tolerant	
landscaping ,low flow toilets , sprinkler system, fire resistant building materials,	
insulated pipes, etc.)	
Develop and implement an all hazards education program. Utilize	
Facebook, city webpage and distribution of brochures to provide information on all	
hazards that could impact the community. Provide mitigation measures to reduce	
risk of damage, injury or illness.	
Identify and implement feasible actions to reduce risk for repetitive loss properties	
including actions such as flood proofing, elevation, acquisition, relocation, and	
retrofitting.	
Public needs to know what to expect during a disaster. The city of Aransas Pass will	
need to promote public awareness by distributing literature, posting information	
on jurisdiction websites, hosting events and taking advantage of other	
opportunities as they arise to keep the community informed to save lives.	
The City of Portland has no Master Drainage Plan that would guide future	
development, and prevent new developments from compounding existing	
drainage problems. This project would develop a Master Drainage Plan for the City	
of Portland.	
Identify opportunities to increase home and business owner awareness of hazards	
and use of mitigation for private property such as the City Web site and	
distribution of printed literature. The City of Port Aransas has a City Web site that	
can be updated to promote mitigation activities by residents and businesses;	
mitigation literature can be added to other emergency preparedness literature	
currently distributed annually.	

Evaluate eligibility for participation in National Flood Insurance Program (NFIP) Community Rating System (CRS) for the purpose of improving CRS rating to qualify policyholders for premium discounts. The City of Port Aransas currently has a rating of 10, which is automatically assigned to all communities participating in the NFIP. In order to qualify for a rating of 9, and entry into the CRS program, sufficient points must be scored in a variety of program areas. This activity is to investigate whether Port Aransas currently can achieve the required score, or can do so with improvement in its program areas.	
The Federal Emergency Management Agency (FEMA) Mitigation Division administers the National Flood Insurance Program (NFIP). To encourage participating communities to go beyond the minimum requirements for flood plain management, the Community Rating System (CRS) program classifies communities by awarding points for related activities. Corpus Christi has participated in the CRS program since 1991 and is currently rated as a Class 9 community, entitling its residents to a 5% discount on flood insurance premiums. This project is intended to improve its rating to a Class 8, thereby increasing the premium discount to 10% for Special Flood Hazard Areas (SFHAs).The CRS classes for local communities are based on 18 creditable activities, organized under four categories: (i) Public Information, (ii) Mapping and Regulations, (iii) Flood Damage Reduction, and (iv) Flood Preparedness. Other actions identified in this Mitigation Plan will have a direct bearing on fulfilling CRS requirements to qualify for the higher classification. This activity includes a comprehensive review of eligible activity requirements, identification of additional potential actions, monitoring completion of previously identified actions, and completing the application process.	
The City of Bishop is subject to frequent episodes of inland flooding during heavy rainfall events. Nueces County Drainage District #3 is responsible for addressing drainage issues which may have impacts for the City of Bishop; however, there has been a lack of coordinated effort in the past. Additional flood control projects of interest to the City of Bishop include clearing of stream blockage on King Ranch property and the Carreto Creek project, including removal of silt and connection with the flood control project on King Ranch.	

Coordinate with Texas A&M University -Kingsville to promote campus mitigation activities, and to enhance awareness of the Disaster Resistant University Program. This activity may potentially include hosting a workshop based on the FEMA report, Building a Disaster-Resistant University.The Texas A&M University- Kingsville campus is located within a predominately residential area on the northwest edge of Kingsville. The university has approximately 6000 students with nearly 1,000 faculty and staff. The main campus encompasses 257 acres and has 82 primary buildings including five occupied residence halls and 13 occupied student family apartments. FEMA's Disaster Resistant University Program is specifically designed to provide assistance for mitigation in the university setting and in the past, has set aside monies from the Pre Disaster Mitigation Competitive grant program for this purpose.	
There are no independent drainage districts currently existing within the county addressing drainage issues in a comprehensive manner. A county-wide approach can facilitate coordination for the development of a Drainage Master Plan. A specially appointed Task Force could be charged with examining alternative frameworks and reporting their recommendations to the participating governing bodies for evaluation and action to reduce losses from flooding.	
Purchase or lease emergency warning call down system (Reverse 911). A call down warning system can alert residents directly by calling their homes or places of business. This capability is especially useful during daylight business hours when individuals may not have access to warnings broadcast via television or radio. Although telephonic messages must be concise, they can provide additional instructions as to recommended response actions for all hazardous situations.	
Areas of Jim Wells County and the City of Alice are subject to persistent flooding including: the south quadrant of the City of Alice (Lattas Creek/South Relief Creek watershed), the northwest quadrant of the Ben Bolt areas, and the southwest quadrant of the city of Alice (Lattas Creek/Rancho Alegre area). There is currently no officially recognized district or advisory group addressing drainage issues in a comprehensive manner. A Joint Advisory group may provide an organizational framework for establishing priorities, determining what studies are needed, and developing a Drainage Master Plan to guide future efforts to reduce flooding.	
Aransas County is in the process of developing the Intergrated Stormwater Management Plan (ISWMP). Aransas County has historically experienced flooding problems due to its coastal location and topography. The ISWMP will identify problem areas and recommend improvement projects.	

Promote public awareness and use of NOAA Weather Radio (NWR) to receive 'All Hazards' warnings by distributing NWR literature, posting information on jurisdiction Web sites, hosting special events, and taking advantage of other opportunities as they arise. The National Weather Service provides weather- related hazards warnings to citizens, both through feeds to commercial media via the Emergency Alert System (EAS), and directly into homes, businesses, schools and other locationsthrough NOAA Weather Radio (NWR). Through the efforts of the Emergency Management programs in both Kleberg and Live Oak counties, broadcast coverage has recently been completed for the Coastal Bend region through installation of transmitters near the communities of Riviera and Three Rivers. These transmitters will also enhance reception of the NWR signals in Jim Wells and Bee counties.	
Implement 'All Hazards' NOAA Weather Radio (NWR) procedures for dissemination of emergency messages originating with local jurisdictions. The National Weather Service (NWS) will implement a new, centralized point of collection for non- weather related emergency messages broadcast over NWS systems. NWS expects to deploy the All-Hazards Emergency Message Collection System, HazCollect, in the summer and fall of 2005. HazCollect will provide an information technology interface between state and local systems, and the NWS Advanced Weather Interactive Processing System (AWIPS). HazCollect will provide a fast, reliable way to inject messagesinto the Emergency Alert System (EAS) and NOAA Weather Radio.	
Increase local enforcement of the flood damage prevention ordinance by hiring a more full time staff	
Voluntary vegetation management on private riparian lands. Riparian area vegetation is a key factor in reducing downstream flooding.	
Improving Stormwater Management	
Hydrological and Hydraulic Study to provide drainage solutions to alleviate flooding within the residential subdivision due to existing hydrological flow patterns from regional (off-site), upgradient (off-site), and local (on-site) runoff drainage areas flowing toward the center of the subdivision.	

Hydrological and Topographic Study to provide drainage solutions to alleviate	
flooding within the residential subdivision, as well as the low areas north and south	
of the intersection of FM 665 with CB 67	
A feasibility study was performed to assess methods to help protect wetlands,	
seagrass, and other related aquatic and coastal habitat at Indian Point from	
erosion associated with shoreline retreat. In addition to the benefits of protecting	
valuable babitat, the project would also provide an increased	
level of protection to public infrastructure at Indian Point Park including a roadway	
narking lot, and nier entrance. This feasibility study is intended as a precursor to	
development of a LLS. Army Corps of Engineers (LISACE) permit application	
This project would create a program to monitor long-term subsidence and sea level	
rise in the Laguna Madre. While the causes of subsidence are understood in	
general they have not been identified for individual coastal communities. This	
project would include assessing combinations of repeated benchmark	
measurements, installing Continuously Operating Reference Stations (CORS)	
studying tide gauge data, and analyzing Interferometric Synthetic Aperture Badar	
(InSAP) data. The project would make data publicly accessible to all coastal	
communities	
communities	
The Baffin Bay Watershed Monitoring and Management Plan would guide	
rectoration eforts aimed at reducing nollutants to the watershed streams and hav	
This project would support all phases of plan development, including additional	
hav and watershed data collection, land use and load modeling, outreach to	
engage landowners and husinesses in the stakeholder process, and improvement	
of stewardship practices. And fnally, assembly of the watershed plan itself. The	
same stakeholder group also is working to secure funding for "early phase"	
targeted restoration activities	
An adaptive management hydrologic restoration study would look at the	
interactions of the physical systems that afect the hydrology in Nueces County, as	
well as the stakeholder interactions in the region. Work has been conducted on	
Nueces Bay freshwater infows via adaptive management plans of the Senate Bill 3	
(80th Texas Legislature, 2007) Environmental Flows Process. Two current studies	
include: Using Comparative Long-Term Benthic Data for Adaptive Management of	
Freshwater Infow to Three Estuaries (Colorado-Lavaca, Guadalupe, and Nueces)	
and Infuence of Freshwater Infow Gradients on Estuarine Nutrient-Phytoplankton	
Dynamics in the Three Estuaries (Guadalupe, Nueces, and Upper Laguna Madre).	
Provide FEMA review of floodplain management criteria by ensuring that the	
community correct NRP program deficiences and enforces existing ordinanaces	
that regular planning and development.	
Study and prioritize low water crossing improvments	

Conduct a countywide floodplain study and mapping to undertand the limits of the	
1% annual chance and 0.2% annunal chance floodplain boundaries and their effects	
on the community, infrastructure and critical facilities.	
Preform a detailed study of cost effective measures to protect and harden schools	
against all hazards	
Enforcement of code and floodplain development is improving with meetins with	
new businesses.	
Idenitfy problem flooding areas within an area drainage study and implement a	
program to reduce citywide and localized flooding.	
Improve drainage in certain areas of the the city that are subject to flooding.	
conduct a study to identify deficiencies in current land development code for	
future developments.	
Create and implement a hazard educational enchancement program which	
faculty/students can collaborate and understand the hazards.	
Develop and implement a new Stormwater Management Plan	
Upgrade existing floodplain maps. Add new Atlas 14 rainfall frequency data.	
Design and implement a dam breach study for dams in Corpus Christi.	
Man and according to the site of the site of the fact for a fact of the site o	
Map and assess the vulnerabilities the city may face for Coastal Erosion,	
Expansive Solis, Land Subsidence, and Wildfires.	
Improve data and manning on specific risks for coastal procian, evaluative sails	
Improve data and mapping on specific fisks for coastal erosion, expansive sons,	
nand subsidence and widthes. Ose GIS to identify and map erosion areas,	
riparianiandslides, expansive soils and wildfires. Develop and maintain a database	
to track vulnerability and indicate where critical structures and any development is	
located in relation to the hazardousareas.	
Complete a feasibility study of Ose Creak at the confluence of La Volla Creak to	
determine if any construction projects will help the creek conveyance capacity	
during high flow events. The drainage profiles of Ose Creek east of the La Vella	
Grank confluence show coveral constrictions that impact the base flood elevations	
creek confidence show several constrictions that impact the base flood elevations	
upstream. This project will investigate the feasibility of the construction of	
additional creek conveyance capacity for high flow events. If the	
investigationshows a significant potential to impact the base flood elevation, then	
construction will be completed in those areas.	

Complete an assessment of the needed repairs and improvements on all 8 major and 100 minor stormwater outfalls that drain into Corpus Christi Bay. There are eight major storm water outfalls and more than 100 other outfalls that allow runoff to drain into Corpus Christi Bay. In 2003, 13.5 miles of these outfall structures were inspected and improvements and repairs were made to four outfalls. The purpose of this current project is toprovide an updated assessment, which may include the Brawner/proctor and Gollihar outfalls and other outfalls, pending results of the initial assessment, and providing recommendations for repairs, improvements, and rehabilitation as necessary.	
Corpus Christi Action #11 Proposed ActionBuild the Catulla Reservoir in the upper	
into Choke Canyon Reservoir.	
The Corps of Engineers studied the Cotulla Reservoir site, located in the upper Nueces Basin, in the 1960's. The recent Nueces River Basin Reconnaissance Study identified a potentially down-sized version of this project, including a pipeline to divert water directly into Choke CanyonReservoir. In addition to the flood damage reduction potential for Lake Corpus Christi and thelower river basin, this project would enhance the regional water supply by increasing water storage capacity, and reducing losses associated with downstream evaporation across an 81 mile braided reach. During Phase 1 of the Feasibility Study, existing data will be reviewed to estimate the flood damage reduction potential of the project: a. A preliminary hydrologic analysis to determine the portion of the volume of historical lower- basin floods that originate upstream of Cotulla will be performed. b. A review of existing map information of the Nueces River for a 25-mile reach downstream of the proposed reservoir to identify areas that couldbenefit from the potential flood damage reduction potential of the reservoir will be performed. c. Data from FEMA and other agencies on historical flood damages will be summarized. (Phase 2) Depending on the findings of the flood damage analyses, a daily flow flood model may need to be developed to evaluate the downstream flood damage reduction potential in terms of magnitude and frequency for the Cotulla Diversion Project.	
The Federal Emergency Management Agency's Multi-Hazard Flood Map Modernization Program will update and digitize flood hazard maps across the nation. Most the City of Corpus Christi's FIRMsare nearly 20 years old. It is in the interest of the City and its residents for the maps, which determine flood insurance premiums, to be accurate and up-to-date. Other planning and hazard mitigation benefits are expected to accrue as well. The City of Corpus Christi is currently working through the appeals process of the map modernization	
Investigate potential partnerships with local non-profits to purchase high priority areas for public parkland/open space preservation.	

Investigate grant opportunities for property buyouts, open space preservations or	
other flood mitigation measures.	
Evaluate areas in the floodplain viable for open space preservation.	
Evaluate list of repetivitive loss propoerties for opportunities to parnter with	
property owners regarding potential mitigation actions.	
Create a coordinated development flow-chart for Arasas County, the Town of	
Fulton, and the City of Rockport floodplain managers.	
Using the information collected in Action 1.1.a, create a plan for how, and when, to	
integrate potential improvements into existing county and municipality	
regulations.	
Evaluate current floodplain management regulations in other coastal towns, cities,	
and counties in order to identify potential areas of improvment for Aransas County	
jurisdictions.	
Design and conduct an engineering study to address flooding in downtown	
Rockport	
Design and implement a program for public education. The program will educate	
citizens on methods of hazard mitigation and risk reduction.	
Assess and map City of Taft hazard vulnerability.	
Complete a comprehensive flood study. Submit data to	
FEMA for flood mapping. Adopt higher floodplain	
development standards, above the minimum required	
based on the results of the flood study.	
Identify and implement feasible actions to reduce risk	
for repetitive loss properties.	
Undertake a comprehensive study of flood risk and flood	
reduction alternatives with the assistance of the USACE;	
Implement feasible alternatives for flood reduction.	

The City does not currently have a clearly defined drainage plan and is only	
marginally affected by the county master plan. To improve drainage throughout	
the City of Agua Dulce, it is necessary to properly assess the community drainage	
needs and establish a local prioritization plan to serve as a guide to successful flood	
mitigation. All citizens and business owners remain concerned about their health	
and public safety due to continuous flooding. Over the past several years, there	
have been numerous flood events that have directly affected the City. The Coastal	
Bend will continue to be susceptible to very heavy rainfall and tropical weather	
events putting the City in a continuous battle to stay accessible and safe for its	
citizens. Agua Dulce is geographically situated in a manner that makes it highly	
susceptible to flooding. Runoff to the west directly flows into the City and has	
almost no ability to continue to drain out, backing up into the streets and private	
property throughout the community. Oneof the City's most critical facilities, the	
waste-water lift stations on both the east and west side has continually been	
affected and the City has a great amount of trouble keeping these facilities	
operable during flooding. In addition to the already mentioned issues, travel near	
and through the community is limited on a regular basis including a very heavily	
highway that is also a critical hurricane evacuation route.	
The Federal Emergency Management Agency's Multi-Hazard Flood Map	
Modernization Program will update and digitize flood hazard maps across the	
nation. The majority of theCity of Corpus Christi's FIRMs are nearly 20 years old. It	
is in the interest of the City and its residents for the maps, which determine flood	
insurance premiums, to be accurate and up-to-date. Other planning and hazard	
mitigation benefits are expected to accrue as well. FEMA has notified the City by	
letter dated July 15, 2004, that its contractor will be contacting the City within the	
next few months regarding the flood mapping effort. A key FEMA strategy is to	
form local partnerships for this purpose under the Cooperating Technical Partners	
program to leverage local resources. In addition to preparation for the contractor	
visit, the City will evaluate the feasibility of becoming a CTP partner.	

The Corpus Christi City Council approved the Storm Water Capital Improvement Program (CIP) for FY99-00 on July 20, 1999 (Ordinance No. 023703). Included were separate projects for drainage studies in specific areas of the City. The need to integrate these individual drainage studies into a consistent, uniform analysis became evident and was approved in Storm Water CIP for FY00-01, (Ordinance No. 024130). The City's use of master plans that date back to 1946, 1961, 1970, 1982, and 1988 resulted in the use of inconsistent criteria without an adopted level of protection policy. The separate projects are integrated into the FY00-01 Storm Water CIP as a Storm Water Master Plan Project. The Development of a comprehensive, updated, consistent Storm Water Master Plan based on an adopted Storm Water Criteria and Design Manual is necessary to respond to development, environmental issues and tobetter define and prioritize on going and future drainage capital improvement projects. The purposes of this project are as follows:a.Establish drainage criteria that reflects input from the different segments of the community (elected officials, developers, engineers, citizens, planning and zoning) and in the consensus process identify a "level of protection" for the City to be adopted as a standard for the Cityb.Adopt a drainage criteria and design procedure for designers to use in capital improvement projects and in the subdivision platting process of residential and commercial developmentc. Establish policy statements or guidelines that are responsive to storm water guality, storm water pollution prevention requirements, development issues for usein future street and drainage project designd. Develop a master plan to implement the drainage criteria established to include updates of the existing areas and production of new master plan for other areas. The master plan will include the inventory of all outfalls and data necessary for the design process and will utilize criteria and reflects the characteristics of each master plan The Nueces River Basin Reconnaissance Study identified a two-way pipeline project between Choke Canyon and Lake Corpus Christi, coupled with the off-channel storage and a high capacity pump station, for the dual purpose of flood control and increased water supply, through reduced channel losses. During the Feasibility Study, analyses will be performed to determine the potential flood damage reduction benefits of this project: a.A review of existing map information of the area along the Lower Nueces River below LCC will be performed to identify areas that could benefit from the potential flood damage reduction potential of the diversion facilities. Records of flood damages associated with historical events will be obtained.b.(Phase 2) A daily flood model to evaluate the downstream flood damage reduction potential in terms of magnitude and frequency for this project will be developed.c.(Phase 2) Analysis will be performed to determine the potential effects of coupling the pipeline with the off-channel storage and a high capacity pump station in order to manage Lake Corpus Christi storage to better

control incoming flood flows.

The Corps of Engineers studied the Cotulla Reservoir site, located in the upper	
Nueces Basin, in the 1960's. Therecent Nueces River Basin Reconnaissance Study	
identified a potentially down-sized version of this project, including a pipeline to	
divert water directly into Choke Canyon Reservoir In addition to the flood damage	
reduction potential for Lake Corpus Christi and the lower river basin, this project	
would enhance the regional water supply by increasing water storage canacity, and	
reducing losses associated with downstream evanoration across an 81 mile braided	
reach During Phase 1 of the Feasibility Study, existing data will be reviewed to	
estimate the flood damage reduction notential of the project a A preliminary	
hydrologic analysis to determine the portion of the volume of historical lower-	
havin floods that originate unstream of Cotulla will be performed by a review of	
existing man information of the Nueces River for a 25-mile reach downstream of	
the proposed receiver to identify areas that could happfit from the potential flood	
demage reduction potential of the recervoir will be performed a Data from EEMA	
admage reduction potential of the reservoir will be performed.c.Data from FEINA	
and other agencies on historical flood damages will be summarized. (Phase 2)	
Depending on the findings of the flood damage analyses, a daily flow flood model	
may need to be developed to evaluate the downstream flood damage reduction	
potential in terms of magnitude and frequency for the Cotulia Diversion Project.	
Improved drainage to reduce disruptions due to flooding in the vicinity of the Live	
Uak County Airport. The area surrounding the airport is subject to flood	
inundation, thereby cutting off access to the airport and also on the future runway	
extension.	
The City of Alice and Jim Wells County were notified in July 2008 that the San	
Diego Creek Levee was an unacceptable flood control structure. Since that time the	
City and County have been moving forward to bring the levee back into compliance	
by conducting the San Diego Creek Levee Certification study, survey work and	
clearing. A total of \$93,500.00 has been spent to date from local funds. This project	
will involve raising the height of the levee to meet the required freeboard for a 100	
year flood.	
Study options for preventing inundation of County Road 303 and the Barbon	
Estates Subdivision. In heavy rainfall events, County Road 303 becomes inundated,	
preventing egress from the Barbon Estates subdivision and access to emergency	
response vehicles. In the past, residents have been stranded for a period of two to	
three days.	
The premise of the Hazard Identification, Risk Assessment and Consequence	
Analysis is to determine what risks are most relevant to Bexar County and the City	
of San Antonio. Moving forward, this risk assesment could be used to determine	
what risks are most relevant, and accordingly pursue projects that work to reduce	
or eliminate these risks. THere could be potential in working with Bexar COunty	
and the City of San Antonio to develope funding sources based on the nature of	
projects they expect to pursue, or work with them to help narrow down a broad	
list of porjects to those that might offer the most benefit.	

Developing Flood Preparedness Toolsets Using Streamgaging and Flood?Inundation	
Mapping	
Drainage Master Plan Study - Driscoll	
Drainage Master Plan Study - Alice	
Flood Planning Study for LOMR - Cotulla	
Drainage Master Plan - Location 9 - Kingsville	
Drainage Master Plan - Location 8 - Kingsville	
Drainage Master Plan - Location 7 - Kingsville	
Drainage Master Plan - Location 6 - Kingsville	
Drainage Master Plan - Location 5 - Kingsville	
Drainage Master Plan - Location 4 - Kingsville	
Drainage Master Plan - Location 3 - Kingsville	
Drainage Master Plan - Location 2 - Kingsville	
Drainage Master Plan - Location 1 - Kingsville	
Atascosa Flood Prevention Project - Pleasanton	
Nueces County Drainage & Conservation District 2	
Flood Planning/Prevention Study	
Drainage Master Planning Study - Bee County	
Drainage Master Planning Study - San Patricio County	
Drainage Master Planning Study - Duval County	
Nueces County Regional Drainage Master Plan Study	
Ingleside Drainage Master Plan	

County				Sponsor
Nueces				City of Corpus Christi
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Nueces				City of Corpus Christi
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Nueces				City of Corpus Christi
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Nueces				City of Corpus Christi
Nueces				City of Corpus Christi
Nueces, Jim Wells,				
Kleberg	244.4050983	Riverine	FNI	TWDB FIF, Nueces County
Duval	166.7713815	Riverine	HDR	Duval County
San Patricio	65.47693177	Riverine	FNI	TDEM, San Patricio County
Вее	81.64120969	Riverine	FNI	TWDB FIF, Bee County
Karnes	69.60447877	Riverine	HDR	TWDB FIF, Karnes County
Nueces	11.79478028	Riverine	FNI	TWDB FIF, Nueces County

Atascosa	0 706252085	Riverine	HDR	TWDB FIF, City of Pleasanton
Kloborg	1 201287727	Piverine	ENU	TWDB FIF, City of
	1.231207727	Niverine .		
Kleberg	1.291287727	Riverine	FNI	TWDB FIF, City of Kingsville
Kleberg	1.291287727	Riverine	FNI	TWDB FIF, City of Kingsville
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Kleberg	1.291287727	Riverine	FNI	Kingsville
Kleberg	1.291287727	Riverine	FNI	TWDB FIF, City of Kingsville

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Kleberg	1.291287727	Riverine	FNI	Kingsville
				TWDB FIF. City of
Kleberg	1.291287727	Riverine	FNI	Kingsville
				TWDB FIF, City of
Kleberg	1.291287727	Riverine	FNI	Kingsville
Kleberg	1.291287727	Riverine	FNI	Kingsville
La Salle	0.183974647	Riverine	HDR	TWDB FIF, City of Cotulla
	1 170015544	Divorino		TMDD FIF. City of Alico
	1.179815544	Riverine	FINI	
Nueces	0.106515502	Riverine	FNI	TWDB FIF, City of Driscoll
				Bandera County, Uvalde
Bandera, Uvalde	0.900368893	Riverine	HDR	County
Bexar			HDR	Bexar County
lim Wells			FNI	lim Wells County
				City of Alice, Jim Wells
Jim Wells			FNI	County
Live Oak			FNI	Live Oak County
Nueces			FNI	Nueces River Authority
				City of Corpus Christi,
Nueces			FNI	Nueces River Authority

Nueces		FNI	City of Corpus Christi
			City of Corpus Christi,
Nueces		FNI	Nueces River Authority
Nueces		FNI	City of Agua Dulce
San Patricio		FNI	City of Ingleside
San Patricio		FNI	City of Sinton
San Patricio		FNI	City of Taft
San Patricio		FNI	City of Taft
Aransas		FNI	Aransas County
Aransas		FNI	City of Rockport, Aransas County
Aransas		FNI	Aransas County
Aransas		FNI	Aransas County
Aransas		ENI	Aransas County, City of Bockport, Town of Fulton
Aransas		FNI	Aransas County
Aransas		FNI	Aransas County
Aransas		FNI	Aransas County
Aransas		FNI	Aransas County
Nueces		FNI	City of Corpus Christi
Nueces		FNI	City of Corpus Christi
Nueces		FNI	City of Corpus Christi

Nueces		FNI	City of Corpus Christi
Nueces		FNI	City of Corpus Christi
Nueces		FNI	City of Corpus Christi
Atascosa		HDR	Atascosa County
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Atascosa		HDR	Atascosa County
Atascosa		HDR	City of Charlotte
Atascosa		HDR	City of Christine
Atascosa		HDR	City of Jourdanton
Atascosa		HDR	City of Lytle

		City of Lette
Atascosa	HDR	City of Lytle
McMullen	HDR	McMullen County
McMullen	HDR	McMullen County
McMullen	HDR	McMullen County
Nueces, San Patricio, Aransas	FNI	Coastal Bend Bays and Estuaries Program, Texas Commission on Environmental Quality, Texas A&M University- Corpus Christi, Nueces River Authority, City of Corpus Christi, Port of Corpus Christi Authority

	Coastal Bend Bays and
	Estuaries Program
	Texas A&M University-
	Corpus
	Christi
	Texas Water Resources
	Institute
	Bafn Bay Stakeholder
FNI	Group
Both	Texas General Land Office
	Coastal Bend Bays &
FNI	Estuaries Program
	City of Handa
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	City of Petronila. Nueces
FNI	County
	FNI FNI FNI FNI FNI FNI FNI FNI FNI

Νυργος		ENI	Nueces County, Town of Tierra Grande
Nueces	0.05	FINI	CLO CMP / City of Port
Nueces	70.74	FNI	Aransas
Various	79.71	FNI	NRCS
Atascosa		HDR	City of Poteet

Aransas,			Kleberg County, Live Oak
Bee,			County
Jim Wells,			
Kleberg,		FNI	
Live Oak, Nueces,			
San Patricio			
Aransas,			Kleberg County, Live Oak
Bee,			County
Jim Wells,		FNI	
Kleberg,			
Live Oak, Nueces,			
San Patricio			
Aransas			Aransas County, Town of
			Fulton, City of Rockport
		FNI	
Jim Wells			Jim Wells County, City of
			Alice
		FNI	
Jim Wells			City of Alice
		FNI	
Kleberg		FNI	Kleberg County, City of
Kleherg			City of Kingsville
Nicberg		FNI	City of Kingsville
Nueces		FNI	City of Bishop
Nueces			City of Corpus Christi
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Nueces		ENII	City of Port Aransas
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Nueces		FNI	City of Port Aransas
San Patricio		FNI	City of Portland
San Patricio		FNI	City of Aransas Pass
San Patricio		FNI	San Patricio County
San Patricio		FNI	San Patricio County
San Patricio		FNI	San Patricio County
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San Patricio		FNI	San Patricio County
San Patricio		FNI	City of Gregory
San Patricio		FNI	City of Ingleside on the Bay
San Patricio		FNI	City of Ingleside on the Bay
San Patricio		FNI	City of Mathis
San Patricio		FNI	City of Mathis
San Patricio		FNI	City of Mathis
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San Patricio		FNI	City of Odem
San Patricio		FNI	City of Portland
San Patricio		FNI	City of Portland

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			City of Portland
San Patricio			City of Sinton
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San Patricio			City of Sinton
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San Patricio		FNI	City of Sinton
San Patricio		FNI	City of Sinton

San Patricio			City of Sinton
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San Patricio			City of Taft
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San Patricio		FNI	City of Taft
San Patricio		FNI	City of Taft
San Patricio		FNI	City of Taft
Aransas		HDR	Aransas County
Aransas		HDR	Aransas County
Aransas		HDR	Aransas County
Aransas		HDR	Aransas County
Aransas		HDR	City of Rockport, Aransas County
Aransas		HDR	Aransas County
San Patricio		FNI	City of Aransas Pass
Aransas		FNI	Town of Fulton

Aransas		FNI	Aransas County
Aransas		HDR	Aransas County
Aransas		HDR	Aransas County
Nueces		FNI	Nueces County
Nueces		FNI	City of Corpus Christi
Nueces		FNI	City of Corpus Christi
Nueces		FNI	City of Corpus Christi
Nueces		FNI	City of Corpus Christi
Atascosa		HDR	City of Christine
Atascosa		HDR	City of Poteet
Nueces, San Patricio		FNI	Texas Parks & Wildlife Department Coastal Bend Bays and Estuaries Program
Nueces		FNI	CBBEP
San Patricio		FNI	Office of Community and Rural Areas
San Patricio		FNI	Potential funding sources include FEMA, ORCA, and GLO
Nueces		FNI	San Patricio County
San Patricio	65.48	FNI	TWDB FIF, San Patricio County, San Patricio County Drainage District
Вее	81.64	FNI	TWDB FIF, Bee County
Uvalde	144.78	HDR	TWDB FIF, Uvalde County
Вее	81.64	FNI	TWDB FIF, Bee County

Aransas, Bandera,	731.72		TWDB FIF, Aransas,
Bexar, Calhoun,			Bandera, Bexar, Calhoun,
Goliad, Karnes, Kerr,		HDR	Goliad, Karnes, Kerr,
Refugio, San Patricio,			Refugio, San Patricio,
Wilson			Wilson
Nueces	11.79		TWDB FIF, Nueces County
		ENI	Drainage & Conservation
			District 2
Nueces	11.79		TWDB FIF, Nueces County
		FNI	Drainage & Conservation
			District 2
Nueces	11.79		TWDB FIF, Nueces County
		FNI	Drainage & Conservation
			District 2
Nueces	11.79		TWDB FIF, Nueces County
		FNI	Drainage & Conservation
			District 2
Aransas, Nueces, San	4.88		TWDB FIF, City of Aransas
Patricio		FNI	Pass
Jim Wells	1.18		TWDB FIF, City of Alice
		FNI	
Atascosa	0.32		TWDB FIF, City of
		НОК	Jourdanton
Jim Wells	0.00		TX GLO, City of Alice
		FNI	
Jim Wells	0.67		TX GLO, Jim Wells County
		ENI	
Bee	0.00		TX GLO, City of Beeville
		FNI	
lim Wells	0.16		TX GLO City of Promont
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Kleberg	0.00		TX GLO, Kingsville
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Kleberg	0.00		TX GLO, Kingsville
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Kleberg	0.00		TX GLO, Kingsville
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Refugio	0.14		TX GLO, Town of Refugio
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Refugio	72 27		
Nerugio	12.21	ENI	TX GLO, Refugio county
San Patricio	0.14		TX GLO. City of Taft
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San Patricio	0.25		TX GLO, City of Sinton
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Nueces	0.00019		City of Corpus Christi
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Live Oak	0.00008		TXDOT
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Live Oak	0.00012	FNI	TXDOT
Nuocos	0.00161		ΤΥΡΟΤ
Nueces	0.00101		TADOT
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Nueces	0.00099		TXDOT
		FNI	
Nueces	0.00047		TXDOT
		FNI	
Live Oak	0.00052		TXDOT
		FINI	
Medina	0.00015		TXDOT
		HDR	

Atascosa	0.00018		TXDOT
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Madias	0.00046		TYPOT
Medina	0.00046		IXDOT
		HDR	
Bandera	0.00033		TXDOT
		HDR	
Medina	0.00040		TXDOT
		HDR	
La Salle	0.00019	HDR	TXDOT
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La Salle	0.00019	HDR	TADOT
Medina	0.00033		TXDOT
Zavala	0.00126		TXDOT
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Zavala	0.00115		TXDOT
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			Corpus Christi
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Aransas			Aransas County
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		1 111	Rockport

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		FNI	Aransas County, Town of Fulton, City of Rockport
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Jim Wells			City of Alice, Jim Wells
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Jim Wells			Jim Wells County,
			Tecolote Subdivision
		FNI	
Jim Wells			City of Orange Grove, Jim
			Wells County
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Jim Wells			Jim Wells County
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Kleberg			City of Kingsville
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LIVE Oak				City of Three Rivers
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Nueces		FNI	City of Port Aransas
Nueces		FNI	City of Corpus Christi
Nueces		FNI	City of Corpus Christi
Nueces		FNI	Nueces County
Nueces		FNI	Nueces County, Precinct 1
Nueces		FNI	City of Driscoll
Nueces			City of Driscoll
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San Patricio		FNI	San Patricio County
San Patricio		FNI	San Patricio County
San Patricio			City of Ingleside
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San Patricio		FNI	City of San Patricio, San Patricio County
San Patricio		FNI	City of Lake City
San Patricio		FNI	City of Aransas Pass

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			Sall Fathers County
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San Patricio			City of Gregory
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San Patricio			City of Ingleside
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San Patricio		FNI	City of Mathis
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San Patricio		FNI	City of Odem
San Patricio		FNI	City of Portland
San Patricio		FNI	City of Sinton
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San Patricio		FNI	City of Taft
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Aransas		FNI	Aransas County
Aransas		FNI	Aransas County
Aransas		FNI	City of Rockport

San Patricio	FNI	City of Aransas Pass
Aransas	FNI	Aransas County
Nueces	FNI	City of Corpus Christi
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Nueces			City of Corpus Christi
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McMullen			City of Pleasanton
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Duval		Duval County
Aransas	FNI	Coastal Bend Bays and Estuaries Program, U.S. Fish and Wildlife Service, Aransas National Wildlife Refuge, U.S. Department of the Interior
Aransas	FNI	TPWD
Aransas	FNI	Aransas County, Aransas County Navigation District
Aransas	FNI	Texas Parks & Wildlife Department

HDR

Kleberg		FNI	Coastal Bend Bays and Estuaries Program, The Nature Conservancy, Audubon Texas, U.S. Fish and Wildlife Service, Texas General Land Ofce
San Patricio, Nueces		FNI	Coastal Bend Bays and Estuaries Program, Texas General Land Ofce
Aransas, Refugio, Nueces		FNI	Texas Parks & Wildlife Department
Kleberg		FNI	Coastal Bend Bays and Estuaries Program, The Nature Conservancy, Texas Parks & Wildlife Department, U.S. Fish and Wildlife Service, U.S. National Park Service, Texas General Land Ofce, Private Landowners
Nueces		FNI	City of Port Aransas Port of Corpus Christi Texas General Land Ofce
Nueces		FNI	City of Corpus Christi and Counties

			City of Corpus
Nueces			Christi/NRA/TALT
		FNI	Nation Fish and Wildlife
San Patricio			Foundation
		FNI	
Aransas			TCEQ
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Aransas			ICEQ
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Aransas			TCEQ
Nueces		FNI	CBBEP

		FNI	
Nueces			TWDB
Nueces		FNI	City of Corpus Christi
Nueces		FNI	City of Corpus Christi, Nueces County, CDBG
San Patricio		FNI	Texas Parks and Wildlife Department
Duval	Urbar 4 Riveri	n/ HDR ne	City of Benavides, Duval County
Duval	3.8 Urbar	HDR	City of Benavides, Duval County
Duval	5.6 Urbar	HDR	City of Freer, Duval County
Duval, Jim Wells	2.7 Urbar	HDR	City of San Diego, Duval County
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San Patricio	16.4	Urban	FNI	City of Aransas Pass
San Patricio	1.35	Urban		Gregory
San Patricio	0.3	Urban/Tidal		Ingleside on the Bay
San Patricio	16.93	Urban		City of Ingleside
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San Patricio				City of Ingleside
San Patricio	0.75	Urban/Revirine		Lake City

	4.75		
San Patricio	1.75	Urban/Revirine	Lakeside
San Patricio	3.32	Urban/Revirine	Mathis

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San Patricio			FNI	City of Ingleside

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EditDate	Flood_Conc	Flood_Freq	When_Did	Description
6/4/2021	Road	Frequently	6/4/2021	
6/9/2021	Building	Frequently	june 3, 2021	heavy rains cause flooding in basement
5/19/2021	Road	Frequently	05/15/2021	
5/19/2021	Road	Frequently	05/15/21	
5/19/2021	Land	Frequently	05/15/21	
5/20/2021	Land	Frequently	5-17-21	
5/20/2021	Land	Frequently		
5/20/2021	Road	Frequently	Every time it rain	One day someone is going to drown. Mc
6/3/2021	Land	Frequently		
6/3/2021	Land	Frequently		
6/3/2021	Kudu	Frequently		
0/3/2021	Land	requently		
6/18/2021	Land	Frequently	Anytime we get a	Starts on the road and flood the side of t
6/18/2021	Land	Frequently	Last big rain	Flooded side of house and garage
6/18/2021	Road	Frequently	Last rain	Everytime it rain W Navarro street in Pe
6/18/2021	Road	Few_Occasions	1970	Carter edition neighbor Pecan, Walnut,
6/18/2021	Land	Frequently	every time it rair	I get the water off Guadalupe and Count
6/18/2021	Land	Frequently	every time it rain	I have several photos and video but they
6/19/2021	Road	Frequently		
6/19/2021	Road	Frequently	Every time it rain	
6/21/2021	Channel	Frequently	10 years or so. It	work was done on garcia ,Eddie and Lisa
7/6/2021	Building	Frequently	May 1,2021	Flooding of school land and alley ditch ca
7/7/2021	Land	Frequently	07/05/2021	Street and yards get flooded with water
7/7/2021	Road	Frequently	07/05/2021	Street floods when it rains
7/7/2021	Road	Frequently	7/6/2021 is most	Bridge at CR 2410 and San Miguel creek
7/7/2021	Road	Frequently	7/5/2021	The road gets flooded every time it rains
7/7/2021	Land	Few_Occasions	2021	I know I am on a road that has low wate
7/7/2021	Building	Few_Occasions		Water from Mesquite St. cannot all go ir
7/16/2021	Road	Frequently	May 1	The pictures and videos that I have attac
//22/2021	Road	Frequently	July 22,2021	Streets fill with water, become undrivea
6/4/2021	Road	Frequently	Each time it rains	The pictures attached were a constant range of the pictures attached were attached were a constant range of the pictures attached were attached
6/3/2021	Building	Frequently	. .	
6/3/2021	Building	Frequently	3 weeks ago May	Water entered house
6/3/2021	Land	Frequently	May 20, 2021	
6/3/2021	Channel	Frequently	May 21, 2020	Drainage area next to Railroad that drain

		Boats needed in downtown area of Thre
5/21/2021 Road	Few_Occasions 5/1/21	Overtop the roadway in both directions
		Moderate flooding occurs. The flow is to
		Major flooding occurs. Disastrous floodii
8/16/2021 Channel	Unknown	The UPRR Bridge at this location and the
8/16/2021 Channel	Unknown	The UPRR Bridge at this location and the

7/13/2021 Building	Few_Occasions
7/13/2021 Building	
7/13/2021 Building	Few_Occasions

7/13/2021	Building	Few_Occasions
7/13/2021	Building	Few_Occasions
7/13/2021	Building	Once
7/13/2021	Building	Few_Occasions
7/13/2021	Building	Once
7/13/2021	Building	Few_Occasions
7/13/2021	Building	Few_Occasions May 19th

This area had heavy flooding and both cı Widespread long-lived residential floodiı

6/4/2021	Land	Frequently	Every time it rain	No drainage at all. water sits in culverts,
6/5/2021	Channel	Frequently	Last week of May	There is a retaining wall made of concre-
6/5/2021	Land	Frequently	May 2021	Flooding caused from west to east towa
6/5/2021	Land	Frequently	June 4, 2021	Drainage is not very good
6/5/2021	Land	Frequently	May 1st, May 17	The water is backing up into our propert
6/5/2021	Road	Frequently	05/31/2021	The city does not have adequate ditches
6/5/2021	Land	Frequently	Every time it rain	We have bad drainage system at the roa
6/5/2021	Land	Frequently	5/24/21, 6/3/21	The lot next to our house fills completely
6/5/2021	Land	Frequently	May	Our yard keeps flossing and the drainage
6/5/2021	Channel	Frequently	May, 2021	Few of any of the drainage ditches in to \ensuremath{v}
6/5/2021	Land	Frequently	May 2021	Drainage limitations, soil erosion, stagna
6/6/2021	Land	Frequently		Erosion, standing water, floods some str
6/6/2021	Land	Few_Occasions		Erosion of fields, roads, runoff creating c
6/7/2021	Land	Frequently	From May 1st to	Yard, adjacent yards, ditches, fields, and
6/8/2021	Land	Frequently	Started on May 1	Rain runoff comes across Third St from c
6/9/2021	Land	Few_Occasions	May 2021	City wide drainage issue needs repairing

6/28/2021 Buildir	ng Frequ	iently We	experience fl	The streets have been repaved at a high
5/24/2021 Road	Few_	Occasions May	/ 19, 2021	Spur 202, poor drainage with heavy rain
5/24/2021 Land	Frequ	ently 5.19	9.2021	Flooding in the ditches, yards all over the
5/25/2021 Land	Frequ	ently 5.19	9.2021	Flooding all over the property, water car
5/25/2021 Land	Frequ	ently 5.19	9.2021	flooding all over the property. The wate
5/25/2021 Land	Frequ	ently 5.19	9.2021	Flooding all over property. Almost came
5/25/2021 Land	Frequ	ently 5.19	.2021	Flooding all over property, almost to the
5/25/2021 Land	Frequ	ently 5.19	.2021	Flooding all over property, almost to the
6/7/2021 Land	Few_	Occasions May	/ 25,2021	See photos
6/9/2021 Road	Frequ	ently Floo	ds FM 1069	Road becomes impassable, cutting off re
6/9/2021 Road	Few_	Occasions Whe	en heavy rain	The bridge is old and gets covered by wa

7/9/2021 Land	Frequently when level of	rai flooding occurs on all surrounding prope
7/12/2021 Road	Frequently	
7/12/2021 Road	Frequently	
7/12/2021 Road	Frequently	
7/12/2021 Channel	Frequently	
7/12/2021 Channel	Few_Occasions	
7/13/2021 Road	Few_Occasions July 7, 2021	TX-35 E access road just pass Whataburg

7/13/2021 Road 5/25/2021 Land	Few_Occasions Frequently	July 7, 2021 5.19.2021	US-181 S access road between Buddy Ga Flooding all over the property, water car Residents of many low lying homes in Cr Disastrous life threatening flooding dest
7/5/2021 Channel	Frequently	Every time it rain	Drainage ditch is damned up with trees,

How_Long	Can_Contac	Name	Phone	Email	Public_Vie	RFPG 13 12
5	Ves	Gilbert N Saenz	361279620	gsaenz@co	Ves	13
33 vrs as a residu	ves	Bobby I Gonzalez	361-279-62	hohhy gon;	ves	
	yes	bobby i conzulez	501 275 02	50557.5011	yes	13
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		Pilo Briseno	+12103320	pilo.brisend	ves	-
4	yes	Pilo Briseno	+12103320	pbriseno20	, yes	
4	yes	Stephanie Maldonado	830505025	spauline10	yes	
					yes	
					yes	
All my life	yes	Edward Salaiz	830267010	Edward.sal	yes	
30 years					yes	
					yes	
					yes	
					yes	
						13
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5 years	yes	Andrea Mitchell	830334744	dracogirl_3	yes	
40	yes	Diana Hernandez	830334113		yes	
2yrs	yes	Amanda Vinton	(830) 317-9	avinton07@	yes	
55 years	yes	Pedro Martinez	830-334-79	pjmtz1965	yes	
16 years	yes	Jennifer Morningstar	830-267-15	journey76@	yes	
16 years	yes	jennifer morningstar	830-267-15	journey76@	yes	
7 yrs	yes	Rosie Teran	830317769	segoviarosi	yes	
8 yrs	yes	Rosie Teran	830317769	segoviarosi	yes	
Since 1980	yes	T lopez	830 334 73	Trljr26@ao	yes	
20+	yes	Carmen Aleman- Berr	214-315-00	cvaleman@	yes	
20 yrs	yes	Susan Belding	830-334-29	Belding.sus	yes	
30 yrs	yes	Susan Belding	830-334-25	Belding.sus	yes	
36 years	yes	Chris Lange	210-391-50	Clange35t@	yes	
Sizes 2010	yes	Jason Villarreal	214532425	Draveniynd	yes	
Since 2019	yes	Toda Colburn	210310809	IUGICODDO I	yes	
54 years	yes	Peggy Fudge	830334795	alludge@si	yes	
At least 20 years	yes	Eulth Corraits	()11))) 0 (bolding cur	yes	
10 years	yes	Susan beluing	(214) 220-5	beluing.sus	yes	10
2 years	VOC	Marica Chana	512 7/2 1/	maricamd0	VOC	15
2 years	of livestock and a	ivialisa Cilapa few residential proper	512-745-14 tips along th		yes lired Many	roadenear
20 vears		Thomas Salazar	136178675	tsalazar@c	ves	i Jaus liedi
20 years	Ves	Thomas Salazar	136178625	tsalazar@c	Ves	
20	Ves	Thomas Salazar	136178625	tsalazar@c	Ves	
10	Ves	Thomas Salazar	136178625	tsalazar@c	Ves	
10	yes		1201/0023	Guiazai @C	ycs	

e Rivers. Water is over the County Road 151 bridge south of George West.

20	yes	John Doe	555-555-55 johndoe@ry	/es
• the slab elevatio	n of the lowest bu	isinesses and homes ir	n Tilden. Numerous road	s and low bridges floo
ng of commercial	and residential bu	uildings in Tilden. Restu	uarant on the right bank	of the Frio River had 3
Lived in Medina	yes	Lora Robbins	830-741-5(lrobbins@ly	/es
Lived in Medina	yes	Lora Robbins	830-741-5(lrobbins@ly	/es
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I	No		Y	/es
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				/05
				/05
				/65
				103

yes 64 years yes Cynthia Contreras 361584256 cynthia.cor yes ng of hundreds of homes above Calallen occurs. This requires residents to be evacuated. Roads into the yes yes

15 years	yes	Donna Easton	361-247-9(donnaeast(yes		
7 years. Hurrica	ſ	Julia Stoner	361-658-4(juliestoner yes		
6+ years	yes	Roland Rodriguez	713366608 Rgrhourgr@yes		
17 years	yes	charmaine briseno	1 (361) 229 charmaine. yes		
14 years, I have	yes	Terry Gray	254-258-78 Dirtdeviltx(yes		
6 years	yes	Gloria Winsor-Smith \	812202301 winsor.siss [,] yes		
4 yrs	yes	Donna & Mike Harriso	337-288-83 dixie50jear yes		
8 years	yes	Sylvia Arehart	281-312-97 skarehart@yes		
11/2	yes	Cherie Word	(214) 317-2 cherieword yes		
40+ years	yes	Judy Blaisdell	juilleb9@gryes		
12 years	yes	E Bradley	361-244-76 yes		
9	yes	Margaret Babb	197252307 ml.babb@y yes		
70 years	yes	Nancy Robbins Hende	432210347 cronezone(yes		
5	, ves	, Monte McCollum	361330012 memacmoi yes		
Owned this prop	ves	Sandra Haley	830-570-23 sandra hal ves		
Under a year	ves	Tony Lamson	517-862-25 Crusty.pilgryes		
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2 years	ves	John &Kathleen Dunk	361779585 Kkdunlap@ves		
50 plus vears	ves	Odilia Reves - Mavor	361-633-93 oreves@gr ves		
6 vears	ves	Krystal Hild (Executive	361-643-5(Krystal hildyes		
6 years	ves	Krystal Hild (Executive 361-643-5(Krystal hild ves			
6 years	ves	Krystal Hild	361-643-50 krystal hildyes		
6 years	ves	krystal Hild (Executive	2361-643-5(krystal hilc ves		
6 years	ves	Krystal Hild (Executive	361643501 krystal hilcyes		
6 years	ves	Krystal Hild (Executive	361643501 krystal hildyes		
3vrs	ves	Frnesto Palomo	361777425 enalomo@ ves		
8 vears	ves	Sara Williams	281-513-62 Swilliams@ves		
o years	yes		201 515 025 016 025		
			yes	13	
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				12	
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20 years	VAS	Carey Dietrich	361776381 cdiatrich@ yas	15	
20 years 7	yes		Sorr According (100		
, 7			yes Vec		
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, 7			yes		
, 7			yes		
, 15 vrs	Ves	loshua Irvin	361777460 joshua irvirves		
LJ YIS	yes		SOT / / 400 JOSHUA.II VII YES		
15 yrsyesJoshua Irvin361777460 joshua.irvir yes6 yearsyesKrystal Hild (Executive 361-643-50 Krystal_hild yesystal City flood in less than a day from a crest in Uvalde. Roads and bridges are damaged above Barksdaroys anything in the flood plain from the headwaters to below Concan. Homes are flooded and a few wa13

13

13

9yrs yes Christopher Dobens 361877603 cdobens84 yes

Meeting Gr Comments County Lower Basin McCambell Slough - Floor Aransas Lower Mid Basin Water back up in creek di Atascosa Duval Duval Lower Mid Basin Channel maintainance ne Duval Lower Mid Basin Drainage needed for roac Duval Lower Mid Basin Flooding - 1' water at the Duval Frio Upper Mid Basin Obstruction causing flooc Frio Upper Mid Basin Flooding in NW part of to Frio Upper Mid Basin FM 1581 shuts down duri Frio Upper Mid Basin IH-35 roadway flooding - Frio Lower Mid Basin Southwestern Duval Cour Jim Wells Kleberg the river will flood, including FM 3408 fror La Salle Live Oak Live Oak Live Oak Live Oak

Lower Mid Basin Flood study needed for Ti Live Oak Lower Mid Basin Three River - Needs some Live Oak Lower Mid Basin Some type of Flood Diver Live Oak Lower Mid Basin River floods Airport Road Live Oak Lower Mid Basin Five families flood in the Live Oak Lower Mid Basin CR 101 Roadway Flooding Live Oak Live Oak

McMullen

d and become very dangerous to motorists McMullen to 4 feet of water in it. McMullen

Medina Medina

Lower Basin Corpus Christi Laguna Shores Road. Con Nueces Ayers Street at Tarlton St Nueces Lipan Street at Coke Stree Nueces Caranchua Street at Coop Nueces North PAdre Island Drive Nueces Baldwin Boulevard at Agr Nueces 2600 Block of Morgan Av Nueces Haven Drive at McKinzie | Nueces Haven Drive at McKinzie | Nueces SH 286 at Holly Road Nueces SH 286 at Holly Road Nueces Las Colonias Subdivision Nueces Nueces

Nueces Nueces Nueces Nueces Nueces Nueces Nueces Nueces Nueces Nueces Nueces Nueces Nueces Nueces Nueces Nueces Nueces Nueces Nueces Nueces

Nueces

Nueces flood prone areas flood for miles, cutting (Nueces Real

Recent flash floods @ Hw Real **Upper Basin** Refugio Lower Basin Tivoli RCP Main, Drains - Refugio Lower Basin Austwell - Bar ditch west Refugio Lower Basin Whitlow - MIssion River - Refugio Lower Basin Eagle Creek - Flood Prone Refugio Lower Basin Froggy Bottom - Flood Pr Refugio Lower Basin Bar Ditches - Flood Prone Refugio Refugio San Patricio Lower Basin Issues with RR - Flood Prc San Patricio Lower Basin Low water crossing - Floo San Patricio Lower Basin Green Lake outfall - Flooc San Patricio Lower Basin Algodon Colonia - Flood F San Patricio Lower Basin Rancho Chico High Schoo San Patricio Lower Basin Tradewinds area - Flood I San Patricio San Patricio

	San Patricio
	San Patricio
le to below Carrizo Springs. Flow ranges fro	Uvalde
ashed downstream below Leakey to below	Uvalde
Lower Mid Basin FM 2505 Roadway	Wilson
Lower Mid Basin FM 541 Roadway	Wilson
Lower Mid Basin FM 247 Roadway	Wilson

County	FMP	FME	FMS	Total
Aransas	66	10	7	83
Atascosa	20	8	7	35
Bandera	1	2		3
Bee	7	2		9
Bexar		2		2
Brooks				0
Dimmit				0
Duval	15	1		16
Edwards	1			1
Frio				0
Goliad		1		1
Jim Hogg				0
Jim Wells	10	2		12
Karnes		2		2
Kenedy		1		1
Kerr		1		1
Kinney				0
Kleberg	9	12	4	25
La Salle	2	1		3
Live Oak	5	1	2	8
Maverick				0
McMullen	3	3	1	7
Medina	4	1		5
Nueces	2		3	5
Real		1		1
Refugio	7	1	2	10
San Patricio	65	7	37	109
Uvalde	1	1		2
Webb				0
Wilson		1		1
Zavala	2	1		3
Total	220	62	63	345

Unique ID	Name
1 N1	Nueces Basin early flood warning system
2 N2	Nueces Basin low water crossing study and upgrade prioritization
3 N3	Nueces Basin High Hazard Dam identification and risk assessment
4 N4	Nueces Basin Floodplain Map Updates
5 N5	Nueces Basin Minimum Flood Management Standards
6 N6	Nueces Basin floodplain restoration and preservation
7 N7 8 U6.3	Nueces Basin flood public information campaign Uvalde City-wide Drainage Study
9 UM3.11	Martin Branch Drainage Study Webb County Becerra
10 UM6.1	Creek Headwater Flood Study
11 LM6.2	City of Three Rivers City- Wide Drainage Study
12 LM10.1	City of Falfurrias City- Wide Flood Study

Description

Develop Flood Preparedness Toolsets Using Streamgaging and Flood Inundation Mapping to develop a basin wide early flood warning system.	Nueces River Authority
low water crossings to prioritize those with high risk. Prepare a large scale public outreach campaign to include "Turn Around Don't Drown' signage at LWCs or roadways aimed at reducing loss of life. Address top	
30% of high risk low water crossings through mitigation or warning hydraulically inadequate or 'non-funtional' and 9 are in poor condition or 'deficient'. This study would identify all deficient high hazard dams in the 31-county region and recommend the removal or rehabilitation of	Nueces River Authority
the most high hazard dams. areas within the basin that have a high flood risk but do not currently have accurate mapping. Accurate mapping is defined as to BLE or NFHL level accuracy. High flood risk HUC 12 watersheds are defined as having	Nueces River Authority
a total flood risk score of greater than 1.0 per the Regional Flood Plan. promote best preactices to maintain drainage structures. Minimum flood management standards to require finish floor of structures to be constructed one foot above 100-year base flood elevations or based on	Nueces River Authority
local ordinances, whichever is more stringent. Best practices to include habitat protection and develop a strategy for expanding these programs and/or identifying high success areas for riparian/wetland/forest conservation, restoration, and upland protection programs to enhance	Nueces River Authority
flood mitigation benefits. Identify preferred areas in Nueces Basin to Identify local, subregional workgroups aligned with flooding issues.	Nueces River Authority
related communications.	Nueces River Authority
to recommend flood risk reduction measures. Martin Branch Drainage Study to evaluate existing flood risk for multiple roadway crossings and potential structural flooding along Martin	City of Uvalde
Branch, just north of Dilley	Frio County
Flood study to define existing flood risk and potential flood risk reduction projects for subdivisions located in the vicinity of Highway 59.	Webb County
City of Three Rivers City-Wide Drainage Study. Study to specifically focus on flood riks in the Hackberry Creek and Frio River watershed.	City of Three Rivers
City-wide flood study to determine existing flood hazards and to recommend flood risk reduction improvements and/or strategies	City of Falfurrias

Recommend

Yes - major issue in Leakey on Frio, Camp Wood on Nueces, Atascosa County, helps meet Goal 3 (flood warning system) Yes - major life safety issue in upper basin due to flash flooding and numerous low water crossings, needed to meet Goal 1 (Low Water Crossings)

Yes - needed to meet Goal 2 (high hazard dams)

Yes - needed to meet Goal 4 (floodplain maps)

Yes - needed to meet Goal 6 (min. flood standards)

Yes - needed to meet Goal 7 (nature-based practices)

Yes - needed to meet Goal 8 (flood public information campaign) Yes - high need, helps with Goal 5 (structures in floodplain)

Yes - high need area, helps with Goal 5 (structures in floodplain)

Yes - high need and vulnerable area, helps with Goal 5 (structures in floodplain)

Yes - high need area, helps with Goal 5 (structures in floodplain)

Yes - high need area, helps with Goal 5 (structures in floodplain)

Agenda Item No. 10- Summary of Flood Response Information and Activities (Task 7)

	General definition	Example projects (not an exhaustive list)
Flood preparedness	Actions, aside from mitigation, that are	Developing emergency management and
	taken before flood events to prepare for	evacuation plans, preparing staging areas,
	flood response activities	and building flood early warning systems
Flood response	Actions taken during and in the immediate	Conducting evacuations, providing
	aftermath of a flood event	shelters, closing flooded roads, and
		operating flood warning systems
Flood recovery	Actions taken after a flood event involving	Repairs to damaged infrastructure, storm
	repairs or other actions necessary to	event debris removal
	return to pre-event conditions	

Task Goal: Summarize existing flood preparedness, response and recovery activities

^A Table adapted from Animals in Disaster, Module A, Awareness and Preparedness (FEMA, 1998)

- RFPGs to consider and summarize the above three flood activity phases
- Plan is to include a written summary of:
 - current state of flood preparedness in the region and summary of roles and responsibilities of entities
 - entities involved and actions taken/planned for flood recovery
- Use to develop recommendations for Chapter 8, such as how policies can be implemented prior to storm events and how they may reduce the need for preparation for an response to flood events

The attached draft tables summarize:

- 1. Region 13 Entities with Ordinances, Emergency Management Plans, and Floodplain Management Plans
- 2. Flood Preparedness Activities (by County/ Municipality)
- 3. Flood Response and Recovery Measures (by County/ Municipality)

Information was gathered from surveys, individual stakeholder interviews, and regional roadshows. HDR also did cursory internet searches to gather additional information.

For RFPG members and stakeholders: Please review the attached three tables. Blanks are shown for entities in which we received no response after survey, interview, and regional roadshow attempts. At the May 16th RFPG meeting, we will request input on Region 13 entities for which no information is shown.

Entity Name	Type of Entity	Level of Engagement (none, low, medium, high)	Ordinance Adopted	Ordinance date	Flood hazard or emergency mgmt plan	Flood hazard or emergency mgmt plan date	Floodplain mgmt plan	Floodplain mgmt plan date
ARANSAS COUNTY	County	Medium	\checkmark	2019	\checkmark	2017	\checkmark	2017
ATASCOSA COUNTY	County		\checkmark	2013	\checkmark			
BANDERA COUNTY	County	Medium	\checkmark	2020	\checkmark			
BEE COUNTY	County		\checkmark	2009				
BEXAR COUNTY	County	Medium	\checkmark	2007	\checkmark			
BROOKS COUNTY	County							
DIMMIT COUNTY	County	None						
DUVAL COUNTY	County	Low						
EDWARDS COUNTY	County							
FRIO COUNTY	County	Low	\checkmark	2016	\checkmark			
GOLIAD COUNTY	County							
JIM HOGG COUNTY	County							
JIM WELLS COUNTY	County							
KARNES COUNTY	County	Medium	\checkmark	2010				
KENEDY COUNTY	County							
KERR COUNTY	County	Medium	\checkmark	2020				
KINNEY COUNTY	County							
KLEBERG COUNTY	County							
LA SALLE COUNTY	County		\checkmark	2008				
LIVE OAK COUNTY	County							
MAVERICK COUNTY	County							
MCMULLEN COUNTY	County		\checkmark					
MEDINA COUNTY	County	High	\checkmark					
NUECES COUNTY	County	High	\checkmark					
REAL COUNTY	County	Medium	\checkmark					
REFUGIO COUNTY	County	Low	\checkmark	2014				
SAN PATRICIO COUNTY	County	High	\checkmark	2019				
UVALDE COUNTY	County	High						
WEBB COUNTY	County	High	\checkmark	2019	✓			
WILSON COUNTY	County	Medium	\checkmark					

Entity Name	Type of Entity	Level of Engagement (none, low, medium, high)	Ordinance Adopted	Ordinance date	Flood hazard or emergency mgmt plan	Flood hazard or emergency mgmt plan date	Floodplain mgmt plan	Floodplain mgmt plan date
ZAVALA COUNTY	County	Medium						
Agua Dulce	Municipality							
Alice	Municipality		\checkmark	2017				
Aransas Pass	Municipality		\checkmark		✓		\checkmark	2017
Asherton	Municipality							
Banquete	Municipality							
Batesville	Municipality							
Bayside	Municipality							
Beeville	Municipality	Low			\checkmark			
Benavides	Municipality							
Big Wells	Municipality							
Bishop	Municipality	Medium	\checkmark	2001	\checkmark			
Camp Wood	Municipality							
Carrizo Springs	Municipality							
Charlotte	Municipality		\checkmark	2009				
Christine	Municipality		\checkmark					
Corpus Christi	Municipality	High			√			
Cotulla	Municipality	Low	\checkmark					
Crystal City	Municipality							
Devine	Municipality							
Dilley	Municipality							
Driscoll	Municipality							
Encinal	Municipality							
Falfurrias	Municipality							
Freer	Municipality							
Fowlerton	Municipality							
Fulton	Municipality		\checkmark				\checkmark	2017
George West	Municipality							
Gregory	Municipality	High	\checkmark	2019				
Hebbronville	Municipality							
Hondo	Municipality	Medium	\checkmark					
Ingleside	Municipality	High	\checkmark		\checkmark			

Entity Name	Type of Entity	Level of Engagement (none, low, medium, high)	Ordinance Adopted	Ordinance date	Flood hazard or emergency mgmt plan	Flood hazard or emergency mgmt plan date	Floodplain mgmt plan	Floodplain mgmt plan date
Ingleside on the Bay	Municipality	Medium	\checkmark					
Jourdanton	Municipality		\checkmark					
Kingsville	Municipality		\checkmark					
La Pryor	Municipality							
Lake City	Municipality							
Lakeside	Municipality							
Leakey	Municipality	Medium						
Lytle	Municipality		\checkmark					
Mathis	Municipality							
Natalia	Municipality							
Odem	Municipality							
Orange Grove	Municipality							
Pearsall	Municipality		\checkmark		\checkmark			
Petronila	Municipality							
Pleasanton	Municipality		\checkmark					
Port Aransas	Municipality	High	\checkmark					
Portland	Municipality	High	\checkmark					
Poteet	Municipality							
Premont	Municipality							
Refugio	Municipality							
Robstown	Municipality		\checkmark					
Rockport	Municipality		\checkmark	2015			\checkmark	2017
Rocksprings	Municipality							
Sabinal	Municipality							
San Diego	Municipality							
San Patricio	Municipality							
Sinton	Municipality	Medium						
Taft	Municipality							
Three Rivers	Municipality							
Tilden	Municipality							
Uvalde	Municipality	Medium	\checkmark					
Woodsboro	Municipality							

Table 2Region 13 Flood PreparednessDraft- May 9, 2022

			Flood Preparedness Measures															
) management plan ular updates	If or mation	te .	od early warn:	buildings against mage at initial	plan of all flood	e practices and to reduce fire.	odplain	trator ⁿ ergency Mgmt ator		tornwater	r higher stand	cio.	oon regulations ain mgmt ons	l Flood Insurance 1 (NFIP) minimum Nen+c	odplain ordinance ther standards than NFIP)	
Entity Name	Type of Entity	Develop with reg	Public II Plan/Of	Prepare	Build flc Systems	Protect flood da construi	Master related	Land us Policies flooding	Have Fl Admini:	Have En Coordin	Develog	Storm/S manage	Conside list	Subdivi	Floodpl; regulati	Nationa Progran require _l	Local Fl, with hig (Breater	/.
ARANSAS COUNTY	County	\checkmark	\checkmark			\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	~
ATASCOSA COUNTY	County								\checkmark	\checkmark			\checkmark	\checkmark				
BANDERA COUNTY	County				\checkmark				\checkmark					\checkmark	\checkmark	\checkmark		
BEE COUNTY	County					\checkmark			\checkmark	\checkmark				\checkmark				
BEXAR COUNTY	County	\checkmark	\checkmark						\checkmark					\checkmark	\checkmark		\checkmark	
BROOKS COUNTY	County																	
DIMMIT COUNTY	County																	
DUVAL COUNTY	County								\checkmark									
EDWARDS COUNTY	County																	
FRIO COUNTY	County								\checkmark					\checkmark	\checkmark	\checkmark		
GOLIAD COUNTY	County													\checkmark				
JIM HOGG COUNTY	County																	
JIM WELLS COUNTY	County									\checkmark				\checkmark				
KARNES COUNTY	County					\checkmark			\checkmark	\checkmark				\checkmark	\checkmark		\checkmark	
KENEDY COUNTY	County																	
KERR COUNTY	County					\checkmark			\checkmark				\checkmark	\checkmark	\checkmark	\checkmark		
KINNEY COUNTY	County																	
KLEBERG COUNTY	County									\checkmark		\checkmark						
LA SALLE COUNTY	County					\checkmark			\checkmark					\checkmark				
LIVE OAK COUNTY	County									\checkmark								
MAVERICK COUNTY	County																	
MCMULLEN COUNTY	County		\checkmark						\checkmark	\checkmark		\checkmark		\checkmark				
MEDINA COUNTY	County					\checkmark			\checkmark				\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
NUECES COUNTY	County							\checkmark	\checkmark	\checkmark		\checkmark						~
REAL COUNTY	County				\checkmark				\checkmark					\checkmark	\checkmark	\checkmark		
REFUGIO COUNTY	County					\checkmark			\checkmark	\checkmark				\checkmark	\checkmark			
SAN PATRICIO COUNTY	County	\checkmark				\checkmark			\checkmark	\checkmark				\checkmark	\checkmark		\checkmark	
UVALDE COUNTY	County				\checkmark													
WEBB COUNTY	County					\checkmark			\checkmark					\checkmark	\checkmark		\checkmark	
WILSON COUNTY	County								\checkmark	\checkmark				\checkmark	\checkmark		\checkmark	
ZAVALA COUNTY	County										Ι			\checkmark	\checkmark		\checkmark	ſ
Agua Dulce	Municipality							\checkmark		\checkmark								
Alice	Municipality								\checkmark	\checkmark			\checkmark					
Aransas Pass	Municipality	\checkmark	\checkmark						\checkmark	\checkmark		\checkmark		\checkmark	\checkmark			



Table 2 (cont.) Region 13 Flood Preparedness Dra

aft- May 9, 202	2
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		Flood Preparedness Measures																
Entity Name	Type of Entity	Develop management plan with regular updates	Public Information Plan/Office	Prepare star	Build flood early warns	Protect buildings against flood damage at inition	Master plan of all flood	Land use practices and flooding to reduce firm	Have Floodplain Administ	Have Emergency Mgmt Coordinator	Develop aug	Storm/Stormwater management	Consider higher stand	Subdivici.	Floodplain mgmt Fegulations Fegulations	National Flood Insurance Program (NFIP) minimum requiremento	Local Floodplain ordinance with higher standards (greater than NFIP)	Dref
Asherton	Municipality																	
Banquete	Municipality																	
Batesville	Municipality																	
Bayside	Municipality	\checkmark				\checkmark			\checkmark	\checkmark				\checkmark	\checkmark			
Beeville	Municipality							\checkmark								\checkmark		
Benavides	Municipality								\checkmark									
Big Wells	Municipality																	
Bishop	Municipality					\checkmark		\checkmark	\checkmark	\checkmark		\checkmark		\checkmark	\checkmark	\checkmark		
Camp Wood	Municipality																	
Carrizo Springs	Municipality																	
Charlotte	Municipality								\checkmark				\checkmark					
Christine	Municipality								\checkmark									
Corpus Christi	Municipality							\checkmark	\checkmark	\checkmark		\checkmark		\checkmark	\checkmark		\checkmark	
Cotulla	Municipality								\checkmark					\checkmark	\checkmark	\checkmark		
Crystal City	Municipality																	
Devine	Municipality																	1
Dilley	Municipality																	1
Driscoll	Municipality								\checkmark									1
Encinal	Municipality																	
Falfurrias	Municipality																	1
Freer	Municipality								\checkmark									
Fowlerton	Municipality																	
Fulton	Municipality								\checkmark	\checkmark				\checkmark	\checkmark			1
George West	Municipality																	
Gregory	Municipality					\checkmark			\checkmark	\checkmark				\checkmark	\checkmark	\checkmark	\checkmark	
Hebbronville	Municipality																	
Hondo	Municipality								\checkmark					\checkmark	\checkmark	\checkmark		
Ingleside	Municipality								\checkmark	\checkmark			\checkmark	\checkmark	\checkmark		\checkmark	
Ingleside on the Bay	Municipality								\checkmark	\checkmark						\checkmark		
Jourdanton	Municipality		\checkmark						\checkmark	\checkmark				\checkmark				
Kingsville	Municipality								\checkmark	\checkmark			\checkmark					
La Pryor	Municipality					1												1
, Lake City	Municipality					1				\checkmark								1
, Lakeside	Municipality									\checkmark				-				<u> </u>
Leakey	Municipality					1								\checkmark	\checkmark	\checkmark		┢
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Mathis	Municipality							1		\checkmark								\vdash
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Table 2 (cont.) Region 13 Flood PreparednessDraft- May 9, 2022

									Flo	ood Prepa	redne	ess Meas	ures					
Type of Entity Name Entity	Develop management plan with regular updates	Public Information Plan/Offic	Prepare	Build flood early warns	Protect buildings against flood damage at initial constructs	Master plan of all flood	Land use practices and floor.	Have Floodplain Admin.	Have Emergency Mgmt	Develop	Storm/Stormwater managemon	Consider higher stand	Subdivie.	Floodplain mgmt regulations	National Flood Insurance Program (NFIP) minimum	Local Floodplain ordinance with higher standards (Breater than NFIP)		
Natalia	Municipality			1							1		1					T
Odem	Municipality									\checkmark								T
Orange Grove	Municipality																	
Pearsall	Municipality																	T
Petronila	Municipality									\checkmark								T
Pleasanton	Municipality		\checkmark						\checkmark	\checkmark				\checkmark				T
Port Aransas	Municipality								\checkmark	\checkmark				\checkmark	\checkmark	\checkmark	\checkmark	T
Portland	Municipality								\checkmark	\checkmark				\checkmark	\checkmark		\checkmark	T
Poteet	Municipality									\checkmark				\checkmark				T
Premont	Municipality																	
Refugio	Municipality	\checkmark				\checkmark			\checkmark	\checkmark				\checkmark	\checkmark			
Robstown	Municipality							\checkmark	\checkmark	\checkmark								
Rockport	Municipality	\checkmark	\checkmark					\checkmark	\checkmark	\checkmark		\checkmark		\checkmark	\checkmark	\checkmark		\checkmark
Rocksprings	Municipality	\checkmark	\checkmark									\checkmark						
Sabinal	Municipality																	
San Diego	Municipality								\checkmark									
San Patricio	Municipality									\checkmark								
Sinton	Municipality									\checkmark				\checkmark	\checkmark	\checkmark		
Taft	Municipality									\checkmark								
Three Rivers	Municipality																	
Tilden	Municipality																	Γ
Uvalde	Municipality								\checkmark					\checkmark	\checkmark		\checkmark	Γ
Woodsboro	Municipality	\checkmark	1	1		\checkmark			\checkmark	\checkmark				\checkmark	\checkmark			Γ



		Flood Response and Recovery Measures															
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ATASCOSA COUNTY	County							\checkmark		\checkmark						<u> </u>	
BANDERA COUNTY	County			\checkmark			\checkmark							\checkmark	\checkmark	\checkmark	
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		Flood Response and Recovery Measures															
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Aransas Pass	Municipality					\checkmark	\checkmark	\checkmark			\checkmark	\checkmark					
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Batesville	Municipality																
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Big Wells	Municipality					1											1

		Flood Response and Recovery Measures												1			
Entity Name	Type of Entity	High Water -	Contact in	Conducts evacuations (with Safety	Provides shelters due.	Closes & Curing flood	Operation 4	Assess rood warning system	List and schedule rend.	Fire or police department	Pump out	Emergency Operations C	EOC + Center	Field operation plan	Stream game	Utilitze Trate	amic Control Plan
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Camp Wood	Municipality																
Carrizo Springs	Municipality																
Charlotte	Municipality																
Christine	Municipality																
Corpus Christi	Municipality					\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark					
Cotulla	Municipality																
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Entity Name	Type of Entity	High Water Ac	Contact p	Conducts evacuations (with Safety	Provides shelters duri	closes flood	Operaties &	Assess rood warning System	List and schedule repair.	Fire or police department.	Pump out of the ponds	Emergency Operations C	EOC + Center	Field operation plan event	Stream Raped	Utilitze Trate	· amic Control Plan
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Kingsville	, Municipality																
La Pryor	Municipality																
Lake City	Municipality																
Lakeside	Municipality																
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Mathis	Municipality																
Natalia	Municipality																
Odem	Municipality																
Orange Grove	Municipality																
Pearsall	Municipality									\checkmark							
Petronila	Municipality						\checkmark										
Pleasanton	Municipality																
Port Aransas	Municipality																
Portland	Municipality																
Poteet	Municipality																
Premont	Municipality																
Refugio	Municipality																
Robstown	Municipality			\checkmark			\checkmark										1
Rockport	Municipality						\checkmark										1
Rocksprings	Municipality																1

			Flood Response and Recovery Measures														
Entity Name	Type of Entity	High Water -	Contart D	Conducts evacuations (with Safety	Provides shelters durit	closes flood	Operates e	Assess road warning system.	List and schedule repair.	Fire or police department	Pump out z.	Emergency Operations C	EOC +	Field operation plan	Stream gang	Utilitze Trats	amc Control Plan
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San Diego	Municipality																
San Patricio	Municipality																
Sinton	Municipality																
Taft	Municipality																
Three Rivers	Municipality																
Tilden	Municipality																
Uvalde	Municipality																
Woodsboro	Municipality																

Agenda Item 11- Nueces Region 13 Draft Administrative, Regulatory and Legislative Recommendations Draft 5/9/2022

TWDB guidelines state that regional flood planning groups are to develop and include administrative, regulatory, administrative, or other recommendations for inclusion in the 2023 Regional Flood Plan. The Nueces RFPG formed a subcommittee at an open meeting on March 28, 2022, to consider legislative and regional policy recommendations. The subcommittee met on May 3rd and developed the following draft recommendations for Region 13 RFPG consideration, updates, and adoption on May 16, 2022.

Administrative Recommendations

- I. The Nueces Regional Flood Planning Group should play a role in facilitating public information/public education activities in the Nueces Basin and providing support to local public agencies to promote a wider understanding of state and regional flood issues and the importance of flood preparedness and long-range regional flood planning and mitigation.
- II. The Texas Water Development Board (TWDB) is encouraged to identify and eliminate barriers that prevent multi-jurisdictional, multi-county, or council of government-level areas from working together to provide regional flood mitigation solutions. Example, if a primary sponsor meets all administrative requirements but additional participating jurisdictions do not, allow the regional solution to remain in consideration for state funding.
- III. The TWDB should provide a funding mechanism for smaller communities to receive dedicated funding for studies / planning efforts to identify FMSs, FMEs and FMPs included both traditional, engineered flood mitigation projects in addition to nature-based solutions. Most smaller communities do not have the resources to hire an engineer to complete these studies.
- IV. The TWDB should use the project list in the adopted Regional Flood Plan and State Flood Plan to help connect local communities to grant programs administered by federal or other state agencies (e.g., General Land Office, FEMA, U.S. Army Corps of Engineers, USGS, HUD Community Block Grant Programs, and others).
- V. The TWDB is encouraged to develop a roadmap on how state and federal agencies work together on flood preparedness, mitigation, response, and recovery activities to support counties, cities, and local floodplain administrators. In addition to the linkages between agencies, the roadmap should distinguish the roles of each agency, schedule of ongoing studies relevant to regional flood planning, how efforts are being coordinated, and other topics.
- VI. The TWDB is encouraged to consider use of hybrid approaches that blend structural engineered projects and nature-based solutions for flood mitigation:
 - Incentivize voluntary buy out programs, turning previously flooded properties/neighborhoods into stormwater parks as an alternative to large-scale construction projects.
 - b. Provide training to state agencies, local governments, engineers, planners in the use of natural floodplain preservation/conservation.

VII. Public entities in the Nueces (Region 13) Flood Planning Region are strongly encouraged to provide their share of continued funding for administrative support activities that facilitate Nueces (Region 13) RFPG activities.

Regulatory/ Policy Recommendations

- I. The Texas Legislature is urged to support adoption of 2015 or 2018 versions of International Building Code and International Residential Code as State Building Standards. This would improve Texas' eligibility for funding under the Building Resilient Infrastructure and Communities (BRIC) program. <u>This FEMA document</u> provides an excerpt of flood related provisions which ensures proper floodplain management practices are integrated with the building permit process. A key measure of the 2015 International Building code is the requirement of 1 foot of freeboard for new buildings.
- II. The Texas Legislature is urged to develop a program through the TWDB to provide support services to rural and socioeconomic disadvantaged communities to develop and maintain flood management activities. The TWDB could develop and provide a toolkit with guidance and templates on floodplain ordinances, minimum building standards, flood response plans, and other materials to support those with limited experience and flood management resources.
- III. The Nueces (Region 13) RFPG urges the legislature to support legislation to empower County governments to have greater regulatory control over land development activities. Additionally, to provide funding support to local floodplain administrators to develop accurate inundation mapping, which is current absent in over 70% of the 31- county area in Region 13.
 - a. The legislature is urged to encourage coordinated efforts between TWDB and FEMA on use of best data, rather than outdated FEMA maps, and;
 - b. Incorporate USGS FIM projects co-funded by state with cost share from local communities.

Legislative Recommendations

- I. The Texas Legislature is urged to continue funding the TWDB to provide support for state mandated regional flood planning group activities.
- II. The Texas Legislature should consider enabling legislation to allow creation of a regional flood authority or funding to river authorities to administer a program to provide support to local floodplain administrators, counties and cities in the region, if needed on a voluntary basis.
- III. The Nueces (Region 13) RFPG urges the legislature to support policies to address Texas' flood risk needs and prepare for and respond to current and future flood conditions, including coordination of federal and state-level agency floodplain initiatives including TDEM, FEMA, and GLO on a five-year cycle for consideration by RFPGs.
- IV. The Texas Legislature should continue to provide funding to state agencies for flood planning initiatives, including providing technical support and assistance to county and city floodplain

administrators or designees to support development of building standards, permitting support to verify new projects meet floodplain development requirements, and training.

- V. The Texas Legislature is urged to make funds available through regional flood planning groups to facilitate public information campaigns through local floodplain administrators and public entities to increase community knowledge of rules and regulations, flood-prone areas, and importance of protecting floodplains from encroachment.
- VI. The Texas Legislature is urged to direct TCEQ to work with Texas Parks and Wildlife, TXDOT, local road and bridge departments, and other state agencies to support removal of debris and/or sediment deposited from major flooding events to avoid creating new flood risk hazards.
- VII. The Texas Legislature is urged to make funds available through the TWDB to establish a dedicated program to provide low-interest loans or grants to implement projects identified through local and TxDOT road and bridge assessment and remediation plans.
- VIII. The Texas Legislature is urged to make funds available through the TWDB to establish a dedicated program to provide funding for maintenance or engineering controls of drainage and culvert systems (both structural and non-structural nature-based solutions) to divert flood flows and identify and resolve structural improvements causing flooding issues.
- IX. The Texas Legislature is urged to make funds available to support nature-based practices through land conservation, restoration programs, and participation in landowner incentive programs to encourage voluntary land stewardship practices to manage floodwaters by slowing runoff and dissipating flood energy to include riparian, wetland, forest, upland, and other habitat protection programs. Promote land coverage studies to effectively identify riparian corridors to protect for floodplain mitigation and erosion reduction. Additional low interest programs to support voluntary city and county buy-back of lands for county parks and flood mitigation should also be included.



P.O. Box 13231, 1700 N. Congress Ave. Austin, TX 78711-3231, www.twdb.texas.gov Phone (512) 463-7847, Fax (512) 475-2053

April 15, 2022

Mr. Travis Pruski Senior Planner Nueces River Authority 200 E Nopal St # 206 Uvalde, TX 78801

RE: Informal Review Comments on Region 13 Nueces RFPG's Technical Memorandum – January 7 Deliverables

Dear Mr. Pruski,

In addition to reviewing Technical Memorandum submissions for administrative completeness and compliance with Regional Flood Planning Grant Agreement requirements, Texas Water Development Board (TWDB) staff have performed a brief technical review resulting in the attached informal comments for the Region 13 Nueces Regional Flood Planning Group's (RFPG) to consider during the remainder of Regional Flood Plan development.

Unlike the TWDB formal comments which will be provided on the Draft Regional Flood Plans, these are informal comments that do not require responses from the planning group.

If you have any questions, please feel free to contact Tressa Olsen of our Flood Planning staff at (512) 475-1908 or via email at tressa.olsen@twdb.texas.gov.

Sincerely,

Reem Zoun

Reem J. Zoun, PE, CFM, ENV SP Director Flood Planning

Attachment: TWDB Comments

Cc: LJ Francis, RFPG Chair Kristi Shaw, HDR Inc. Bryan Martin, HDR Inc. Matt Nelson, TWDB James Bronikowski, TWDB Tressa Olsen, TWDB

April 15, 2022

TWDB Informal Comments on Region 13 Nueces Regional Flood Planning Group's Technical Memorandum – January 7 Deliverables

GENERAL COMMENTS

- Please note that while only some of the table templates provided in Exhibit C Technical Guidelines for Regional Flood Planning were required in the Tech Memo submission, complete versions of all TWDB-provided tables and geodatabases will be required in the region's Draft Regional Flood Plan. You can find these tables throughout Exhibit C and Exhibit D – Data Submittal Guidelines for Regional Flood Planning, and in a more condensed format in Exhibit C Tables and Flood Planning Geodatabase Templates available at http://www.twdb.texas.gov/flood/planning/planningdocu/2023/index.asp.
- 2. All GIS deliverables: For fields with distance/area units, consider reducing the number of decimal places and/or significant figures as appropriate. This does not apply to latitude, longitude, or other data fields needing increased precision.
- Please include the following elements as part of all map submissions: north arrow, a reference scale, and appropriate assumptions and/ or disclaimers (Exhibit C Section 3.10). For example, Figures 1-1 and B-1 appear to be missing north arrows and reference scales.

<u>TASK 1</u>

- 1. Tech Memo Text: Exhibit C Item 4C.1.a, List of Entities:
- a. See comments on Task 1 Item 2: GIS Feature Class: Exhibit D Table 3, Entities.
- 2. GIS Feature Class: Exhibit D Table 3, Entities:
 - a. Please address all <Null> values for required fields, including 'CID'. All Entities actively participating in the NFIP should have their corresponding CID Code populated. Please refer to the NFIP Participation Table included as an attachment with the informal comments letter.
- 3. Tech Memo Text: Exhibit C Table 1, Existing Infrastructure:
 - a. No comments.
- 4. GIS Feature Class: Exhibit D Table 5, ExFldInfraPol:
 - a. All EXINFPY_ID entries are missing a "0". Please ensure the Unique ID matches the format in Exhibit D, Table 2 or more recent updates.
 - b. Please address <Null> values for all required fields, including 'NAME'. Please refer to Table 5 in Exhibit D for a list of valid entries.
 - c. The SHAPE_LENGTH and SHAPE_AREA fields include the invalid entry "0". Please update all "0" entries with either nonzero digits or <Null>.
 - d. Please address invalid and inconsistent entries for all required fields including DESCR. This field should include text entries providing a brief description of the infrastructure. It appears that current entries contain GlobalIDs (i.e. {072D9E29-29D1-47AC-9710-8A120DE99327}) and other unknown codes (i.e., 101088502). Please update as necessary to include only valid entries.
- 5. GIS Feature Class: Exhibit D Table 6, ExFldInfraLn:
 - a. EXINFPY_ID entries are missing a "0". Please ensure the unique ID matches the format in Table 2 or more recent updates.

- b. Several of the required fields have blank, invalid, or inconsistent entries, including NAME. Please ensure all required fields include only valid and accurate entries.
- c. The DIAMETER, HEIGHT, and LENGTH fields include the invalid entry "0". Please update all "0" entries with either nonzero digits or <Null>.
- d. At least one levee was included in this feature class that does not spatially align with USACE's National Levee Database feature class: EXINFLN_ID 13000006 (St Charles Bay Levee). Please review this feature class provided by TWDB to confirm the accuracy of entries.
- 6. GIS Feature Class: Exhibit D Table 7, ExFldInfraPt:
 - a. EXINFPT_ID entries are missing a "0". Please ensure the unique ID matches the format in Exhibit D Table 2 or more recent updates.
 - b. Several of the required fields have blank, invalid, or inconsistent entries, including NAME and COUNTY. Please ensure all required fields include only valid and accurate entries as listed in Exhibit D Table 7.
 - c. Some entries in the DESCR field include an unknown code. For example, "070700023502029". Please update this field to include text descriptions of existing infrastructure.
 - d. Please address inconsistent formatting in the COUNTY field. For example, "Atacosa" vs. "ATASCOSA".
 - e. Please replace all "0" entries in the LENGTH field with either nonzero digits or <Null> entries. For example, see WS_ID 13000334.
 - f. There appears to be additional points representing low water crossings (LWC) that are not present in TWDB's LWC data. For example, see EXINFPT_ID 13001673. Please review all entries for accuracy and confirm this inclusion in this dataset.
 - g. Please consider including gaging stations/stream gages from USGS National Hydrography Dataset (NHD):
 - i. NHDPointEventFC feature class with EventType:
 - 1. 57001 Active, Continuous
 - 2. 57002 Active, Partial
 - ii. NHDPoint feature class with FCode:
 - 1. 36700 status not specified
 - 2. 36701 Active, Continuous
- 7. Tech Memo Text: Exhibit C Table 2: Proposed or ongoing Flood Mitigation Projects (FMP):
 - a. No comments.
- 8. GIS Feature Class: Exhibit D Table 8, ExFldProjs:
 - a. Please be aware that the Bee County FIF project to install a Flood Early Warning System (EXPROJ_ID 13000009) has been withdrawn, however the project may still be considered for the future or may have received funding from another source.
 - Please address <Null> values in all required fields, including ExHaz_ID. Please ensure that all fields include only valid and accurate entries as listed in Exhibit D Table 8.
- 9. GIS Feature Class: Low Water Crossings:
 - a. N/A

TASK 2A

1. Tech Memo Text: Exhibit C 4C.1.b, List of Previous Studies:

 a. Please consider including the TWDB sponsored Flood Protection Planning Study with Medina County and the Community of D'Harris (TWDB Contract No. 1004831094) completed in 2011. Note: TWDB sponsored studies may be accessed via

https://www.twdb.texas.gov/publications/reports/contracted_reports/index.asp.

- b. Please determine whether H&H studies, neighborhood/watershed masterplan studies, or studies conducted in conjunction with LOMR/LOMAs are available in the region and if applicable, consider utilizing those studies in the regional flood plan development. Smaller local studies may assist in identifying flood mitigation solutions.
- 2. Tech Memo Text: Exhibit C 4C.1.f, List of Available Models:
 - a. Please provide the source links for the model if publicly available.
 - b. For the "Study Completion Date" please confirm for FEMA studies when the model was completed, not when the FIS was completed.
 - c. Please consider using the USGS Estimated Base Flood Elevation (estBFE) Viewer (https://webapps.usgs.gov/infrm/estbfe/) to search for pertinent BLE models.
 - d. Please consider utilizing the Available Models table template included as an attachment with the informal comments letter.

TASK 3A

- 1. GIS Feature Class: Exhibit D Table 20, ExFpMP:
 - a. Please address <Null> values for all required fields, including MIN_CODE. Refer to Table 20 in Exhibit D for a list of valid entries.

TASK 3B

- 1. Tech Memo Text: Exhibit C 4C.1.g, Goals:
 - a. See comments on Task 3B Item 2: GIS Feature Class: Exhibit D Table 21, Goals.
- 2. GIS Feature Class: Exhibit D Table 21, Goals:
 - a. Please address blank and <Null> values for the required fields, including RESIDUAL and MEASURE. Refer to Exhibit D Table 21 for a list of valid entries.
 - b. Where appropriate, please consider including baseline data or information to add greater context related to the achievability of goals. For example: a goal such as "Increase NFIP participation from 90 percent to 95 percent of communities in the region" facilitates measurement towards goal achievement.

TASK 4B

- 1. Tech Memo Text: Exhibit C 4C.1.h, Process to Identify Potential FMSs and FMPs:
 - a. Please consider whether the potential impact of new Atlas 14 rainfall data should be included with "Factors to Consider" when determining if FEMA inundation mapping is inadequate.
 - b. Please consider defining the conditions for "Emergency Need" and how infrastructure will be classified as damaged or failing.
 - c. Exhibit C, Section 2.4.B: "A description of potential impacts and benefits to environment, agriculture, recreational resources, navigation, water quality, erosion, sedimentation and impacts to any other resources deemed relevant to the RFPG."

Potential impacts and benefits to environment, agriculture, etc. do not appear to be included in the evaluation. Please include evaluation of resources deemed relevant to the RFPG. Please consider adding clarity on which factors were considered and how.

- 2. Tech Memo Text: Exhibit C 4C.1.i, Potential FMEs, FMSs, FMPs:
 - a. Please consider including more detailed descriptions to clarify the proposed actions (FME/S/P). For example, FME IDs 131000008-131000016 might benefit from additional clarification.
 - b. Please review certain FMSs to ensure correct categorization. For example, FMS IDs 132000067, 132000068, and 132000069, describe buyout programs and drainage projects. Based on the examples provided in Exhibit C (pg. 53-54), these actions might be considered non-structural FMPs if the required data is available. Please consider updating solution descriptions to make clear why they are considered either an FMS or FMP.
 - c. Please review FMS_COST entries to ensure accuracy and that FMSs include only nonrecurring, non-capital costs (Title 31 TAC §361.10(n)). For example, see FMS IDs 132000007 and 132000017. Guidance was provided in a December 14, 2021 email "New Field for FMS feature class and spreadsheet" that included a request to add an additional field named NRNC_COST in the FMS feature class to capture both the Nonrecurring, Noncapital Cost and the Estimated Total Strategy Cost. A pdf copy of this email is included as an attachment with the informal comments letter.
 - d. When created, please ensure the FME, FMP, and FMS feature classes are consistent with the information provided in written tables of feasible FME/S/Ps.
- 3. Tech Memo Text: Exhibit C 4C.1.j, Infeasible FMEs, FMSs, FMPs:
 - a. The Tech Memo indicates that no FME/S/Ps have yet been identified as infeasible. As a reminder, when identifying infeasible solutions, please include a primary reason for infeasibility is included in the list of infeasible FME/P/S.
- 4. GIS Feature Class: Exhibit D Table 23, FME:

Note: This Feature Class was not included with the Tech Memo submission. However, some general, additional guidance has been included below:

- a. When creating the FME feature class please be sure to include relevant watersheds and streams in the FME, and vice versa.
- b. Please ensure all required fields are populated with valid entries per Table 23 of Exhibit D.
- c. Please ensure the information provided in the FME feature class is consistent with the written list of potential FMEs.
- d. Please add and populate both the LWC and MODEL_ID fields to the FME feature class.
- 5. GIS Feature Class: Exhibit D Table 24, FMP:

Note: This Feature Class was not included with the Tech Memo submission. However, some general, additional guidance has been included below:

- a. When creating the FME feature class please be sure to include both watersheds and streams in the FMP, and vice versa.
- b. Please ensure all required fields are populated with valid entries per Table 24 of Exhibit D.

- c. Please ensure the information provided in the feature class is consistent with the written list of potential FMPs.
- d. Please add and populate the MODEL_ID field to the FMP feature class.
- 6. GIS Feature Class: Exhibit D Table 26, FMS:
 - **Note**: This Feature Class was not included with the Tech Memo submission. However, some general, additional guidance has been included below:
 - a. When creating the FMS feature class please be sure to include both watersheds and streams in the FMS and vice versa, where applicable.
 - b. Please ensure all required fields are populated with valid entries per Table 26 of Exhibit D.
 - c. Please ensure the information provided in the feature class is consistent with written list of potential FMSs.
 - d. Please add and populate the following fields in the FMS feature class: NRNC_COST and MODEL_ID.
- GIS Feature Class: Exhibit D Table 22, Streams: Note: This Feature Class was not included with the Tech Memo submission. However, some general, additional guidance has been included below:
 - a. Please include all appropriate FME/P/S IDs when creating Streams feature class.
- 8. GIS Feature Class: Exhibit D Table 4, Watersheds:

Note: This Feature Class was not included with the Tech Memo submission. However, some general, additional guidance has been included below:

a. Please include all appropriate FME/P/S IDs when creating the Watersheds feature class.

TWDB CONTRACT NO. 2101792498 APPROVED BUDGET MEMORANDUM NO 1 AMENDED EXHIBIT B Task and Expense Budgets

Note: There are no proposed changes to the Task Budget, so it was not included in this memorandum.

EXPENSE BUDGET CATEGORY	ORIGINAL BUDGET	REVISED BUDGET	AMOUNT CHANGED
Contractor Other Expenses ¹	\$102,700.00	\$ <u>2</u> 0 <u>.000</u> .00	<u>(\$82,70</u> 0.00]
Contractor Salaries and Wages ²	\$0.00	\$ <u>82,70</u> 0.00	\$ <u>82,70</u> 0.00
Subcontract Services	\$1,766,100.00	\$0.00	\$0.00
Voting Planning Member Travel ³	\$3,000.00	\$0.00	\$0.00
TOTAL	\$1,871,800.00	\$ <u>102,70</u> 0.00	\$0.00

EXPENSE BUDGET

¹<u>Eligible Other Expenses</u> as described in 31 TAC § 361.72(b) include the following administrative costs if the RFPG or its chairperson certifies, during a public meeting, that the expenses are eligible for reimbursement and are correct and necessary:

- a) Travel expenses as authorized by the General Appropriations Act are available only for attendance at a posted meeting of the RFPG, unless the travel is specifically authorized by the RFPG and EA;
- b) Costs associated with providing translators and accommodations for persons with disabilities for public meetings when required by law or deemed necessary by the RFPGs and certified by the chairperson;
- c) Direct costs, excluding personnel-related costs of the Planning Group Sponsor, for placing public notices for the legally required public meetings and of providing copies of information for the public and for members of the RFPGs as needed for the efficient performance of planning work such as:
 - 1. expendable supplies actually consumed in direct support of the planning process;
 - 2. direct communication charges;
 - 3. limited direct costs/fees of maintaining RFPG website domain, website hosting, and/or website;
 - 4. reproduction of materials directly associated with notification or planning activities (the actual non-labor direct costs as documented by the Contractor);
 - 5. direct postage (e.g., postage for mailed notification of funding applications or meetings); and
 - 6. other direct costs of public meetings, all of which must be directly related to planning (e.g., newspaper and other public notice posting costs).
- d) The cost of public notice postings including a website and for postage for mailing notices of public meetings; and
- e) The Planning Group Sponsor's personnel costs for the staff hours that are directly spent providing, preparing for, and posting public notice for RFPG meetings, including labor, fringe, overhead, and other expenses for their support of and attendance at such RFPG meetings, in accordance with, and as specifically limited by, the flood planning grant contract with the Board. This may not exceed: \$5,000 per regular RFPG meeting nor a total of \$60,000 over the first planning cycle.

<u>²Contractor Salaries and Wages</u> as described in 31 TAC § 361.72(b) include the following administrative costs if the RFPG or its chairperson certifies, during a public meeting, that the expenses are eligible for reimbursement and are correct and necessary: the Planning Group Sponsor's personnel costs for the staff hours that are directly spent providing, preparing for, and posting public notice for RFPG meetings, including labor, fringe, overhead, and other expenses for their support of and attendance at such RFPG meetings, in

accordance with, and as specifically limited by, the flood planning grant contract with the Board. This may not exceed: \$5,000 per regular RFPG meeting nor a total of \$85,000 over the first planning cycle.

³<u>Voting Planning Member Travel Expenses</u> is defined as eligible mileage expenses incurred by regional flood planning members that cannot be reimbursed by any other entity, planning group sponsor, etc. as certified by the voting member. Travel expenses are available only for attendance at a posted meeting of the RFPG unless the travel is specifically authorized by the RFPG and EA. The reimbursed amount is limited to the maximum amounts authorized for state employees by the General Appropriations Act, Tex. Leg. Regular Session, 2019, Article IX, Part 5, as amended or superseded.

Ineligible Expenses as described in 31 TAC § 361.72(a) include, but are not limited to:

- a) Activities for which the Board determines existing information, data, or analyses are sufficient for the planning effort
- b) Activities directly related to the preparation of applications for state or federal permits or other approvals, activities associated with administrative or legal proceedings by regulatory agencies, and preparation of engineering plans and specifications;
- c) Compensation for the time or expenses of RFPGs members' service on or for the RFPG
- d) Costs of administering the RFPG, other than those explicitly allowed under 31 TAC § 361.72(b)
- e) Staff or overhead costs for time spent providing public notice and meetings, including time and expenses for attendance at such meetings;
- f) Costs for training;
- g) Costs of developing an application for funding or reviewing materials developed due to this grant;
- h) Costs of administering the regional flood planning grant and associated contracts;
- i) Analysis or other activities related to planning for disaster response or recovery activities; and
- j) Analyses of benefits and costs of FMSs beyond the scope of such analyses that is specifically allowed or required by regional flood planning guidance to be provided by the EA unless the RFPG demonstrates to the satisfaction of the EA that these analyses are needed to determine the selection of the FMS or FMP.
- k) Labor, reproduction, or distribution of newsletters;
- l) Food, drink, or lodging for Regional Flood Planning Group members (including tips and alcoholic beverages);
- m) Purchase, rental, or depreciation of equipment (e.g., computers, copiers, fax machines);
- n) General purchases of office supplies not documented as consumed directly for the planning process; and
- o) Costs associated with social events or tours.

APPROVED:	
CONTRACT MANAGER	DEPUTY EXECUTIVE ADMINISTRATOR
Tressa Olsen	Matt Nelson
DATE	DATE

Nueces River Auth	ority					Payment F	Request No.	3
Contract No:	2101792498					Billing Pe	riod of This Payme	nt Request
Contract Type:	Research			Fr	om:	08/29/21	То:	03/31/22
Contract Amount:	\$ 1,143,700.00					R	equested Amount:	\$ 365,608.11
				ls t	his th	ne final Request?	[]∕es	
Contract Start Date	Contract End Date	Total	Contract Amount	Local Cas	h	Local In-Kind	TWDB Share	Retainage
10/26/20	06/30/23	\$	1,143,700.00	\$	2	\$ -	\$ 1,143,700.00	\$ 57,185.00
Payment Request No.		Total R	Expenses for this eimbursement	Local Cash fo Reimbursen	r this ient	Local In-Kind for this Reimbursement	TWDB Share for this Reimbursement	Retainage for this Reimbursement
3,00		\$	365,608.11	\$	-	\$-	\$ 365,608.11	\$ 18,280.41
Contractor: Contractor Address: City, State, ZIP:	Nueces River Authority 539 S. Hwy 83 Uvalde, Texas 78801							
Contact: Contact Title:	Travis Pruski Director of Planning							
Contact Phone: Contact Fax:	210-710-0617 830-278-2025							
	Ipruski@nueces-ra.org							
Payment Contact:	Frankie Kruckemeyer							
Payment Contact Title:	Director of Finance							
Payment Contact Phone:	830-278-6810							
Payment Contact Fax:	830-278-2025							
Payment Contact Email:	fkruckemeyer@nueces-ra.org					the second s		
Certification: I certify that to the p	est of my knowledge and belief that the	billed cos	sts hereon are in accordance	e with the above ment	oned co	ntract(s) and all work perform	ed is in accordance with said co	ontract(s).
1605	AAI						4-15-27	
Signature and Title of Authoriz	ed Représentative			-			Date Signed	`
John Byrum, Executive Direct	or			-			830-278-6810	a - Constanting and the second se
Print or Type Name and Title of	of Representative Signing						Telephone Number	