

# ARANSAS COUNTY MULTI-JURISDICTIONAL FLOODPLAIN MANAGEMENT PLAN

2017

VOLUME II  
SUPPORT DOCUMENTS





# ARANSAS COUNTY MULTI-JURISDICTIONAL FLOODPLAIN MANAGEMENT PLAN

2017

## INCLUDES:

Aransas County, Texas  
City of Aransas Pass, Texas  
Town of Fulton, Texas  
City of Rockport, Texas



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## CHAPTER 1: MULTI-JURISDICTIONAL EXECUTIVE PLANNING COMMITTEE MEETING MATERIALS (Step 1.b)

AUGUST 1, 2016 AGENDA

NOTICE OF MEETING OF THE  
**STORM WATER MANAGEMENT ADVISORY COMMITTEE**  
ARANSAS COUNTY, TEXAS

Notice is hereby given that a meeting of the above named committee *UTCA Government Code, Section 551.001 (4)* will be held on the 1<sup>st</sup> day of August, 2016 at 1:30 p.m. At the Aransas County Service Center, 1931 FM 2165, Rockport, Texas, at which a quorum of County Commissioners may be present. The following subjects will be discussed, to-wit:

1. Open meeting & declare quorum - McLallen
2. Read and approve minutes from the July 7, 2016 Stormwater Management Advisory Committee meeting - McLallen
3. Discuss and possible action on NEI proposal for Aransas County drainage Improvements - Reid, NEI
4. Discuss and possible action on drainage issues in Palm Harbor and recommendations of a course of action - Reid
5. Discuss and possible action on the National Flood Insurance Program (NFIP) Community Rating System (CRS) and establishing a Program for Public Information (PPI) - McLallen
6. Staff Report - Reid
7. Adjourn

Dated this the 28<sup>th</sup> day of July, 2016.

By: 

David J. Reid, P.E.

I, the undersigned, county clerk, do hereby certify that the notice of the above named storm water management advisory committee, is a true and correct copy of said notice, and that I posted a true and correct copy of said notice on the bulletin board in the courthouse lobby of Aransas county, Texas on the \_\_\_\_ day of \_\_\_\_\_, 2016, and said notice remained so posted continuously for at least seventy-two (72) hours preceding the scheduled time of said meeting.

Dated this the \_\_\_\_ day of \_\_\_\_\_, 2016,

\_\_\_\_\_  
County Clerk, Aransas County, Texas

AUGUST 1, 2016 MINUTES

MINUTES OF THE ARANSAS COUNTY  
STORMWATER MANAGEMENT ADVISORY COMMITTEE  
August 1 2016

On the 1<sup>st</sup> day of August 2016, the Stormwater Advisory Committee met at 1:30 PM at the Aransas County Service Center at 1931 FM 2165, Rockport, Texas. The following members present: De McLallen, Pat McKelvey, Charlie Smith, Randy Hunter, Jimmy Kendrick, and Malcolm Dieckow. Also attending were Betty Stiles, Bubba Casterline, Craig Thompson, Brian Olsen, Jack Chaney, Harrilyn Tipton, Mario Perez, K. C. Kimbrough, Amanda Torres, Dana Sjoström and David Reid.

1. Meeting was opened at 1:30 pm and a quorum was declared by Mr. McLallen.
2. Mr. McKelvey made a motion that the minutes from July 7, 2016 meeting be approved. Commissioner Smith seconded the motion. The minutes were approved.
3. Mr. Reid referenced the NEI proposal for Drainage improvements Project Identification, Scoping and Cost estimating. Mr. McKelvey questioned how previously rated projects will be included in the new prioritization. Mr. McLallen provided prioritization criteria and project descriptions from the original CIP list. Mr. Thompson stated that he will use the same prioritization criteria as previously used. Commissioner Casterline suggested that the watershed that includes Linden Street should also be included. Commissioner Smith made a motion that the committee recommend that the Commissioners' Court accept NEI's proposal. Mayor Kendrick seconded the motion and the motion was approved.
4. Mr. Reid updated the committee on the Palm Harbor bulkhead adjacent to Gary Barnum Rd. Vernon Townsend has located an heir of the original developer and has had discussions regarding transferring ownership of the bulkhead parcel to the Property Owners Association. Mr. Reid presented a drainage study done in 2011 that recommended three projects that would help drainage in Palm Harbor and also help drainage on the west side of SH 35. He suggested that we ask NEI to submit a proposal for engineering services and preparation of construction documents. Mr. Kimbrough, a private citizen that lives on Bishop Road suggested that the County should buy property south of Palm Harbor for drainage improvements. This is one of the alternatives discussed in the drainage study. Mr. Thompson stated that he would review the study and meet with concerned citizens as part of engineering services. Mayor Kendrick made a motion that the committee recommends that the Commissioners Court accept a proposal from NEI for engineering services related to drainage improvements on Palm Harbor. Mr. Hunter seconded the motion and the motion was approved.
5. Mr. McLallen presented a document that summarized the FEMA Community Response System which offers the opportunity for entities to earn reductions in residents flood insurance premiums by establishing a Floodplain Management Committee and implementing various activities. Pursuant to a suggestion by Mayor Wax at the last SWMAC meeting Mr. McLallen proposed that the SWMAC be expanded to take on the joint role of both Stormwater management and Floodplain management consistent with the FEMA/ CRS program. Ms. Torres presented a long list of potential candidates for the expanded committee. Commissioner Smith opined that the SWMAC functions very well as a small committee and expanding the committee too much would be detrimental to productivity. He asked how many new members should be appointed to the committee. Ms. Torres was not sure of the exact number needed, but pointed out the expertise of members that FEMA suggested. Mr. McLallen suggested that expertise could be filled by technical committees that reported to the main committee. Mayor Kendrick thought the concept of using the SWMAC as part of the CRS was valid as did essentially all other SWMAC members, but wanted more information of the required make-up of the expanded committee. All members agreed the Committee needed to be kept to the minimum size to meet FEMA/CRS requirements. Ms. Torres will gather additional information and return to the next SWMAC meeting.

Meeting was adjourned at 2:46 PM



David J. Reid, P.E., CFM  
County Engineer


SEPTEMBER 12, 2016 AGENDA

NOTICE OF MEETING OF THE  
**STORM WATER MANAGEMENT ADVISORY COMMITTEE**  
ARANSAS COUNTY, TEXAS

Notice is hereby given that a meeting of the above named committee *UTCA Government Code, Section 551.001 (4)* will be held on the 12<sup>th</sup> day of September, 2016 at 1:30 p.m. At the Aransas County Service Center, 1931 FM 2165, Rockport, Texas, at which a quorum of County Commissioners may be present. The following subjects will be discussed, to-wit:

1. Open meeting & declare quorum - McLallen
2. Read and approve minutes from the August 1, 2016 Stormwater Management Advisory Committee meeting - McLallen
3. Update on Club Lake Watershed Easement acquisition - Reid
4. Update on Palm Harbor Drainage Improvements - Reid, NEI
5. Update on Aransas County Drainage Improvements prioritization plan - Reid, NEI
6. Discuss and possible action on the Aransas County Floodplain Management Plan - Amanda Torres
7. Staff Report - Reid
8. Adjourn

Dated this the 9<sup>th</sup> day of September, 2016.

By:   
David J. Reid, P.E.

I, the undersigned, county clerk, do hereby certify that the notice of the above named storm water management advisory committee, is a true and correct copy of said notice, and that I posted a true and correct copy of said notice on the bulletin board in the courthouse lobby of Aransas county, Texas on the \_\_\_\_ day of \_\_\_\_\_, 2016, and said notice remained so posted continuously for at least seventy-two (72) hours preceding the scheduled time of said meeting.

Dated this the \_\_\_\_ day of \_\_\_\_\_, 2016.

\_\_\_\_\_  
County Clerk, Aransas County, Texas

SEPTEMBER 12, 2016 MINUTES

MINUTES OF THE ARANSAS COUNTY  
STORMWATER MANAGEMENT ADVISORY COMMITTEE  
September 12, 2016

On the 12<sup>th</sup> day of September, 2016, the Stormwater Advisory Committee met at 1:30 PM at the Aransas County Service Center at 1931 FM 2165, Rockport, Texas. The following members present: De McLallen, Pat McKelvey, Charlie Smith, Randy Hunter, Jimmy Kendrick, and Malcolm Dieckow. Also attending were Betty Stiles, Linda Pechacek, Jack Chaney, K. C. Kimbrough, Amanda Torres, Dana Sjostrom, Karen Bareford, Jim Paxton and David Reid.

1. Meeting was opened at 1:30 pm and a quorum was declared by Mr. McLallen.
2. Mayor Wax made a motion that the minutes from August 1, 2016 meeting be approved. Mr. Dieckow seconded the motion. The minutes were approved.
3. Mr. Reid informed the committee that he had received the appraisal reports for the Club Lake watershed easements. The total "just compensation" for eight easements is \$96,622. Mr. Reid will begin contacting property owners.
4. Mr. Reid informed the committee that NEI was gathering survey data for Palm Harbor design work. Field work should be completed this week. Processing data will take a few weeks and then HEI will develop design alternatives. Commissioner Smith inquired as to the condition of the bulkhead adjacent to Gary Barnum Rd. Mr. Reid informed him that county crews have backfilled the washout. Commissioner Smith made the motion that the committee recommends to the Commissioners' Court that the County acquire a drainage easement through the bulkhead from the HOA and install drainage improvements, subject to the recommendation from NEI. Mr. McKelvey seconded the motion and the motion was approved.
5. Mr. Reid updated the committee on Drainage Improvement Prioritization. NEI is gathering data and will want to meet with some sub-committee of the SWMAC to rate projects. McLallen agreed to be included in the sub-committee.
6. Ms. Torres presented an overview of an Aransas County Floodplain Management Plan. The presentation explained the plan, with an emphasis on creating a county wide committee to administrate the plan. Mayor Wax suggested that the SWMAC could become the committee for the Floodplain Management Plan with a slight restructure of the members. Two additional members from the private sector were needed. Commissioners Smith suggested three new members, with the City of Rockport, the Town of Fulton and Aransas County each appointing a member. Commissioner Smith made the motion that the committee recommends to the Commissioners' Court that the County apply to become included in the Community Rating System and restructure the SWMAC to comply with FEMA requirements in the CRS. Mr. McKelvey seconded the motion and the motion was approved.

Meeting was adjourned at 2:42 PM



David J. Reid, P.E., CFM  
County Engineer

OCTOBER 3, 2016 AGENDA

NOTICE OF MEETING OF THE  
**STORMWATER & FLOODPLAIN MANAGEMENT ADVISORY COMMITTEE**  
ARANSAS COUNTY, TEXAS

Notice is hereby given that a meeting of the above named committee *UTCA Government Code, Section 551.001 (4)* will be held on the 3<sup>rd</sup> day of October, 2016 at 1:30 p.m. At the Aransas County Service Center, 1931 FM 2165, Rockport, Texas, at which a quorum of County Commissioners may be present. The following subjects will be discussed, to-wit:

1. Open meeting & declare quorum - McLallen
2. Read and approve minutes from the September 12, 2016 Stormwater Management Advisory Committee meeting - McLallen
3. Discuss and possible action on Aransas County Multi-Jurisdictional Floodplain Management Plan - Torres
4. Discuss and possible action on a request for proposals (RFP) from Gulf of Mexico Alliance for funding the Aransas County Community Rating System (CRS) - Bareford
5. Discuss and possible action on Beach Watch test results in Little Bay - Dieckow
6. Update on Club Lake Watershed Easement acquisition - Reid
7. Update on Palm Harbor Drainage Improvements - Reid, NEI
8. Staff Report - Reid
9. Adjourn

Dated this the 29<sup>th</sup> day of September, 2016.

By: 

David J. Reid, P.E.

I, the undersigned, county clerk, do hereby certify that the notice of the above named storm water management advisory committee, is a true and correct copy of said notice, and that I posted a true and correct copy of said notice on the bulletin board in the courthouse lobby of Aransas county, Texas on the \_\_\_\_ day of \_\_\_\_\_, 2016, and said notice remained so posted continuously for at least seventy-two (72) hours preceding the scheduled time of said meeting.

Dated this the \_\_\_\_ day of \_\_\_\_\_, 2016.

\_\_\_\_\_  
County Clerk, Aransas County, Texas

OCTOBER 3, 2016 MINUTES

MINUTES OF THE ARANSAS COUNTY  
STORMWATER MANAGEMENT ADVISORY COMMITTEE  
October, 2016

On the 3<sup>rd</sup> day of October, 2016, the Stormwater Advisory Committee met at 1:30 PM at the Aransas County Service Center at 1931 FM 2165, Rockport, Texas. The following members present: De McLallen, Pat McKelvey, Randy Hunter, Pat Rios, and Malcolm Dieckow. Also attending were Betty Stiles, Brian Olsen, Art Smith, Craig Thompson, Amanda Torres, Dana Sjoström, Karen Bareford, Diana Espinosa and David Reid.

1. Meeting was opened at 1:30 pm and a quorum was declared by Mr. McLallen.
2. Mr. McKelvey made a motion that the minutes from September 12, 2016 meeting be approved. Mr. Dieckow seconded the motion. The minutes were approved.
3. Mr. Reid informed the committee that Commissioners' Court approved a resolution to participate in the floodplain management plan and community rating system. Mr. McLallen added that the Rockport, Fulton and the County will appoint one new member each to comply with CRS guidelines. Ms. Torres presented a working draft of the Floodplain Management Plan and asked the committee to review and comment. Ms. Torres suggested that each entity should have their own technical group for CRS credits.
4. Ms. Bareford informed the committee that Gulf of Mexico Alliance has asked for proposals from coastal communities who wish to proactively address vulnerabilities to coastal hazards. Three communities in Texas will receive \$45,000 grant money. There is a 50% match, which can be paid with in-kind services. County staff hours qualifies for the match. Ms. Bareford stated that communities applying for the grant must have a Community Resiliency Index before submitting proposal. Ms. Bareford offered to help with the CRI and suggested late October. Mr. McKelvey made a motion that the committee recommend to Commissioners' Court that the County participate in a CRI and submit a proposal for the Gulf of Mexico Alliance grant. Mr. Dieckow seconded the motion and the motion was approved.
5. Mr. Dieckow presented results of water quality testing by Beach Watch, which indicated little Bay was trending in a negative direction. He suggested that the ACND would like to have a study conducted that would pinpoint the source of bacteria in Little Bay. After identifying the source, steps can be taken to solve the problem. Ms. Sjoström suggested that the problem is not from a single source, but it is important to understand the causes of the problem.
6. Mr. Reid informed the committee that the appraisals have been mailed to property owners in the Club Lake Watershed from which the county is seeking drainage easements. He assumed that it would be a few weeks before property owners respond.
7. Mr. Reid informed the committee that the Court authorized staff to acquire a drainage easement from the Palm Harbor Property Owners Association. He has sent a draft document to the POA and is waiting for comments. Mr. Thompson stated that NEI has collected the field data necessary and would begin looking at alternate designs and coordinate with citizens in the vicinity.

Meeting was adjourned at 2:30 PM



David J. Reid, P.E., CFM  
County Engineer

NOVEMBER 7, 2016 AGENDA

NOTICE OF MEETING OF THE  
**STORMWATER & FLOODPLAIN MANAGEMENT ADVISORY COMMITTEE**  
ARANSAS COUNTY, TEXAS

Notice is hereby given that a meeting of the above named committee *UTCA Government Code, Section 551.001 (4)* will be held on the 7<sup>th</sup> day of November, 2016 at 1:30 p.m. At the Aransas County Service Center, 1931 FM 2165, Rockport, Texas, at which a quorum of County Commissioners may be present. The following subjects will be discussed, to-wit:

1. Open meeting & declare quorum - McLallen
2. Read and approve minutes from the October 3, 2016 Stormwater Management Advisory Committee meeting - McLallen
3. Discuss and possible action on Aransas County Multi-Jurisdictional Floodplain Management Plan - Torres
4. Discuss and possible action on status and prioritization of Capital Improvement Program projects - Reid, NEI
5. Update on Poinciana Watershed drainage improvements - Reid
6. Update on Club Lake Watershed Easement acquisition - Reid
7. Update on Palm Harbor Drainage Improvements - Reid, NEI
8. Staff Report - Reid
9. Adjourn

Dated this the 3<sup>rd</sup> day of November, 2016.

By: 

David J. Reid, P.E.

I, the undersigned, county clerk, do hereby certify that the notice of the above named storm water management advisory committee, is a true and correct copy of said notice, and that I posted a true and correct copy of said notice on the bulletin board in the courthouse lobby of Aransas county, Texas on the \_\_\_\_ day of \_\_\_\_\_, 2016, and said notice remained so posted continuously for at least seventy-two (72) hours preceding the scheduled time of said meeting.

Dated this the \_\_\_\_ day of \_\_\_\_\_, 2016.

\_\_\_\_\_  
County Clerk, Aransas County, Texas

NOVEMBER 7, 2016 MINUTES

MINUTES OF THE ARANSAS COUNTY  
STORMWATER & FLOODPLAIN MANAGEMENT ADVISORY COMMITTEE  
November 7, 2016

On the 7<sup>th</sup> day of November, 2016, the Stormwater & Floodplain Management Advisory Committee met at 1:30 PM at the Aransas County Service Center at 1931 FM 2165, Rockport, Texas. The following members present: De McLallen, Pat McKelvey, Randy Hunter, C. J. Wax, Charles Smith, Russel Cole, K. C. Kimbrough, Randy Hunter, Jimmy Kendrick and Malcolm Dieckow. Also attending were Betty Stiles, Brian Olsen, Art Smith, Craig Thompson, Amanda Torres, Linda Pechacek, Kathrine Comeaux, Leslie Casterline, Karen Bareford, Diana Espinosa and David Reid.

1. Meeting was opened at 1:30 pm and a quorum was declared by Mr. McLallen.
2. Mr. McKelvey made a motion that the minutes from October 3, 2016 meeting be approved. Mr. Dieckow seconded the motion. The minutes were approved.
3. Ms. Bareford presented the latest draft of the Aransas County Floodplain Management Plan and asked if everyone had reviewed the document. Several members indicated that they had not received the draft. Ms. Bareford would email a pdf file of the latest draft. Commissioner Smith suggested that all the commissioners should be included in the email. The goal is to have a final draft by November 25 and have a public hearing in January. All comments on the draft should be emailed to Ms. Bareford.
4. Mr. Reid presented a spread sheet with three new potential projects that he would like to include in Capital Improvement Plan; Mundine, Southeast FM 1069 and Shaver Road. Mr. Reid stated that Linden Road watershed should also be prioritized, however the work could be accomplished with Road & Bridge funds. Commissioner Smith voiced concern that the CIP budget would be exhausted in early 2017. He suggested that staff revise the spreadsheet to more clearly illustrate the timeline of the depletion of the CIP budget and prioritize the work that should be completed with remaining funds. Commissioner Smith made a motion that the easement acquisitions cost be separated in the spreadsheet. Mr. Kendrick seconded the motion and the motion was approved.
5. Mr. Reid updated the committee on the status of the Poinciana project. The project is under construction and should be substantially complete after the first of the year.
6. Mr. Reid informed the committee that the Commissioners' Court approved one of the necessary drainage easements and that he had made tentative agreements with three other property owners. Those three easements will be on the next Commissioners' Court agreement.
7. Mr. Thompson informed the committee that survey data collection for Palm Harbor watershed was complete and NEI would begin analyzing hydrology and hydraulics next week.

Meeting was adjourned at 2:15 PM



David J. Reid, P.E., CFM  
County Engineer


DECEMBER 5, 2016 AGENDA

NOTICE OF MEETING OF THE  
**STORMWATER & FLOODPLAIN MANAGEMENT ADVISORY COMMITTEE**  
ARANSAS COUNTY, TEXAS

Notice is hereby given that a meeting of the above named committee *UTCA Government Code, Section 551.001 (4)* will be held on the 5<sup>th</sup> day of December, 2016 at 1:30 p.m. At the Aransas County Service Center, 1931 FM 2165, Rockport, Texas, at which a quorum of County Commissioners may be present. The following subjects will be discussed, to-wit:

1. Open meeting & declare quorum - McLallen
2. Read and approve minutes from the November 7, 2016 Stormwater Management Advisory Committee meeting - McLallen
3. Discuss and possible action on Aransas County Multi-Jurisdictional Floodplain Management Plan - Torres
4. Update on Palm Harbor Drainage Improvements - Reid, NEI
5. Discuss and possible action on status and prioritization of Capital Improvement Program projects - Reid, NEI
6. Staff Report - Reid
7. Adjourn

Dated this the 2<sup>nd</sup> day of December, 2016.

By:   
David J. Reid, P.E.

I, the undersigned, county clerk, do hereby certify that the notice of the above named storm water management advisory committee, is a true and correct copy of said notice, and that I posted a true and correct copy of said notice on the bulletin board in the courthouse lobby of Aransas county, Texas on the \_\_\_\_ day of \_\_\_\_\_, 2016, and said notice remained so posted continuously for at least seventy-two (72) hours preceding the scheduled time of said meeting.

Dated this the \_\_\_\_ day of \_\_\_\_\_, 2016.

\_\_\_\_\_  
County Clerk, Aransas County, Texas

DECEMBER 5, 2016 MINUTES

MINUTES OF THE ARANSAS COUNTY  
STORMWATER & FLOODPLAIN MANAGEMENT ADVISORY COMMITTEE  
December 5, 2016

On the 5<sup>th</sup> day of December, 2016, the Stormwater & Floodplain Management Advisory Committee met at 1:30 PM at the Aransas County Service Center at 1931 FM 2165, Rockport, Texas. The following members present: De McLallen, Pat McKelvey, Randy Hunter, C. J. Wax, Charles Smith, Russel Cole, Dudley McDaniel, Jimmy Kendrick and Malcolm Dieckow. Also attending were Betty Stiles, Brian Olsen, Art Smith, Craig Thompson, Amanda Torres, Kathrine Comeaux, Leslie Casterline, Dana Sjoström, Diana Espinosa and David Reid.

1. Meeting was opened at 1:30 pm and a quorum was declared by Mr. McLallen.
2. Mr. McKelvey made a motion that the minutes from November 7, 2016 meeting be approved. Mr. Dieckow seconded the motion. The minutes were approved.
3. Ms. Torres updated the committee on the latest draft of the Aransas County Floodplain Management Plan. Ms. Bareford is addressing comments and will continue to accept comments until January 31. Beginning in January, the second half of the plan will be drafted. We need another public meeting, which is tentatively scheduled for January 19. Ms. Espinosa continues to work on the grant proposal and will submit it this week. City of Rockport is also submitting on the grant.
4. Mr. Thompson presented his report on Palm Harbor. The report is limited to improvements in Palm Harbor and does not address needed improvements west of SH 35 Business. Mr. Thompson's recommendation for an outfall is Repair the bulkhead and install 3-30" RCP. He also suggests an additional outfall be constructed north of Palm Harbor. Mr. Smith, with the City of Rockport Public Works department, stated that the City has done preliminary engineering for an outfall north of Palm Harbor. Mr. McDaniel questioned whether an outfall through the bulkhead would cause a buildup of siltation in the canal. Mr. Reid stated that the County had considered that. But the severity of the drainage problems outweighed the potential silting problem. Mr. Thompson pointed out that there is already two 18" RCP through the bulkhead that could be conveying silt into the canal and increased pipes would not increase the amount of pollutants being discharged.
5. Mr. Reid presented a document titled *2011 Capital Improvement Program Analysis & Projections*. The document summarized the progress of each of the original CIP priority projects, including original budget, scope of project, work completed, cost to date and recommendations (if applicable). Nine of the projects are either complete, functionally complete or are active projects. Three projects are recommended to be deferred. Four additional projects (mid-priority projects) were identified as projects that should be considered. The available CIP fund should be sufficient to complete the active priority projects. Mr. Reid suggested that the maintenance fund be used to acquire easements for mid-priority projects identified, with construction undertaken when funds become available.

Meeting was adjourned at 2:30 PM



David J. Reid, P.E., CFM  
County Engineer


JANUARY 9, 2017 AGENDA

NOTICE OF MEETING OF THE  
**STORMWATER & FLOODPLAIN MANAGEMENT ADVISORY COMMITTEE**  
ARANSAS COUNTY, TEXAS

Notice is hereby given that a meeting of the above named committee *UTCA Government Code, Section 551.001 (4)* will be held on the 9<sup>th</sup> day of January, 2017 at 1:30 p.m. At the Aransas County Service Center, 1931 FM 2165, Rockport, Texas, at which a quorum of County Commissioners may be present. The following subjects will be discussed, to-wit:

1. Open meeting & declare quorum - McLallen
2. Read and approve minutes from the December 5, 2016 Stormwater Management Advisory Committee meeting - McLallen
3. Discuss and possible action on Aransas County Multi-Jurisdictional Floodplain Management Plan - Torres
4. Update on Palm Harbor Drainage Improvements - Reid, NEI
5. Update on CIP projects - Reid
6. Staff Report - Reid
7. Adjourn

**Dated this the 6<sup>th</sup> day of December, 2017.**

By:   
David J. Reid, P.E.

I, the undersigned, county clerk, do hereby certify that the notice of the above named storm water management advisory committee, is a true and correct copy of said notice, and that I posted a true and correct copy of said notice on the bulletin board in the courthouse lobby of Aransas county, Texas on the \_\_\_\_ day of \_\_\_\_\_, 2017, and said notice remained so posted continuously for at least seventy-two (72) hours preceding the scheduled time of said meeting.

Dated this the \_\_\_\_ day of \_\_\_\_\_, 2017,

\_\_\_\_\_  
County Clerk, Aransas County, Texas

JANUARY 9, 2017 MINUTES

MINUTES OF THE ARANSAS COUNTY  
STORMWATER & FLOODPLAIN MANAGEMENT ADVISORY COMMITTEE  
January 9, 2017

On the 9<sup>th</sup> day of January, 2017, the Stormwater & Floodplain Management Advisory Committee met at 1:30 PM at the Aransas County Service Center at 1931 FM 2165, Rockport, Texas. The following members present: De McLallen, Pat McKelvey, Randy Hunter, C. J. Wax, Brian Olsen, Russel Cole, Dudley McDaniel, K. C. Kimbrough and Malcolm Dieckow. Also attending were Betty Stiles, Craig Thompson, Amanda Torres, Karen Bareford, Leslie Casterline, Dana Sjostrom, Dave Pietruszynski, Diana Espinosa and David Reid.

1. Meeting was opened at 1:30 pm and a quorum was declared by Mr. McLallen.
2. Mr. McKelvey made a motion that the minutes from December 5, 2016 meeting be approved. Mayor Wax seconded the motion. The minutes were approved.
3. Dr. Bareford informed the committee that she is taking comments on the draft Floodplain Management Plan (FMP) until January 27. There will be a public workshop on Thursday, January 19 at Fulton Town Hall, 6:00 PM until 8:00 PM. Ms. Torres stated the plan proposes four overriding goals; 1) Protect existing resources through regulatory standards, 2) Protecting property through mitigation measures, 3) Create a coordinated flood preparedness and response strategy and 4) Create a coordinated infrastructure plan for all jurisdictions. Dr. Bareford presented a proposed Goals and Actions worksheet and asked that the committee members complete the worksheet and return to her at their earliest convenience, but no later than the public workshop. The worksheet will also be used at the workshop.
4. Mr. Thompson updated the committee on Palm Harbor: The hydrology and hydraulics was completed in December. Mr. Thompson met with Art Smith at the City to discuss the City's proposed drainage projects. The City has a proposed project to bring stormwater to SH-35 Business, but does not have an outfall to the bay. Mr. Thompson will continue discussions with County staff and interested property owners. He anticipates to complete his report by the next SWFMAC meeting and have recommendations to discuss.
5. Mr. Reid updated the committee on other CIP projects. Excavation continues in the bell property and efforts to acquire drainage easements for Club Lake watershed continues.

Meeting was adjourned at 2:10 PM



David J. Reid, P.E., CFM  
County Engineer


FEBRUARY 6, 2017 AGENDA

NOTICE OF MEETING OF THE  
**STORMWATER & FLOODPLAIN MANAGEMENT ADVISORY COMMITTEE**  
ARANSAS COUNTY, TEXAS

Notice is hereby given that a meeting of the above named committee *UTCA Government Code, Section 551.001 (4)* will be held on the 6<sup>th</sup> day of February, 2017 at 1:30 p.m. At the Aransas County Service Center, 1931 FM 2165, Rockport, Texas, at which a quorum of County Commissioners may be present. The following subjects will be discussed, to-wit:

1. Open meeting & declare quorum - McLallen
2. Read and approve minutes from the January 9, 2017 Stormwater Management Advisory Committee meeting - McLallen
3. Discuss and possible action on Aransas County Multi-Jurisdictional Floodplain Management Plan - Torres
4. Update on Palm Harbor Drainage Improvements - Reid, NEI
5. Update on CIP projects - Reid
6. Staff Report - Reid
7. Adjourn

Dated this the 3<sup>rd</sup> day of February, 2017,

By:   
David J. Reid, P.E.

I, the undersigned, county clerk, do hereby certify that the notice of the above named storm water management advisory committee, is a true and correct copy of said notice, and that I posted a true and correct copy of said notice on the bulletin board in the courthouse lobby of Aransas county, Texas on the \_\_\_\_ day of \_\_\_\_\_, 2017, and said notice remained so posted continuously for at least seventy-two (72) hours preceding the scheduled time of said meeting.

Dated this the \_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
County Clerk, Aransas County, Texas

FEBRUARY 6, 2017 MINUTES

MINUTES OF THE ARANSAS COUNTY  
STORMWATER & FLOODPLAIN MANAGEMENT ADVISORY COMMITTEE  
February 6, 2017

On the 6<sup>th</sup> day of February, 2017, the Stormwater & Floodplain Management Advisory Committee met at 1:30 PM at the Aransas County Service Center at 1931 FM 2165, Rockport, Texas. The following members present: De McLallen, Pat McKelvey, Randy Hunter, C. J. Wax, Brian Olsen, Russel Cole, Dudley McDaniel, Jimmy Kendrick and Malcolm Dieckow. Also attending were Betty Stiles, Craig Thompson, Karen Bareford, Leslie Casterline, Dana Sjostrom, Diana Espinosa and David Reid.

1. Meeting was opened at 1:30 pm and a quorum was declared by Mr. McLallen.
  2. Commissioner Olsen made a motion that the minutes from January 9, 2017 meeting be approved. Mr. McKelvey seconded the motion. The minutes were approved.
  3. Dr. Bareford presented a summary of ratings of proposed goals and actions of the Floodplain Management Plan (FMP) and recommendations to the SWFMAC. A discussion of the survey results followed. Dr. Bareford recommended the following goals of the FMP:
    - a. Protect existing resources through regulatory standards
    - b. Protect property through mitigation measures
    - c. Create a coordinated flood preparedness and response strategy
    - d. Create a coordinated infrastructure plan for all jurisdictions
- Mr. Hunter made a motion that the recommended goals be accepted. Mr. Dieckow seconded the motion. The motion was approved.
4. Mr. Thompson updated the committee on Palm Harbor: He has met with several property owners in the vicinity and will incorporate their knowledge into the final report. Mr. Reid suggested that we should begin the design of the first phase of Palm Harbor improvements. Mayor Kendrick made a motion to ask Naismith-Hanson to prepare a proposal for engineering design and construction documents of phase 1 of Palm Harbor drainage improvements. Mr. McKelvey seconded the motion. The motion was approved.
  5. Mr. Reid updated the committee on other CIP projects. Excavation continues in the bell property and efforts to acquire drainage easements for Club Lake watershed continues.

Meeting was adjourned at 2:20 PM



David J. Reid, P.E., CFM  
County Engineer

MARCH 5, 2017 AGENDA

NOTICE OF MEETING OF THE  
**STORMWATER & FLOODPLAIN MANAGEMENT ADVISORY COMMITTEE**  
ARANSAS COUNTY, TEXAS

Notice is hereby given that a meeting of the above named committee *UTCA Government Code, Section 551.001 (4)* will be held on the 6<sup>th</sup> day of March, 2017 at 1:30 p.m. At the Aransas County Service Center, 1931 FM 2165, Rockport, Texas, at which a quorum of County Commissioners may be present. The following subjects will be discussed, to-wit:

1. Open meeting & declare quorum - McLallen
2. Read and approve minutes from the February 6, 2017 Stormwater Management Advisory Committee meeting - McLallen
3. Discuss and possible action on Aransas County Multi-Jurisdictional Floodplain Management Plan - Torres
4. Update on Palm Harbor Drainage Improvements - Reid, NEI
5. Discuss and possible action on the acquisition of 3.5 acres of land located on N. Burton St. - Reid
6. Update on CIP projects - Reid
7. Staff Report - Reid
8. Adjourn

Dated this the 3<sup>rd</sup> day of March, 2017.

By: \_\_\_\_\_



David J. Reid, P.E.

I, the undersigned, county clerk, do hereby certify that the notice of the above named storm water management advisory committee, is a true and correct copy of said notice, and that I posted a true and correct copy of said notice on the bulletin board in the courthouse lobby of Aransas county, Texas on the \_\_\_\_ day of \_\_\_\_\_, 2017, and said notice remained so posted continuously for at least seventy-two (72) hours preceding the scheduled time of said meeting.

Dated this the \_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
County Clerk, Aransas County, Texas

MARCH 5, 2017 MINUTES

MINUTES OF THE ARANSAS COUNTY  
STORMWATER & FLOODPLAIN MANAGEMENT ADVISORY COMMITTEE  
March 6, 2017

On the 6<sup>th</sup> day of March, 2017, the Stormwater & Floodplain Management Advisory Committee met at 1:30 PM at the Aransas County Service Center at 1931 FM 2165, Rockport, Texas. The following members present: De McLallen, Pat McKelvey, Randy Hunter, C. J. Wax, Cole, Dudley McDaniel, and K. C. Kimbrough. Also attending were Betty Stiles, Craig Thompson, Leslie Casterline, Pat Rios, Al Johnson, Amanda Torres, Diana Espinosa and David Reid.

1. Meeting was opened at 1:30 pm and a quorum was declared by Mr. McLallen.
2. Mr. McKelvey made a motion that the minutes from February 6, 2017 meeting be approved. Mayor Wax seconded the motion. The minutes were approved.
3. Ms. Torres informed the committee that a draft of goals will be ready for discussion at the April SWFMAC meeting. The proposed goals are as follows:
  - a. Protect existing resources through regulatory standards
  - b. Protect property through mitigation measures
  - c. Create a coordinated flood preparedness and response strategy
  - d. Create a coordinated infrastructure plan for all jurisdictions
4. Mr. Thompson presented Pat 2 of the Palm Harbor Area Drainage Improvements report. The report identified several elements to alleviate drainage issues; upgrading driveway pipe, upgrading cross drain culverts and redesign of the outfall structure through the bulkhead. Mr. Thompson stated that the priority improvements should be replace the cross drainage structure at Gary Barnum and reconstruct the outfall in the bulkhead. The cost of the bulkhead improvements is estimated at \$450,000. Mr. Reid agreed with that assessment and asked the committee to recommend to the Commissioners' Court to accept a proposal from Hanson, Inc. for engineering services to design, prepare construction documents, and assist in bidding and construction administration related to bulkhead drainage improvements. The proposal is for \$47,500. Mr. Reid noted that R&B crews will upgrade the cross drainage structure at Gary Barnum. Mayor Wax made the motion and Mr. Kimbrough seconded it. The motion was approved.
5. Mr. Reid informed the committee that he was approached by Al Johnson who wanted to sell 3.5 acres on land along Burton Street right-of-way. The property is naturally low and could be used for stormwater detention. Mr. Thompson stated that he has reviewed the area and stormwater conveyance is an issue. A pond that could be used for storage would facilitate drainage. Mr. Hunter made the motion that the committee recommend to the Commissioners' Court to accept Mr. Johnson's price of \$35,000 for the 3.5 acres of land. Mr. McKelvey seconded the motion and the motion was approve.
6. Mr. Reid updated the committee on other CIP projects. He is getting bids on replacing the Bell's fence and should be able to finish the project in a couple of months. Efforts to acquire drainage easements for Club Lake watershed continues.

Meeting was adjourned at 2:12 PM



David J. Reid, P.E., CFM  
County Engineer


APRIL 3, 2017 AGENDA

NOTICE OF MEETING OF THE  
**STORMWATER & FLOODPLAIN MANAGEMENT ADVISORY COMMITTEE**  
ARANSAS COUNTY, TEXAS

Notice is hereby given that a meeting of the above named committee *UTCA Government Code, Section 551.001 (4)* will be held on the 3<sup>rd</sup> day of April 2017 at 1:30 p.m. At the Aransas County Service Center, 1931 FM 2165, Rockport, Texas, at which a quorum of County Commissioners may be present. The following subjects will be discussed, to-wit:

1. Open meeting & declare quorum - McLallen
2. Read and approve minutes from the March 6, 2017 Stormwater Management Advisory Committee meeting - McLallen
3. Discuss, and possible action on, the final draft of chapters 6-9 of the Floodplain Management Plan - Torres/Bareford
4. Discuss, and possible action on, Aransas County Multi-Jurisdictional Program for Public Information - Torres
5. Update on Aransas County Community Rating System program - Espinosa
6. Update on Palm Harbor Drainage Improvements - Reid, NEI
7. Discuss, and possible action on, a recommendation to Commissioners Court to apply for a Coastal Management Program (CMP) Grant for the acquisition of 47.148 acres of land described as Coleman Fulton Pasture, part of Lot 17, Lot 18, parts of Lots 19 and 24, and Lots 25 & 26.
8. Update on CIP projects - Reid
9. Staff Report - Reid
10. Adjourn

Dated this the 31<sup>st</sup> day of March, 2017.

By:   
David J. Reid, P.E.

I, the undersigned, county clerk, do hereby certify that the notice of the above named storm water management advisory committee, is a true and correct copy of said notice, and that I posted a true and correct copy of said notice on the bulletin board in the courthouse lobby of Aransas county, Texas on the \_\_\_\_ day of \_\_\_\_\_, 2017, and said notice remained so posted continuously for at least seventy-two (72) hours preceding the scheduled time of said meeting.

Dated this the \_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
County Clerk, Aransas County, Texas

APRIL 3, 2017 MINUTES

MINUTES OF THE ARANSAS COUNTY  
STORMWATER & FLOODPLAIN MANAGEMENT ADVISORY COMMITTEE

April 3, 2017

On the 3<sup>rd</sup> day of April, 2017, the Stormwater & Floodplain Management Advisory Committee met at 1:30 PM at the Aransas County Service Center at 1931 FM 2165, Rockport, Texas. The following members were present: De McLallen, Pat McKelvey, Russel Cole, C. J. Wax, Malcolm Dieckow, Dudley McDaniel, and K. C. Kimbrough. Also attending were Betty Stiles, Craig Thompson, Leslie Casterline, Karen Bareford, Greg Harlan, Art Smith, Amanda Torres, Diana Espinosa and David Reid.

1. Meeting was opened at 1:30 pm and a quorum was declared by Mr. McLallen.
2. Mr. McKelvey made a motion that the minutes from March 6, 2017 meeting be approved. Mayor Wax seconded the motion. The minutes were approved.
3. Dr. Bareford presented the draft of chapters 6 thru 9 of the Floodplain Management Plan and suggest chapter 7 details the goals and actions that various entities will agree to. The plan is a 5-year plan and will be reviewed and updated after 5 years. Mr. McKelvey expressed concern of how to measure progress and suggested the plan should include deliverables. Mayor Wax stated staff should work toward implementation of the plan and document progress. Mr. McDaniel questioned perceived inconsistency on page 2, which was explained. He also asked if other counties had similar programs that could be incorporated into the Aransas County Plan and asked for clarification of City of Aransas Pass and Town of Fulton intents regarding the plan. Dr. Bareford responded that Aransas pass and Fulton are interested, but have not yet made the commitment. The Committee agreed to work with staff to develop a list of deliverables and/or milestones for the various elements of the plan. Milestones will be used by the committee to monitor progress. Mr. McKelvey made a motion to accept chapters 6 thru 9 in concept, understanding that wording could change before the document is finalized. Mayor Wax seconded the motion. The motion was approved.
4. Ms. Torres presented a draft document entitled, "Developing a Program for Public Information". She asked the committee members to review and offer comments.
5. Ms. Espinosa updated the committee on the GOMA grant that was awarded to Aransas County. Funds from the grant will be used to hire a consultant to help the County enter the CRS program. Ms. Espinosa is developing a request for proposals (RFP).
6. Mr. Reid informed the committee that Commissioners' Court approved the Hanson Inc. contract for Palm Harbor construction documents. Mr. Thompson presented a work schedule and stated surveyors will begin gathering data next week.
7. Mr. Reid reminded the committee that acquisition of Gordon Stanley's property is included in the County's drainage plan and has been discussed in this committee. He suggested that a Costal Management Program (CMP) grant could help the County acquire the property with the County only paying the grant match of 25% of the asking price (\$250k). Mr. Cole suggested the asking price was too high, there was other property that would be more beneficial and that the County didn't need to take additional property off the tax roll. Commissioner Casterline opined that if developers wanted an off-site stormwater management facility then they should acquire the land and construct the facility there self. Mr. McLallen suggested the item be tabled. Mr. McKelvey made the motion, Mr. Cole seconded it and the item was tabled.
8. Mr. Reid updated the committee on other CIP projects. Construction on replacing the Bell's fence should begin next week. Commissioners' Court approved the Tellez easement.

Meeting was adjourned at 2:50 PM



David J. Reid, P.E., CFM  
County Engineer


MAY 1, 2017 AGENDA

NOTICE OF MEETING OF THE  
**STORMWATER & FLOODPLAIN MANAGEMENT ADVISORY COMMITTEE**  
ARANSAS COUNTY, TEXAS

Notice is hereby given that a meeting of the above named committee *UTCA Government Code, Section 551.001 (4)* will be held on the **1<sup>st</sup> day of May 2017** at **1:30 p.m.** At the Aransas County Service Center, 1931 FM 2165, Rockport, Texas, at which a quorum of County Commissioners may be present. The following subjects will be discussed, to-wit:

1. Open meeting & declare quorum - McLallen
2. Read and approve minutes from the April 3, 2017 Stormwater Management Advisory Committee meeting - McLallen
3. Discuss, and possible action on, the final draft of the Floodplain Management Plan - Torres/Bareford
4. Discuss, and possible action on, Aransas County Multi-Jurisdictional Program for Public Information - Torres
5. Update on Aransas County Community Rating System program - Espinosa
6. Update on Palm Harbor Drainage Improvements - Reid, NEI
7. Update on CIP projects - Reid
8. Staff Report - Reid
9. Adjourn

Dated this the 27<sup>th</sup> day of April, 2017.

By:   
David J. Reid, P.E.

I, the undersigned, county clerk, do hereby certify that the notice of the above named storm water management advisory committee, is a true and correct copy of said notice, and that I posted a true and correct copy of said notice on the bulletin board in the courthouse lobby of Aransas county, Texas on the \_\_\_\_ day of \_\_\_\_\_, 2017, and said notice remained so posted continuously for at least seventy-two (72) hours preceding the scheduled time of said meeting.

Dated this the \_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
County Clerk, Aransas County, Texas

MAY 1, 2017 MINUTES

MINUTES OF THE ARANSAS COUNTY  
STORMWATER & FLOODPLAIN MANAGEMENT ADVISORY COMMITTEE  
May 1, 2017

On the 1<sup>st</sup> day of May, 2017, the Stormwater & Floodplain Management Advisory Committee met at 1:30 PM at the Aransas County Service Center at 1931 FM 2165, Rockport, Texas. The following members were present: De McLallen, Russel Cole, C. J. Wax, Dudley McDaniel, Jimmy Kendrick, Brian Olsen and K. C. Kimbrough. Also attending were Roger Horan, Betty Stiles, Craig Thompson, Karen Bareford, Vicki Pitluk, Amanda Torres, Diana Espinosa and David Reid.

1. Meeting was opened at 1:30 pm and a quorum was declared by Mr. McLallen.
2. Kendrick Wax seconded the motion. The minutes were approved.
3. Ms. Torres handed out a worksheet titled Aransas County Multi-Jurisdictional Program for Public Information and asked committee members to complete the worksheet and return to her before the June SWFMAC meeting.
4. Mr. Thompson updated the committee on the Palm Harbor project. The survey is complete, structural engineers have taken measurements, geotech would be on site next week. Hanson has submitted for a nationwide permit, expect three months for approval. Mr. Thompson intends to have construction plans ready for the next meeting. Mr. Horan asked if the structure would be a pipe or a box and asked about the timeline to complete construction. Mr. Thompson stated that structure type has not been determined and he expects construction to be completed by the end of the year.
5. Dr. Bareford presented the final draft of the Aransas County Multi-Jurisdictional Floodplain Management Plan. A public meeting is scheduled for May 25 at 6:00 PM in the Rockport Service Center. Dr. Bareford encouraged all committee members to attend. She will receive comments until June 9 and anticipates a final acceptance in July.
6. Ms. Espinosa informed the committee that no progress was made on the GOMA grant that was awarded to Aransas County. She anticipates having a final RFP by the June meeting.
7. Mr. Reid updated the committee on other CIP projects. Construction on replacing the Bell's fence is ongoing and should be complete in a couple of weeks. The Tellez easement has been signed and recorded. Mr. Reid has had conversations with two other property owners and negotiations continue.

Meeting was adjourned at 1:55 PM



David J. Reid, P.E., CFM  
County Engineer

JUNE 5, 2017 AGENDA

NOTICE OF MEETING OF THE  
**STORMWATER & FLOODPLAIN MANAGEMENT ADVISORY COMMITTEE**  
ARANSAS COUNTY, TEXAS

Notice is hereby given that a meeting of the above named committee *UTCA Government Code, Section 551.001 (4)* will be held on the **5<sup>th</sup> day of June 2017** at **1:30 p.m.** At the Aransas County Service Center, 1931 FM 2165, Rockport, Texas, at which a quorum of County Commissioners may be present. The following subjects will be discussed, to-wit:

1. Open meeting & declare quorum - McLallen
2. Read and approve minutes from the May 1, 2017 Stormwater Management Advisory Committee meeting - McLallen
3. Discuss, and possible action on, the final draft of the Floodplain Management Plan - Torres/Bareford
4. Discuss, and possible action on, Aransas County Multi-Jurisdictional Program for Public Information - Torres
5. Update on Aransas County Community Rating System program - Espinosa
6. Update on Palm Harbor Drainage Improvements - Reid, NEI
7. Update on CIP projects - Reid
8. Staff Report - Reid
9. Adjourn

Dated this the 2<sup>nd</sup> day of June, 2017.

By: 

David J. Reid, P.E.

I, the undersigned, county clerk, do hereby certify that the notice of the above named storm water management advisory committee, is a true and correct copy of said notice, and that I posted a true and correct copy of said notice on the bulletin board in the courthouse lobby of Aransas county, Texas on the \_\_\_\_ day of \_\_\_\_\_, 2017, and said notice remained so posted continuously for at least seventy-two (72) hours preceding the scheduled time of said meeting.

Dated this the \_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
County Clerk, Aransas County, Texas

JUNE 5, 2017 MINUTES

*Replace this text with the Minutes from the June 5, 2017 meeting (black boarder, ¾ pt, sized 8.28 high by 6.4 wide)*

JULY 10, 2017 AGENDA

*Replace this text with the Agenda from the July 2017 meeting (black boarder, ¾ pt, sized 8.28 high by 6.4 wide)*

JULY 10, 2017 MINUTES

*Replace this text with the Minutes from the July 2017 meeting (black boarder, ¾ pt, sized 8.28 high by 6.4 wide)*

## CHAPTER 2: LIST OF SUB-COMMITTEE MEETINGS

List of all Local Jurisdictional Meetings, Including Commissioners Court and Sub-committees.

<b>Date</b>	<b>Entity</b>	<b>Topic</b>
September 26, 2016	Aransas County Commissioners Court	Resolution
October 3, 2016	Aransas Pass City Council	Resolution
October 18, 2016	Fulton Town Council	Resolution
October 25, 2016	Rockport City Council	Resolution
November 1, 2016	Fulton Town Council	Step 4 Update
November 14, 2016	City of Aransas Pass Planning & Zoning Commission	Step 4 Update
November 14, 2016	City of Rockport Planning & Zoning Commission	Step 4 Update
November 15, 2016	Fulton Town Council	Step 5 Update
November 28, 2016	Aransas County Commissioners Court	Step 4 Update
January 9, 2017	Aransas County Commissioners Court	Step 5 Update
January 9, 2017	City of Aransas Pass Planning & Zoning Commission	Step 5 Update
January 16, 2017	City of Rockport Planning & Zoning Commission	Step 5 Update
January 17, 2017	Fulton Town Council	Step 6 Update
February 20, 2017	City of Rockport Planning & Zoning Commission	Step 6 Update
March 7, 2017	Fulton Town Council	Step 7 Update
March 13, 2017	Aransas County Commissioners Court	Step 6 Update
March 13, 2017	City of Aransas Pass Planning & Zoning Commission	Step 6 Update
April 4, 2017	Fulton Town Council	Step 8 Update
April 10, 2017	Aransas County Commissioners Court	Step 7 Update
April 10, 2017	City of Aransas Pass Planning & Zoning Commission	Step 7 Update
May 8, 2017	City of Aransas Pass Planning & Zoning Commission	Draft Plan Release
May 15, 2017	City of Rockport Planning & Zoning Commission	Draft Plan Release
May 16, 2017	Fulton Town Council	Draft Plan Release
June 6, 2017	Fulton Town Council	Final Update
June 12, 2017	City of Aransas Pass Planning & Zoning Commission	Final Update

**CHAPTER 3: RESOLUTIONS FORMALIZING EACH JURISDICTION'S  
COMMITMENT TO THE FLOODPLAIN MANAGEMENT PLANNING PROCESS**  
(Step 1.c)

ARANSAS COUNTY RESOLUTION



THE STATE OF TEXAS     §  
                                      §  
COUNTY OF ARANSAS   §

COMMISSIONERS COURT

**RESOLUTION # R-21-2016**

**A RESOLUTION OF SUPPORT FOR PARTICIPATION IN THE FLOODPLAIN MANAGEMENT PLAN AND  
COMMUNITY RATING SYSTEM AND RECOGNITION OF THE FLOODPLAIN MANAGEMENT  
PLANNING COMMITTEE**

**WHEREAS,** the National Flood Insurance Program (NFIP) provides federally supported flood insurance to communities that regulate development in their floodplains, and the Community Rating System (CRS) reduces flood insurance premiums in those communities that do more than implement the minimum regulatory requirements; and,

**WHEREAS,** by being a full participant in the development of the Aransas County Multi-Jurisdictional Floodplain Management Plan, to include the City of Rockport, the City of Aransas Pass, the Town of Fulton, and Aransas County, Aransas County will be eligible to receive credit for Activity 510 of the Community Rating System, which would contribute to lowering flood insurance premiums in the COUNTY, if and when they are admitted into the Community Rating System program; and,

**WHEREAS,** Aransas County recognizes that in order to receive credit for the Floodplain Management Plan under the Community Rating System, a formal planning committee will need to be established, and

**WHEREAS,** The Stormwater Management Advisory Committee, which is a functioning committee whose members represent Aransas County, City of Rockport, Town of Fulton, City of Aransas Pass and Aransas County Navigation District, as well as private citizen members, and whose mission is to advise the County on policy decisions related to stormwater issues.

**NOW, THEREFORE, BE IT RESOLVED THAT BY THE COMMISSIONERS' COURT OF ARANSAS COUNTY, TEXAS:**

A. **THAT** Aransas County shall authorize the re-structuring of the Stormwater Management Advisory Committee to, in addition to its current mission, serve as the planning committee for the Aransas County Multi-Jurisdictional Floodplain Management Plan. Delegates to the Aransas County Multi-Jurisdictional Executive Planning Committee are as follows:

1. De McLallen – Public Representative
2. Charles Smith – Commissioner, Aransas County
3. Charles J. Wax – Mayor, City of Rockport
4. Jimmy Kendrick – Mayor, Town of Fulton
5. Randy Hunter – Representing City of Aransas Pass

6. Malcom Dieckow – Chairman, Aransas County Navigation District
7. Patrick McKelvey – Public Representative
8. David Reid – Road & Bridge Engineer, Aransas County

Three additional Public Representative Delegates shall be appointed, one each by Aransas County, City of Rockport and Town of Fulton.

B. **THAT** Aransas County, will adhere to the following criteria:

1. Aransas County will use its best efforts to participate in the Aransas County Multi-Jurisdictional Floodplain Management Plan in an effort to reduce flood risk and flood insurance premiums throughout the County.
2. Aransas County will designate two governmental members to represent the County on the Multi-Jurisdictional Executive Planning Committee, as well as one representative from the public.
3. Aransas County, pursuant to specific recommendations from the Floodplain and Storm Water Management Committee, will form a Planning Sub-Committee consistent with the requirements of the FEMA CRS. Membership of said sub-committee shall consist of public members and county staff from departments that implement or have expertise in the following areas:
  - Preventive measures
  - Property protection
  - Natural resource protection
  - Emergency services
  - Structural flood control projects
  - Public information
4. Aransas County's Floodplain Management office will be responsible for overseeing the development of the plan, to be completed no later than January 1, 2018.

C. This resolution will be effective upon passage.

Passed and approved on the 26<sup>th</sup> day of September 2016.

COMMISSIONERS' COURT OF ARANSAS COUNTY

  
C.H. "Burt" Mills, County Judge

ATTEST:

  
Valerie K. Amason



ARANSAS PASS RESOLUTION

**RESOLUTION NO. 2016-790**

**A RESOLUTION OF SUPPORT AND PARTICIPATION IN THE FLOODPLAIN  
MANAGEMENT PLAN AND RECOGNITION OF THE FLOODPLAIN MANAGEMENT  
PLANNING COMMITTEE**

- WHEREAS,** the National Flood Insurance Program (NFIP) provides federally supported flood insurance to communities that regulate development in their floodplains, and the Community Rating System (CRS) reduces flood insurance premiums in those communities that do more than implement the minimum regulatory requirements; and,
- WHEREAS,** by being a full participant in the development of the Aransas County Multi-Jurisdictional Floodplain Management Plan, to include the City of Rockport, the City of Aransas Pass, the Town of Fulton, and Aransas County, the City of Aransas Pass will be eligible to receive credit for Activity 510 of the Community Rating System, which would contribute to lowering flood insurance premiums in the City, if and when they are admitted into the Community Rating System program; and,
- WHEREAS,** the City of Aransas Pass recognizes that in order to receive credit for the Floodplain Management Plan under the Community Rating System, a formal planning committee will need to be established.

**NOW, THEREFORE, BE IT RESOLVED THAT BY THE CITY COUNCIL OF THE CITY OF  
ARANSAS PASS, ARANSAS COUNTY, TEXAS:**

**A. THAT** The City of Aransas Pass, will adhere to the following criteria:

1. The City of Aransas Pass will use its best efforts to participate in the Aransas County Multi-Jurisdictional Floodplain Management Plan in an effort to reduce flood risk and flood insurance premiums throughout the City.
2. The City of Aransas Pass will designate two governmental members to represent the City on the Multi-Jurisdictional Executive Planning Committee, as well as one representative from the public. Its members shall be:
  - Fernando Quintanilla, Director of Public Works
  - Katherine Comeaux, City Planner
  - Randy Hunter (Public Representative)
3. The City of Aransas Pass will form a 14 member Planning Sub-Committee. Nine of these members will be from the public, with an additional five members from City staff. Its members shall be:
  - Katherine Comeaux, City Planner - Chair
  - Randall Freeze, Public Representative – Vice-Chair

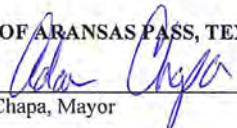
- Dale Wells, Building Official
- Fernando Quintanilla, Public Works Director
- Lynn Pearce, Emergency Management Coordinator
- Sylvia Carrillo, City Manager
- Richard (Sandy) Kubek, Public Representative
- Lisa Barker, Public Representative
- Elizabeth Dorris, Public Representative
- Pat Fenton, Public Representative
- Shirley Gallagher, Public Representative
- Carol Salinas, Public Representative
- Kathleen Sweatt, Public Representative
- Cynthia Vasquez, Public Representative

4. The City of Aransas Pass' Development Services office will be responsible for overseeing the development of the plan, to be completed no later than January 1, 2018.

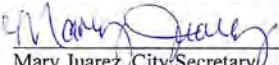
B. This resolution will be effective upon passage.

Passed and approved on the 3 day of October, 2016.

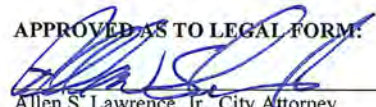
**CITY OF ARANSAS PASS, TEXAS**

  
\_\_\_\_\_  
Adan Chapa, Mayor

**ATTEST:**

  
\_\_\_\_\_  
Mary Juarez, City Secretary

**APPROVED AS TO LEGAL FORM:**

  
\_\_\_\_\_  
Allen S. Lawrence, Jr., City Attorney

FULTON RESOLUTION

**RESOLUTION NO. 101816**

**A RESOLUTION OF SUPPORT AND PARTICIPATION IN THE FLOODPLAIN  
MANAGEMENT PLAN AND RECOGNITION OF THE FLOODPLAIN MANAGEMENT  
PLANNING COMMITTEE**

**WHEREAS,** the National Flood Insurance Program (NFIP) provides federally supported flood insurance to communities that regulate development in their floodplains, and the Community Rating System (CRS) reduces flood insurance premiums in those communities that do more than implement the minimum regulatory requirements; and,

**WHEREAS,** by being a full participant in the development of the Aransas County Multi-Jurisdictional Floodplain Management Plan, to include the City of Rockport, the City of Aransas Pass, the Town of Fulton, and Aransas County, the Town of Fulton will be eligible to receive credit for Activity 510 of the Community Rating System, which would contribute to lowering flood insurance premiums in the City, if and when they are admitted into the Community Rating System program; and,

**WHEREAS,** the Town of Fulton recognizes that in order to receive credit for the Floodplain Management Plan under the Community Rating System, a formal planning committee will need to be established.

**NOW, THEREFORE, BE IT RESOLVED THAT BY THE TOWN COUNCIL OF THE TOWN OF FULTON, ARANSAS COUNTY, TEXAS:**

**A. THAT** The Town of Fulton, will adhere to the following criteria:

1. The Town of Fulton will use its best efforts to participate in the Aransas County Multi-Jurisdictional Floodplain Management Plan in an effort to reduce flood risk and flood insurance premiums throughout the Town.
2. The Town of Fulton will designate two governmental members to represent the Town on the Multi-Jurisdictional Executive Planning Committee, as well as one representative from the public. Its members shall be:
  - Mayor Jimmy Kendrick
  - Matt Olenick, FPM
  - Russel Cole, Citizen
3. The Town of Fulton will form a 14-member Planning Sub-Committee. Nine of these members will be from city staff, with an additional five members from the public. Its members shall be:
  - Chair, Rick McLester
  - Vice-Chair, Bob Loflin
  - Jan Hill

- Staff - Matt Olenick
- Staff - Fayenell Harrell
- Staff - Tim Brown
- Staff - Les Cole
- Staff - Larry Pahmiyer
- Staff - Carol Thompson
- Public Representative – Russel Cole
- Public Representative - Rickey McLester
- Public Representative – Jackie Mundine
- Public Representative – Larry Pearce
- Public Representative – Donna Townsend

4. The Town of Fulton's Floodplain Management office will be responsible for overseeing the development of the plan, to be completed no later than January 1, 2018.

B. This resolution will be effective upon passage.

Passed and approved on the 18th day of October, 2016.

**TOWN OF FULTON, TEXAS**

  
\_\_\_\_\_  
Jimmy Kendrick, Mayor

**ATTEST:**

  
\_\_\_\_\_  
Jan Hill, City Secretary

ROCKPORT RESOLUTION

**RESOLUTION NO. 2016-17**

**A RESOLUTION OF SUPPORT AND PARTICIPATION IN THE FLOODPLAIN  
MANAGEMENT PLAN AND RECOGNITION OF THE FLOODPLAIN MANAGEMENT  
PLANNING COMMITTEE**

**WHEREAS,** the National Flood Insurance Program (NFIP) provides federally supported flood insurance to communities that regulate development in their floodplains, and the Community Rating System (CRS) reduces flood insurance premiums in those communities that do more than implement the minimum regulatory requirements; and,

**WHEREAS,** by being a full participant in the development of the Aransas County Multi-Jurisdictional Floodplain Management Plan, to include the City of Rockport, the City of Aransas Pass, the Town of Fulton, and Aransas County, the City of Rockport will be eligible to receive credit for Activity 510 of the Community Rating System, which would contribute to lowering flood insurance premiums in the City, if and when they are admitted into the Community Rating System program; and,

**WHEREAS,** the City of Rockport recognizes that in order to receive credit for the Floodplain Management Plan under the Community Rating System, a formal planning committee will need to be established.

**NOW, THEREFORE, BE IT RESOLVED THAT BY THE CITY COUNCIL OF THE CITY OF  
ROCKPORT, ARANSAS COUNTY, TEXAS:**

**A. THAT** The City of Rockport, will adhere to the following criteria:

1. The City of Rockport will use its best efforts to participate in the Aransas County Multi-Jurisdictional Floodplain Management Plan in an effort to reduce flood risk and flood insurance premiums throughout the City.
2. The City of Rockport will designate two governmental members to represent the City on the Multi-Jurisdictional Executive Planning Committee, as well as one representative from the public. Its members shall be:
  - Mayor C.J. Wax
  - Amanda Torres, Community Planner
  - Dudley McDaniel (Public Representative)
3. The City of Rockport will form a 13 member Planning Sub-Committee. Six of these members will be from city staff, with an additional seven members from the public. Its members shall be:
  - Amanda Torres, chair, Community Planner
  - Brian Olsen, vice-chair, Public Representative
  - Mike Donoho, Director of Public Works & Building Development

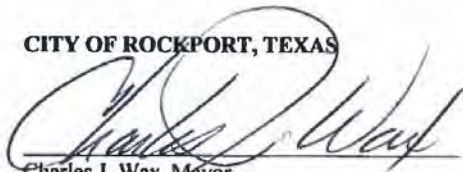
- Art Smith, Assistant Public Works Director
- Frank Truitt, Building Official
- Mary Bellinger, Assistant to Building Director
- Kevin Carruth, City Manager
- Ruth Davis, Public Representative
- Diana Severino-Saxon, Public Representative
- Edward Bellion, Public Representative
- Kent Howard, Public Representative
- Graham Wilson, Public Representative
- Shawn Johnson, Public Representative

4. The City of Rockport's Community Planning office will be responsible for overseeing the development of the plan, to be completed no later than January 1, 2018.

B. This resolution will be effective upon passage.

Passed and approved on the 25<sup>th</sup> day of October 2016.

**CITY OF ROCKPORT, TEXAS**

  
Charles J. Wax, Mayor



**ATTEST:**

  
Teresa Valdez, City Secretary

## CHAPTER 4: ARANSAS COUNTY MULTI-JURISDICTIONAL FLOODPLAIN MANAGEMENT PLAN PUBLIC WORKSHOPS MATERIALS (Step 2.B, C, & D)


OCTOBER 27, 2016 PUBLIC WORKSHOP MATERIALS

October 27, 2016 Public Workshop Flyer

# We want your input!

Workshop Objectives:


1. Review the purpose of, and process for, preparing a Floodplain Management Plan
2. Provide brief summaries of the work completed for the Plan (includes: community outreach, committee efforts, flood hazard profiles, and other data collected)
3. Solicit input regarding the data collected and other needs









## Join us for a workshop to outline Aransas County's Floodplain Management Plan

Location: Aransas Pass City Hall  
600 W Cleveland Blvd  
Aransas Pass, TX

October 27, 2016  
6:00pm – 8:00pm





October 27, 2016 Public Workshop Agenda

**Aransas County  
Floodplain Management Plan Development Process  
Planning Kickoff Workshop**

October 27, 2016, 6:00 pm  
Aransas Pass City Hall, 600 W. Cleveland, Aransas Pass, Texas

**Objectives**

1. Review the purpose of, and process for, preparing a Floodplain Management Plan
2. Provide brief summaries of the work completed for the Plan
3. Solicit input regarding the data collected, and other needs.

**Workshop Agenda**

Time	Activity
6:00	Official Welcome <i>Amanda Torres, Community Planner, City of Rockport</i>
6:05	Introduction to Floodplain Management Plan <ul style="list-style-type: none"> <li>Why are we developing a Floodplain Management Plan?</li> <li>How does this benefit your community?</li> </ul> <i>Race Hodges, Resiliency Program Coordinator, Texas Coastal Watershed Program</i>
6:15	Overview of County Plan <ul style="list-style-type: none"> <li>Review of community outreach and committee efforts</li> <li>Review of flood hazard profiles and other data collected</li> </ul> <i>Karen Bareford, Coastal Planning Specialist, Texas Sea Grant</i>
6:30	Public Comments and Stakeholder Feedback <ul style="list-style-type: none"> <li>Rotate between kiosks</li> </ul> <i>Dana Sjostrom, Coastal Training Program Coordinator, Mission: Aransas Reserve</i>
7:20	Feedback from Kiosks: Short summary of kiosk discussions <i>Project Staff</i>
7:30	Public Comment Period <ul style="list-style-type: none"> <li>Those that signed the "speakers list" are given three minutes to make public comments. Note: You must provide comments in writing for inclusion in the written meeting summary.</li> </ul> <i>Dana Sjostrom</i>
7:45	Next Steps in Planning Process and Thank You <i>Amanda Torres Race Hodges</i>
8:00	Adjourn

For more information or to submit a public comment, please contact Amanda Torres, City of Rockport Community Planner, by phone at (361) 790-1125, ext. 116 or by email at [communityplanner@cityofrockport.com](mailto:communityplanner@cityofrockport.com). Public Comments can be submitted until November 15, 2016.

## October 27, 2016 Public Workshop Notes

### ARANSAS COUNTY FLOODPLAIN MANAGEMENT PLANNING KICK OFF WORKSHOP NOTES

Aransas Pass City Hall

October 27, 2016

6:00 pm – 8:00 pm

#### ATTENDEES:

Dave Pietruszynski, Mission-Aransas Reserve  
Maxine Bowen, City of Aransas Pass  
JD Villa, City of Rockport  
Patrick Rios, City of Rockport  
John Metz, NWS Corpus Christi  
Randy Hunter, Aransas County Stormwater  
Mgmt. Advisory Committee  
Rusty Day, City of Rockport  
Matt Olenick, Town of Fulton  
Annita West, Progress/Index  
Cammie Hyatt, City of Aransas Pass &  
Mission-Aransas Reserve

Greg Harlan, The Grant Connection  
Fernando Quintanilla, City of Aransas Pass  
Sylvia Carrillo, City of Aransas Pass  
Philip Hyatt, City of Aransas Pass  
Vickie Abrego, City of Aransas Pass  
Katherine Comeaux, City of Aransas Pass  
Rudy Abrego, City of Aransas Pass  
Kimber Clark, Aransas County Independent  
School District  
Lynn Pearce, Aransas Pass Police Department

#### STAFF:

Karen Bareford, Texas Sea Grant  
Katherine Comeaux, Aransas Pass  
Kate De Gennaro, Texas A&M/Texas Sea Grant  
Diana Espinosa, Aransas County  
Race Hodges, Texas Coastal Watershed Program  
Dana Sjostrom, Mission-Aransas Reserve  
Art Smith, City of Rockport  
Amanda Torres, City of Rockport

#### PRESENTATIONS:

The meeting started with the following two presentations:

1. Race Hodges spoke about Floodplain Management Plans, and the benefits of creating this type of plan.
2. Karen Bareford provided a short overview of the process, including what to expect in upcoming months, and the contents of the first five chapters of the draft plan.

#### GROUP DISCUSSIONS:

The majority of the meeting consisted of groups visiting five stations designed to spur discussion and collect information about the types of impacts individuals have seen, and might anticipate, from a flooding event in Aransas County. These stations included the following topics: Life and Safety, Public Health, Critical Facilities and Infrastructure, Economy and Tax Base, and Areas prone to flooding; but not in the Floodplain. Summaries of the data received are included below.

#### **Life and Safety** (Table facilitated by Dana Sjostrom)

##### What areas along transportation corridors and evacuation routes flood easily?

- Aransas Pass: Commercial Street and Wheeler (both of these streets leading out of the city)

- 1069 where it meets 35
- Bypass: there use to be a slough there that has been removed; so flooding now occurs more often
- Business 35
- 181 near Portland; raised but it still floods easily
- Bridge after Sinton: the bridge was raised so it's less of an issue now
- 188: portions underwater with 1' rise in water levels
- \*188 is a recommended route considering all the options
- Right before overpass at Gregory— underwater easily
- 361 a concern as well
- The Aransas Pass curve

What methods are used locally to communicate warnings and the need to evacuate?

- STEER (State of Texas Emergency Assistance Registry) is a program that registers individuals who need assistance evacuating. After entering the program assistance will be sent to the identified address to assist the household should evacuation orders be given. The individual, or other concerned citizens, can register their needs by calling 211. (Katherine Comeaux is the data custodian for Aransas Pass and can also be contacted to register needs.)
- Weather alert radios
  - Lights and non-auditory signals also included
- Email list
- Code Red (previously known as “Reverse 911”) is a national system that allows people to sign up to receive warnings and alerts in the case of natural disasters, emergencies, and accidents. The system allows local Police Departments to deliver texts, emails, phone recordings, and/or social media alerts to rapidly inform citizens about issues of public concern.
- Social Media
- HAMM radios
  - Resident locally spearheading that movement
  - HAMM-fest and other interested residents as well
- Electronic billboard in Corpus
- Public access channels
- Multi-city efforts are needed here!
- During Rita, the police drove around using PA systems to inform people
- A loud speaker is used in Fulton to inform people
- “Storm Ready Community” designation through the National Weather Services (provides CRS Points, too!)
- Repeaters on Police Department station were also discussed; however, further discussion with the County Emergency Operations Manager indicate that this is not a reliable system for communicating workings.

Questions Raised:

- How to reach home bound residents?
  - Magnets on city cars

- Home health care folks
  - Utility bill mailers
  - Visual cues, not just auditory
  - Talk to text with light – special phones that many already have
- Does a county-wide email list exist?
- Could some kind of text message (like an amber alert) be used?
- Serious weather alerts go out through all carriers – FEMA sends to cell phone companies

**Public Health** (Table facilitated by Diana Espinosa & Katherine Comeaux)

What are the potential effects of a flood event?

- Mold and mildew are created when unable to properly dry homes, which then affects the people residing there.
- Flood waters collect Bacteria as it passes over roads, through homes, and when septic and sewer systems backflow
- Floods can result in drownings (regardless of a person's ability to swim)
- Fallen wires can result in electrocutions, especially if the wire is in a body of water or puddle
- Boil Bans, if put into effect, will help to ensure water is safe for consumption
- Wildlife
  - Standing water will draw Mosquitoes
  - Floodwaters will leave dead animal carcasses behind
- Infiltration of contaminants into shallow wells
- Septic systems could backflow
- Possible sources of pollution (caused by the storm)
  - Oil Spills from overturned boats, vehicles, etc.
  - Debris blown from buildings and trees
- May have an increased need for access to medical attention and immunizations (e.g. due to cuts from rusted metals, cold, and flu)
- Some systems may be clogged with debris
- Pets may be left behind

How can we prevent/improve/fix these effects?

- Tighter inspections (shallow wells, homes, septic systems) not just in Aransas County, but surrounding counties as well
- After an oil spill, we will have equipment to clean up (booms and absorbent pads)
- Educate about FEMA map elevations
- STEER (State of Texas Emergency Assistance Registry) is a program that registers individuals who need assistance evacuating. After entering the program assistance will be sent to the identified address to assist the household should evacuation orders be given. The individual, or other concerned citizens, can register their needs by calling 211. (Katherine Comeaux is the data custodian for Aransas Pass and can also be contacted to register needs.)
- Code Red (previously known as "Reverse 911") is a national system that allows people to sign up to receive warnings and alerts in the case of natural disasters, emergencies, and accidents. The system allows local Police Departments to deliver texts, emails, phone

recordings, and/or social media alerts to rapidly inform citizens about issues of public concern.

- Immunizations

Other things to consider:

- Natural gas will not be cut off; therefore people and homes should still be supplied
- Fuel tanks on Business 35
- Structure elevations
- Public Notices
- Communication
- Access to medical attention: some people were concerned that people with illnesses or disabilities will need to be checked on; but in the past the Police, Sheriffs, and Coast Guard have handled this.

**Critical Facilities and Infrastructure** (Table facilitated by Kate de Gennaro & Art Smith)

Participants were asked to verify the location of the critical infrastructure and facilities listed in the draft plan (Chapter 5), and to provide information on any infrastructure and facilities that are not included, or that may be affected by a flood event.

- The Aransas County Navigation District Building is included in the plan; but they are building a new building. The new building will be in the same location; but will be elevated. Should this information be included in the plan?
- Two new, private 24hr emergency clinics are being built. These should be included in the plan.
- There is no Emergency Operations Center (EOC) listed in the plan. Aransas County has an EOC located in the building with their police and sheriff's offices. This building is located in the 100-year floodplain, and is 7 feet above sea level. Should this building flood, the EOC (and Law Enforcement) would be relocated to the Rockport Service Center. These facilities should be included in the plan.
- The county emergency plan names specific churches as "emergency shelter locations". These facilities should be included in the plan.
- The county has a number of Communication Towers. It is unknown if the towers are susceptible to wind damage; but there are also buildings below the towers which house a lot of equipment that could be susceptible to flooding, and thus could interrupt communications. These facilities should be included in the plan.
- The city-owned Fueling Facilities should be included in the plan.
- Fulton contains 8 lift stations as a part of wastewater system. None of these are in the Special Flood Hazard Area (SFHA), but one is near the harbor. These facilities should be included in the plan.
- For the location, of the lift stations in Aransas Pass, email Sylvia Carrillo. She can also identify the total number, and whether each is in the SFHA.
- All the schools in the county should be included in the plan, not just the Aransas County Independent School District schools (e.g.: the Catholic School, First Learning Center, ABC, Head Start program, and Aransas Pass child care center)

- Should banks be included?
- Should grocery stores—provide food and water—be included
- Questions were raised regarding what “CRITICAL” and “INFRASTRUCTURE” mean. These terms should be defined in the plan.
- Should harbors, ports, and roads be included? (There are many boats in the area, and passing through, in a disaster many of these vessels would be coming into shore, is the community equipped to handle the needs associated with this influx of boats?)

**Economy and Tax Base** (Table facilitated by Amanda Torres)

Major employers in Aransas County:

- Wastewater Treatment Plant (Aransas Pass)
- FM 2725 and other industrial corridors employ many Aransas County residents
  - MMR, Kiewit, Gulf Marine, Cheniere, Voestalpine, etc.)
- The Aransas County Independent School District is a large employer
- City of Aransas Pass (100+ employees)
- Gulf marine, Kiewit
- Walmart, Lowe’s, McCoy’s, HEB
- Auto dealerships
- Ace hardware (48 full time employees)
- Nursing homes:
  - Oak crest (80 residents, flooded multiple times)
  - Gulf pointe plaza
  - Rockport coastal care
  - Lexington place nursing home (# of employees)
- Cove Harbor area:
  - Dry stack
  - Companies in area
- Health care professionals
- Commuters who work in Corpus Christi will also be impacted

Other employers or industry groups who may be affected by flooding:

- Flooding could cause unemployment
- Tourism
  - Damaged infrastructure will negatively impact tourism
  - Hotel occupancy tax will go down on bed & breakfasts and hotels (currently bolstered by industry workers)
- Seafood industry
- Businesses along the FM 188/SH 35 corridor would suffer from extended flooding issues
- Major festivals (could completely shut down)
- Fishing guides
- Real estate agents
- Oxychem, Voestalpine, Cheniere, Sherwin Alumina

Other local economic impacts:

- Transportation corridors could be damaged, which could have far reaching impacts
- No new tax base built, only repairing existing
- Ad valorem taxes will go down because so many coastal homes
- Sales tax will go down
- Flooding will destroy homes, which means a loss of tax base
- Flooding will make it hard for people to pay taxes on a house that is no longer there
- Floodplain regulations could prove to be troublesome for some property owners to implement, particularly when substantial improvements are required

**Areas prone to flooding; but not in the Floodplain** (Table facilitated by Race Hodges)

The following areas fit this description:

- S. Euclid Street and E. Nelson
- S. Euclid and W. Deberry
- S. Commercial and W. Deberry
- S. Commercial and E. Nelson.
- Harrison Boulevard, between E. Nelson and E. Greenwood Avenue
- Goodnight Avenue, between N. Arch Street and S. Pacific Street
- Railroad section between E. Wilson Avenue and E. Wheeler Avenue
- E. Wheeler Avenue between S. Arch Street and Huff Street
- W. Maddox Avenue and W. Ireland Avenue
- N. 11st St and N. 10th Street
- E. Wheeler Avenue, between N. 9th Street and N 12th Street
- W. Greenwood Avenue, between S. 8th Street and Saunders Street
- N. 13th Street, between W. Stoddard Avenue and W. Nelson Avenue
- Multiple streets flood near W. McClung Ave and S. 10th Street

JANUARY 19, 2017 PUBLIC WORKSHOP MATERIALS  
January 19, 2017 Public Workshop Flyer

The flyer features a teal background with white and yellow text. The title 'Aransas County Floodplain Management Plan' is in white, with 'Public Workshop' in yellow. The date and time 'Thursday, January 19, 2017, 6:00 pm' and the location 'Fulton Town Hall' are in white. The address '209 N. 7th Street, Fulton, TX 78358' is also in white. Below the text is a horizontal strip of three photographs showing coastal scenes: a marina with sailboats, a wooden pier over water, and a grassy field near water.

# Aransas County Floodplain Management Plan Public Workshop

Thursday, January 19, 2017, 6:00 pm  
Fulton Town Hall  
209 N. 7th Street, Fulton, TX 78358

## Workshop Objectives:

- 1) Receive comments on the draft version of Chapters 1-5
- 2) Discuss possible goals and potential actions for how Aransas County might address floodplain management in the future

*Please join us, your input is critically important!*



## January 19, 2017 Public Workshop Agenda

### Aransas County Floodplain Management Plan Development Process Public Workshop

Thursday, January 19, 2017, 6:00 pm  
Fulton Town Hall, 209 N. 7<sup>th</sup> Street, Fulton, Texas

#### Objectives

1. Receive comments on the draft version of Chapters 1-5
2. Discuss possible goals and potential actions for how Aransas County might address floodplain management in the future

#### Workshop Agenda

Time	Activity
6:00	Official Welcome <i>Amanda Torres, Community Planner, City of Rockport</i>
6:05	Overview of the County Floodplain Management Plan <ul style="list-style-type: none"> <li>• Provide a brief overview of Chapters 1-5 of the Draft Plan</li> </ul> <i>Karen Bareford, Coastal Planning Specialist, Texas Sea Grant</i>
6:15	Overview of the Proposed Draft Goals <ul style="list-style-type: none"> <li>• Present draft goals for how to address Floodplain Management to the group</li> <li>• Provide examples of possible actions</li> </ul> <i>Amanda Torres, Community Planner, City of Rockport</i>
6:30	Public Comments and Stakeholder Feedback <ul style="list-style-type: none"> <li>• Rotate between kiosks in order to provide feedback regarding the proposed goals, and ideas about possible actions for each proposed goal. There will also be a kiosk where individuals can provide comments on the Draft Chapters 1-5 of the Floodplain Management Plan.</li> </ul> <i>Dana Sjostrom, Coastal Training Program Coordinator, Mission-Aransas Reserve</i>
7:20	Feedback from Kiosks: Short summary of kiosk discussions <i>Project Staff</i>
7:30	Public Comment Period <ul style="list-style-type: none"> <li>• Interested individuals will be given three minutes to make public comments. Note: You must provide comments in writing for inclusion in the written meeting summary.</li> </ul> <i>Dana Sjostrom</i>
7:45	Update on Aransas County Coastal Resiliency Initiative <i>Aaron Horine, Senior Project Engineer, Mott MacDonald</i>
7:50	Next Steps in Planning Process and Thank You <i>Amanda Torres</i>
8:00	Adjourn

Written comments regarding the draft version of chapters 1-5 of the Floodplain Management Plan will be accepted through Friday, January 27, 2017. If you would like to provide written comments, please email them to [AransasCountyFMP@gmail.com](mailto:AransasCountyFMP@gmail.com). If you do not have email, or would prefer to provide comments in a different manner, please call Karen Bareford at (361) 825-3332.

## January 19, 2017 Public Workshop Notes

### ARANSAS COUNTY FLOODPLAIN MANAGEMENT PLAN PUBLIC WORKSHOP NOTES

Fulton Town Hall  
January 19, 2017 • 6:00 pm – 8:00 pm

#### ATTENDEES:

Matt Olenick, Fulton	Bob Loflin, Fulton	Jimmy Kendrick, Fulton
Barbara Gurtner, Rockport	Dan Wilkins, Citizen	Sam Robertson, Citizen
KC Kimbrough, Aransas County	Barbara Wilkins, Citizen	Anna Robertson, Citizen
Mary Kimbrough, Citizen	Aaron Horine, Mott MacDonald	G. Maynard Green, Rockport
Pam Strachan, Citizen	Kevin Carruth, Rockport	Patrick Rios, Rockport
Dale Wells, Aransas Pass	Carolyn Howard, Citizen	Zach Perkins, Rockport Pilot
Mari Wells, Citizen	Kent Howard, Rockport	Valerie Smith, Citizen
Ginger Easton Smith, TAMU AgriLife	Patty Rios, Citizen	Pat Fenton, Aransas Pass
	Karen Mella, Citizen	Rick McLester, Fulton

#### STAFF:

Karen Bareford, Texas Sea Grant	Dana Sjoström, Mission-Aransas Reserve
Kate De Gennaro, Texas A&M/Texas Sea Grant	Art Smith, City of Rockport
Diana Espinosa, Aransas County	Amanda Torres, City of Rockport

#### PRESENTATION:

The meeting started with presentation by Karen Bareford that provided a brief overview of the first five chapters of the draft plan. This included a description of the public involvement and community coordination that has already taken place, and a summary of known flood hazards and non-flood related hazards that are relevant to Aransas County.

#### GROUP DISCUSSIONS:

The majority of the meeting consisted of small groups (approximately 6-10 people in each group) visiting four stations designed to spur discussion and collect information about flood mitigation strategies. These small group discussions focused on potential actions that could be taken to help mitigate flooding in Aransas County. These stations covered specific action items under each goal, which were approved by the Stormwater Management Advisory Committee.

Individuals received handouts at each station that summarized the possible actions that pertained to the goal being discussed at that location. The handout provided space for them to classify each activity as relevant/not relevant to the county or their municipality, and if so, when they thought the action should be initiated (years 1 or 2 of implementation; years 3 - 5 of implementation; or years 5+ of implementation). The handout also asked them to prioritize what they thought to be the top five actions within each goal. The handout included space for any additional notes that participants could use to provide about each possible action. The staff members at each station took notes about the discussions that occurred during the rotations. Participants were also given five dot stickers to place next to their highest priority actions within each goal. This visual representation allowed participants to see a poster-sized version of the goals, and see the relative priorities from the group overall. Participants were permitted to place the five dots in five different actions, or designate an action as even more important by adding more than one of their dots to that particular action.

#### PRESENTATION #2:

Aaron Horine with Mott MacDonald, gave a presentation about the activities and goals of the Aransas County Resiliency Committee, and encouraged the public to participate in upcoming meetings. He highlighted ongoing projects and discussed future projects that the Committee is working to fund.

The rest of this document provides a summary of the information received at the workshop. The "notes" on each action are replicated, as closely as possible, from the actual comments provided.

**Goal 1: Protect existing resources through regulatory standards**

Goal 1:	Summary of Goal 1 Data																	
	No Adverse Impact	Comm. Rating System	Comm.-wide Master Plan	Development Restrictions	Drainage Study/Stormwater Master Plan	FIRM Mapping	FIRM Mapping (Updates)	Floodplain Regulation Enforcements/Updates	Floodplain Regulations	Higher Building Codes and Standards	Intergovernmental Support	Low Impact Development	NFIP Continuation	NFIP Enroll and Participate	Parcel Level Evaluation of Floodprone Properties	Relocation of Hazardous Storage	Stormwater Management Committee	Update Comprehensive Plan
Relevant	29	23	26	27	27	19	21	25	19	18	19	19	18	13	14	17	17	16
Not relevant	0	0	1	0	1	1	0	0	1	2	2	0	0	3	3	2	3	1
Years 1-2	19	16	12	10	8	5	8	11	6	6	7	8	8	9	5	7	9	4
Years 3-5	0	2	2	3	4	4	3	2	3	2	1	4	0	0	5	6	0	4
Years 5+	2	1	2	2	5	1	0	0	2	2	1	1	0	0	2	0	0	0
Highest priority	8	7	5	4	4	1	1	5	4	1	2	1	3	3	3	2	3	0
Second highest priority	4	1	4	7	3	0	3	2	1	2	2	2	0	0	0	1	1	0
Third highest priority	6	0	1	0	02	2	1	0	0	3	1	1	2	0	2	2	1	0
Fourth highest priority	0	3	0	0	3	1	0	1	1	0	0	3	0	0	0	3	0	2
Fifth highest priority	1	0	1	4	2	0	0	1	0	0	2	1	0	0	0	0	1	1
Priority dots received	16	7	6	11	13	1	2	9	3	4	7	5	1	0	2	8	1	0

Adopt a No Adverse Impact: Adopt a no adverse impact approach to floodplain management. No Adverse Impact floodplain management is an approach that insures that the action of one property owner does not adversely impact the properties and rights of other property owners, as measured by increased flood peaks, flood stage, flood velocity, and erosion and sedimentation.

Notes:

- Already Required
- This is very difficult to ascertain as there is little to no information regarding velocity, flow, etc. of effected areas before action by an owner that has a negative impact.
- Happened to me. Neighbor filled in low spot - I now flood
- It is my understanding that this rule exists in Rockport; but it is not being enforced!!!!
- Dealing with this currently in our neighborhood. Eyesore & flood issue for some homeowners
- You cannot impact state status and all adverse issues are civil matters for your ordinances--city already has this in place & doesn't enforce
- Important that neighbors can't do anything to cause flooding at your house
- Already started with higher building standards
- Would require hydrological study by developers to see how base flood elevation is impacted

Community Rating System: Participation in the Community Rating System (CRS), part of the National Flood Insurance Program (NFIP), can provide a movement for the community to undertake a number of projects and activities designed to increase flooding mitigation efforts.

Notes:

- Rockport is already participating
- Being Done
- Doing it
- In process
- Helps Citizens
- Rockport – seeking entry
- Aransas Co. – grant to seek entry
- AP/Fulton – interested

Create a Community Wide Master Plan to Prioritize all Flood Related Projects: Identify potential flooding sources and flood-vulnerable areas. Explore solutions and prioritize.

Notes:

- All Jurisdictions participate in the Stormwater Mgt. Advisory Committee
- Being Done (Rkpt)
- Doing it
- County does this.
- Currently doing

Development Restrictions: Enhance floodplain regulations to restrict types of development allowed in the floodplain.

Notes:

- Doing it

Drainage Study/Stormwater Master Plan: Preliminary drainage studies and assessments can be conducted to identify and prioritize design improvements to address site specific localized flooding/drainage issues to reduce and/or alleviate flooding. Stormwater master plans can be developed to help identify stormwater problem areas and potential drainage improvements.

Notes:

- Rockport updated its Master Plan in 2015 & updated the Future Projects List
- City needs to update all drainage systems
- Doing it
- Please say this is already being done
- Done by County
- Most Important!
- Relevant to AP, County & City already have

FIRM Mapping: Develop digital FIRM maps for regulatory use.

Notes:

- Done in 2015
- Have in place
- Also very important!
- Already on FEMA Map Svc; Appraisal District Pictometry

FIRM Mapping (Updates): Update FIRM maps to reflect accurate flood inundation areas within the jurisdiction.

Notes:

- Done in 2015
- Have it
- Also very important!

Floodplain Regulation Enforcements/Updates: Continue to enforce local floodplain regulations for structures located in the 1-percent floodplain. Strict enforcement of the type of development and elevations of structures should be considered through issuance of building permits by any community or county. Continue education of building inspectors or Certified Floodplain Managers.

Notes:

- Updated Regulations in 2015, including increasing freeboard to 18 inches
- Evergreen
- Doing it
- Also very important!
- Higher standards protect now & later

Floodplain Regulations: Develop and pass more restrictive floodplain regulations. Enhancements may include: limiting types of development within the floodplain, redefining substantial loss for impacted homes, and increasing the free-board requirement to more than one foot above base flood elevation.

Notes:

- Partly done
- More restrictive, hmmm?

- Having more restrictive

Higher Building Codes and Standards: Promote the use of higher codes and standards, such as the Fortified for Safer Living Standard, in order to provide greater protection for any new construction or building retrofits.

Notes:

- Not sure
- ?
- Very important
- Help with pre & post storm

Intergovernmental Support: Support other local governmental entities, such as fire departments, schools, and townships in the identification and pursuit of mitigation actions.

Notes:

- All Jurisdictions participate in Stormwater Mgmt Advisory Committee
- Already doing this
- Doing it now

Low Impact Development: Utilize low impact development practices and green infrastructure to reduce flood risk.

Notes:

- Agree, but no buy-outs in Aransas County

NFIP Continuation: Maintain good standing with National Flood Insurance Program.

Notes:

- Already Doing
- Done
- Doing it
- Already participating

NFIP, Enroll and Participate: Participate in the National Flood Insurance Program.

Notes:

- Already Doing
- Done
- Doing it
- Already participating

Parcel Level Evaluation of Floodprone Properties: Conduct a study examining parcels located in floodprone areas and identify mitigation measures that can reduce future impacts.

Notes:

- In Progress
- ?

Relocation of Hazardous Storage: Explore a plan and funding for relocation of tanks and hazardous storage located in the floodplain or floodprone areas.

Notes:

- If needed
- n/a

Stormwater Management Committee: Establish a stormwater development committee to oversee improvements to the stormwater system and to respond to community concerns.

Notes:

- Already done
- Partly done
- Doing it
- Done at county
- Already in place
- Already exists

Update Comprehensive Plan: Update comprehensive plan; Integrate plan with Hazard Mitigation Plan components.

Notes:

- Happening
- Will help with all phases of development and strengthen standard.

## Goal 2: Protecting property through mitigative measures

Summary of Goal 2 Data.

Goal 2:	Flood Prone Property Acquisition	Floodplain Management
Relevant	18	21
Not relevant	2	0
Years 1-2	3	13
Years 3-5	7	3
Years 5+	5	1
Highest priority	0	17
Second highest priority	12	0
Third highest priority	2	1
Fourth highest priority	0	0
Fifth highest priority	1	0
Priority dots received	6	28

Flood Prone Property Acquisition: Voluntary acquisition and demolition of properties prone to flooding will reduce the general threat of flooding for communities. Additionally, this can provide flood insurance benefits to those communities within the NFIP. Repetitive loss structures are typically highest priority.

Notes:

- Cities acquired properties have a trade for flood prone properties
- Seems difficult to complete
- Hard to do at sea level
- There has been no buy-out in the history
- Important to everyone because eventually can raise costs for everyone (e.g. insurance)
- Cities acquired properties have a trade for floodprone property
- What if FEMA says it has flooded; but the City/Co. knows it is not (Wrong address for FEMA claim info)
- Should be determined by community agreement/consensus
- This would be an on-going process
- It seems to me like people should have enough sense to do this on their own
- I feel money would be better spent on drainage improvements
- Would be very helpful
- Cities that have acquired properties—maybe relocate folks in vulnerable areas to safer spaces
- Ongoing
- With CRS, next repetitive loss helps us qualify/get assistance to help those areas/buildings. (i.e. lady Claire)

Floodplain Management: Preserve natural and beneficial functions of floodplain land through measures such as: retaining natural vegetation, restoring streambeds, and preserving open space in the floodplain.

Notes:

- Detention pond development
- The county has numerous low areas that act as a retention area during flooding events, very important to maintain these areas
- not sure retention ponds & vegetative streams work, will clog up if not concrete
- Very important, ongoing
- Detention pond development
- Should be everyone's #1 choice
- Critical that we dedicate resources to protect habitats thru natural measures. Also allows for filtration of flood waters that end up in our bays.
- I agree with this to a point
- Detention pods as well
- Ongoing also

Goal 3: Create a coordinated flood preparedness and response strategy

Goal 3:		Summary of Goal 3 Data																		
		Back-up Generator	Back-up Municipal Records	Civil Service Improvements	Comprehensive City Disaster/ Emergency Response Plan	Continuity Planning	Emergency Fuel Supply Plan	Emergency Management Exercise	Emergency Operations	Facilities for Vulnerable Populations	Facility Floodproofing	Improvements to Flood Warning System	Mutual Aid through WARRN Program	Short Term Residency Shelters	Database of Vulnerable Population	Develop Flood Assistance Strategies	Emergency Communication	First Aid Training	Public Awareness/ Education	Risk Communication
Relevant		17	12	17	17	14	18	14	13	11	13	9	12	9	14	13	14	11	15	15
Not relevant		0	2	0	1	0	0	1	3	1	1	1	0	5	2	1	1	2	1	1
Years 1-2		7	5	6	8	8	9	7	8	4	4	4	6	3	11	7	11	6	8	10
Years 3-5		3	1	7	1	3	3	3	0	2	3	2	3	4	1	4	1	2	4	1
Years 5+		3	1	1	0	0	0	0	1	0	2	0	0	1	0	0	0	2	0	0
Highest priority		1	1	4	7	0	1	3	2	1	1	1	2	0	0	2	3	1	2	1
Second highest priority		1	1	1	1	4	2	2	2	0	0	0	0	1	3	2	1	0	2	0
Third highest priority		2	0	1	1	1	2	2	1	0	0	3	0	1	1	1	0	0	3	0
Fourth highest priority		1	0	0	0	2	2	0	1	0	3	1	0	1	1	1	0	1	2	0
Fifth highest priority		1	1	3	0	0	1	0	0	1	2	0	0	0	1	1	1	1	1	0
Priority dots received		5	1	8	10	3	6	8	4	1	6	3	1	2	3	8	5	3	13	0

Back-up Generator: Provide a portable or stationary source of backup power to redundant power supplies, municipal wells, lift stations and other critical facilities and shelters.

Notes:

- Currently not enough generators
- Done
- Exists
- We have 1 for our main lift station (Fulton)
- Not enough for all stations
- not enough to (?) whole system
- Have some, need more
- Portable, could be moved as needed
- All utilities should have back up in flood areas
- Do not currently have enough for all lift stations
- Not practical or necessary
- The system will be shut down at some point—the real issue is getting everything restarted

Back-up Municipal Records: Develop protocol for back-up of critical municipal records.

Notes:

- Rockport back ups all data to off-site data warehouses
- Exists in cloud
- In place. Doing it now, storage in cloud
- I think we have it
- Electronic & hard copy
- Rockport moves its servers
- Fulton stores data in the cloud

Civil Service Improvements: Improve emergency rescue and response equipment and facilities by providing additional, or updating existing emergency response equipment. This can include fire trucks, ATV's, water tanks/trucks, snow removal equipment, etc. This would also include developing backup systems for emergency vehicles and identifying and training additional personnel for emergency response.

Notes:

- Good, but can always improve
- Exists, can be improved
- Feel pretty good about our current ability to respond to these type of call now

Comprehensive City Disaster/Emergency Response Plan: Develop a Comprehensive County Disaster and Emergency Response Plan.

Notes:

- Already done
- Being done
- Exists
- Most important
- Have one now - need to exercise more
- Have it

- System exists & works day-to-day, will just have to ramp the system up for large events

Continuity Planning: Develop continuity plans for critical community services. Encourage businesses to do the same.

Notes:

- Done city, help businesses
- Exists
- Pre storm planning

Emergency Fuel Supply Plan: Plan to ensure adequate fuel supply is available during an emergency. Actions might include: prioritization and rationing plan for gasoline and diesel uses in extended loss of fuel supply or electric power supply; a plan to purchase local fuel supply, etc.

Notes:

- Part of Emergency Operations Plan
- Being done
- Exists
- Plan already in place
- In place. Plan in place & confident in the ability to perform

Emergency Management Exercise: Develop and facilitate an exercise to identify gaps in planning and to ensure that community response plans are sufficient to meet the needs of the jurisdiction.

Notes:

- Good idea
- Exists
- Need to practice every year!
- In place. Currently participating in 1 annual exercise that will be 2 this year
- May have this?

Emergency Operations: Identify and establish an Emergency Operations Center.

Notes:

- EOC is at Public Safety Center. Back up EOC at Rockport Service Center
- Done
- Exists
- In place. Have primary & 2nd EOC now
- Have it in Rkpt/County
- Done

Facilities for Vulnerable Populations: Ensure that facilities which will house vulnerable populations are placed in the least vulnerable areas of the community. Harden existing facilities if applicable.

Notes:

- Exists, can be improved
- N/A
- We do not shelter in Aransas County we Evac
- Ongoing

- No shelter in place in Aransas County!

Facility Floodproofing: Explore the possibility of floodproofing for facilities which fall into the HAZUS 1-percent flood inundation areas.

Notes:

- ok, but not as important
- Exists
- more important to get people & critical records out or secured than trying to flood proof

Improvements to Flood Warning System: Update equipment, insure equipment is in a secure location, and install additional gauges.

Notes:

- No system in place
- Needs to be better developed (?)
- Already pretty good (?)
- Done. Available thru City & County websites to get auto-notices on cell phone, email or home phone

Mutual Aid through WARN Program: Establish mutual aid agreements through Water/Wastewater Agency Response Network (WARN) Program.

Notes:

- Already doing
- Could be accomplished
- In place, but not through WARN
- Good plan
- ?

Short Term Residency Shelters: Design and construct short term shelters for rural residents after damage from an event. These structures would not serve as FEMA approved safe rooms. The building could also be used for things such as short term sheltering during a high heat event for those without A/C. The building is not intended to be used for long term recovery, such as long-term displacement from floods, fires, etc. The number of shelters needed depends on the size of the building, population, proximity to users, etc.

Notes:

- Emergency Operations Plan calls for no shelters for storm events due to flooding. No heat shelters identified.
- N/A - No shelters here
- Using faith base & school facilities
- Have this at Rockport Service Center

Database of Vulnerable Population: Work with stakeholders to develop a database of vulnerable populations and the organizations which support them.

Notes:

- Part of Emergency Operations Plan; but not updated
- Have system in place

- Need
- Ongoing/in progress
- Important to know priorities for evacuation/Emergency response
- High responsibility to care for vulnerable citizens

Develop Flood Assistance Strategies: Develop strategies to provide necessary services in the event of flooding.

Notes:

- In place
- Have this

Emergency Communication: Establish an action plan to improve communication between agencies to better assist residents and businesses during and following emergencies. Establish inner-operable communications.

Notes:

- Part of Emergency Operations Plan & Chamber of Commerce Emergency Plan
- Emergency service in place. Community Notifications need work
- Might have?
- Should be worked on ASAP.
- Should be communication with residents. Command centers in other cities only communicate with agencies, not public.

First Aid Training: Promote first aid training for all residents.

Notes:

- ?
- Should be worked on ASAP.

Public Awareness/Education: Through activities such as outreach projects, distribution of maps and environmental education increase public awareness of natural hazards to both public and private property owners, renters, businesses, and local officials about hazards and ways to protect people and property from these hazards. Also, educate citizens on water conservation methods, evacuation plans, etc. In addition, purchasing equipment such as overhead projectors and laptops.

Notes:

- Water Conservation Plan & Restrictions over the last four years has reduced average residential consumption 14%
- Pre storm education
- ?
- Ongoing. In process but still need to reach all, and to reach visitors & new residents
- Should be worked on ASAP.

Risk Communication: Require landlords to disclose if a rental property is located in a floodprone area or if the structure has been impacted previously by high water events.

Notes:

- Yes
- Should be done!

- This should have already been done!

General notes regarding Goal 3:

- We need to consider how we will provide "safe harbor for people coming in from other disaster areas."
- "Info needs to be accessible for new residents as to Hi Risk areas."

**Goal 4:**

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Bank Stabilization: Stabilize banks along streams and rivers. This may include, but is not limited to; reducing bank slope, addition of riprap, installation of erosion control materials/fabrics.

Notes:

- Only 2 rivers in County
- Needed all along water front
- Could be improved
- Categories are too similar

Channel and Bridge Improvements: Implement channel and bridge improvements to increase channel conveyance and decrease the base flood elevations.

Notes:

- Choke points along Tule Creek
- But not many opportunities
- More important channel than bridges
- Can't lower the tide

Drainage Ditches: Deepen drainage ditches and clean out culverts.

Notes:

- Rockport completed \$2M of projects in 2016. Stormwater
- Overall comprehensive drainage plan-long term
- Continuous
- Always on-going
- This is the most cost effective maint item

Elevate Pad Mounted Transformers and Switch Gear: Elevate pad mounted transformers and switch gear above base flood elevation to eliminate damages from flooding.

Notes:

- Advisory Committee has completed several projects in last 5 years
- Believe this is in place
- ?

Grade Control Structures: Stream bed degradation occurs along many river and creeks. Grade control structures including sheet-pile weirs, rock weirs, ponds, road dams, etc. can be implemented to maintain the channel bed.

Notes:

- Not high priority not many streams
- No rivers in A. Co. that impact us

Improve/Upgrade Bridges: Investigate, design and retrofit or improve bridges to provide greater capacity and maintain or improve structural integrity during flood events.

Notes:

- Key Allegro bridge & walkway needs to be replaced
- Currently 2 bridges not rated to handle Fire Trucks

- Some bridges need attention

Improve Drainage: Improve storm sewers and drainage patterns in and around the community.

Notes:

- Identified flood areas need mitigation
- Overall plan for now & long term
- Master Drainage Plan in place & being worked (?) on
- somewhat redundant - maintain what we have
- Overall drainage improvements needed

Infrastructure Assessment Study: Conduct an assessment of bridges in the county and assess other potential areas of concern.

Notes:

- Done by TxDOT every 5 yrs
- Needs to be addressed
- Assessment is best first step
- Copano only critical bridge in Aransas Co.

Infrastructure Protection: Develop flood control devices to protect critical infrastructure during flood events.

Notes:

- Don't know where flood control would be installed to be effective
- Don't think this is a problem
- Protect our business on Austin St. in downtown Rkpt from flooding.

Levee/Floodwall Construction &/or Improvements: Levees and floodwalls serve to provide flood protection to businesses and residents during large storm events. Improvements to existing levees and floodwalls will increase flood protection. If possible, the structure should be designed to FEMA standards to provide 1-percent flood protection providing additional flood insurance benefits.

Notes:

- Don't know how or where this would be
- Don't live in A.P.

Promote Infiltration: Convert concrete-lined channels to natural channels to promote infiltration.

Notes:

- No concrete-lined channels
- Definitely needed
- Reverse current standards
- Concrete ditches stay cleaner for faster water movement
- Use natural methods wherever possible.
- Gone back & forth depending on whatever is the current
- Studies already; What will future bring? How will future be different?

Relocate Municipal Infrastructure: Acquire Geographic Information System (GIS) to relocate municipal infrastructure (water and sewer lines).

Notes:

- Being done as old infrastructure fails. GIS survey done

Remove Flow Restrictions: Conduct a preliminary drainage assessment and/or design bridge improvements to reduce and/or alleviate flooding. Bridges typically serve as flow restrictions along streams and rivers. Cleanout and reshaping channel segments at bridge crossings can increase conveyance, reducing the potential for flooding. Replacing or modifying of bridges and other flow restrictions may be necessary to eliminate flooding threats and damages.

Notes:

- Low priority few bridges
- Bridges include culverts & this is where Aransas County is far behind in maintaining this
- Done
- This applies to culverts & bridges thru 35 hwy south, the water is blocked by hwy & O/D railroad bed
- N/A
- Bridge vs. culvert?

Site Hardening: Locate critical mechanical systems above the base flood elevation. Consider moving electrical systems to higher floors or the roof rather than the basement.

Notes:

- no basements
- N/A
- Homes & business? Or infrastructure?
- N/A
- Site? = Home, Business, Critical Facility?

Storm Water Management: Upgrade combined sewer system to improve storm water management.

Notes:

- Stormwater is not part of wastewater system
- Not sure what this means
- Doing
- Controlling & filtering storm water is critical to protection of our valuable natural habitats!

Stormwater System and Drainage Improvements (Lg. comm.): Larger communities generally utilize underground stormwater systems comprising of pipes and inlets to convey runoff. Undersized systems can contribute to localized flooding. Stormwater system improvements may include pipe upsizing and additional inlets. Retention and detention facilities may also be implemented to decrease runoff rates while also decreasing the need for other stormwater system improvements.

Notes:

- Problem only in in a few areas
- Not a large community
- Aren't these the same (Lg. & Sm. Community Objectives)
- Not as relevant for smaller cities

Stormwater System and Drainage Improvements (Sm. comm.): Smaller communities may utilize stormwater systems comprising of ditches, culverts, or drainage ponds to convey runoff. Undersized systems can contribute to localized flooding. Drainage improvements may include ditch upsizing, ditch cleanout and culvert improvements. Retention and detention facilities may also be implemented to decrease runoff rates while also decreasing the need for other stormwater system improvements. Bridges typically serve as flow restrictions along streams and rivers. Cleanout and reshaping of channel segments at bridge crossings can increase conveyance, reducing the potential for flooding.

Notes:

- Rockport completed revision of Master Drainage Plan in 2016 & identified future projects.
- Being done, but should be more
- Problem only in a few areas
- Ditches along hwy 35 S don't have a common flow line. Flow line changes with ponding occurring
- So similar to above question. References bridges which is not quite as relevant
- County has Stormwater Master Plan that is being implemented. Daniel Reid Rocks!!
- Aren't these the same (Lg. & Sm. Community Objectives)

Improve overall Drainage Master Plans

Filtration Facility Upgrade: Add a retention pond to the filtration facility.

Notes:

- Retention ponds are somewhat ineffective due to ground levels
- N/A
- Municipal? Engineered? Who is running the facility?

Transportation Drainage Improvements: Make improvements to roadways and drainage ways to prevent damage to key transportation routes. Utilize geosynthetic products for repair and mitigation of damages. Consider covering of road washouts, culvert sizing headwalls, steep banks, slides, in-road springs, roadway edge armoring, low water crossings, pothole grading, weak foundations, gravel road maintenance, ditch linings, on steep grades, erosion protection, etc.

Notes:

- Have issues with current system
- Now & ongoing
- Ongoing
- Lesser of two evils: low streets—get flooded & emergency vehicles can't get in...high streets—homes get flooded

General notes regarding Goal 4:

- The regional plan should grow to include San Patricio County

JUNE 1, 2017 PUBLIC WORKSHOP MATERIALS  
June 1, 2017 Public Workshop Flyer

# Aransas County Multi-Jurisdictional Floodplain Management Plan Public Workshop

**Thursday, June 1, 2017, 6:00 pm**

Rockport Service Center • 2751 SH 35 Bypass, Rockport, TX 78382



## Participants will be able to:

1. Learn about the purpose, history, and scope of the Floodplain Management Plan
2. Provide input on the final Draft Aransas County Multi-Jurisdictional Floodplain Management Plan

*Please join us, your input is critically important!*



Comments regarding the draft Aransas County Multi-Jurisdictional Floodplain Management Plan will be accepted through Friday, June 9, 2017. If you would like to provide written comments, please email them to [AransasCountyFMP@gmail.com](mailto:AransasCountyFMP@gmail.com). If you have any questions, or would prefer to provide comments in a different manner, please call Karen Bareford at (361) 825-3225.

## June 1, 2017 Public Workshop Agenda

### Aransas County Multi-Jurisdictional Floodplain Management Plan Development Process Public Workshop

Thursday, June 1, 2017, 6:00 pm  
Rockport Service Center, 2751 SH 35 Bypass, Rockport, Texas 78382

#### Participants will be able to:

1. Learn about the purpose, history, and scope of the Floodplain Management Plan
2. Provide input on the final Draft Aransas County Multi-Jurisdictional Floodplain Management Plan

#### Workshop Agenda

Time	Activity
6:00 pm	Official Welcome <i>Amanda Torres, Community Planner, City of Rockport</i>
6:05 pm	Overview of the County Floodplain Management Planning Process <ul style="list-style-type: none"> <li>• Provide a brief overview regarding the purpose, history, and scope of the Floodplain Management Plan <i>Karen Bareford, Coastal Planning Specialist, Texas Sea Grant</i></li> </ul>
6:15 pm	Overview of the Draft Action Plan <ul style="list-style-type: none"> <li>• Briefly discuss the goals, objectives, and actions presented in the plan <i>Amanda Torres, Community Planner, City of Rockport</i></li> </ul>
6:30 pm	Public Comments and Stakeholder Feedback <ul style="list-style-type: none"> <li>• Public will rotate between stations in order to provide feedback regarding the Draft Action Plan. Staff will be arranged at stations representing each of the following topics: <ul style="list-style-type: none"> <li>• Chapter 7, Goal 1: Protect existing resources through regulatory standards</li> <li>• Chapter 7, Goal 2: Protect property through mitigative measures</li> <li>• Chapter 7, Goal 3: Create a coordinated flood preparedness and response strategy</li> <li>• Chapter 7, Goal 4: Create a coordinated infrastructure plan for all jurisdictions</li> <li>• Maps: Information and questions about the plan maps</li> <li>• Provide feedback on any part of the plan not covered above <i>Dana Sjostrom, Coastal Training Program Coordinator, Mission-Aransas Reserve</i></li> </ul> </li> </ul>
7:30 pm	Feedback from Kiosks: Short summary of kiosk discussions <i>Project Staff</i>
7:40 pm	Public Comment Period <ul style="list-style-type: none"> <li>• Interested individuals will be given three minutes to make public comments. <i>Note:</i> Any comments you want included, verbatim, in the written meeting summary must be provided in writing (this can be done tonight or before June 9<sup>th</sup> (*see below)) <i>Dana Sjostrom</i></li> </ul>
7:50 pm	Next Steps in Planning Process and Thank You <i>Amanda Torres</i>
8:00 pm	Adjourn

\*Written comments regarding the draft Aransas County Multi-Jurisdictional Floodplain Management Plan will be accepted through Friday, June 9, 2017. If you would like to provide written comments, please email them to [AransasCountyFMP@gmail.com](mailto:AransasCountyFMP@gmail.com). If you do not have email, or would prefer to provide comments in a different manner, please call Karen Bareford at (361) 825-3225.

## June 1, 2017 Public Workshop Notes

### ARANSAS COUNTY FLOODPLAIN MANAGEMENT PLAN PUBLIC WORKSHOP NOTES

Rockport Service Center  
June 1, 2017 • 6:00 pm – 8:00 pm

#### ATTENDEES:

Patrick Rios, Rockport	Dora McKelvey, Citizen	Tom Rodino, Citizen
Barbara Gurtner, Rockport	Pak McKelvey, Citizen	Lynn Baskind, Citizen
CJ Wax, Rockport	Jack Briton, Citizen	Rogene Villa, Citizen
De McLallen, Aransas County	Alfred Killen, Citizen	Charlie Montgomery, Citizen
Julie Noska, Aransas Pass	Geoff Bywater, Citizen	Adelaide Madatt, Citizen
Melinda Cook, Aransas Pass	Jason Noska, Citizen	Laura Alexander, Citizen
Kyle McElroy, Mott	John Alexander, Citizen	Marine Kocurek-Montgomery,
MacDonald	Bill Oldham, Citizen	Citizen
Larry Doonan, Citizen	Marlene Oldham, Citizen	

#### STAFF:

Amanda Torres, Rockport	Mike Donoho, Rockport
Dana Sjostrom, Mission Aransas Reserve	David Reid, Aransas County,
Diana Espinosa, Aransas County	Johnny Davis, Fulton
Kat Comeaux, Aransas Pass	Rick McLester, Fulton
Kate de Gennaro, Texas A&M/Texas Sea Grant	Karen Bareford, Texas Sea Grant
Matt Olenick, Fulton	

#### PRESENTATION:

The workshop started with Amanda Torres welcoming everyone, and acknowledging the Advisory Committee and Sub-Committee members who were present and thanking them for their assistance in the development of the Draft Floodplain Management Plan ("Plan"). Karen Bareford then provided a brief overview of the purpose and scope of the Plan, and the process that has resulted in the Draft Plan. Finally, Amanda Torres offered an overview of the Plan, with an emphasis on the Draft Action Plan, which specifies how floodplain management will be addressed in Aransas County over the next five years.

#### GROUP DISCUSSIONS:

The majority of the workshop consisted of the participants rotated freely among six stations designed to spur discussion and collect comments on the Plan. Four of these stations focused on the goals, objectives and actions laid out in the Plan. The remaining stations concentrated on the maps from the Plan, and provided an opportunity to comment on any other topic within the Plan. While visiting the various stations, individuals received handouts that summarized each of the goals and the associated objectives and actions; and were able to have discussions, ask questions, and provide feedback via conversation, or by writing comments on notecards. Productive and lively dialogs were held between staff and the public, as well as amongst the public at each station. According to the workshop evaluations, this freedom to circulate and talk was the most valuable aspect of the workshop for most of the participants. The feedback received at each station is summarized below.

#### GOAL 1: PROTECT EXISTING RESOURCES THROUGH REGULATORY STANDARDS

- There is an interest in looking into the possibility of joining CRS as Multi-Jurisdictional entity. Amanda will be pursuing this option with FEMA and the ISO
- Aransas Pass also looking into higher freeboard requirements to meet the County's existing 18" for new construction
- Many standards and practices have been in place for quite some time, this workshop serves as a platform for municipal officials to share those ongoing efforts. (i.e. in response to a question asking

why haven't we always been doing this, we are hoping to educate local residents that there are hardworking city and county staff that are pro-active and interested in enhancing local floodplain management strategies.)

**Specific Comments:**

- "Action 1.1.d [Incorporate higher floodplain management standards into City of Aransas Pass comprehensive plan update] – yay!" (Mindy from Aransas Pass)
- "Ask FEMA/ISO why all jurisdictions can't be treated as a single entity?" (Pat McKelvey)

**GOAL 2: PROTECTING PROPERTY THROUGH MITIGATIVE MEASURES**

- Part of this is shown in our 18" freeboard
- These are not immediate – speaks to the cost required, but still necessary
- Getting consensus takes time
- Action 2.1.c:
  - spot on in Aransas Pass for retention ponds
  - there is not a lot of room for this in Rockport
  - Wandering Oaks showed a good example of this with detention pond
- We should consider the implications of developing over large prairies pot holes/ponds etc.
- How do FEMA grants fit in here? Seems like a useful interface with these efforts
- This process is a good approach – not reinventing the wheel (i.e. use stormwater committee)
- Why is all this not already in place? (i.e. retention ponds, etc.)
- 3036 -> some interesting drainage issues here
- Marion and Cedar Ridge regularly flood & Champions (better now, but previously very bad)
- The flood risks are changing (think about 20 years ago) -> less negative growth
- Think about how open spaces impacts these flood events -> link to effective policies
- In Rockport- note water comes back up—i.e. retention ponds not as effective (w/high water table)
- What is covered with CRS discounts?
- Note: with a big storm here – almost no one was here for the past big ones – speaks to need for preparing
- As a new development comes in – how does this affect them?
- Buy outs – how can that be used with existing buildings?
- Using floodplain management for great stuff? In your community

**GOAL 3: CREATE A COORDINATED FLOOD PREPAREDNESS AND RESPONSE STRATEGY**

- There is a need for the ability to do/use GIS more (for pre disaster planning, and post disaster response) in the County and municipalities
- There is a need for more signage regarding flooding and possibly for "flood sticks" to show the depth of flooding events
- The communication between entities is quite well-coordinated, and officials work together across jurisdictional boundaries in preparation for hurricane season and throughout the year
- There are strategies in place that help remove debris immediately after thunderstorms or other wind-related events, communicating this to the public and reminding residents to keep storm drains clear is another identified need

**Specific Comments:**

- "Workshop for property managers – flood insurance for rentals"

**GOAL 4: CREATE A COORDINATED INFRASTRUCTURE PLAN FOR ALL JURISDICTIONS**

- The maintenance that is already being done on our flooding infrastructure needs to continue
- Bridges and evacuation routes are considered in future planning efforts – making sure residents in areas with limited in/out paths are well aware of evacuation plans and orders
- Some projects that would enhance and improve at-risk areas are also considered high priority
- Flooding risks are not limited to the special flood hazard area
- Infrastructure can be either a hindrance or help to drainage – designs and future improvements should always consider drainage patterns and alleviate flood risk to the greatest degree possible
- Jurisdictions should be working together to coordinate efforts, these initiatives should be more broadly shared and celebrated (i.e. public workshops similar to this)

**MAPS**

- People generally wanted to know where their homes were located on the maps and if their homes were in the floodplain
- There were questions about what VE/AE means (all maps are explained in the text of the Plan, and workshop participants were given the website where the Plan can be download)
- How do islands affect storm surge and tides?
- How do individual insurance rates, or BFE, related to AE/VE zones, and the 100-year and 500-year floodplains?
- How does flooding in areas not identified as a floodplain enter the conversation (i.e. some places are low lying, and flood often but are not labeled in the special flood hazard area)?

**Specific Comments:**

- ♦ “Graphical extent of Hurricane Celia storm surge and freshwater flooding?”
- ♦ “Website – section on “is my property in the floodplain?””
- ♦ “Making maps separate from plan online to make them easy to find and update in the future?”

**FEEDBACK ON ALL OTHER PARTS OF THE PLAN**

- Most of the questions and conversation revolved around the plan development process and what to expect next.

**Specific Comments:**

- ♦ “Graphical extent of Hurricane Celia storm surge and freshwater flooding?”

## CHAPTER 5: ROCKPORT SPECIFIC PUBLIC ENGAGEMENT OPPORTUNITIES MATERIALS (Step 2.D)

### ROCKPORT COMMUNITY SURVEY MATERIALS Rockport Community Survey Flyer

**We Need You**  
to help the  
**City of Rockport**  
become **BETTER!**



**We are working to develop a Floodplain Management Plan for the City. In an effort to include your concerns and local knowledge in the development of this plan, Texas Sea Grant has developed an online survey to gather information about your experiences and perceptions regarding flooding hazards in the City of Rockport. Your participation in this survey will help us to ensure that all segments of the population of Rockport are represented.**

**If you are ready to help us, please follow the link below to complete the survey before July 31, 2016. *This should not take more than 6-8 minutes of your time.***

**If you do not wish to participate in the survey; but would like to provide input regarding the Floodplain Management Planning Process, please contact Karen Bareford, Coastal Planning Specialist with Texas Sea Grant, at (361)825-3225, or karen.bareford@tamu.edu.**



<http://svy.mk/29aIfcv>  
IRB NUMBER: IRB2016-0448D  
IRB APPROVAL DATE: 07/01/2016  
IRB EXPIRATION DATE: 07/01/2017



**We Need You**  
to help the  
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<http://svy.mk/29aIfcv>  
IRB NUMBER: IRB2016-0448D  
IRB APPROVAL DATE: 07/01/2016  
IRB EXPIRATION DATE: 07/01/2017



**Lead Researcher:** Karen Bareford with Texas Sea Grant

**Partners:**

- City of Rockport
- Mission-Aransas Reserve

**Purpose of this survey:** To gather information about your experiences and perceptions regarding flooding hazards in the City of Rockport.

**Importance:** The data collected from this survey will be used in the development of a Floodplain Management Plan for Rockport which will provide a strategy of programs, goals, and actions to reduce the adverse impact of hazards on the community.

**Benefit to you:** The hazards associated with potential flooding can affect individuals. These impacts can be personal, through the destruction of property, and even include physical harm to individuals. These impacts can also alter the daily lives of individuals as physical infrastructure and access to critical facilities (including utilities, emergency perceives, and roads) can be affected. All of these impacts have the potential to influence individuals emotionally, financially, their personal comfort, and time. By participating in the survey you are contributing to the process of creating a plan to minimize all of these impacts.

For additional information, or questions, please contact:

Karen Bareford, Ph.D.  
Coastal Planning Specialist  
Texas Sea Grant College Program  
Texas A&M University at Corpus Christi  
6300 Ocean Drive  
NRC-2800, Unit 5840  
Corpus Christi, TX 78412  
(361) 825-3225



IRB NUMBER: IRB2016-0448D  
IRB APPROVAL DATE: 07/01/2016  
IRB EXPIRATION DATE: 07/01/2017

**Lead Researcher:** Karen Bareford with Texas Sea Grant

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(361) 825-3225



IRB NUMBER: IRB2016-0448D  
IRB APPROVAL DATE: 07/01/2016  
IRB EXPIRATION DATE: 07/01/2017

## Rockport Community Survey

### City of Rockport Floodplain Management Planning Survey

**Project Title:** City of Rockport Floodplain Management Planning Survey

You are invited to take part in a research survey being conducted by Karen Bareford, a researcher from Texas Sea Grant College Program at Texas A&M University and funded by the Texas General Land Office. This project is being conducted in order to collect data that will be used to assist in the development of a Floodplain Management Plan for the City of Rockport. The information in this form is provided to help you decide whether or not to take part. If you decide you do not want to participate, there will be no penalty to you, and you will not lose any benefits you normally would have.

#### **Why Is This Study Being Done?**

This survey is being done to gather information about the experiences and perceptions of individuals who live, work, and own businesses in Rockport, specifically, the survey is designed to find out about your experience and perceptions regarding flooding hazards in the City

#### **Why Am I Being Asked To Be In This Study?**

You are being asked to be in this study because you may live, work, or own a business in Rockport, and are over the age of 18.

#### **How Many People Will Be Asked To Be In This Study?**

We would like to capture as many responses as possible to this survey. As such we are casting a very wide net using the city website, email distribution of the link to the survey, and informational flyers that include the link to the survey. We apologize for cross-postings; but need to get as wide a distribution as possible in order to capture the maximum potential responses, to represent as diverse a cross-section of the population as feasible.

#### **What Are the Alternatives to being in this study?**

The alternative to taking the survey are to not take the survey. If you would like to provide input regarding the Floodplain Management Planning Process, but do not want to take the survey, please contact Karen Bareford, Coastal Planning Specialist with Texas Sea Grant, at (361)825-3225, or [karen.bareford@tamu.edu](mailto:karen.bareford@tamu.edu).

#### **What Will I Be Asked To Do In This Study?**

You will be asked to answer questions about your experiences and perceptions regarding flooding hazards in the City of Rockport. The survey will be open through July 31, 2016, and your participation should not take more than 8 minutes.

#### **Are There Any Risks To Me?**

The things that you will be doing are no greater risks than you would come across in everyday life.

#### **Are There Any Benefits To Me?**

The hazards associated with potential flooding can affect individuals. These impacts can be personal, through the destruction of property, and even include physical harm to individuals. These impacts can also alter the daily lives of individuals as physical infrastructure and access to critical facilities (including utilities, emergency services, and roads) can be affected. All of these impacts have the potential to influence individuals emotionally, financially, their personal comfort, and time. By participating in the survey you are contributing to the process of creating a plan to minimize all of these impacts.



Bareford  
IRB NUMBER: IRB2016-04480  
IRB APPROVAL DATE: 07/01/2016  
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**Will There Be Any Costs To Me?**

Aside from your time, there are no costs for taking part in the study.

**Will I Be Paid To Be In This Study?**

You will not be paid for being in this study.

**Will Information From This Study Be Kept Private?**

The records of this study will be kept private. No identifiers linking you to this study will be collected. Research records will be stored securely and only staff affiliated with this research will have access to the raw data.

Information will be stored in computer files protected with a password.

People who have access to the raw data collected include the Lead Researcher and research study personnel. Representatives of regulatory agencies such as the Office of Human Research Protections (OHRP) and entities such as the Texas A&M University Human Subjects Protection Program may access your records to make sure the study is being run correctly and that information is collected properly.

**Who may I Contact for More Information?**

You may contact the Lead Researcher, Karen Bareford, Ph.D., to tell her about a concern or complaint about this research at (361) 825-3225 or karen.bareford@tamu.edu.

For questions about your rights as a research participant, to provide input regarding research, or if you have questions, complaints, or concerns about the research, you may call the Texas A&M University Human Subjects Protection Program office by phone at 1-979-458-4067, toll free at 1-855-795-8636, or by email at irb@tamu.edu.

**What if I Change My Mind About Participating?**

This research survey is voluntary and you have the choice whether or not to be in this research study. You may decide to not begin or to stop participating at any time. If you choose not to be in this study or stop being in the study, there will be no negative effects for you.

By completing the survey, you are giving permission for the investigator to use your information for research purposes.

Thank you.

**Karen Bareford**

After reviewing the above information, please click (*appropriate text will be entered according to needs*) to continue to the survey.

(Continue to next page)



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- 1) I \_\_\_\_\_ in the city of Rockport. (Check all that apply)
- ☐ Live full-time
  - ☐ Live part-time (Number of months you live in Rockport each year \_\_\_\_\_)
  - ☐ Work full-time
  - ☐ Work part-time
  - ☐ Own a business
  - ☐ Other (Please specify below)
- 2) I \_\_\_\_\_ my home, business, or property in the city of Rockport.
- ☐ Own
  - ☐ Rent
  - ☐ Not applicable
- 3) Is your home, business, or property in the floodplain?
- ☐ Yes
  - ☐ No
  - ☐ Not sure
  - ☐ Not applicable
- 4) Are you aware of any current flood control or management projects in the City of Rockport?
- ☐ Yes
  - ☐ No
  - ☐ Not sure
- (If yes, please specify what projects you are aware of below)

(Continue to next page)



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IRB# 2016-04480  
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5) Do you have flood insurance for your home, business, or property? (Check all that apply)

- ☐ Home
- ☐ Business
- ☐ Property
- ☐ None of the above
- ☐ Not sure
- ☐ Not applicable

6) If you have flood insurance, why do you carry it? (Check all that apply)

- ☐ It is required because I live in the floodplain
- ☐ It is required because I have a mortgage
- ☐ It is required because I accepted disaster recovery funds from the government in the past
- ☐ It is not required but I felt it was advantageous
- ☐ Not applicable

7) If you do not have flood insurance, why don't you carry it? (Check all that apply)

- ☐ I do not live in the floodplain
- ☐ My home, business, or property is elevated or otherwise protected
- ☐ I rent
- ☐ Insurance is too expensive
- ☐ I don't need it because it never floods
- ☐ I never really considered it
- ☐ Not applicable
- ☐ Other (Please specify below)

8) Has your life or property been impacted by high water or flooding in Rockport

- ☐ Never
- ☐ Occasionally
- ☐ Regularly

(Continue to next page)



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9) Has your daily work or routine been impacted by, high water or flooding in Rockport?

- ☐ Never
- ☐ Occasionally
- ☐ Regularly

10) How concerned are you about the possibility of Rockport being impacted by a flood event?

- ☐ Very concerned
- ☐ Somewhat concerned
- ☐ Mildly concerned
- ☐ Not concerned

11) Which of the following actions have you taken to protect your home, business, or property from a flood event? (Check all that apply)

- ☐ Purchased flood insurance
- ☐ Fortified my home, business, or property with sandbags
- ☐ Elevated my home or business
- ☐ I have not taken any actions
- ☐ I have taken other actions (Please list below)

(Continue to next page)



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12) What sources have you used to collect information about protecting your home, business, or property from a flood event? (Check all that apply)

- ☐ Governmental agency
- ☐ Schools or Libraries
- ☐ Real-estate agent/Seller/Landlord
- ☐ Faith-based institution
- ☐ Community events
- ☐ TV/Radio news
- ☐ Internet/Social media
- ☐ Friends/Family/Neighbors
- ☐ My involvement in a non-profit or social organization
- ☐ My personal experience with flood events
- ☐ Other sources

13) How would you MOST like to receive time-sensitive warnings and instructions regarding a flood event?

- ☐ TV
- ☐ Radio
- ☐ Cellphone Alerts (similar to Amber Alerts or Silver Alerts)
- ☐ Text Message
- ☐ Email
- ☐ Social media
- ☐ Other (Please list below)

14) When you moved into your home, business, or purchased your property, did you consider the impacts of potential flood events?

- ☐ Yes
- ☐ No
- ☐ Not sure
- ☐ Not applicable

(Continue to next page)



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- 15) If your home, business, or property were designated as “in a high flood hazard area,” or received repeated damages from flooding, would you consider a program where a government agency would pay you current market value for it; therefore allowing you relocate to a safer location?
- ☐ Yes
- ☐ No
- ☐ Not sure
- ☐ Not applicable
- 16) Would you support rules regarding how land within a known “high flood hazard area” can be used or zoned, to reduce risks associated with future flood events in Rockport?
- ☐ Strongly support
- ☐ Somewhat support
- ☐ Do not support
- ☐ Not sure

The following nine questions will ask you to rate how much you would support different types of actions designed to reduce risks associated with flood events.

- 17) How much you would support engineered projects such as levees, dams, and bulkheads designed to reduce the risks associated with flood events?
- ☐ Strongly support
- ☐ Somewhat support
- ☐ Do not support
- ☐ Not sure

(Continue to next page)



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- 18) How much you would support stronger building codes and land use rules in floodplain areas to reduce the risks associated with flood events?
- ☐ Strongly support
- ☐ Somewhat support
- ☐ Do not support
- ☐ Not sure
- 19) How much you would support retrofitting infrastructure such as roads and drainage to reduce the risks associated with flood events?
- ☐ Strongly support
- ☐ Somewhat support
- ☐ Do not support
- ☐ Not sure
- 20) How much you would support retrofitting critical facilities such as fire stations and hospitals to reduce the risks associated with flood events?
- ☐ Strongly support
- ☐ Somewhat support
- ☐ Do not support
- ☐ Not sure
- 21) How much you would support retrofitting utility infrastructure to reduce disruption of services during and after flood events?
- ☐ Strongly support
- ☐ Somewhat support
- ☐ Do not support
- ☐ Not sure

(Continue to next page)



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- 22) How much you would support protection of natural areas, such as wetlands, and their inherent flood-preventing benefits in an effort to reduce the risks associated with flood events?
- ☐ Strongly support
- ☐ Somewhat support
- ☐ Do not support
- ☐ Not sure
- 23) How much you would support buying vulnerable properties and increasing natural areas to reduce the risks associated with flood events?
- ☐ Strongly support
- ☐ Somewhat support
- ☐ Do not support
- ☐ Not sure
- 24) How much you would support better access to information about flood risks and protective actions individual households can take to reduce the risks associated with flood events?
- ☐ Strongly support
- ☐ Somewhat support
- ☐ Do not support
- ☐ Not sure
- 25) Are there any other types of actions that you would support to reduce the risks associated with flood events? (Please specify below)
- 26) Please provide any additional information regarding Rockport's efforts to plan for the long-term management of our floodplains.


Thank you for your time!



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SEPTEMBER 1, 2016 ROCKPORT PUBLIC WORKSHOP MATERIALS

September 1, 2016 Rockport Public Workshop Flyer



**We want your input!**


Workshop Objectives:




1. Review the purpose of, and process for, preparing a Floodplain Management Plan
2. Provide brief summaries of the work completed (includes: State of the Community Report for Rockport, Community Survey, and the Alternative Planning Scenarios)
3. Solicit input regarding the data collected and other needs

**Join us for a workshop to outline  
The City of Rockport's  
Floodplain Management Plan**

Location: Bay Education Center,  
121 Seabreeze Drive  
Across from beach entrance

**September 1, 2016**  
6:00pm – 8:00pm



September 1, 2016 Rockport Public Workshop Agenda

**City of Rockport  
Floodplain Management Plan Development Process  
Planning Kickoff Meeting**

September 1, 2016, 6:00 pm  
Bay Education Center, 121 Seabreeze Dr., Rockport, Texas

**Objectives**

1. Review the purpose of, and process for, preparing a Floodplain Management Plan
2. Provide brief summaries of the work completed (includes: State of the Community Report for Rockport, Community Survey, and the Alternative Planning Scenarios)
3. Solicit input regarding the data collected, and other needs.

**Workshop Agenda**

Time	Activity
6:00	Official Welcome <i>Amanda Torres, Community Planner, City of Rockport</i>
6:05	Introduction to Floodplain Management Plan <ul style="list-style-type: none"> <li>Why are we developing a Floodplain Management Plan?</li> <li>How does this benefit your community?</li> </ul> <i>Race Hodges, Resiliency Program Coordinator, Texas Coastal Watershed Program</i>
6:15	Overview of Data Collected <ul style="list-style-type: none"> <li>Accomplishments/What we know: <ul style="list-style-type: none"> <li>State of the Community Report</li> <li>Community Survey – methods and results</li> <li>Alternative Scenarios</li> </ul> </li> </ul> <i>Karen Bareford, Coastal Planning Specialist, Texas SeaGrant Amanda Torres, Community Planner, City of Rockport</i>
6:30	Public Comments and Stakeholder Feedback <ul style="list-style-type: none"> <li>Rotate between kiosks</li> </ul> <i>Dana Sjostrom, Coastal Training Program Coordinator, Mission-Aransas Reserve</i>
7:20	Feedback from Kiosks: Short summary of kiosk discussions <i>Project Staff</i>
7:30	Public Comment Period <ul style="list-style-type: none"> <li>Those that signed the “speakers list” are given three minutes to make public comments. Note: You must provide comments in writing for inclusion in the written meeting summary.</li> </ul> <i>Dana Sjostrom</i>
7:45	Immediate Next Steps in Planning Process and Thank You <i>Amanda Torres Race Hodges</i>
8:00	Adjourn

For more information or to submit a public comment, please contact Amanda Torres, City of Rockport Community Planner, by phone at (361) 790-1125, ext. 116 or by email at [communityplanner@cityofrockport.com](mailto:communityplanner@cityofrockport.com). Public Comments can be submitted until September 15, 2016.

September 1, 2016 Rockport Public Workshop Notes

**City of Rockport Floodplain Management Planning Kick Off Workshop Notes**

Bay Education Center, Rockport, TX

September 1, 2016

6:00 pm – 8:00 pm

**Attendees:**

Katherine Comeaux, Aransas Pass  
Linda Alvarez, Citizen  
Phil Perry, Citizen  
Mary Ann Davis, Citizen  
Diane Probst, Rockport-Fulton Chamber of  
Commerce  
Ginger Easton Smith, AgriLife Extension  
Karen Bareford, Texas Sea Grant  
Diana Espinosa, Aransas County  
Bob Lollin, Town of Fulton  
MJ Olsen, Coldwell Banker Reality  
Brian Olsen, Citizen  
Jerry Givvons, Citizen  
Matt Olenick, Town of Fulton  
De McLallen, SWMAC

Barbara Gurtner, City of Rockport  
CJ Wax, City of Rockport  
Patrick Rios, City of Rockport  
Roy Nystrom, Citizen  
Betsy Nystrom, Citizen  
Brad Brundrett, Griffith and Brundrett  
Tom Rodino, Citizen  
Bill Fisher, Citizen  
Richard Davis, Harte Research Inst.  
Mike Probst, Rockport Pilot  
Art Smith, City of Rockport  
Olive Smith, Citizen  
Eric Baker, City of Rockport  
Nelida Spurrell, Mission-Aransas Reserve

**Staff:**

Amanda Torres, City of Rockport  
Dana Sjostrom, Mission-Aransas Reserve  
Race Hodges, TX Coastal Watershed Program  
Karen Bareford, Texas Sea Grant

**Presentations:**

The meeting started off with a two short presentations, which are summarized below:

1. Race Hodges spoke about Floodplain Management Plans, and the benefits of creating this type of plan.
2. Karen Bareford provided a short overview of the State of Rockport Report, and the Community Survey completed this summer (to access these documents, please visit: <http://www.cityofrockport.com/603/Floodplain-Information-and-Management>). She then provided a brief introduction to the four alternative scenarios that were used to provide information about the importance of planning for the City of Rockport, and to start a discussion about what the community wants to evolve into over the next 20 years.

**Group Discussions:**

The majority of the meeting consisted of groups visiting four stations designed to spur discussion about the four alternative scenarios, and the potential impacts of each. (For a complete description each scenario, please visit: <http://www.cityofrockport.com/603/Floodplain-Information-and-Management>). The following information summarizes the reactions to each scenario.

(Continued on next page.)

Minimal Development – Dana facilitating

- Unrealistic
- Little/low levels of population influx assumed here
- This doesn't allow folks near the water, and that's what people want when they move here
- This one influences more trees – those protect us
- Develops on affordable land
- This scenario has the least impact on wildlife and plants (yay)
- Note that 35 is zoned commercial on both sides – pink color there should be on both sides of the road

Development as Usual – Amanda facilitating

- Group 3:
  - Pros:
    - More realistic
    - Concentrated commercial along bypass
    - Value of water view/tax base
  - Cons:
    - More homes in floodplain
    - Not enough education about living in floodplain
- Group 4:
  - Like constrained growth in comparison to others
  - Logical/realistic growth
  - Flooding no matter what
- Group 1:
  - Like – very few homes in floodplain
  - Flood insurance savings
  - Good that most development along Bypass 35 in higher elevation
- Group 2
  - Dislike total business thoroughfare
  - Removing trees/no protection
  - Lose pretty access to City
  - Concentrate retail/business centers
  - Bringing more business/industrial instead of natural
  - Promoting certain types of developments
  - Need investing middle-class clientele for homes

Large Development – Race facilitating, Ginger took some notes

- Land put in conservation can increase points, decrease flood insurance premiums
- More points for land in 100 year flood area
- Both habitats, marsh and higher/oak tree areas should be included in conservation

Maximum Development – Karen facilitating

- Build away from coasts
- Where do you want your house?
- Expect more development on the northern end of peninsula

## CHAPTER 6: COMMUNITY ENGAGEMENT AND RISK COMMUNICATION EVALUATIVE FRAMEWORK FOR THE CITY OF ROCKPORT AND ARANSAS COUNTY

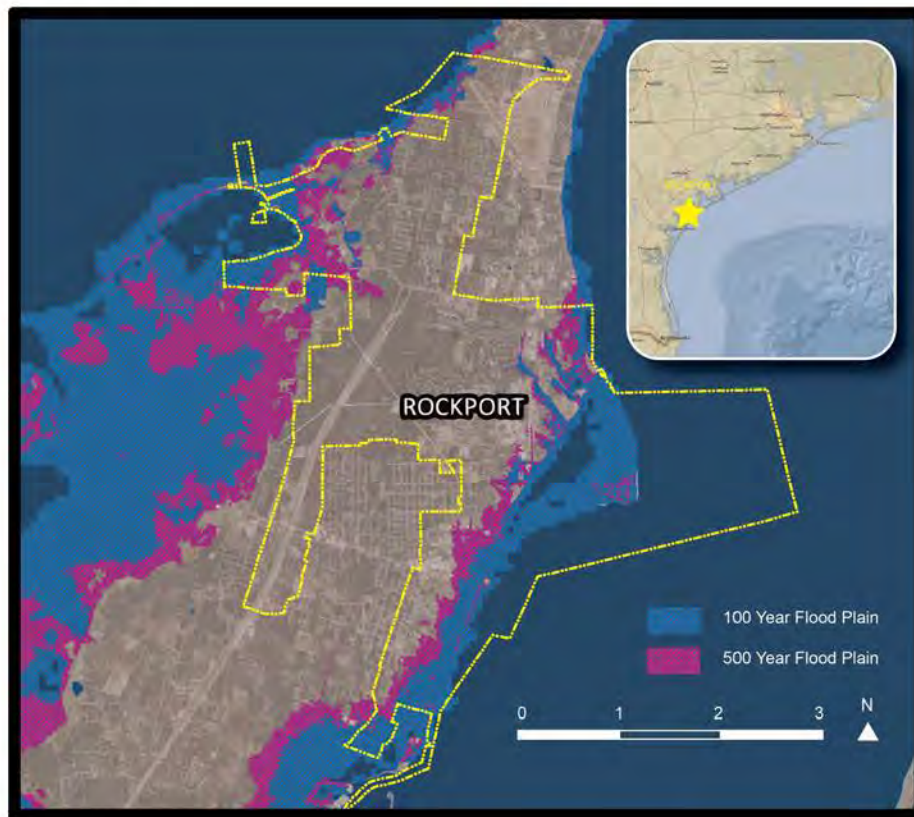
# Texas A&M

## CERC Evaluative Framework

**Date:** August 24, 2016

**Community:** Rockport

**County:** Aransas



TEXAS A&M  
AGRI LIFE  
EXTENSION



FEMA

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### **Introduction**

This evaluative framework documents local capabilities, priorities, opportunities, and needs in Rockport, as they relate to enhancing resiliency, advancing risk reduction activities, and promoting risk literacy.

There is strong political willpower in Rockport to advance hazard mitigation initiatives which, when supplemented with technical expertise in hazard mitigation planning from outside entities (TCWP, UTMSI, FEMA, Texas Sea Grant, etc.), has the potential to make substantial dividends in reducing risk for people, property, and the natural environment.

The community planner for the city, Amanda Torres, is a highly industrious advocate for resiliency and should be considered a champion for mitigation projects around the city, as well as throughout Aransas County. The planning department is housed within the City's Public Works Department, administered by Mike Donoho, a former emergency manager official and public works engineer. Councilmember Barbara Gurtner, Mayor CJ Wax, and Assistant Public Works Director Art Smith, have also expressed a high level of interest in risk reduction measures and are critical contacts to this end.

Rockport has a long standing relationship with the Texas Coastal Watershed Program (TCWP), in part because TCWP's message of long term planning to mitigate disaster impacts has resonated with municipal staff. Since 2011, TCWP has conducted multiple land use planning workshops in Rockport, resulting in a high understanding of the intersection between land use and disaster risk reduction. Rockport frequently requests planning support services from TCWP and Texas Sea Grant, making them an ideal candidate for sustained and future engagement.

During 2016, TCWP has supported Rockport with:

- Passing a freeboard ordinance by providing letters of clarification and support to the city council.
- Consulting on site plan reviews to reduce impacts to native wetlands.
- Providing oversight and project management services on the development of a Floodplain Management Plan for the Community Rating System.
- Providing other consulting services for the Community Rating System.
- Engaging the Rockport Chamber of Commerce in business continuity planning and hurricane preparedness risk awareness.
- Presenting with Rockport staff at the 2015 Coastal Bend Hurricane Conference.
- Serving as a liaison between state and federal agencies.

### Demographic and Hazard Overview

This section provides a concise overview of the community, focusing on select demographic variables, historical disaster impacts, land use indicators, and other information relevant to hazard mitigation.

#### Population of Rockport (2000-2020)

Year	Population
2000	7,385
2010	8,766
2020 (projected)	9,260

Source: U.S. Census Bureau, 2000/2010, Table DP-1; Texas Water Development Board Population Projections

#### Selected Social Vulnerability Indicators for Rockport (2014)

Indicator	Rockport	Texas
Median Household Income	47,887	52,576
% Pre 1980 Housing Units	35.8	43.1
% Mobile Homes	10.1	7.5
% Housing Units (no vehicle available)	7.3	5.9
% with a disability	18.5	11.6
% 65 and older	28.3	10.3

Source: ACS 2009-2013 Estimates

#### Severe Weather Occurrences in Rockport (1995-2015)

Hazards	# of occurrences	Total Property Damage
Hurricane <sup>1</sup>	8	Unknown
Flash Flood	18	1,600,000
Thunderstorm/Heavy Rain	17	575,000
Tornado	5	265,000
Hail	12	15,000
Flood	2	0
Funnel Cloud	3	0

Source: NOAA National Climatic Data Center; <sup>1</sup>Hurricanes within 65 nautical miles of Rockport

#### Presidentially Declared Disaster Declarations for Aransas County (1995-2015)

Disaster Number	Date	Incident Title
3313	6/29/2010	Tropical Storm Alex
2803	4/5/2009	Holiday Beach Fire
1791	9/13/2008	Hurricane Ike
3294	9/10/2008	Hurricane Ike
3290	8/29/2008	Hurricane Gustav
1780	7/24/2008	Hurricane Dolly
3284	3/14/2008	Wildfires
3277	8/18/2007	Hurricane Dean
1624	1/11/2006	Extreme Wildfire Threat
1606	9/24/2005	Hurricane Rita
3261	9/21/2005	Hurricane Rita
3216	9/2/2005	Hurricane Katrina Evacuation
1479	7/17/2003	Hurricane Claudette
1439	11/5/2002	Severe Storms, Tornadoes And Flooding
1287	8/22/1999	Hurricane Bret
1239	8/26/1998	Tropical Storm Charley

Source: FEMA; [www.fema.gov/disasters/grid/state-tribal-government/](http://www.fema.gov/disasters/grid/state-tribal-government/)

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**Land Use Indicators for Aransas County**

Year	% land developed	% Impervious Surface
1996	2.76	0.88
2010	2.95	0.98
% net increase	6.98	11.28

*Source: NOAA C-CAP Land Cover Atlas*

**Distribution of Areas Lost To Development by Land Cover (1996-2010)**

Agriculture	Square Miles
Barren Land	.02
Emergent Wetland	.04
Forested	.09
Grassland	.41
Scrub/Shrub	.3
Woody Wetland	.13
Open Water	.08

*Source: NOAA C-CAP Land Cover Atlas*

**Severe Repetitive Loss (SRL) Properties in Rockport**

Classification	# of Properties
Residential	14
Commercial	9
Other	0

*Source: NOAA C-CAP Land Cover Atlas*

**FEMA Funded UHMA and PA Projects in Aransas County**

Grant	# of Projects	Total Federal Contribution
HMGF	0	0
FMA	0	0
PDM	0	0
SRL	0	0
PA	46	423,395.40

*Source: NOAA C-CAP Land Cover Atlas*

- In their 2011 Hazard Mitigation Plan, Rockport identified Coastal Erosion, Drought, Flood, Hurricanes, Tornadoes, and Wildfire as the greatest sources of risk.

**Capabilities****1. Administrative – Staffing Capabilities**

The following table includes a selection of municipal staff that would likely be involved in hazard mitigation initiatives.

Position	Name		E-Mail	Phone
	First	Last		
Administrative Assistant	Diana	Leonard	records@cityofrockport.com	361-729-2213 ext. 221
Administrative Assistant	Meredith	Yarnall	Unavailable	Unavailable
Assistant City Secretary	Ruby	Heaven	admin@cityofrockport.com	361-729-2213 ext. 222
Assistant Public Works Director	Art	Smith	publicworks1@cityofrockport.com	361-790-1160
Building Inspector	Frank	Truitt	inspector@cityofrockport.com	361-790-1125 ext. 111
Chief of Police	Tim	Jayroe	tjayroe@cityofrockport.com	361-790-1101
City Attorney	Terry E.	Baamonte	Unavailable	Unavailable
City Councilmember	J. R.	Day, Jr.	ward1council@cityofrockport.com	361-729-2213 ext. 222
City Councilmember	Barbara	Gurrier	ward4council@cityofrockport.com	361-729-2213 ext. 222
City Councilmember	Joe D.	Villa	ward2council@cityofrockport.com	361-729-2213
City Engineer	Jim	Urban	Unavailable	Unavailable
City Manager	Kevin	Carruth	citymgr@cityofrockport.com	361-729-2213 ext. 221
City Secretary	Teresa	Valdez	citysec@cityofrockport.com	361-729-2213 ext. 225
Code Enforcement	Ignacio	Buitron	codeenforcer@cityofrockport.com	361-790-1125 ext. 223
Code Enforcement	Angie	West	codeenforcement2@cityofrockport.com	361-790-1125 ext. 108
Community Planner	Amanda	Torres	communityplanner@cityofrockport.com	361-790-1125 ext. 226
Director of Finance	Paty	Howard	Unavailable	Unavailable
Director of Information Technology	Brian	Jacobs	Unavailable	Unavailable
Director of Public Works	Michael	Doncho	publicworksdirector@cityofrockport.com	361-790-1160
Director Parks & Recreation	Tom	Staley	parks@cityofrockport.com	361-790-1136
Environmental Specialist	Kendra	Baird	publicworks2@cityofrockport.com	361-790-1160
Fire Marshal/Captain	Larry	Sinclair	lsinclair@cityofrockport.com	361-790-1110
Mayor	C.J.	Wax	mayor@cityofrockport.com	361-729-2213 ext. 221
Mayor Pro Tem	Patrik	Rios	ward3council@cityofrockport.com	361-729-2213 ext. 222
Office Staff	Judi	Yarnall	Unavailable	Unavailable
Office Staff	Mary Ann	Dela Rosa	Unavailable	Unavailable
Permit Coordinator	Mary	Pellinger	permits@cityofrockport.com	361-790-1125 ext. 227
Street Superintendent	Reuben	Garza	street2@cityofrockport.com	361-790-1160
Tax Assessor/Collector	Jeri	Cox	Unavailable	Unavailable

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*The following table contains an exhaustive list of all boards and commissions for the City of Rockport.*

Boards and Commissions
Environmental Committee for Water Issues
Parks and Leisure Services Advisory Board
Planning and Zoning Commission
Rockport Heritage District Board
Zoning Board of Adjustment
Tree and Landscape Committee
YMCA Development Committee

## 2. Administrative – Fiscal Capabilities

*The following is a list of selected fiscal capabilities for the community. This table highlights internal capabilities that the municipality has to fund hazard mitigation initiatives.*

Survey Components/Subcomponents		Existing (Yes/No)	
		Local Level	Other Level
Fiscal Capability	Capital Improvement Project Funding	Yes	No
	Community Development Block Grant	Yes	No
	Authority to Levy Taxes for Specific Purposes	Yes	Yes (County)
	Gas/Electric Service Fees	Yes	No
	Storm Water Service Fees	No	No
	Water/Sewer Service Fees	Yes	No
	Development Impact Fees	No	No
	General Obligation Revenue or Special Tax Bonds	Yes	Yes
	Other – Utility System Fund	Yes	No
	Other – Building Permit Fees	Yes	No
	Other – Platting and Zoning Fees	Yes	No
	Other – Inspection Fees	Yes	No
	Other – Site Development Fees	Yes	No

## 3. Planning/Regulatory/Technical Capabilities

*The following is a list of selected planning and regulatory mechanisms that the community has to support hazard mitigation initiatives.*

Survey Components/Subcomponents		Existing (Yes/No)	
		Local Level	Other Level
Planning Mechanisms	Comprehensive Plan	Yes	No
	Downtown Master Plan	Yes	No
	Capital Improvements Plan	Yes	No
	Hazard Mitigation Plan	Yes	Yes, COG/County
	Economic Development Plan	Yes	Yes, COG
	Local Emergency Operations Plan	Yes	Yes, County
	Debris Management Plan	No	Yes (Private Firm)

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Survey Components/Subcomponents		Existing (Yes/No)	
		Local Level	Other Level
	Local Recovery Plan	No	No
	Natural Resources Protection Plan	No	No
	Parks, Open Space, and Recreation Plan	No	No
	Post Disaster Redevelopment Plan	No	No
	Transportation Plan	No	Yes (MPO)
	Watershed Plan	No	No
	Open Space Preservation Plan	No	No
	Floodplain Management Plan	Yes	Yes, County
	Master Drainage Plan	Yes	No
Policies / Ordinances	Storm Water Ordinance	Yes	No
	Tree Trimming Ordinance	Yes	No
	Zoning Ordinance	Yes	No
	Subdivision Regulation/Ordinance	Yes	No
	Site Plan Review Requirements	Yes	No
	Historic Preservation Ordinance	Yes	No
	Floodplain Ordinance	Yes	Yes (County)
	Building Codes	Yes	No
	National Flood Insurance Program	Yes	Yes (County)
	Community Rating System	Yes	No
	Post Disaster Recovery Ordinance	No	No
	Tree Preservation Ordinance	Yes	No
Studies and Maps	Flood Insurance Rate Maps	Yes	Yes (County)
	Flood Insurance Study	Yes	Yes (County)
	Critical Facilities Inventory	Yes	Yes (County)
	Current Land Use Map	Yes	No
	Future Land Use Map	Yes	No
	Evacuation Route Map	No	Yes (TxDOT)

#### 4. Education and Outreach Capabilities

The following is a list of education and outreach capabilities throughout the community that may be involved in hazard mitigation initiatives.

Survey Components/Subcomponents		Existing (Yes/No)	
		Local Level	Other Level
Education and Outreach Programs	Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. Please list.	Yes (Note: Local GIS User Group)	Yes
	Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Yes	Yes
	Natural Disaster or Safety related school programs	Yes	No
	StormReady Certification	No	No
	Firewise Communities Certification	No	No

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Survey Components/Subcomponents		Existing (Yes/No)	
		Local Level	Other Level
	Public-private partnership initiatives addressing disaster-related issues	Yes	Yes
	Mutual Aid Agreements	Yes	Yes
	Faith-Based Organizations	Yes	Yes
	Registered 501c3 Non-Profits	Yes	Yes

### Priorities

1. Hazard Mitigation Project Priorities (Non-Structural)
2. Hazard Mitigation Project Priorities (Structural)
3. Land Use Priorities
4. Capital Improvement Project Priorities
5. Economic Development Project Priorities

#### 1. Hazard Mitigation Project Priorities (Non-Structural)

The following is an exhaustive list of non-structural hazard mitigation projects that the City of Rockport identified in their most recent hazard mitigation plan.

Hazard Mitigation Project Priorities (Non-Structural)		Priority Level	Timeline
Projects	Implement Hazcollect System - Implement 'All Hazards' NOAA Weather Radio (NWR) procedures for dissemination of emergency messages to the public, originating with local jurisdictions.	Medium	12 months
	Host a training workshop on Continuity of Operations (COOP) for local government representatives.	Medium	24 months.
	Outreach for NWR Awareness - Promote public awareness and use of NOAA Weather Radio (NWR)	Medium	Ongoing
	Extreme Heat Data Deficiency	Low	3 Months
	Flood Plain Management Training	Low	24 Months
	Public Drought Education	Low	24 Months
	Live Oak Peninsula Master Drainage Plan Mitigation Action - 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 in south Rockport. As new streets arise in the future, they will be built in accordance with the requirements of the Master Plan, to ensure that flooding is minimized. The City Councils of the Town of Fulton and The City of Rockport will adopt improvement actions such as modifying zoning regulations in the affected area.	In progress	Ongoing
	Aransas County Integrated Storm Water Management Plan Mitigation Action - Aransas County is in the process of developing the Integrated Storm water 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 improvements. The ISWMP will identify problem areas and improvement actions such as modified zoning regulations in the affected areas will be adopted by the City Councils of the Town of Fulton and The City of Rockport.	Medium	6 months

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Hazard Mitigation Project Priorities (Non-Structural)		Priority Level	Timeline
	Generator for Chaparral Sewer Lift Station	High	6 months
	Generator for Austin Street Sewer Lift Station	High	6 months
	Generator for Gagon Street Sewer Lift Station	High	6 months
	Retrofit 3 Existing Public Buildings for Cooling Shelters	Medium	12 months
	Implement Flood Plain Ordinance - Create and implement city ordinance to require a 2' elevation above the current freeboard requirement. This action will help to reduce the flooding on development in all flood prone areas including minimal flood prone areas. The City of Rockport Flood Damage Prevention Ordinance is enforced to comply with the requirements of the NFIP and to minimize the threat to life and property resulting from flooding.	Medium	6 months (COMPLETED)

*Source: 2011 Coastal Bend COG Mitigation Action Plan; Priorities levels are designated in the plan.*

## 2. Hazard Mitigation Project Priorities (Structural)

*The following is an exhaustive list of structural hazard mitigation projects that the City of Rockport identified in their most recent hazard mitigation plan.*

Hazard Mitigation Project Priorities (Structural)		Priority Level	Timeline
Projects	<p>Live Oak Peninsula Shoreline Stabilization Strategic Plan Mitigation Action - 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. As funding becomes available, stabilization projects of adding oyster reefs and concrete breakwaters will be implemented. 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.</p> <p>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)</p>	Medium	2 years. Priority 5 project has started.

*Source: 2011 Coastal Bend COG Mitigation Action Plan. Priorities levels are designated in the plan.*

## 3. Land Use Priorities

*The following is a list of land use priorities identified in the City of Rockport's most recent comprehensive plan.*

Land Use Priorities		Source
Projects	The future land use pattern will remain similar to the existing land use pattern. SH 35 and FM 881 will continue to be the major thoroughfares and growth structure.	Comprehensive Plan p. 74

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Land Use Priorities		Source
	Facilitate Industrial development adjacent to SH-35, just outside city limits.	Comprehensive Plan p. 115
	The utilities systems of the Rockport can be extended to serve any location along SH 35 in the vicinity of Rockport and any areas immediately surrounding the city.	Comprehensive Plan p. 121
	Development of local land use and growth control capabilities, through planning and enforcement of subdivision controls, and building codes inside the city limits and within the area of extraterritorial jurisdiction.	Comprehensive Plan p. 75
	Development of utility extension policies and impact fees to encourage quality development.	Comprehensive Plan p. 75
	Continuing activity of the planning and zoning commission in the review and approval of zoning variances.	Comprehensive Plan p. 75
	Joint efforts with the local Chamber of Commerce and Economic Development Committee to attract non-polluting industries and businesses that are compatible with the community, while discouraging large industries which may be out of scale and in conflict with the small town character and image which the local residents have expressed a desire to maintain.	Comprehensive Plan p. 75

Source: City of Rockport Comprehensive Plan 1999

#### 4. Capital Improvement Project Priorities

*The following is a list of capital improvement priorities identified in the City of Rockport's 2015/2016 Capital Improvements Plan.*

Capital Improvement Project Priorities		Priority Level	Timeline
Projects	Storm Water Management Plan Revision	1	Completed
	Spanish Woods Drainage	2	Nearing End
	Cape Velero Loop Line	3	Unknown
	WWTP Rehabilitation	4	Unknown
	Tank Rehab – Annual	5	Ongoing
	Key Allegro Bridge	6	2016-2017
	Heritage District Street Sign Project	7	2016-2017
	Way Finding Sign Project	8	2016-2017
	Traylor St and Henderson St. Rehab – Reconstruct pavement failures between 35 and Fulton Beach Rd.	9	2018-2019
	Austin St. Rebuild – Rebuild failing street either by concrete or hotmix	10	2017-2018

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Capital Improvement Project Priorities	Priority Level	Timeline
Downtown Water Line	11	Unknown
Gagon Force Main	12	Unknown
Linden Street Rehab	13	2017-2018
Stormwater Crossing at FM 1781 – Upgrade / Replace box culverts to accommodate growth	14	Unknown
WW SCADA System	15	Unknown
Distribution Integrity Management	16	Unknown
Master Plan Drainage – Project 1 – SH35 Business – Traylor Ave & Tule Park Dr – Eliminates flooding in areas 1 and 8.	17	2017-2018
Master Plan Drainage – Project 2 – Box culvert outfall on Maple from SH 35 Business to Little Bay – Eliminates flooding in areas 2 and 3.	18	2017-2018
Master Plan Drainage – Project 6 – Upgrade storm sewer system on Enterprise from Stadium to Omohundro and Omohundro from Maple to Cherry. Eliminates flood in areas 11 and 14 and flooding on Live Oak in area 12.	19	2017-2018
Force Main – 1 <sup>st</sup> to Gagon	20	Unknown
Force Main Upgrade – Woodlands to WWTP	21	Unknown
Master Plan Drainage – Project 3 – Improvements to Ruby Allen ditch system is the first step to reducing flooding in Areas 4,6 and 10. Downstream improvements will be completed in project 5	22	2018-2019
Master Plan Drainage – Project 4 – Upgrade storm sewer system down Ann St from Market to Murray, eliminating flooding in area 5	23	2018-2019
Master Plan Drainage – Project 5 – Improvements to Traylor Ditch system on Terry St from Market to Corpus Christi to eliminate flood in areas 7 and 9.	24	2018-2019
Master Plan Drainage – Project 7 – New storm sewer pipe on Market St. from Church St. to bay to eliminate flooding in area 16.	25	2019-2020
Master Plan Drainage – Project 8 – New box culvert outfall down Orleans from Ann to Little Bay with major crossings at Pearl St. and SH 35 Business. Also extending down Sabinal on the west side of Pearl and additional capacity being added to existing outfall at Nopal, to eliminate flooding in area 16.	26	2019-2020
Construction & Upgrades – Substandard Roadways	27	Unknown
RCC Lakes – Sedimentation Removal	28	Unknown
Concho Street Drainage	29	Unknown
Community Center (YMCA)	30	Unknown

Source: City of Rockport Annual Budget and Capital Improvements Program (2015/2016)

##### 5. Economic Development Project Priorities

*The following is a list of economic development priorities identified in the City of Rockport's most recent comprehensive plan.*

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Economic Development Project Priorities		Source
Projects	Promotion of tourism business which will take advantage of the natural and historic resource in the area; support for ecotourism in the region and local bird watching.	Comprehensive Plan p.132
	Promotion of Rockport as a location convenient to sources of tourism, as a location of production for the region's market, and as a location which offers a please living environment.	Comprehensive Plan p.132
	Promotion of commercial development, particularly through technical and leveraged financial assistance to existing local business for expansion and diversification.	Comprehensive Plan p.132
	Participation in regional efforts such as the revolving loan fund effort of the Private Industry Council under the Revolving Loan Program of the Economic Development Administration.	Comprehensive Plan p.132
	Promotion and sponsorship of training and job education programs through Workforce Training assistance.	Comprehensive Plan p.132
	Improvement of the community's image through downtown revitalization and beautification in the commercial areas.	Comprehensive Plan p.132
	Participation in assistance programs such as the Main Street Program, the Texas Capital Fund assistance of the Texas Department of Commerce, EDA public works programs, and USDA/RECD financing.	Comprehensive Plan p.132
	Development of policies or action necessary to create a business climate that will attract and encourage new investment and expansion of existing businesses, including support for the activities of the Rockport-Fulton Area Chamber of Commerce.	Comprehensive Plan p.132

### Opportunities

1. What opportunities exist for integrating the community's plans and planning mechanisms to be mutually supportive?

#	Comprehensive Plan I	Present	
		Yes	No
In delineating future growth areas, does the community's future land use map take into account natural or human caused high-hazard areas such as:			
<b><u>Natural high-hazard areas</u></b>			
1.1.1	Steep slopes subject to landslides		<input type="checkbox"/>
1.1.2	Steep slopes and wooded areas subject to wildfire		<input type="checkbox"/>
1.1.3	Urban/wildland intermix areas		<input type="checkbox"/>
1.1.4	100-year floodplain		<input type="checkbox"/>
1.1.5	500-year floodplain		<input type="checkbox"/>
1.1.6	Coastal flood zones		<input type="checkbox"/>
1.1.7	Hurricane-prone areas		<input type="checkbox"/>
1.1.8	Erosion areas		<input type="checkbox"/>
1.1.9	Seismic hazard zones		<input type="checkbox"/>
1.1.10	Areas of expansive/unstable soils, subsidence areas		<input type="checkbox"/>
1.1.11	Coastal construction line		<input type="checkbox"/>

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#	Comprehensive Plan I	Present	
		Yes	No
1.1.12	Wind speed zone over 100 miles per hour or special wind regions		<input type="checkbox"/>
1.1.13	Sinkhole areas		<input type="checkbox"/>
<b>Human-caused high-hazard areas</b>			
1.1.14	Areas within the identified inundation zone of a "high" or "significant" hazard dam		<input type="checkbox"/>
1.1.15	Areas within the determined vulnerability zone (10-mile emergency planning zone) of a nuclear power plant		<input type="checkbox"/>
1.1.16	Areas contiguous to railroads, highways, or waterways that regularly carry significant quantities of hazardous materials		<input type="checkbox"/>
1.1.17	Areas contiguous to oil/gas wells, pipeline terminals, storage facilities, production facilities, or compressor stations		<input type="checkbox"/>
1.1.18	Areas contiguous to high-volume commercial passenger airports and other passenger transportation terminals and facilities		<input type="checkbox"/>

#	Comprehensive Plan II	Present	
		Yes	No
1.2	Does the future land use plan take into account high-hazard areas and identify adequate space for projected future growth outside of these high-hazard areas? If yes, which hazard areas does it address?		<input type="checkbox"/>
1.3	Does the plan include policies to restrict the density of new development in high-hazard areas or guide new development away from high-hazard areas? Does the plan include policies to relocate vulnerable existing development to safer/less vulnerable areas?		<input type="checkbox"/>
1.4	Do the land use policies discourage development or redevelopment within natural hazard areas?	<input type="checkbox"/>	
1.5	Does your plan include policies for existing structures and facilities to be strengthened, elevated, or relocated during the redevelopment process?		<input type="checkbox"/>
1.6	Does your plan include policies to strengthen stormwater management retention (e.g., retain more stormwater on site) during the redevelopment process?		<input type="checkbox"/>
1.7	Are there any areas identified in the land use plan where a proposed rezoning would put more people at risk (for example, by allowing higher-density development in the 100-year floodplain)?		<input type="checkbox"/>
1.8	Does your comprehensive plan include goals and objectives aimed at safe growth? For example, if your community is located in a high-hazard area, does your community have a provision wherein allowable densities for undeveloped areas in coastal high-hazard zones will be considered for reduction or new development on barrier islands will be limited to densities that meet required evacuation standards?		<input type="checkbox"/>
1.9	Are the goals and policies of the comprehensive plan compatible with those of the hazard mitigation plan? Do any goals and policies conflict with the hazard mitigation plan?	<input type="checkbox"/>	
1.10	Is safety explicitly included in the plan's growth and development policies?	<input type="checkbox"/>	
1.11	Does the monitoring and implementation section of the land use plan cover safe growth objectives?		<input type="checkbox"/>

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1.12	Does your future land use plan contain growth management techniques, such as land conservation, buffering, and clustering of development to protect and conserve natural resources?		<input type="checkbox"/>
1.13	Does your plan include other techniques, such as crime prevention through environmental design (CPTED), planned unit developments, or cluster developments?		<input type="checkbox"/>
1.14	Are the goals and policies of the comprehensive plan related to those of the FEMA Local Hazard Mitigation Plan?	<input type="checkbox"/>	

#	Zoning Ordinance	Present	
		Yes	No
2.1	Does the zoning ordinance conform to the comprehensive plan in terms of discouraging development or redevelopment within natural hazard areas?		<input type="checkbox"/>
2.2	Does the ordinance contain natural hazard overlay zones that set conditions for land use within such zones?		<input type="checkbox"/>
2.3	Do rezoning procedures recognize natural hazard areas as limits on zoning changes that allow greater intensity or density of use?		<input type="checkbox"/>
2.4	Does the ordinance prohibit development within, or filling of, wetlands, floodways, and floodplains over and above minimum NFIP requirements?		<input type="checkbox"/>

#	Subdivision Regulations	Present	
		Yes	No
3.1	Do the subdivision regulations restrict the subdivision of land within or adjacent to natural hazard areas?		<input type="checkbox"/>
3.2	Do the regulations permit conservation subdivisions or cluster subdivisions that conserve environmental resources by setting aside land for protection of natural resources?		<input type="checkbox"/>
3.3	Do the regulations allow density transfers or transfer of development rights where hazard areas exist?		<input type="checkbox"/>
3.4	Are there any additional mitigating measures, such as additional setbacks in critical erosion areas, conservation of dunes and vegetation, floodproofing of utilities, and structural wind resistance and floodplain management?		<input type="checkbox"/>

#	Capital Improvement Program and Infrastructure Policies	Present	
		Yes	No
4.1	Does the capital improvement program provide funding for hazard mitigation projects identified in the hazard mitigation plan or include mitigation as a component to a redevelopment, renovation, or development project (e.g., replacing a courthouse roof, elevating a water treatment plant)?		<input type="checkbox"/>
4.2	Does the capital improvement plan limit or prohibit expenditures on projects that would encourage new development or additional development in areas vulnerable to natural hazards?		<input type="checkbox"/>

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#	Capital Improvement Program and Infrastructure Policies	Present	
		Yes	No
4.3	Does your community have infrastructure policies that limit extension of existing infrastructure, facilities, and/or services that would encourage development in areas vulnerable to natural hazards?		<input type="checkbox"/>
4.4	Do your community policies limit public expenditures in coastal high-hazard areas (e.g., limit expenditures to necessary repairs to maintain in current condition public safety needs, services to existing residents, recreation, and open space uses)?		<input type="checkbox"/>

#	Environmental Management	Present	
		Yes	No
5.1	Are environmental systems that protect development from hazards identified and mapped?		<input type="checkbox"/>
5.2	Do environmental policies maintain and restore protective ecosystems?		<input type="checkbox"/>
5.3	Do environmental policies provide incentives to development that is located outside protective ecosystems?		<input type="checkbox"/>

#	Building Codes	Present	
		Yes	No
6.1	What building codes, standards, and design/construction review practices does your community currently use? (e.g., type of code/date of adoption)?	2012	
6.2	Does the building code contain hazard reduction provisions (e.g., strengthen construction to withstand wind forces)?		<input type="checkbox"/>
6.3	Are policies in place to reduce vulnerability to wind, water, hail, lightning, fire, extreme temperatures, and ground shift/collapse through regulating the location, size, design, type, construction methods, and materials used in structures?	<input type="checkbox"/>	
6.4	Does your building code contain sections on hurricane preparedness, flood hazard reduction (over and above minimum National Flood Insurance Program [NFIP] requirements), environment and natural resources? Does your plan include a wind speed map showing areas subject to 100-, 110-, 120-, and 130-mile-per-hour winds?		<input type="checkbox"/>
6.5	Are there measures for protecting historically vulnerable significant structures to preserve their historic character and appearance as well as protect them from damage from hazard events?		<input type="checkbox"/>

#	Transportation Plan	Present	
		Yes	No
7.1	Does the long-range transportation plan address hazards that can occur and affect the transportation system assets? For example, does it identify hazards and their likely effects on the various modes of the transportation system, vulnerable assets, and other risks in the system? Does it include a plan to monitor hazardous material transportation?		<input type="checkbox"/>
7.2	Does the Transportation Improvement Program (TIP) have projects that address hazard mitigation and/or emergency management (e.g., Intelligent Transportation Systems [ITS] investments to coordinate local traffic management centers for evacuation)?		<input type="checkbox"/>

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#	Transportation Plan	Present	
		Yes	No
7.3	Is the transportation network developed in a manner that provides redundancy (i.e., alternate routes) if certain key nodes or routes are affected by disaster?	<input type="checkbox"/>	
7.4	Is the transportation system designed to function under disaster conditions and does it adequately address evacuation? Is there a memorandum of understanding between agencies for sharing data and information before, during, and after a disaster? Are communication systems interoperable (e.g., for communication between transportation entities and first responders)?	<input type="checkbox"/>	
7.5	Are policies in place to protect transportation facilities, such as airports, from hazard events and to locate them outside of high-hazard areas?		<input type="checkbox"/>
7.6	Are policies in place for design and siting of water and sewer systems, roads and bridges, hospitals and medical facilities, power plants, and public safety facilities to protect these facilities during hazard events and for their continued operation after a disaster event?		<input type="checkbox"/>
7.7	How does your state law address the siting of new critical facilities in high-hazard coastal zones? Does it prohibit them or allow them with stipulations?		
7.8	Are there any public transit stations/lines and highways in close proximity to flood-prone areas?	<input type="checkbox"/>	
7.9	Are there specific designated routes for the conveyance of hazardous materials so that public safety is not compromised?	<input type="checkbox"/>	
7.10	Are rail crossings designed in a manner that minimizes the likelihood of car-train crashes—a major cause of rail transportation accidents?		<input type="checkbox"/>
7.11	Are highways and local streets designed with capacity to accommodate community-wide evacuations?		<input type="checkbox"/>
7.12	Are any transportation facilities designed and constructed (hardened) to withstand the excessive forces of nature to ensure continuity of operations immediately after a disaster?		<input type="checkbox"/>
7.13	Is there a de-concentration of public facilities that provide essential public services within your community?		<input type="checkbox"/>
7.14	Is there a de-concentration in the design of service networks (roads, pipelines, cables, etc.) to reduce the risk of failure and loss of service after a hazard event?		<input type="checkbox"/>
7.15	Are evacuation route capacity and clearance times addressed through land development regulations, a schedule of evacuation route improvements, or any mechanism to reach the level of service?		<input type="checkbox"/>

Source: Regional Public Transportation Plan 2011 for the Coastal Bend Region. 2011. CC MPO; Transportation Coordination Network of the Coastal Bend.

#	Emergency Management Plan	Present	
		Yes	No
8.1	Has your community adopted an evacuation and shelter plan to deal with emergencies from natural hazards?		<input type="checkbox"/>
8.2	Does your EOP contain information on maintaining or reducing hurricane evacuation times?	<input type="checkbox"/>	
8.3	Does your EOP show which major evacuation routes are prone to flooding?	<input type="checkbox"/>	
8.4	Has your community prepared a post-disaster redevelopment plan that includes policies to reduce or eliminate the exposure of human life and public and private property to natural hazards after a disaster?		<input type="checkbox"/>

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#	Emergency Management Plan	Present	
		Yes	No
8.5	If yes, does post-disaster redevelopment include policies to address short-term repair and cleanup actions needed to protect public health and safety and long-term repair and redevelopment activities; address the removal, relocation, or structural retrofitting of damaged infrastructure; and limit redevelopment in areas of repeated damage?	N/A	N/A
8.6	Does your post-disaster redevelopment plan include actions or policies on incorporating hazard mitigation into the short- and long-term recovery process (e.g., Public Assistance 406 Mitigation in short-term recovery)?	N/A	N/A
8.7	Is there a policy to meet existing and future shelter demand to ensure the safety of residents in the event of a disaster?	<input type="checkbox"/>	
8.8	Are there enough shelters to support population growth and special needs populations?	<input type="checkbox"/>	
8.9	Does your community's hazard mitigation plan reference the EOP and which departments would be involved for specific functions, such as shelter operations, damage assessment, and flood control for various hazards, to ensure that the two plans are well integrated? For example, does your EOP include actions to collect valuable data (e.g., high water marks) after a recent hazard event? This type of information can be essential to preparing hazard mitigation project applications for FEMA funding.		<input type="checkbox"/>
8.10	Do your continuity of operations (COOP) or continuity of government (COG) plans identify mitigation opportunities for key government facilities at higher risk?	N/A	N/A
8.11	Is there joint participation of community staff in plan exercises (e.g., COOP, comprehensive emergency management plan [CEMP], emergency operations center [EOC], shelter, evacuation, housing, mitigation, recovery, comprehensive planning charettes)?	<input type="checkbox"/>	

Source: Aransas County Emergency Operations Plan

#	Environment and Open Space Plans	Present	
		Yes	No
9.1	Is there a policy to utilize land that is otherwise unsuitable for development (such as floodplains, steep slopes) for recreational purposes, thereby lowering the community's risk?	N/A	N/A
9.2	Are there policies to encourage the development of waterfront areas for recreational purposes, to serve as tourist attractions, and to provide an economic benefit to the community from land that is otherwise prone to hazards?	N/A	N/A
9.3	Are your wetlands identified and mapped?	N/A	N/A
9.4	Are your wetlands maintained and conserved so as to be able to mitigate hazard damage?	N/A	N/A
9.5	Do environmental policies maintain and restore protective ecosystems?	N/A	N/A
9.6	Do environmental policies provide incentives to encourage development outside protective ecosystems?	N/A	N/A
9.7	Are the hazard vulnerability implications of land development considered on a regional (or watershed) basis?	N/A	N/A
9.8	If applicable, do your community's environmental policies address the effect that upstream development has on stormwater management and flooding potential downstream?	N/A	N/A

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#	Environment and Open Space Plans	Present	
		Yes	No
9.9	Are policies in place for the protection and conservation of the natural functions of existing soils, rivers, lakes, floodplains, and beaches and shores?	N/A	N/A
9.10	Does your community's stormwater management plan address low-impact development techniques to manage stormwater, such as bio-retention areas, dry wells, infiltration trenches, filter/buffer strips, vegetated swales, rain barrels, and cisterns?	N/A	N/A
9.11	Are any other best management practices (BMPs) in place to reduce stormwater runoff?	N/A	N/A
9.12	Is a policy or program in place for sediment and erosion control?	N/A	N/A

#	Downtown Revitalization Plan	Present	
		Yes	No
10.1	Does the downtown revitalization plan include strategies or provisions for mitigating natural hazards?	<input type="checkbox"/>	
10.2	Does the downtown revitalization plan include a zoning overlay?	<input type="checkbox"/>	
10.3	Does the plan and/or standards allow for modified design standards to reduce flood risk?	<input type="checkbox"/>	

Source: Rockport Heritage District Zoning Overlay Code

**Needs**

1. What types of support is needed to enhance and implement the local hazard mitigation plan and hazard mitigation activities?

- 1) *Communication Barriers*

Rockport City Council Members indicated that communication barriers regarding sea level rise are an issue in Aransas County and the City of Rockport. Texas A&M has discussed partnering with the University of Texas Marine Sciences Institute to assist in public outreach and education discussing sea level rise in the area.

- 2) *CRS Technical Support*

The City of Rockport is currently in the process of joining the Community Rating System. Texas A&M has provided support to this end by helping answer technical questions about the program and being a resource for the city in this effort. Texas A&M is also helping to develop the city's floodplain management plan, which is a CRS activity.

- 3) *Smart Growth*

The City of Rockport has expressed strong interest in promoting walkability, so much so that they aspire to be one of the most walkable communities along the Texas Coast. Opportunities exist to partner with the City Council and planning and development staff to discuss how smart growth can support disaster risk reduction in their communities.

- 4) *Comprehensive Plan Update / Plan Integration*

The City of Rockport has expressed interest in developing a new Comprehensive Plan. The current plan has been rendered obsolete and of poor quality by the City. The City has expressed interest in working with TCWP to develop a new Comprehensive Plan which incorporates strong elements of mitigation and resiliency. To this end, the planning process for this action would have a strong element of integrating planning mechanisms to support the goals of both the Comprehensive Plan and the Hazard Mitigation Plan, which is currently being developed.

- 5) *Knowledge of pursuing grant opportunities*

Rockport does not have a grant writer on staff, but does make use of GrantWorks, a firm with local offices specializing in municipal grant writing. Rockport has never received a UHMA grant. Currently, Rockport finances the majority of their flood mitigation projects through capital improvement bonds.

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Texas A&M Corpus Christi, Texas Sea Grant, the Texas Coastal Watershed Program, and the University of Texas Marine Services Institute all do flood and risk communication work in Rockport.

6) *Confused/overwhelmed with grant requirements*

Rockport has expressed that due to their lack of experience in grant management, many procedural requirements often seem overwhelming.

7) *Staff size and available time*

Rockport has expressed difficulties in pursuing mitigation work due to a relatively small staff and a lack of available time. Much of this work would likely be delegated to the City's community planner.

8) *Moving from a reactive to a proactive culture.*

Rockport does not have an emergency manager (county level only) but does have a proactive public works department. This department undertakes a number of flood and stormwater management projects annually.

9) *Lack of GIS capabilities*

Rockport does not currently make use of GIS, but has expressed interest in learning. Currently, GIS services are contracted out to private firms, as needed.

10) *Data for local funding*

Rockport has expressed that for certain grant opportunities, data necessary for completing applications has not been acquired.

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**Plans and Planning Mechanisms for Reference.**

<b>Plans/Planning Mechanism</b>	<b>Date</b>
A Cultural Plan for the Rockport Cultural Arts District. City of Rockport	2015
A Vision for the Heritage District and Downtown Rockport. Halff Associates.	2006
Annual Budget and Capital Improvements Program. City of Rockport	2015/2016
City of Rockport. Master Drainage Plan.	2016
Coastal Bend COG Mitigation Action Plan.	2011
Comprehensive Plan. City of Rockport	1999
Floodplain Ordinance. Ordinance No. 1658. City of Rockport.	n.d
Future Land Use Plan w/ETJ. No Date. City of Rockport	n.d
Regional Public Transportation Plan 2011 for the Coastal Bend Region. CC MPO; Transportation Coordination Network of the Coastal Bend.	2011
Rockport Heritage District Zoning Overlay Code. City of Rockport.	2012
Rockport Land Use Study. Texas Sea Grant	2012
Statewide Long-Range Transportation Plan 2035. TxDOT.	2015
Stormwater Ordinance. Ordinance No. 1663. City of Rockport.	n.d
Subdivision Ordinance. Ordinance No. 1663. City of Rockport	n.d
Tree and Landscape Ordinance. Ordinance No. 1349. City of Rockport.	n.d
Zoning Map. City of Rockport	2014
Zoning Ordinance. Ordinance No. 1027. City of Rockport.	n.d

## CHAPTER 7: DETAILED COMMUNICATIONS/COORDINATION INFORMATION

Detailed list of communications and coordination (Step. 3.b.).

Organization Name	Contact Name	Initial Contact	By whom?	Content	Additional Contact	Content
APA – Texas Chapter – Coastal Bend Section	Renissa Garza Montalvo	7/28/2016 In-person	Amanda Torres, Karen Bareford, Dana Sjostrom, & Race Hodges	Presentaion on Communtiy Resiliency, and Invited to Rkpt FMP kickoff workshop (9/1/16).	ongoing	Attendance at meetings to discuss local planning issues.
Aransas County	De McLallen, David Reid	8/26/2016 email	Amanda Torres	Invited to Rkpt FMP kickoff workshop (9/1/16).		8/30/16 Reminder about Rkpt FMP kickoff workshop. 9/1/16 Attended Rkpt FMP kickoff workshop.
Aransas County Commissioners Court	All members	9/26/2016 In-person	Amanda Torres & Karen Bareford	Passed Resolution formalizing commitment to the development of the FMP.	ongoing	Have actively participated in the process, and receive updates ~monthly.
Aransas County Navigation District	Malcolm Dieckow, Keith Barrett	8/26/2016 email	Amanda Torres	Invited to Rkpt FMP kickoff workshop (9/1/16).	ongoing	Have actively participated in the process
Aransas Pass City Council	All members	10/3/2016	Amanda Torres & Karen Bareford	Passed Resolution formalizing commitment to the development of the FMP.	ongoing	Have actively participated in the process, and receive updates monthly.
City of Aransas Pass	Katherine Comeaux, Sylvia Carrillo, Miguel Saldana, Lynn Pearce, Robert Brake, Fernando Quintanilla	8/12/2016 phone	Amanda Torres	Invited to join County FMP process.	ongoing	Have actively participated in the process.
City of Aransas Pass Planning and Zoning Commission	All members	11/14/2016	Amanda Torres & Karen Bareford	Have actively participated in the process, and receive updates monthly.	ongoing	

Aransas County Multi-Jurisdictional Flood Plain Management Plan

Organization Name	Contact Name	Initial Contact	By whom?	Content	Additional Contact	Content
Fulton (Town of)	Bob Loflin, Matt Olenick, Rick McLester, Jimmy Kendrick, Jan Hill	8/12/2016 phone	Amanda Torres	Invited to join County FMP process.	ongoing	Have actively participated in the process.
Fulton Town Council	All members	10/18/2016	Amanda Torres & Karen Bareford	Passed Resolution formalizing commitment to the development of the FMP.	ongoing	Have actively participated in the process, and receive updates monthly.
Coastal Bend Council of Governments	Marty Johnson	In-person	Race Hodges	Invited to join County FMP process.		
Environmental Committee for Water Issues (Rockport)	All members (5 people)	8/17/2016 committee meeting	Dana Sjostrom	Discussed the FMP process. Invited all members to Rkpt FMP kickoff workshop (9/1/16).		
FEMA	Charla Marchuk	8/12/2016 email	Amanda Torres	Contacted about FMP committee formation question. Directed AT to ISO representative Deidra Mares.		
ISO	Deidra Mares	8/18/2016 email	Amanda Torres	Contacted about FMP committee formation question. Answer = mayors would be considered part of government.		
LAN Consulting Group	Janine Ellington	In-person	Amanda Torres	Technical assistance.	ongoing	
Naismith Engineering	Craig Thompson	In-person & via email	Amanda Torres, Karen Bareford, & Dana Sjostrom	Invited to join County FMP process, and provide technical assistance on prior county stormwater projects.	ongoing	
National Weather Service, Corpus Christi	Tom Johnstone (and John Metz in subsequent contact)	9/19/2016 email	Karen Bareford	Set up in-person meeting to discuss data, and staff availability for FMP meetings.	9/22/16 personal meeting	Have actively participated in the process, and assisted in the verification

Aransas County Multi-Jurisdictional Flood Plain Management Plan

Organization Name	Contact Name	Initial Contact	By whom?	Content	Additional Contact	Content
						of historical storm data.
National Weather Service	Penny Zabel and Lara Keys	10/04/16 personal meeting	Dana Sjostrom	Discussed updates to collaborative stormwater and preparedness initiatives.		
NOAA's Office for Coastal Management	Kristin Ransom (and Becky Allee in subsequent contact)	8/29/2016 phone call	Dana Sjostrom	Discussed how Rockport and Aransas County are planning to move forward. She offered feedback on the process and available tools to assist in these efforts.	9/22/16 personal meeting	Discussed resilience efforts and FMP progress for multiple jurisdictions.
Port Aransas City Council	Joan Holt	9/02/2016 personal meeting	Dana Sjostrom	Discussed progress related to FMP and CRS in Rockport and Aransas County. She indicated interest in planning similar efforts for Port Aransas.		
Rockport City Council	All members	10/25/2016	Amanda Torres	Passed Resolution formalizing commitment to the development of the FMP	ongoing	Have actively participated in the process, and receive updates ~monthly.
Rockport Heritage District Board	Anita Diebel, Jim Godfrey, Loretta Schnidler, Chad Lee, Bill Fisher	8/30/2016 email	Amanda Torres	Invited to Rkpt FMP kickoff workshop (9/1/16).		Representatives have attended meetings, provided comments, and committed to assisting with plan implementation.
Rockport Planning & Zoning Commission	Brian Olsen, Ruth Davis, Diana Severino-Saxon, Graham	8/29/2016 commission meeting	Amanda Torres	Invited to Rkpt FMP kickoff workshop (9/1/16).	ongoing	Have actively participated in the process, and receive

Aransas County Multi-Jurisdictional Flood Plain Management Plan

Organization Name	Contact Name	Initial Contact	By whom?	Content	Additional Contact	Content
	Wilson, Edward Bellion					updates monthly.
Rockport-Fulton Chamber of Commerce	Diane Probst	8/26/2016 email	Amanda Torres	Invited to Rkpt FMP kickoff workshop (9/1/16).		Attended Rkpt FMP kickoff workshop (9/1/2016) and has actively participated in the process since.
Santa Rosa County	Karen Thornhill	8/29/2016 phone	Amanda Torres	Asked advice on FMP.		
SPB	Autumn Lotze, Disaster Specialist	10/4/2016 phone	Dana Sjostrom	Discussed potential collaborative workshops and training events related to floods and resilience.		
Texas Coastal Watershed Program	John Jacob, Steve Mikulencak	In-person	Amanda Torres, Karen Bareford, & Race Hodges	Technical assistance.	ongoing	
Texas General Land Office (GLO)	Julie McEntire	8/18/2016 phone call	Dana Sjostrom	Discussed current FMP efforts and future ideas for Rockport and surrounding communities. Also discussed potential funding opportunities for related projects with floodplain/watershed management and protection plans.		
Texas General Land Office (GLO)	Kate Saul	9/06/2016 email	Karen Bareford	Request for assistance with data needed for plan development.	9/08/2016 personal meeting	She supports the Aransas County FMP process, and should be able to provide additional GIS data.

Organization Name	Contact Name	Initial Contact	By whom?	Content	Additional Contact	Content
Texas Parks and Wildlife, Aransas County Biologist	Dustin Windsor	7/26/2016 email	Karen Bareford	Request for assistance with data needed for plan development.	7/28/2016 personal meeting	Provided information about species and key habitats to mitigate flooding impacts. Asked him to participate in the FMP process, and have kept him informed.
TX AgriLife Extension	Ginger Easton-Smith	8/17/2016 personal meeting	Dana Sjostrom	Invited to Rkpt FMP kickoff workshop (9/1/16).		Attended Rkpt FMP kickoff workshop (9/1/2016) and has actively participated in the process since.
Urban Engineering	Brandi Karl, Project Engineer for the City of Rockport	8/12/2016 personal meeting	Karen Bareford	Provided information about flood control projects that Rockport has completed in the last 10 years. Invited to participate in the FMP process.	Amanda Torres & Karen Bareford email	Invited to Rkpt FMP kickoff workshop (9/1/16).
US Army Corps of Engineers	Eduardo Irigoyen, Mario Bedingfield	phone and email	Dana Sjostrom & Karen Bareford	Discussed FMP efforts and potenial collaboration		

## CHAPTER 8: DETAILED SUMMARY OF INFORMATION COMPILED REGARDING POSSIBLE FLOODPLAIN MANAGEMENT PLAN ACTIONS

### ARANSAS COUNTY MULTI-JURISDICTIONAL FLOODPLAIN MANAGEMENT PLAN DEVELOPMENT SUMMARY OF INFORMATION COMPILED REGARDING POSSIBLE FMP ACTIVITIES

#### CONDENSED SUMMARY OF RESULTS

##### **Goal 1: Protect existing resources through regulatory standards**

Adopt a No Adverse Impact: Adopt a no adverse impact approach to floodplain management. No Adverse Impact floodplain management is an approach that insures that the action of one property owner does not adversely impact the properties and rights of other property owners, as measured by increased flood peaks, flood stage, flood velocity, and erosion and sedimentation.

Summary: This is a problem, and there appears to be regulations—that are difficult to enforce. Encourage this group and the plan to make some statement on this issue.

Community Rating System: Participation in the Community Rating System (CRS), part of the National Flood Insurance Program (NFIP), can provide a movement for the community to undertake a number of projects and activities designed to increase flooding mitigation efforts.

Summary: Rockport & County doing. Is this feasible for Aransas Pass & Fulton? On what timeframe?

Create a Community Wide Master Plan to Prioritize all Flood Related Projects: Identify potential flooding sources and flood vulnerable areas. Explore solutions and prioritize.

Summary: Does a county-wide, prioritized plan exist? If not, creating one would be a great idea? When could this reasonably be accomplished?

Development Restrictions: Enhance floodplain regulations to restrict types of development allowed in the floodplain.

Summary: Suggest a coordinated effort to implement standardized, minimum requirements throughout the county. These would then have to be adopted into each municipality (including Aransas Pass)

Drainage Study/Stormwater Master Plan: Preliminary drainage studies and assessments can be conducted to identify and prioritize design improvements to address site specific localized flooding/drainage issues to reduce and/or alleviate flooding. Stormwater master plans can be developed to help identify stormwater problem areas and potential drainage improvements.

Summary: Has this been done? Is it something that could be done within the next 3- 5 years? Do you want to commit to this?

FIRM Mapping: Develop digital FIRM maps for regulatory use.

Summary: Done. (Correct?)

FIRM Mapping (Updates): Update FIRM maps to reflect accurate flood inundation areas within the jurisdiction.

Summary: Done. (Correct? When were they officially updated?)

Floodplain Regulation Enforcements/Updates: Continue to enforce local floodplain regulations for structures located in the 1-percent floodplain. Strict enforcement of the type of development and elevations of structures should be considered through issuance of building permits by any community or county. Continue education of building inspectors or Certified Floodplain Managers.

Summary: Ongoing? Is this actually happening? Is this something that can reasonably be tackled right now?

Floodplain Regulations: Develop and pass more restrictive floodplain regulations. Enhancements may include: limiting types of development within the floodplain, redefining substantial loss for impacted homes, and increasing the free-board requirement to more than one foot above base flood elevation.

Summary: Is this something that can reasonably be tackled right now?

Higher Building Codes and Standards: Promote the use of higher codes and standards, such as the Fortified for Safer Living Standard, in order to provide greater protection for any new construction or building retrofits.

Summary: Ongoing? Is this happening? (Need an update.)

Intergovernmental Support: Support other local governmental entities, such as fire departments, schools, and townships in the identification and pursuit of mitigation actions.

Summary: The SWMAC in and of itself does not accomplish this. Is this something you want to actively tackle, or do you want to maintain current efforts to integrate efforts when and where possible?

Low Impact Development: Utilize low impact development practices and green infrastructure to reduce flood risk.

Summary: A lot could be done with this; but a coordinated effort might be tough at this time. Suggest looking into ideas and try to start a longer-term educational process about low impact development and green infrastructure (possibly as part of the public information plan).

NFIP Continuation: Maintain good standing with National Flood Insurance Program.

Summary: Ongoing.

NFIP, Enroll and Participate: Participate in the National Flood Insurance Program.

Summary: Done. All jurisdictions participate.

Parcel Level Evaluation of Floodprone Properties: Conduct a study examining parcels located in floodprone areas and identify mitigation measures that can reduce future impacts.

Summary: Is this needed? Is this something you want to (can) tackle at this point?

Relocation of Hazardous Storage: Explore a plan and funding for relocation of tanks and hazardous storage located in the floodplain or floodprone areas.

Summary: Is this an issue? Do you know where all storage tanks are within the County? If not, suggest putting together a comprehensive report of what storage is where, and conditions of tanks.

Stormwater Management Committee: Establish a stormwater development committee to oversee improvements to the stormwater system and to respond to community concerns.

Summary: Committee established, and will be maintained.

Update Comprehensive Plan: Update comprehensive plan, Integrate plan with Hazard Mitigation Plan components.

Summary: Ongoing. When was last update? Suggest mentioning that future updates will include floodplain management concerns.

## **Goal 2: Protecting property through mitigative measures**

Flood Prone Property Acquisition: Voluntary acquisition and demolition of properties prone to flooding will reduce the general threat of flooding for communities. Additionally, this can provide flood insurance benefits to those communities within the NFIP. Repetitive loss structures are typically highest priority.

Summary: Appears to be limited by funding. Suggest the group begin investigating possible funding options.

Floodplain Management: Preserve natural and beneficial functions of floodplain land through measures such as: retaining natural vegetation, restoring streambeds, and preserving open space in the floodplain.

Summary: Appears to be limited by funding. Suggest the group begin investigating possible funding options.

## **Goal 3: Create a coordinated flood preparedness and response strategy**

Back-up Generator: Provide a portable or stationary source of backup power to redundant power supplies, municipal wells, lift stations and other critical facilities and shelters.

Summary: Addressed via Garner Env. Contract. Maintain status quo, no additional action.

Back-up Municipal Records: Develop protocol for back-up of critical municipal records.

Summary: Do you need digital and hard copies? If not, maintain status quo, no additional action.

Civil Service Improvements: Improve emergency rescue and response equipment and facilities by providing additional, or updating existing emergency response equipment. This can include fire trucks, ATV's, water tanks/trucks, snow removal equipment, etc. This would also include developing backup systems for emergency vehicles and identifying and training additional personnel for emergency response

Summary: Ongoing. May be some room for improvement. Maintain status quo?

Comprehensive Disaster/Emergency Response Plan: Develop a Comprehensive County Disaster and Emergency Response Plan.

Summary: Done. (When was it last updated?) Will maintain with updates every (??) years?

Continuity Planning: Develop continuity plans for critical community services. Encourage businesses to do the same.

Summary: Addressed via Garner Env. Contract. Maintain status quo, no additional action.

Emergency Fuel Supply Plan: Plan to ensure adequate fuel supply is available during an emergency. Actions might include: prioritization and rationing plan for gasoline and diesel uses in extended loss of fuel supply or electric power supply; a plan to purchase local fuel supply, etc.

Summary: Ongoing, & Addressed via Garner Env. Contract. Maintain status quo, no additional action.

Emergency Management Exercise: Develop and facilitate an exercise to identify gaps in planning and to ensure that community response plans are sufficient to meet the needs of the jurisdiction.

Summary: Ongoing. Maintain status quo, no additional action.

Emergency Operations: Identify and establish an Emergency Operations Center.

Summary: Done. No action needed.

Facilities for Vulnerable Populations: Ensure that facilities which will house vulnerable populations are placed in the least vulnerable areas of the community. Harden existing facilities if applicable.

Summary: N/A. No sheltering in Aransas County—everyone must evacuate.

Facility Floodproofing: Explore the possibility of floodproofing for facilities which fall into the HAZUS 1-percent flood inundation areas (aka SFHA).

Summary: Would require funding. Possibly recommend an assessment of what could be done to help floodproof the facilities that are within the SFHA, and then the investigation of funding opportunities.

Improvements to Flood Warning System: Update equipment, insure equipment is in a secure location, and install additional gauges.

Summary: Being accomplished with NWS data. Recommend making this a part of the Public Information Plan.

Mutual Aid through WARN Program: Establish mutual aid agreements through Water/Wastewater Agency Response Network (WARN) Program.

Summary: Ongoing. Accomplished as part of the Texas Interjurisdictional Emergency Operations Plan. Maintain status quo, no additional action.

Short Term Residency Shelters: Design and construct short term shelters for rural residents after damage from an event. These structures would not serve as FEMA approved safe rooms. The building could also be used for things such as short term sheltering during a high heat event for those without A/C. The building is not intended to be used for long term recovery, such as long-term displacement from floods, fires, etc. The number of shelters needed depends on the size of the building, population, proximity to users, etc.

Summary: N/A. No sheltering in Aransas County—everyone must evacuate.

Database of Vulnerable Population: Work with stakeholders to develop a database of vulnerable populations and the organizations which support them.

Summary: Somewhat accomplished via STEER; however, needs improvements, and annual maintenance. Suggest including education and outreach to improve this process as a part of the Public Information Plan.

Develop Flood Assistance Strategies: Develop strategies to provide necessary services in the event of flooding.

Summary: Included in the County Emergency Management Plan (or is it called the Emergency Operations Plan?) Maintain status quo, no additional action.

Emergency Communication: Establish an action plan to improve communication between agencies to better assist residents and businesses during and following emergencies. Establish inner-operable communications.

Summary: Included in the County Emergency Management Plan (or is it called the Emergency Operations Plan?) Maintain status quo, no additional action.

First Aid Training: Promote first aid training for all residents.

Summary: Is this something that you want to tackle as a part of this process? Could encourage first aid training via the Public Information Plan.

Public Awareness/Education: Through activities such as outreach projects, distribution of maps and environmental education increase public awareness of natural hazards to both public and private property owners, renters, businesses, and local officials about hazards and ways to protect people and property from these hazards. Also, educate citizens on water conservation methods, evacuation plans, etc. In addition, purchasing equipment such as overhead projectors and laptops.

Summary: Suggest the development of a coordinated, county-wide Public Information Plan

Risk Communication: Require landlords to disclose if a rental property is located in a floodprone area or if the structure has been impacted previously by high water events.

Summary: Is this something that you want to tackle as a part of this process, at this time?

#### **Goal 4: Create a coordinated infrastructure plan for all jurisdictions**

Bank Stabilization: Stabilize banks along streams and rivers. This may include, but is not limited to: reducing bank slope, addition of riprap, installation of erosion control materials/fabrics.

Summary: No rivers or streams; but does address drainage canals. (Part of proposed "Drainage Maintenance" category, which would include the prioritization of infrastructural improvements to drainage ditches in years 3-5, then starting the work in years 5+)

Channel and Bridge Improvements: Implement channel and bridge improvements to increase channel conveyance and decrease the base flood elevations.

Summary: Combine with Bridge Upgrades. 3 bridges will need to be replaced (10+ years)

Drainage Ditches: Deepen drainage ditches and clean out culverts.

Summary: Part of proposed “Drainage Maintenance” category, which would include annual maintenance; then, the prioritization of infrastructural improvements to drainage ditches in years 3-5, then starting the work in years 5+.

Elevate Pad Mounted Transformers and Switch Gear: Elevate pad mounted transformers and switch gear above base flood elevation to eliminate damages from flooding.

Summary: Is this something that you want to take on or prioritize at this point?

Grade Control Structures: Stream bed degradation occurs along many river and creeks. Grade control structures including sheet-pile weirs, rock weirs, ponds, road dams, etc. can be implemented to maintain the channel bed.

Summary: Part of proposed “Drainage Maintenance” category, which would include annual maintenance; then, the prioritization of infrastructural improvements to drainage ditches in years 3-5, then starting the work in years 5+.

Improve/Upgrade Bridges: Investigate, design and retrofit or improve bridges to provide greater capacity and maintain or improve structural integrity during flood events.

Summary: Combine with Bridge Improvements. 3 bridges will need to be replaced (10+ years)

Improve Drainage: Improve storm sewers and drainage patterns in and around the community.

Summary: Part of proposed “Drainage Maintenance” category, which would include annual maintenance; then, the prioritization of infrastructural improvements to drainage ditches in years 3-5, then starting the work in years 5+.

Infrastructure Assessment Study: Conduct an assessment of bridges in the county and assess other potential areas of concern.

Summary: Is this done by TxDOT every 5 years? Were there any problem issues in the last assessment? Is any action needed?

Infrastructure Protection: Develop flood control devices to protect critical infrastructure during flood events.

Summary: Is this needed? How would it be done?

Levee/Floodwall Construction &/or Improvements: Levees and floodwalls serve to provide flood protection to businesses and residents during large storm events. Improvements to existing levees and floodwalls will increase flood protection. If possible, the structure should be designed to FEMA standards to provide 1-percent flood protection providing additional flood insurance benefits.

Summary: N/A. Levee in Aransas Pass has been reclassified by FEMA as an earthen berm.

Promote Infiltration: Convert concrete-lined channels to natural channels to promote infiltration.

Summary: N/A. Most, if not all of the channels are earth-lined, not concrete-lined. Suggest this be maintained. (Vegetation and earth = infiltration = filtering of the water – this is a good thing!) Recommend continuation of the status quo and continue ongoing maintenance.

Relocate Municipal Infrastructure: Acquire Geographic Information System (GIS) to relocate municipal infrastructure (water and sewer lines).

Summary: Is there anything that needs to be moved? Is a study needed to assess the situation?

Remove Flow Restrictions: Conduct a preliminary drainage assessment and/or design bridge improvements to reduce and/or alleviate flooding. Bridges typically serve as flow restrictions along streams and rivers. Cleanout and reshaping channel segments at bridge crossings can increase conveyance, reducing the potential for flooding. Replacing or modifying of bridges and other flow restrictions may be necessary to eliminate flooding threats and damages.

Summary: Very few bridges; but does apply to culverts. Suggest including as a part of proposed "Drainage Maintenance" category, which would include annual maintenance; then, the prioritization of infrastructural improvements to drainage ditches in years 3-5, then starting the work in years 5+.

Site Hardening: Locate critical mechanical systems above the base flood elevation. Consider moving electrical systems to higher floors or the roof rather than the basement.

Summary: Is this something you want to tackle right now? Could be two angles: 1) regulations; and 2) changes to government facilities.

Storm Water Management: Upgrade combined sewer system to improve storm water management.

Summary: Done. These systems are already separate.

Stormwater System and Drainage Improvements (Lg. comm.): Larger communities generally utilize underground stormwater systems comprising of pipes and inlets to convey runoff. Undersized systems can contribute to localized flooding. Stormwater system improvements may include pipe upsizing and additional inlets. Retention and detention facilities may also be implemented to decrease runoff rates while also decreasing the need for other stormwater system improvements.

Summary: N/A. This area qualifies as a "small community."

Stormwater System and Drainage Improvements (Sm. comm.): Smaller communities may utilize stormwater systems comprising of ditches, culverts, or drainage ponds to convey runoff. Undersized systems can contribute to localized flooding. Drainage improvements may include ditch upsizing, ditch cleanout and culvert improvements. Retention and detention facilities may also be implemented to decrease runoff rates while also decreasing the need for other stormwater system improvements. Bridges typically serve as flow restrictions along streams and rivers. Cleanout and reshaping of channel segments at bridge crossings can increase conveyance, reducing the potential for flooding.

Summary: Suggest these items could (and should) be addressed as a part of the proposed "Drainage Maintenance" category, which would include annual maintenance; then, the prioritization of infrastructural improvements to drainage ditches in years 3-5, then starting the work in years 5+.

Filtration Facility Upgrade: Add a retention pond to the filtration facility.

Summary: N/A. No filtration facility in county.

Transportation Drainage Improvements: Make improvements to roadways and drainage ways to prevent damage to key transportation routes. Utilize geosynthetic products for repair and mitigation of damages. Consider covering of road washouts, culvert sizing headwalls, steep banks, slides, in-road springs, roadway edge armoring, low water crossings, pothole grading, weak foundations, gravel road maintenance, ditch linings, on steep grades, erosion protection, etc.

Summary: Suggest these items could (and should) be addressed as a part of the proposed "Drainage Maintenance" category, which would include annual maintenance; then, the prioritization of infrastructural improvements to drainage ditches in years 3-5, then starting the work in years 5+.

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DETAILED SUMMARY OF RESULTS

Goal 1: Protect existing resources through regulatory standards

Goal 1:	Summary of Goal 1 Data																	
	No Adverse Impact	Comm. Rating System	Comm.-wide Master Plan	Development Restrictions	Drainage Study/Stormwater Master Plan	FIRM Mapping	FIRM Mapping (Updates)	Floodplain Regulation Enforcements/Updates	Floodplain Regulations	Higher Building Codes and Standards	Intergovernmental Support	Low Impact Development	NFIP Continuation	NFIP Enroll and Participate	Parcel Level Evaluation of Floodprone Properties	Relocation of Hazardous Storage	Stormwater Management Committee	Update Comprehensive Plan
Relevant	29	23	26	27	27	19	21	25	19	18	19	19	18	13	14	17	17	16
Not relevant	0	0	1	0	1	1	0	0	1	0	2	0	0	0	3	2	3	1
Years 1-2	19	16	12	10	8	5	8	11	6	6	7	8	8	9	5	7	9	4
Years 3-5	0	2	2	3	4	4	3	2	3	2	1	1	0	0	3	6	0	4
Years 5+	2	1	2	2	5	1	0	0	2	2	1	1	0	0	2	0	0	0
Highest priority	8	7	5	4	4	1	1	5	4	1	2	1	3	3	3	2	3	0
Second highest priority	4	1	4	7	3	0	3	2	1	2	2	2	0	0	0	1	1	0
Third highest priority	6	0	1	0	02	2	1	0	0	3	1	1	2	0	2	2	1	0
Fourth highest priority	0	3	0	0	3	1	0	1	1	0	0	3	0	0	0	3	0	2
Fifth highest priority	1	0	1	4	2	0	0	1	0	0	2	1	0	0	0	0	1	1
Priority dots received	16	7	6	11	13	1	2	9	3	4	7	5	1	0	2	8	1	0

**Adopt a No Adverse Impact:** Adopt a no adverse impact approach to floodplain management. No Adverse Impact floodplain management is an approach that insures that the action of one property owner does not adversely impact the properties and rights of other property owners, as measured by increased flood peaks, flood stage, flood velocity, and erosion and sedimentation.

Adopt a No Adverse Impact	Government Staff/Official	Other Critical Advisors	Public	Totals
Relevant	16	2	11	29
Not relevant	0	0	0	0
Years 1-2	9	1	9	19
Years 3-5	0	0	0	0
Years 5+	2	0	0	2
Highest priority	3	0	5	8
Second highest priority	3	0	1	4
Third highest priority	3	0	3	6
Fourth highest priority	0	0	0	0
Fifth highest priority	1	0	0	1
Priority dots received	6	0	10	16

Notes:

*SWMAC:*

- Comp! Within our subdivisions & stormwater ordinances
- Consistent w/County req. that flow rate off of developed property does not exceed rate off undeveloped tract. To "insure" all entities must implement & enforce requirement
- Continue. Currently have a policy that now construction on properties above a certain minimal acreage cannot produce more runoff onto adjacent properties than prior to construction.
- This is a critical issue as we have new concrete being poured every day in the county. It is my understanding that City Planning and Zoning addresses this in Rockport. But I am not clear on how the County currently addresses this.

*Government Staff/Official:*

- Ongoing
- Already Required
- This is very difficult to ascertain as there is little to no information regarding velocity, flow, etc. of effected areas before action by an owner that has a negative impact.
- Happened to me. Neighbor filled in low spot--I now flood

*Public:*

- It is my understanding that this rule exists in Rockport; but it is not being enforced!!!!
- Dealing with this currently in our neighborhood. Eyesore & flood issue for some homeowners
- You cannot impact state status and all adverse issues are civil matters for your ordinances—city already has this in place & doesn't enforce
- Important that neighbors can't do anything to cause flooding at your house
- Already started with higher building standards
- Would require hydrological study by developers to see how base flood elevation is impacted

Summary: This is a problem, and there appears to be regulations—that are difficult to enforce. Encourage this group and the plan to make some statement on this issue.

Community Rating System: Participation in the Community Rating System (CRS), part of the National Flood Insurance Program (NFIP), can provide a movement for the community to undertake a number of projects and activities designed to increase flooding mitigation efforts.

Community Rating System	Government Staff/Official	Other Critical Advisors	Public	Totals
Relevant	14	2	7	23
Not relevant	0	0	0	0
Years 1-2	11	1	4	16
Years 3-5	1	0	1	2
Years 5+	1	0	0	1
Highest priority	6	0	1	7
Second highest priority	1	0	0	1
Third highest priority	0	0	0	0
Fourth highest priority	2	0	1	3
Fifth highest priority	0	0	0	0
Priority dots received	5	0	2	7

Notes:

*SIFMAC:*

- In progress (x2)

*Government Staff/ Official:*

- As stated above CRS and NFIP compliance is key to helping hardening our County to Flood damage, and attracting preferred risk FEMA rates. I suspect this may take 2-3 years to earn.
- Currently in the process of commencing
- Rockport is already participating
- Being Done
- Doing it

*Other Critical Advisors:*

- In process

*Public:*

- Helps Citizens
- Rockport – seeking entry
- Aransas Co. – grant to seek entry
- AP/Fulton – interested

Summary: Rockport & County doing. Is this feasible for Aransas Pass & Fulton? On what timeframe?

Create a Community Wide Master Plan to Prioritize all Flood Related Projects: Identify potential flooding sources and flood-vulnerable areas. Explore solutions and prioritize.

Development Restrictions	Government Staff/Official	Other Critical Advisors	Public	Totals
Relevant	15	2	9	26
Not relevant	1	0	0	1
Years 1-2	6	1	5	12
Years 3-5	2	0	0	2
Years 5+	1	1	0	2
Highest priority	3	0	2	5
Second highest priority	3	0	1	4
Third highest priority	1	0	0	1
Fourth highest priority	0	0	0	0
Fifth highest priority	0	0	1	1
Priority dots received	3	0	3	6

Notes:

*SWMAC:*

- Stormwater committee has been working 4+ years--City Plan updated
- County drainage study & CIP recommendations essentially does this. Completion of CIP's requires time & funding.
- Continue. Have identified over 13(?) watersheds in county and have CIP projects identified, prioritized, underway and/or completed.
- creating the list and prioritizing it should be relatively straightforward. Funding and executing the list will take 5-10 years.

*Government Staff/Official:*

- Already adopted
- All Jurisdictions participate in the Stormwater Mgt. Advisory Committee
- Being Done (Rkpt)
- Doing it

*Public:*

- County does this.
- Currently doing

Summary: Does 1 county-wide, prioritized plan exist? If not, creating one would be a great idea? When could this reasonably be accomplished?

**Development Restrictions:** Enhance floodplain regulations to restrict types of development allowed in the floodplain.

Development Restrictions	Government Staff/Official	Other Critical Advisors	Public	Totals
Relevant	16	2	9	27
Not relevant	0	0	0	0
Years 1-2	5	1	4	10
Years 3-5	3	0	0	3
Years 5+	2	0	0	2
Highest priority	3	0	1	4
Second highest priority	3	1	3	7
Third highest priority	0	0	0	0
Fourth highest priority	0	0	0	0
Fifth highest priority	5	1	5	11
Priority dots received	5	1	5	11

Notes:

*SWMAC:*

- Comp & within development ordinances
- County/City have acted. Key is enforcement.
- Continue. Have polices prescribing minimal free board of 18 inches above roadway and for restricting runoff as stated above.
- seems consistent with the above comments

*Government Staff/Official:*

- Plan to enhance as soon as CRS has been established
- Doing it

Summary: Suggest a coordinated effort to implement standardized, minimum requirements throughout the county. These would then have to be adopted into each municipality (including Aransas Pass)

Drainage Study/Stormwater Master Plan: Preliminary drainage studies and assessments can be conducted to identify and prioritize design improvements to address site specific localized flooding/drainage issues to reduce and/or alleviate flooding. Stormwater master plans can be developed to help identify stormwater problem areas and potential drainage improvements.

Drainage Study/Stormwater Master Plan	Government Staff/Official	Other Critical Advisors	Public	Totals
Relevant	15	2	10	27
Not relevant	1	0	0	1
Years 1-2	3	0	5	8
Years 3-5	2	1	1	4
Years 5+	5	0	0	5
Highest priority	2	0	2	4
Second highest priority	2	0	1	3
Third highest priority	2	0	0	2
Fourth highest priority	1	0	1	2
Fifth highest priority	0	0	2	2
Priority dots received	9	0	4	13

Notes:

*SIFMAC:*

- Ongoing. City Comprehensive Master Plan recently (2016) updated
- Studies essentially complete. Implementation requires time/money.
- Continue. Had identified the various watersheds in county, have H&H studies in many, have blue corridors identified, have CIP priority list in place, have bond money to fund some projects and have pursued grant funding, etc.
- much of this work is already on going and in progress in both Rockport and the county. Putting the full project list it together in a master plan, should not take more than 1-2 years.

*Government Staff/Official:*

- Already established
- Rockport updated its Master Plan in 2015 & updated the Future Projects List
- City needs to update all drainage systems
- Doing it

*Public:*

- Please say this is already being done
- Done by County
- Most Important!
- Relevant to AP, County & City already have

Summary: Has this been done? Is it something that could be done within the next 3- 5 years? Do you want to commit to this?

FIRM Mapping: Develop digital FIRM maps for regulatory use.

FIRM Mapping	Government Staff/Official	Other Critical Advisors	Public	Totals
Relevant	12	2	5	19
Not relevant	0	0	1	1
Years 1-2	2	1	2	5
Years 3-5	4	0	0	4
Years 5+	1	0	0	1
Highest priority	1	0	0	1
Second highest priority	0	0	0	0
Third highest priority	2	0	0	2
Fourth highest priority	0	0	1	1
Fifth highest priority	0	0	0	0
Priority dots received	0	0	1	1

Notes:

*SIFMAC:*

- FEMA (2) Feb 2016
- What is this?
- I believe this already exists based on LIDAR data. But it does not have sufficient granularity to determine specific land elevations where improvements have been added, such as homes

*Government Staff/Official:*

- To facilitate floodplain mgmt.
- Done in 2015
- Have in place

*Public:*

- Also very important!
- Already on FEMA Map Svc; Appraisal District Pictometry

Summary: Done.

FIRM Mapping (Updates): Update FIRM maps to reflect accurate flood inundation areas within the jurisdiction.

FIRM Mapping (Updates)	Government Staff/Official	Other Critical Advisors	Public	Totals
Relevant	13	2	6	21
Not relevant	0	0	0	0
Years 1-2	3	1	4	8
Years 3-5	3	0	0	3
Years 5+	0	0	0	0
Highest priority	0	0	1	1
Second highest priority	3	0	0	3
Third highest priority	0	0	1	1
Fourth highest priority	0	0	0	0
Fifth highest priority	0	0	0	0
Priority dots received	0	0	2	2

Notes:

*SWMAC:*

- FEMA (?) Feb 2016
- current maps reflect storm surge only.
- This is critical, but will take a huge effort to accurately survey the developed portions of the county where current FIRM maps are incorrect.

*Government Staff/Official:*

- Pin point low spots
- Done in 2015
- Have it

*Public:*

- Also very important!

Summary: Done. (Correct? When were they officially updated?)

Floodplain Regulation Enforcements/Updates: Continue to enforce local floodplain regulations for structures located in the 1-percent floodplain. Strict enforcement of the type of development and elevations of structures should be considered through issuance of building permits by any community or county. Continue education of building inspectors or Certified Floodplain Managers.

Floodplain Regulation Enforcements/Updates	Government Staff/Official	Other Critical Advisors	Public	Totals
Relevant	15	2	8	25
Not relevant	0	0	0	0
Years 1-2	7	1	3	11
Years 3-5	2	0	0	2
Years 5+	0	0	0	0
Highest priority	4	1	0	5
Second highest priority	0	1	1	2
Third highest priority	0	0	0	0
Fourth highest priority	1	0	0	1
Fifth highest priority	1	0	0	1
Priority dots received	4	2	3	9

Notes:

*SIFMAC:*

- Should be required all the time
- Continuing. Updating Floodplain Management Plan through Committee action.
- Now
- Continue. Limited as to what the county can do.
- As I understand it, this is being done in the City, but to a lesser extent in the County, where most of our open land remains. A fundamental regulation code problem exists between FEMA (height relative to MSL) and City building codes which regulate height relative to street level. There are many examples where these are in direct conflict with the Floodplain Management objective.

*Government Staff/Official:*

- Continue education of code enforcement officers as well.
- Updated Regulations in 2015, including increasing freeboard to 18 inches
- Evergreen
- Doing it

*Public:*

- Also very important!
- Higher standards protect now & later

Summary: Ongoing? Is this actually happening? Is this something that can reasonably be tackled right now?

**Floodplain Regulations:** Develop and pass more restrictive floodplain regulations. Enhancements may include: limiting types of development within the floodplain, redefining substantial loss for impacted homes, and increasing the free-board requirement to more than one foot above base flood elevation.

Floodplain Regulations	Government Staff/Official	Other Critical Advisors	Public	Totals
Relevant	12	2	5	19
Not relevant	0	0	1	1
Years 1-2	4	0	2	6
Years 3-5	2	1	0	3
Years 5+	1	0	1	2
Highest priority	4	0	0	4
Second highest priority	1	0	0	1
Third highest priority	1	0	0	1
Fourth highest priority	1	0	0	1
Fifth highest priority	0	0	0	0
Priority dots received	2	0	1	3

Notes:

*SIFMAC:*

- Continuing. Updating Floodplain Management Plan through Committee action.
- Possibly relevant. More restrictive then what? I suggest "study and evaluate need for more restrictive..."
- Continue. Have free-board requirement of 18 inches in the county
- as mentioned above the building codes should encourage higher structures relative to MSL and not be based on height above street. In more upland areas, the codes should respect height above local 50-year flood levels in drainage systems

*Government Staff/Official:*

- Especially the limiting types of dev, w/in floodplain
- Partly done
- More restrictive, hmmm?

*Public:*

- Having more restrictive

Summary: Is this something that can reasonably be tackled right now?

Higher Building Codes and Standards: Promote the use of higher codes and standards, such as the Fortified for Safer Living Standard, in order to provide greater protection for any new construction or building retrofits.

Higher Building Codes and Standards	Government Staff/Official	Other Critical Advisors	Public	Totals
Relevant	12	1	5	18
Not relevant	0	0	2	2
Years 1-2	3	0	3	6
Years 3-5	2	0	0	2
Years 5+	1	1	0	2
Highest priority	1	0	0	1
Second highest priority	1	0	1	2
Third highest priority	2	0	1	3
Fourth highest priority	0	0	0	0
Fifth highest priority	0	0	0	0
Priority dots received	1	0	3	4

Notes:

*SIFMAC:*

- Continuing
- Possibly relevant. More restrictive than what? I suggest "study and evaluate need for more restrictive..."
- similar comments as above, but will probably take longer to define and pass new building codes.

*Government Staff/Official:*

- Ongoing
- Can promote, but probably can't enforce as a county.
- Not sure

*Other Critical Advisors:*

- ?

*Public:*

- Very important
- Help with pre- & post- storm

Summary: Ongoing? Is this happening? (Need an update.)

**Intergovernmental Support:** Support other local governmental entities, such as fire departments, schools, and townships in the identification and pursuit of mitigation actions.

Intergovernmental Support	Government Staff/Official	Other Critical Advisors	Public	Totals
Relevant	14	2	3	19
Not relevant	0	0	2	2
Years 1-2	4	1	2	7
Years 3-5	1	0	0	1
Years 5+	1	0	0	1
Highest priority	2	0	0	2
Second highest priority	2	0	0	2
Third highest priority	0	0	1	1
Fourth highest priority	0	0	0	0
Fifth highest priority	0	2	0	2
Priority dots received	3	2	2	7

Notes:

*SWMAC:*

- Continue
- I think we are doing this now with the County FPM committee.

*Government Staff/Official:*

- Ongoing
- Good communication for emergency events
- All Jurisdictions participate in Stormwater Mgmt Advisory Committee
- Already doing this
- Doing it now

Summary: The SWMAC in and of itself does not accomplish this. Is this something you want to actively tackle, or do you want to maintain current efforts to integrate efforts when and where possible?

Low Impact Development: Utilize low impact development practices and green infrastructure to reduce flood risk.

Low Impact Development	Government Staff/Official	Other Critical Advisors	Public	Totals
Relevant	11	2	6	19
Not relevant	0	0	0	0
Years 1-2	3	0	5	8
Years 3-5	2	2	0	4
Years 5+	1	0	0	1
Highest priority	1	0	0	1
Second highest priority	2	0	0	2
Third highest priority	0	0	1	1
Fourth highest priority	1	1	1	3
Fifth highest priority	0	0	1	1
Priority dots received	1	1	3	5

Notes:

*SWMAC:*

- Where appropriate within urban areas.
- Adopt UT water resource "Guidance for Sustainable Stormwater Drainage on the Texas Coastal"
- I don't know what this means.
- Continue. Have developed swales and took part in development of Tule Creek east of Bus 35N
- Of course all new "developments should be required to retain a % open green space and oversized drainage systems

*Government Staff/Official:*

- Improves run-off
- Agree, but no buy-outs in Aransas County

Summary: A lot could be done with this; but a coordinated effort might be tough at this time. Suggest looking into ideas and try to start a longer-term educational process about low impact development and green infrastructure (possibly as part of the public information plan).

NFIP Continuation: Maintain good standing with National Flood Insurance Program.

NFIP Continuation	Government Staff/Official	Other Critical Advisors	Public	Totals
Relevant	11	2	5	18
Not relevant	0	0	0	0
Years 1-2	4	1	3	8
Years 3-5	0	0	0	0
Years 5+	0	0	0	0
Highest priority	3	0	0	3
Second highest priority	0	0	0	0
Third highest priority	1	1	0	2
Fourth highest priority	0	0	0	0
Fifth highest priority	0	0	0	0
Priority dots received	0	1	0	1

Notes:

*SIFMAC:*

- Continuing
- Forever
- Continue. Doing this
- seems to be the primary objective here

*Government Staff/Official:*

- Ongoing, forever
- Already Doing
- Done
- Doing it

*Public:*

- Already participating

Summary: Ongoing.

NFIP, Enroll and Participate: Participate in the National Flood Insurance Program.

NFIP, Enroll and Participate	Government Staff/Official	Other Critical Advisors	Public	Totals
Relevant	8	1	4	13
Not relevant	2	1	0	3
Years 1-2	5	1	3	9
Years 3-5	0	0	0	0
Years 5+	0	0	0	0
Highest priority	3	0	0	3
Second highest priority	0	0	0	0
Third highest priority	0	0	0	0
Fourth highest priority	0	0	0	0
Fifth highest priority	0	0	0	0
Priority dots received	0	0	0	0

Notes:

*SWMAC:*

- Now, Continuing
- I believe all A/C entered(?)
- See above
- believe this is the case now under the current initiative.

*Government Staff/Official:*

- Already enrolled
- Already Doing
- Done
- Doing it

*Public:*

- Already participating

Summary: Done. All jurisdictions participate.

**Parcel Level Evaluation of Floodprone Properties:** Conduct a study examining parcels located in floodprone areas and identify mitigation measures that can reduce future impacts.

Parcel Level Evaluation of Floodprone Properties	Government Staff/Official	Other Critical Advisors	Public	Totals
Relevant	10	1	3	14
Not relevant	1	0	2	3
Years 1-2	3	0	2	5
Years 3-5	4	0	1	5
Years 5+	1	1	0	1
Highest priority	3	0	0	3
Second highest priority	0	0	0	0
Third highest priority	2	0	0	2
Fourth highest priority	0	0	0	0
Fifth highest priority	0	0	0	0
Priority dots received	1	0	1	2

Notes:

*SWMAC:*

- Update probably needed as development continues
- Included in blocks 1 & 3 above
- seems essential to examine every new development in the county with respect to flood water management, consistent with above comments.

*Government Staff/Official:*

- In Progress
- ?

Summary: Is this needed? Is this something you want to (can) tackle at this point?

Relocation of Hazardous Storage: Explore a plan and funding for relocation of tanks and hazardous storage located in the floodplain or floodprone areas.

Relocation of Hazardous Storage	Government Staff/Official	Other Critical Advisors	Public	Totals
Relevant	10	2	5	17
Not relevant	1	0	1	2
Years 1-2	2	2	3	7
Years 3-5	4	0	2	6
Years 5+	0	0	0	0
Highest priority	0	1	1	2
Second highest priority	1	0	0	1
Third highest priority	2	0	0	2
Fourth highest priority	0	1	2	3
Fifth highest priority	0	0	0	0
Priority dots received	1	2	5	8

Notes:

*SWMAC:*

- Probably not applicable to city, limited hazardous materials
- (underlined: "explore" & "funding")
- Do we have any? I know of only gas stations, and 3 LPG Gas Terminals (Bus 35N--across from High School, Ace Hardware...
- of course, but I am not familiar with where we have hazardous material storage other than fuels. We have underground fuel in all gasoline stations with vents and other above ground tanks for commercial applications. A study of what happens to all the underground fuel storage systems if under a 6-10 ft. flood should be done, with mitigations put in place.

*Government Staff/ Official:*

- If needed
- n/a

Summary: Is this an issue? Do you know where all storage tanks are within the County? If not, suggest putting together a comprehensive report of what storage is where, and conditions of tanks.

**Stormwater Management Committee:** Establish a stormwater development committee to oversee improvements to the stormwater system and to respond to community concerns.

Stormwater Management Committee	Government Staff/Official	Other Critical Advisors	Public	Totals
Relevant	9	1	7	17
Not relevant	1	1	1	3
Years 1-2	4	1	4	9
Years 3-5	0	0	0	0
Years 5+	0	0	0	0
Highest priority	3	0	0	3
Second highest priority	0	0	1	1
Third highest priority	0	1	0	1
Fourth highest priority	0	0	0	0
Fifth highest priority	0	0	1	1
Priority dots received	0	1	0	1

Notes:

*SWMAC:*

- Continuing
- Keep existing committee active
- Done (x2)
- Already established and meeting.

*Government Staff/Official:*

- Already in action
- Already done
- Partly done
- Doing it

*Public:*

- Done at county
- Already in place
- Already exists

Summary: Committee established, and will be maintained.

Update Comprehensive Plan: Update comprehensive plan. Integrate plan with Hazard Mitigation Plan components.

Update Comprehensive Plan	Government Staff/Official	Other Critical Advisors	Public	Totals
Relevant	10	2	4	16
Not relevant	0	0	1	1
Years 1-2	2	0	2	4
Years 3-5	2	1	1	4
Years 5+	0	0	0	0
Highest priority	0	0	0	0
Second highest priority	0	0	0	0
Third highest priority	0	0	0	0
Fourth highest priority	2	0	0	2
Fifth highest priority	1	0	0	1
Priority dots received	0	0	0	0

Notes:

*SWMAC:*

- 2016 updated city comp plan
- Comprehensive plan for what?
- not a bad idea, but seems more bureaucratic and not a high priority relative to above specifics

*Government Staff/Official:*

- Happening

*Public:*

- Will help with all phases of development and strengthen standard.

Summary: Ongoing. When was last update? Suggest mentioning that future updates will include floodplain management concerns.

**Goal 2: Protecting property through mitigative measures**

Summary of Goal 2 Data.

<b>Goal 2:</b>	<b>Flood Prone Property Acquisition</b>	<b>Floodplain Management</b>
Relevant	26	29
Not relevant	2	0
Years 1-2	5	15
Years 3-5	8	5
Years 5+	8	1
Highest priority	3	20
Second highest priority	14	2
Third highest priority	2	1
Fourth highest priority	0	2
Fifth highest priority	3	0
Priority dots received	6	28

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Flood Prone Property Acquisition: Voluntary acquisition and demolition of properties prone to flooding will reduce the general threat of flooding for communities. Additionally, this can provide flood insurance benefits to those communities within the NFIP. Repetitive loss structures are typically highest priority.

Flood Prone Property Acquisition	Government Staff/Official	Other Critical Advisors	Public	Totals
Relevant	16	2	8	26
Not relevant	0	0	2	2
Years 1-2	3	0	2	5
Years 3-5	4	1	3	8
Years 5+	5	1	2	8
Highest priority	3	0	0	3
Second highest priority	6	2	6	14
Third highest priority	2	0	0	2
Fourth highest priority	0	0	0	0
Fifth highest priority	2	0	1	3
Priority dots received	2	2	2	6

Notes:

*SIFMAC:*

- Relevant but not actionable at city level
- Big issues—Cost & time to implement realistically would require big grants
- I'm not sure county has the authority
- Certainly makes sense, but funding and private property rights will be very difficult

*Government Staff/Official:*

- Cities acquired properties have a trade for flood prone properties
- Seems difficult to complete
- Hard to do at sea level
- There has been no buy-out in the history

*Other Critical Advisors:*

- Important to everyone because eventually can raise costs for everyone (e.g. insurance)

*Public:*

- Cities acquired properties have a trade for floodprone property
- What if FEMA says it has flooded; but the City/Co. knows it is not (Wrong address for FEMA claim info)
- Should be determined by community agreement/consensus
- This would be an on-going process
- It seems to me like people should have enough sense to do this on their own
- I feel money would be better spent on drainage improvements
- Would be very helpful
- Cities that have acquired properties—maybe relocate folks in vulnerable areas to safer spaces
- Ongoing
- With CRS, next repetitive loss helps us qualify/get assistance to help those areas/buildings. (i.e. lady Claire)

Summary: Appears to be limited by funding. Suggest the group begin investigating possible funding options.

**Floodplain Management:** Preserve natural and beneficial functions of floodplain land through measures such as: retaining natural vegetation, restoring streambeds, and preserving open space in the floodplain.

Floodplain Management	Government Staff/Official	Other Critical Advisors	Public	Totals
Relevant	16	2	11	29
Not relevant	0	0	0	0
Years 1-2	6	2	7	15
Years 3-5	3	0	2	5
Years 5+	0	0	1	1
Highest priority	8	2	10	20
Second highest priority	2	0	0	2
Third highest priority	1	0	0	1
Fourth highest priority	2	0	0	2
Fifth highest priority	0	0	0	0
Priority dots received	17	2	9	28

**Notes:**

*SWMAC*

- Continuing
- Ongoing. Much has already been done via storm water Management, Aransas Pathways & Aransas First
- County encourages maintenance of blue corridors, building of retention and detention ponds in new developments. Developed the Henderson Tract and assisted in Tule Creek east of Bus 35 N
- Makes sense, but should be incorporate in the building code regulations as discussed above. And again funding and private property rights will be a challenge

*Government Staff/Official*

- Detention pond development
- The county has numerous low areas that act as a retention area during flooding events, very important to maintain these areas
- not sure retention ponds & vegetative streams work, will clog up if not concrete
- Ongoing, forever. Continuation

*Other Critical Advisors*

- Very important, ongoing

*Public*

- Detention pond development
- Should be everyone's #1 choice
- Critical that we dedicate resources to protect habitats thru natural measures. Also allows for filtration of flood waters that end up in our bays.
- I agree with this to a point
- Detention pods as well
- Ongoing also

Summary: Appears to be limited by funding. Suggest the group begin investigating possible funding options.

Goal 3: Create a coordinated flood preparedness and response strategy

Summary of Goal 3 Data																				
Goal 3:	Back-up Generator	Back-up Municipal Records	Civil Service Improvements	Comprehensive Disaster/Emergency Response Plan	Continuity Planning	Emergency Fuel Supply Plan	Emergency Management Exercise	Emergency Operations	Facilities for Vulnerable Populations	Facility Floodproofing	Improvements to Flood Warning System	Mutual Aid through WARM Program	Short Term Residency Shelters	Database of Vulnerable Population	Develop Flood Assistance Strategies	Emergency Communication	First Aid Training	Public Awareness/Education	Risk Communication	
	Relevant	25	19	22	23	21	25	21	20	17	19	16	17	14	22	21	22	14	22	22
	Not relevant	0	3	2	3	1	1	2	3	3	4	2	1	9	3	1	1	3	2	2
	Years 1-2	10	8	9	10	10	11	9	10	6	4	7	8	4	12	10	15	8	11	12
	Years 3-5	5	1	8	2	5	4	4	0	4	6	3	4	5	2	5	1	2	6	2
	Years 5+	3	1	1	0	0	1	0	2	0	2	0	1	3	2	0	0	3	0	2
	Highest priority	2	1	5	9	0	2	3	3	3	1	2	3	1	1	3	5	1	5	1
	Second highest priority	2	2	3	4	5	2	3	3	0	0	0	0	1	3	4	1	0	3	1
	Third highest priority	3	2	2	1	1	3	2	2	1	0	3	0	1	3	1	1	0	3	1
	Fourth highest priority	2	0	2	1	2	2	1	1	1	3	2	1	1	1	2	1	1	4	0
Fifth highest priority	1	1	3	0	2	2	0	0	1	3	1	0	3	3	1	1	2	2	2	
Priority dots received	5	1	8	10	1	6	8	4	1	6	3	1	2	3	8	5	3	13	0	

**Back-up Generator:** Provide a portable or stationary source of backup power to redundant power supplies, municipal wells, lift stations and other critical facilities and shelters.

Back-up Generator	Government Staff/Official	EOC Staff	Other Critical Advisors	Public	Totals
Relevant	13	1	2	9	25
Not relevant	0	0	0	0	0
Years 1-2	3	0	1	6	10
Years 3-5	2	0	1	2	5
Years 5+	2	1	0	0	3
Highest priority	1	0	0	1	2
Second highest priority	1	0	0	1	2
Third highest priority	2	0	1	0	3
Fourth highest priority	0	0	0	1	1
Fifth highest priority	1	0	0	1	2
Priority dots received	0	0	1	4	5

**Notes:**

*SWMAC:*

- Ongoing. Done for critical city bldgs.
- Probably much has been done already by(?) Emergency Mgmt. Groups.
- City
- good idea, but not clear how practical it is. Focus should be on creating passive drainage systems that do not require power to work. Sure, sewage life stations will always be an issue, but can be managed without generators all over the county "just in case"

*EOC Staff:*

- Have what is needed. Other will be provided by Garner Env. Contract.
- not enough to (?) whole system

*Government Staff/Official:*

- Ongoing. Back-up generators available at City Hall, emergency response, and Waste-water facility (AP)
- Must be prepared
- Currently not enough generators
- Done
- Exists
- We have 1 for our main lift station (Fulton)
- Not enough for all stations

*Other Critical Advisors:*

- Have some, need more

*Public:*

- Portable, could be moved as needed
- All utilities should have back up in flood areas
- Do not currently have enough for all lift stations
- Not practical or necessary
- The system will be shut down at some point—the real issue is getting everything restarted

Summary: Addressed via Garner Env. Contract. Maintain status quo, no additional action.

Back-up Municipal Records: Develop protocol for back-up of critical municipal records.

Back-up Municipal Records	Government Staff/Official	EOC Staff	Other Critical Advisors	Public	Totals
Relevant	10	1	1	7	19
Not relevant	1	0	1	1	3
Years 1-2	3	0	1	4	8
Years 3-5	0	0	0	1	1
Years 5+	1	0	0	0	1
Highest priority	0	1	0	0	1
Second highest priority	1	1	0	0	2
Third highest priority	2	0	0	0	2
Fourth highest priority	0	0	0	0	0
Fifth highest priority	0	0	1	0	1
Priority docs received	0	0	1	0	1

Notes:

*SWMAC:*

- Ongoing. Continuing
- How much has been done?
- City
- easy and should already be done through "cloud" storage systems available now

*EOC Staff:*

- In place. Doing it now, storage in cloud

*Government Staff/Official:*

- Ongoing. Court is currently digitizing records (AP)
- Already established
- Rockport backups all data to off-site data warehouses
- Exists in cloud

*Other Critical Advisors:*

- I think we have it
- Electronic & hard copy

*Public:*

- Rockport moves its servers
- Fulton stores data in the cloud

Summary: Do you need digital and hard copies? If not, maintain status quo, no additional action.

**Civil Service Improvements:** Improve emergency rescue and response equipment and facilities by providing additional, or updating existing emergency response equipment. This can include fire trucks, ATV's, water tanks/trucks, snow removal equipment, etc. This would also include developing backup systems for emergency vehicles and identifying and training additional personnel for emergency response.

Civil Service Improvements	Government Staff/Official	EOC Staff	Other Critical Advisors	Public	Totals
Relevant	10	1	2	9	22
Not relevant	2	0	0	0	2
Years 1-2	5	0	0	4	9
Years 3-5	3	0	2	3	8
Years 5+	0	0	0	1	1
Highest priority	1	1	0	3	5
Second highest priority	2	0	0	1	3
Third highest priority	1	0	0	1	2
Fourth highest priority	2	0	0	0	2
Fifth highest priority	2	0	0	1	3
Priority dots received	3	0	0	5	8

Notes:

*SIFMAC:*

- All are VFDs and not Civil Service Employees.
- Need to define what has been done & what remains
- City
- This is certainly a good civic responsibility, but not directly relevant to the NFIP

*EOC Staff:*

- Included in Garner Env. Contract
- Feel pretty good about our current ability to respond to these type of call now

*Government Staff/Official:*

- Ongoing
- Training of city and county officials would smoothen process
- Good, but can always improve
- Exists, can be improved

Summary: Ongoing. May be some room for improvement. Maintain status quo?

Comprehensive Disaster/Emergency Response Plan: Develop a Comprehensive County Disaster and Emergency Response Plan.

Comprehensive Disaster/Emergency Response Plan	Government Staff/Official	EOC Staff	Other Critical Advisors	Public	Totals
Relevant	12	1	1	9	23
Not relevant	2	0	1	0	3
Years 1-2	3	0	1	6	10
Years 3-5	1	0	0	1	2
Years 5+	0	0	0	0	0
Highest priority	5	1	0	3	9
Second highest priority	3	0	0	1	4
Third highest priority	0	0	0	1	1
Fourth highest priority	1	0	0	0	1
Fifth highest priority	0	0	0	0	0
Priority dots received	6	0	0	4	10

Notes:

*SWMAC:*

- Ongoing, Single joint entity plan in existence
- What is in place?
- City
- This is certainly a good civic responsibility, but not directly relevant to the NFIP

*EOC Staff:*

- County has a plan.
- Have one now--need to exercise more

*Government Staff/Official:*

- Ongoing, Adopted FEMA annexes, currently working on adopting advanced annexes (AP)
- There needs to be a way to identify residents with disabilities who reside alone and would require assistance to evacuate or that emergency personnel can check on after a hazardous event.
- Already in place
- Already done
- Being done
- Exists
- Most important

*Other Critical Advisors:*

- Have it

*Public:*

- System exists & works day-to-day, will just have to vamp the system up for large events

Summary: Done. (When was it last updated?) Will maintain with updates every (??) years?

Continuity Planning: Develop continuity plans for critical community services. Encourage businesses to do the same.

Continuity Planning	Government Staff/Official	EOC Staff	Other Critical Advisors	Public	Totals
Relevant	11	1	2	7	21
Not relevant	1	0	0	0	1
Years 1-2	4	0	1	5	10
Years 3-5	3	0	1	1	5
Years 5+	0	0	0	0	0
Highest priority	0	0	0	0	0
Second highest priority	3	0	0	2	5
Third highest priority	0	0	0	1	1
Fourth highest priority	1	0	0	1	2
Fifth highest priority	2	0	0	0	2
Priority dots received	1	0	0	2	3

Notes:

*SWMAC:*

- Included in EOC Plan
- What is in place?
- City
- every civic and commercial entity should have a continuity plan. But I am not sure how this is relevant to NFIP

*EOC Staff:*

- Included in Garner Env. Contract

*Government Staff/Official:*

- Ongoing
- Done city, help businesses
- Exists
- Pre-storm planning

Summary: Addressed via Garner Env. Contract. Maintain status quo, no additional action.

**Emergency Fuel Supply Plan:** Plan to ensure adequate fuel supply is available during an emergency. Actions might include: prioritization and rationing plan for gasoline and diesel uses in extended loss of fuel supply or electric power supply; a plan to purchase local fuel supply, etc.

Emergency Fuel Supply Plan	Government Staff/Official	EOC Staff	Other Critical Advisors	Public	Totals
Relevant	12	1	2	10	25
Not relevant	1	0	0	0	1
Years 1-2	3	0	1	7	11
Years 3-5	1	0	1	2	4
Years 5+	1	0	0	0	1
Highest priority	1	1	0	0	2
Second highest priority	0	0	0	2	2
Third highest priority	1	0	0	2	3
Fourth highest priority	0	0	0	2	2
Fifth highest priority	1	0	0	1	2
Priority dots received	2	0	0	4	6

Notes:

*SIFMAC:*

- Under contract with joint Emergency Management Plan
- What is in place?
- City
- If we are talking about a flood event, it will be very short lived measured in days, and not value added to pre-determine and fund emergency fuels beyond routine needs.

*EOC Staff:*

- Part of County Disaster Emergency Response Plan
- In place. Plan in place & confident in the ability to perform

*Government Staff/Official:*

- Ongoing (for city). City has fuel for emergency response, but not for civilian (AP)
- Part of Emergency Operations Plan
- Being done
- Exists
- Plan already in place

Summary: Ongoing, & Addressed via Garner Env. Contract. Maintain status quo, no additional action.

**Emergency Management Exercise:** Develop and facilitate an exercise to identify gaps in planning and to ensure that community response plans are sufficient to meet the needs of the jurisdiction.

Emergency Management Exercise	Government Staff/Official	EOC Staff	Other Critical Advisors	Public	Totals
Relevant	12	1	2	6	
Not relevant	1	0	0	1	2
Years 1-2	4	0	1	4	9
Years 3-5	1	0	1	2	4
Years 5+	0	0	0	0	0
Highest priority	2	1	0	0	3
Second highest priority	1	0	1	1	3
Third highest priority	2	0	0	0	2
Fourth highest priority	1	0	0	0	1
Fifth highest priority	0	0	0	0	0
Priority dots received	6	0	1	1	8

Notes:

*SWMAC:*

- Yeady immediately following Coastal Bend Hurricane Conference
- What is in place?
- City
- All plans should be tested with exercises. But we need the plans first.

*EOC Staff:*

- Done at the Coastal Bend Hurricane Conf, annually (table-top exercise for each County)
- In place. Currently participating in 1 annual exercise--that will be 2 this year

*Government Staff/Official:*

Ongoing

- Good idea
- Exists
- Need to practice every year!

*Other Critical Advisors:*

- May have this?

Summary: Ongoing. Maintain status quo, no additional action.

Emergency Operations: Identify and establish an Emergency Operations Center.

Emergency Operations	Government Staff/Official	EOC Staff	Other Critical Advisors	Public	Totals
Relevant	10	1	1	8	20
Not relevant	1	0	1	1	3
Years 1-2	3	0	0	7	10
Years 3-5	0	0	0	0	0
Years 5+	1	0	1	0	2
Highest priority	1	1	0	1	3
Second highest priority	2	0	0	1	3
Third highest priority	1	0	0	1	2
Fourth highest priority	0	0	0	1	1
Fifth highest priority	0	0	0	0	0
Priority dots received	1	0	0	3	4

Notes:

*SWMAC:*

- Ongoing, Joint & Continuing
- I believe this is in place?
- City

*EOC Staff:*

- Done (w/ Rkpt Service Center as back-up)
- In place. Have primary & 2nd EOC now

*Government Staff/Official:*

- Ongoing, City Hall
- EOC is at Public Safety Center. Back-up EOC at Rockport Service Center
- Done
- Exists

*Other Critical Advisors:*

- Have it in Rkpt/County

*Public:*

- Done

Summary: Done, No action needed.

**Facilities for Vulnerable Populations:** Ensure that facilities which will house vulnerable populations are placed in the least vulnerable areas of the community. Harden existing facilities if applicable.

Facilities for Vulnerable Populations	Government Staff/Official	EOC Staff	Other Critical Advisors	Public	Totals
Relevant	10	1	2	4	17
Not relevant	1	1	0	1	3
Years 1-2	4	0	0	2	6
Years 3-5	2	0	2	0	4
Years 5+	0	0	0	0	0
Highest priority	2	1	0	0	3
Second highest priority	0	0	0	0	0
Third highest priority	1	0	0	0	1
Fourth highest priority	1	0	0	0	1
Fifth highest priority	1	0	0	0	1
Priority dots received	1	0	0	0	1

Notes:

*SWMAC:*

- Evacuation plans and contracts in place due to floodplain entire peninsula
- What is status locations of such facilities now
- City
- should be managed in building codes for new. Existing facilities are private and will be difficult to force changes

*EOC Staff:*

- No sheltering in Aransas County. Must evacuate.
- We do not shelter in Aransas County we Evac

*Government Staff/Official:*

- Exists, can be improved
- N/A

*Public:*

- Ongoing
- No shelter in place in Aransas County!

Summary: N/A. No sheltering in Aransas County—everyone must evacuate.

**Facility Floodproofing:** Explore the possibility of floodproofing for facilities which fall into the HAZUS 1-percent flood inundation areas (aka SFHA).

Facility Floodproofing	Government Staff/Official	EOC Staff	Other Critical Advisors	Public	Totals
Relevant	9	0	2	8	19
Not relevant	2	1	0	1	4
Years 1-2	0	0	1	3	4
Years 3-5	4	0	0	2	6
Years 5+	0	0	0	1	1
Highest priority	0	0	1	0	1
Second highest priority	0	0	0	0	0
Third highest priority	0	0	0	0	0
Fourth highest priority	2	0	0	1	3
Fifth highest priority	1	0	0	2	3
Priority dots received	2	0	1	3	6

Notes:

*SWMAC:*

- Requires external funding
- City
- focus should be on new construction, "flood proofing" existing facilities is not likely to happen in isolation. Focus should be on getting floodwater out into the bays as rapidly as possible

*EOC Staff*

- Already floodproofed

*Government Staff/Official:*

- Ongoing. Storm shutters recently purchased for City Hall (EOC)
- ok, but not as important
- Exists

*Public:*

- more important to get people & critical records out or secured than trying to flood proof

**Summary:** Would require funding. Possibly recommend an assessment of what could be done to help floodproof the facilities that are within the SFHA, and then the investigation of funding opportunities.

Improvements to Flood Warning System: Update equipment, insure equipment is in a secure location, and install additional gauges.

Improvements to Flood Warning System	Government Staff/Official	EOC Staff	Other Critical Advisors	Public	Totals
Relevant	10	0	1	5	16
Not relevant	1	0	1	0	2
Years 1-2	3	0	1	3	7
Years 3-5	2	0	0	1	3
Years 5+	0	0	0	0	0
Highest priority	1	0	1	0	2
Second highest priority	0	0	0	0	0
Third highest priority	1	0	0	2	3
Fourth highest priority	1	1	0	0	2
Fifth highest priority	1	0	0	0	1
Priority dots received	1	0	1	1	3

Notes:

*SWMAC:*

- Requires external funding
- What is in place now
- City
- Flood Warning systems I believe are adequate with todays technology available everyone. We know when a storm is coming. The problem is forced action and evacuations prior to road closures, which would happen very quickly on Live Oak Peninsula

*EOC Staff:*

- Ongoing. NWS sends all pre-storm information

*Government Staff/ Official:*

- Ongoing. Code Red
- Use of social media and such
- No system in place
- Needs to be better developed (?)

*Other Critical Advisors:*

- Already pretty good (?)

*Public:*

- Done. Available thru City & County websites to get auto notices on cell phone, email or home phone

Summary: Being accomplished with NWS data. Recommend making this a part of the Public Information Plan.

Mutual Aid through WARN Program: Establish mutual aid agreements through Water/Wastewater Agency Response Network (WARN) Program.

Mutual Aid through WARN Program	Government Staff/Official	EOC Staff	Other Critical Advisors	Public	Totals
Relevant	9	1	2	5	17
Not relevant	1	0	0	0	1
Years 1-2	4	0	1	3	8
Years 3-5	1	0	1	2	4
Years 5+	1	0	0	0	1
Highest priority	2	1	0	0	3
Second highest priority	0	0	0	0	0
Third highest priority	0	0	0	0	0
Fourth highest priority	1	0	0	0	1
Fifth highest priority	0	0	0	0	0
Priority dots received	1	0	0	0	1

Notes:

*SWMAC:*

- In place
- City
- good idea, but not critical to the CRS/NFIP Planning

*EOC Staff:*

- Achieved through the Interjurisdictional Emergency Operations Plan (Texas)
- In place, but not through WARN

*Government Staff/Official:*

- Already doing
- Could be accomplished

*Other Critical Advisors:*

- Good plan

*Public:*

- ?

Summary: Ongoing. Accomplished as part of the Texas Interjurisdictional Emergency Operations Plan. Maintain status quo, no additional action.

**Short Term Residency Shelters:** Design and construct short term shelters for rural residents after damage from an event. These structures would not serve as FEMA approved safe rooms. The building could also be used for things such as short term sheltering during a high heat event for those without A/C. The building is not intended to be used for long term recovery, such as long term displacement from floods, fires, etc. The number of shelters needed depends on the size of the building, population, proximity to users, etc.

Short Term Residency Shelters	Government Staff/Official	EOC Staff	Other Critical Advisors	Public	Totals
Relevant	8	0	1	5	14
Not relevant	4	1	1	3	9
Years 1-2	2	0	0	2	4
Years 3-5	2	0	0	3	5
Years 5+	2	0	1	0	3
Highest priority	1	0	0	0	1
Second highest priority	1	0	0	0	1
Third highest priority	1	0	0	0	1
Fourth highest priority	0	0	0	1	1
Fifth highest priority	3	0	0	0	3
Priority dots received	1	0	0	1	2

**Notes:**

**SIFMAC:**

- For necessary employees, location provided Not for residents who should have evacuated on declaration
- This is a very long term high cost deal.
- City
- plan to utilize existing facilities like schools, community centers and churches. Not build new facilities, which would take currently open green space. Only idea I have would be to acquire the old HEB building and convert it for this purpose.

**EOC Staff:**

- No sheltering in Aransas County. Must evacuate.
- Using faith base & school facilities

**Government Staff/Official:**

- Emergency Operations Plan calls for no shelters for storm events due to flooding. No heat shelters identified.
- N/A - No shelters here

**Other Critical Advisors:**

- Have this at Rockport Service Center

Summary: N/A. No sheltering in Aransas County—everyone must evacuate.

Database of Vulnerable Population: Work with stakeholders to develop a database of vulnerable populations and the organizations which support them.

Database of Vulnerable Population	Government Staff/Official	EOC Staff	Other Critical Advisors	Public	Totals
Relevant	12	2	2	6	22
Not relevant	1	0	0	2	3
Years 1-2	4	1	2	5	12
Years 3-5	1	0	0	1	2
Years 5+	2	0	0	0	2
Highest priority	0	0	0	1	1
Second highest priority	1	1	0	1	3
Third highest priority	3	0	0	0	3
Fourth highest priority	0	0	1	0	1
Fifth highest priority	2	0	1	0	3
Priority dots received	0	0	2	1	3

Notes:

*SWMAC:*

- Coord with nursing homes & assisted living for early evac
- City
- what would be done with this. Arguably this is everyone who lives in a trailer home. How would this data base be used effectively?

*EOC Staff*

- Ongoing. Steer does this; but has to be maintained
- Need

*Government Staff/Official:*

Ongoing

- Part of Emergency Operations Plan; but not updated
- Have system in place

*Other Critical Advisors:*

- Ongoing/in progress
- Important to know priorities for evacuation/Emergency response

*Public:*

- High responsibility to care for vulnerable citizens

Summary: Somewhat accomplished via STEER; however, needs improvements, and annual maintenance. Suggest including education and outreach to improve this process as a part of the Public Information Plan.

Develop Flood Assistance Strategies: Develop strategies to provide necessary services in the event of flooding.

Develop Flood Assistance Strategies	Government Staff/Official	EOC Staff	Other Critical Advisors	Public	Totals
Relevant	13	0	1	7	21
Not relevant	0	0	1	0	1
Years 1-2	4	0	1	5	10
Years 3-5	3	0	0	2	5
Years 5+	0	0	0	0	0
Highest priority	1	0	0	2	3
Second highest priority	3	0	0	1	4
Third highest priority	0	0	1	0	1
Fourth highest priority	1	0	0	1	2
Fifth highest priority	0	0	0	1	1
Priority dots received	4	0	1	3	8

Notes:

*SWMAC:*

- In Emergency Management Plan
- City
- Most likely a significant flood even will impact relatively small areas of South Texas. I feel certain non-impacted communities would render aid as requested, now.

*EOC Staff:*

- In place

*Government Staff/Official:*

- Ongoing

*Other Critical Advisors:*

- Have this

Summary: Included in the County Emergency Management Plan (or is it called the Emergency Operations Plan?) Maintain status quo, no additional action.

**Emergency Communication:** Establish an action plan to improve communication between agencies to better assist residents and businesses during and following emergencies. Establish inner-operable communications.

Emergency Communication	Government Staff/Official	EOC Staff	Other Critical Advisors	Public	Totals
Relevant	13	0	2	7	22
Not relevant	0	0	0	1	1
Years 1-2	7	0	1	7	15
Years 3-5	0	0	1	0	1
Years 5+	0	0	0	0	0
Highest priority	4	0	0	1	5
Second highest priority	0	0	1	0	1
Third highest priority	1	0	0	0	1
Fourth highest priority	1	0	0	0	1
Fifth highest priority	0	0	0	1	1
Priority dots received	2	0	1	2	5

Notes:

*SWMAC:*

- In Emergency Management Plan
- City
- I would be surprised if this does not already exist in Aransas County. Expanding it to other Coastal Bend Counties would be helpful. Once said, we will come to each other aid if needed now.

*EOC Staff*

- Done. Part of the EOC Evacuation Plan.
- Emergency service in place. Community Notifications need work

*Government Staff/Official:*

- Ongoing. Emergency radios & phones available for City emergency response
- Part of Emergency Operations Plan & Chamber of Commerce Emergency Plan

*Other Critical Advisors:*

- Might have?

*Public:*

- Should be worked on ASAP.
- Should be communication with residents. Command centers in other cities only communicate with agencies, not public.

Summary: Included in the County Emergency Management Plan (or is it called the Emergency Operations Plan?) Maintain status quo, no additional action.

First Aid Training: Promote first aid training for all residents.

First Aid Training	Government Staff/Official	EOC Staff	Other Critical Advisors	Public	Totals
Relevant	5	0	2	7	14
Not relevant	2	0	0	1	3
Years 1-2	3	0	2	3	8
Years 3-5	0	0	0	1	1
Years 5+	2	0	0	1	3
Highest priority	0	0	0	1	1
Second highest priority	0	0	0	0	0
Third highest priority	0	0	0	0	0
Fourth highest priority	1	0	0	0	1
Fifth highest priority	1	0	0	1	2
Priority dots received	1	0	0	2	3

Notes:

*SIFMAC:*

- City
- Sure "promoting First Aid training is a good idea. Forcing it is Impossible and not relevant to CRS and NFIP

*EOC Staff:*

- ?

*Public:*

- Should be worked on ASAP.

Summary: Is this something that you want to tackle as a part of this process? Could encourage first aid training via the Public Information Plan.

**Public Awareness/Education:** Through activities such as outreach projects, distribution of maps and environmental education increase public awareness of natural hazards to both public and private property owners, renters, businesses, and local officials about hazards and ways to protect people and property from these hazards. Also, educate citizens on water conservation methods, evacuation plans, etc. In addition, purchasing equipment such as overhead projectors and laptops.

Public Awareness/Education	Government Staff/Official	EOC Staff	Other Critical Advisors	Public	Totals
Relevant	12	0	2	8	22
Not relevant	1	0	0	1	2
Years 1-2	5	0	1	5	11
Years 3-5	3	0	1	2	6
Years 5+	0	0	0	0	0
Highest priority	4	0	0	1	5
Second highest priority	3	0	0	0	3
Third highest priority	1	0	0	2	3
Fourth highest priority	2	0	1	1	4
Fifth highest priority	2	0	0	0	2
Priority dots received	10	0	1	2	13

**Notes:**

*SOMLAC:*

- Continuing & expanding effort.
- This seems highly important & should be an ongoing effort.
- City
- purchasing overhead projectors and lap tops will not mitigate flood risk

*EOC Staff:*

- ?

*Government Staff/Official:*

- Ongoing
- Additionally, creating a public service announcement educating residents on ways they can reduce drainage failure by keeping garbage out of street drains; keeping curb and gutter clean and clear of overgrown grass and weeds; garbage; dirt/gravel.
- Will be facilitated by GOMA Grant in the hiring of CRS coordinator which will help in this area as well
- Water Conservation Plan & Restrictions over the last four years has reduced average residential consumption 14%
- Pre-storm education

*Other Critical Advisors:*

- Ongoing. In process but still need to reach all, and to reach visitors & new residents

*Public:*

- Should be worked on ASAP.

**Summary:** Suggest the development of a coordinated, county-wide Public Information Plan

**Risk Communication:** Require landlords to disclose if a rental property is located in a floodprone area or if the structure has been impacted previously by high-water events.

Risk Communication	Government Staff/Official	EOC Staff	Other Critical Advisors	Public	Totals
Relevant	11	1	2	8	22
Not relevant	1	0	0	1	2
Years 1-2	3	1	2	6	12
Years 3-5	2	0	0	0	2
Years 5+	2	0	0	0	2
Highest priority	0	1	0	0	1
Second highest priority	1	0	0	0	1
Third highest priority	1	0	0	0	1
Fourth highest priority	0	0	0	0	0
Fifth highest priority	2	0	0	0	2
Priority dots received	0	0	0	0	0

Notes:

*SWMAC:*

- Database needs updating.
- What requirements are in place now? What requirements can be imposed by ordinances
- City
- very low priority initiative, with poor compliance

*EOC Staff:*

- Yes

*Government Staff/Official:*

- To allow people to take preventative measures

*Other Critical Advisors:*

- Should be done!

*Public:*

- This should have already been done!

General notes regarding Goal 3:

- We need to consider how we will provide "safe harbor for people coming in from other disaster areas?"
- "Info needs to be accessible for new residents as to Hi Risk areas."

Summary: Is this something that you want to tackle as a part of this process, at this time?

**Goal 4:**

### Summary of Goal 4 Data.

**Bank Stabilization:** Stabilize banks along streams and rivers. This may include, but is not limited to; reducing bank slope, addition of riprap, installation of erosion control materials/fabrics.

Bank Stabilization	Government Staff/Official	Public Works Staff	Other Critical Advisors	Public	Totals
Relevant	8	1	1	5	15
Not relevant	5	1	1	1	8
Years 1-2	2	0	0	1	3
Years 3-5	2	1	1	1	5
Years 5+	2	0	0	1	3
Highest priority	2	0	0	0	2
Second highest priority	1	0	0	0	1
Third highest priority	0	0	0	0	0
Fourth highest priority	0	0	0	1	1
Fifth highest priority	0	0	0	0	0
Priority dots received	2	0	0	1	3

Notes:

*SWMAC:*

- Work have been done on Tule Creek along these lines
- Much has been done as part of stormwaters management (?)
- City/County, shore stabilization Little Bay, straightening bend on Tule Creek North, Development of numerous drainage conduits. See Naismith Engineering.
- ASAP. yes, we must focus on strong, adequately sized and resilient passive water drainage back to the bays. Easily the most important action we should take.

*Public Works Staff:*

- No streams & rivers; but do have drainage canals. Would need to prioritize in ~ yrs 3-5, and do work in yrs 5+

*Government Staff/Official:*

- Only 2 rivers in County
- Needed all along water front
- Could be improved

*Public:*

- Categories are too similar

Summary: No rivers or streams; but does address drainage canals. (Part of proposed "Drainage Maintenance" category, which would include the prioritization of infrastructural improvements to drainage ditches in years 3-5, then starting the work in years 5+)

**Channel and Bridge Improvements:** Implement channel and bridge improvements to increase channel conveyance and decrease the base flood elevations.

Channel and Bridge Improvements	Government Staff/Official	Public Works Staff	Other Critical Advisors	Public	Totals
Relevant	10	1	1	7	19
Not relevant	3	1	1	0	5
Years 1-2	2	0	0	1	3
Years 3-5	2	0	0	2	4
Years 5+	1	1	0	2	4
Highest priority	0	0	0	0	0
Second highest priority	2	0	0	0	2
Third highest priority	1	0	0	0	1
Fourth highest priority	0	0	0	1	1
Fifth highest priority	0	0	0	1	1
Priority dots received	0	0	0	2	2

Notes:

*SWMAC:*

- Installation of numerous box culverts and outfalls under roadways and through bulkheads
- same as above, but will take more money and time.

*Public Works Staff:*

- Three bridges will ultimately have to be replaced (~10 yrs+) Key Allegro, Harbor Oaks, & Lamar

*Government Staff/Official:*

- Choke points along Tule Creek
- But not many opportunities
- More important channel than bridges
- Can't lower the tide

Summary: Combine with Bridge Upgrades. 3 bridges will need to be replaced (10+ years)

Drainage Ditches: Deepen drainage ditches and clean out culverts.

Drainage Ditches	Government Staff/Official	Public Works Staff	Other Critical Advisors	Public	Totals
Relevant	6	2	2	10	20
Not relevant	0	0	0	0	0
Years 1-2	4	1	1	6	12
Years 3-5	0	0	1	1	2
Years 5+	0	0	0	0	0
Highest priority	0	0	0	2	2
Second highest priority	4	0	0	2	6
Third highest priority	0	0	1	1	2
Fourth highest priority	1	1	0	0	2
Fifth highest priority	0	0	0	0	0
Priority dots received	3	3	1	9	16

Notes:

*Public Works Staff:*

- Ongoing
- Constant Issues

*Government Staff/Official:*

- Rockport completed \$2M of projects in 2016. Stormwater
- Overall comprehensive drainage plan-long term
- Continuous

*Other Critical Advisors:*

- Always on-going

*Public:*

- This is the most cost effective maint item

Summary: Part of proposed "Drainage Maintenance" category, which would include annual maintenance; then, the prioritization of infrastructural improvements to drainage ditches in years 3-5, then starting the work in years 5+.

**Elevate Pad Mounted Transformers and Switch Gear:** Elevate pad mounted transformers and switch gear above base flood elevation to eliminate damages from flooding.

Elevate Pad Mounted Transformers and Switch Gear	Government Staff/Official	Public Works Staff	Other Critical Advisors	Public	Totals
Relevant	11	2	2	8	23
Not relevant	2	0	0	0	2
Years 1-2	2	0	2	2	6
Years 3-5	1	0	0	2	3
Years 5+	2	0	0	1	3
Highest priority	1	0	0	1	2
Second highest priority	2	0	1	1	4
Third highest priority	0	0	0	0	0
Fourth highest priority	0	0	0	0	0
Fifth highest priority	0	0	0	0	0
Priority dots received	0	0	1	0	1

Notes:

*SWMAC:*

- AEP responsibility
- I see many of these facilities that will blow in 3-4 ft. flood event. We should immediately initiate efforts to get them off the ground.

*Public Works Staff:*

- Ongoing
- New code

*Government Staff/Official:*

- Ongoing
- Already requiring new construction to be 18" above BFE or adj. road if in "X" zone
- Advisory Committee has completed several projects in last 5 years
- Believe this is in place

*Public:*

- ?

Summary: Is this something that you want to take on or prioritize at this point?

**Grade Control Structures:** Stream bed degradation occurs along many river and creeks. Grade control structures including sheet-pile weirs, rock weirs, ponds, road dams, etc. can be implemented to maintain the channel bed.

Grade Control Structures	Government Staff/Official	Public Works Staff	Other Critical Advisors	Public	Totals
Relevant	7	0	2	7	16
Not relevant	3	2	0	1	6
Years 1-2	0	0	0	2	2
Years 3-5	4	0	2	1	7
Years 5+	0	0	0	0	0
Highest priority	0	0	0	1	1
Second highest priority	1	0	0	0	1
Third highest priority	0	0	0	0	0
Fourth highest priority	0	0	0	0	0
Fifth highest priority	0	0	0	0	0
Priority dots received	0	0	0	1	1

Notes:

*SWMAC:*

- Sediment ponds on Tule Creek. Detention/Retention ponds (e.g. Henderson Tract)
- similar and redundant issue as above

*Public Works Staff:*

- Only applies to drainages (no streams & creeks) which are monitored.

*Government Staff/Official:*

- Already been establishing
- Not high priority not many streams
- No rivers in A. Co. that impact us

Summary: Part of proposed "Drainage Maintenance" category, which would include annual maintenance; then, the prioritization of infrastructural improvements to drainage ditches in years 3-5, then starting the work in years 5+.

Improve/Upgrade Bridges: Investigate, design and retrofit or improve bridges to provide greater capacity and maintain or improve structural integrity during flood events.

Improve/Upgrade Bridges	Government Staff/Official	Public Works Staff	Other Critical Advisors	Public	Totals
Relevant	6	1	1	7	15
Not relevant	5	1	1	2	9
Years 1-2	1	0	0	2	3
Years 3-5	3	0	1	1	5
Years 5+	0	1	0	1	2
Highest priority	2	0	0	0	2
Second highest priority	0	0	0	0	0
Third highest priority	1	0	0	1	2
Fourth highest priority	0	0	0	0	0
Fifth highest priority	0	0	0	1	1
Priority dots received	4	0	0	1	5

Notes:

*SWMAC:*

- TxDOT responsibility for both evac bridges
- certainly, but costly with questionable benefit as most access roads to bridges in Aransas County will flood and become impassable prior to the bridge.

*Public Works Staff:*

- Three bridges will ultimately have to be replaced (~10 yrs+) Key Allegro, Harbor Oaks, & Lamar

*Government Staff/Official:*

- Key Allegro bridge & walkway needs to be replaced
- Currently 2 bridges not rated to handle Fire Trucks

*Public:*

- Some bridges need attention

Summary: Combine with Bridge Improvements. 3 bridges will need to be replaced (10+ years)

Improve Drainage: Improve storm sewers and drainage patterns in and around the community.

Improve Drainage	Government Staff/Official	Public Works Staff	Other Critical Advisors	Public	Totals
Relevant	13	2	2	12	29
Not relevant	1	0	0	0	1
Years 1-2	5	0	2	7	14
Years 3-5	4	0	0	2	6
Years 5+	2	0	0	1	3
Highest priority	2	0	0	4	6
Second highest priority	3	0	0	2	5
Third highest priority	2	0	1	1	4
Fourth highest priority	0	0	0	0	0
Fifth highest priority	1	0	1	1	3
Priority dots received	7	5	2	8	22

Notes:

*SIFMAC:*

- Recently updated City Master Plan
- City
- redundant question and answered with above

*Public Works Staff:*

- Ongoing as part of regular maintenance.

*Government Staff/Official:*

- Ongoing
- A continuing process
- Identified flood areas need mitigation
- Overall plan for now & long term
- Master Drainage Plan in place & being worked (?) on

*Other Critical Advisors:*

- somewhat redundant - maintain what we have

*Public:*

- Overall drainage improvements needed

Summary: Part of proposed "Drainage Maintenance" category, which would include annual maintenance; then, the prioritization of infrastructural improvements to drainage ditches in years 3-5, then starting the work in years 5+.

Infrastructure Assessment Study: Conduct an assessment of bridges in the county and assess other potential areas of concern.

Infrastructure Assessment Study	Government Staff/Official	Public Works Staff	Other Critical Advisors	Public	Totals
Relevant	8	0	2	6	16
Not relevant	4	0	0	2	6
Years 1-2	0	0	1	2	3
Years 3-5	2	0	1	1	4
Years 5+	2	0	0	0	2
Highest priority	1	0	0	0	1
Second highest priority	0	0	0	1	1
Third highest priority	0	0	0	1	1
Fourth highest priority	1	0	0	0	1
Fifth highest priority	0	0	0	0	0
Priority dots received	1	0	0	0	1

Notes:

*SWMAC:*

- Awareness only, TxDOT responsibility
- should be a routine government responsibility, not necessarily driven by CRS and NPIP

*Government Staff/Official:*

- Recently assessed by TxDOT (Bridge in Lamar on 1st St.)
- Done by TxDOT every 5 yrs
- Needs to be addressed

*Other Critical Advisors:*

- Assessment is best first step

*Public:*

- Copano only critical bridge in Aransas Co.

Summary: Is this done by TxDOT every 5 years? Were there any problem issues in the last assessment? Is any action needed?

Infrastructure Protection: Develop flood control devices to protect critical infrastructure during flood events.

Infrastructure Protection	Government Staff/Official	Public Works Staff	Other Critical Advisors	Public	Totals
Relevant	11	0	2	10	23
Not relevant	2	1	0	1	4
Years 1-2	4	0	1	3	8
Years 3-5	3	0	0	1	4
Years 5+	2	0	0	1	3
Highest priority	2	0	1	2	5
Second highest priority	0	0	0	0	0
Third highest priority	1	0	0	0	1
Fourth highest priority	0	0	1	0	1
Fifth highest priority	1	0	0	0	1
Priority dots received	1	0	2	2	5

Notes:

*SWMAC*:

- of course, but redundant Q&A with above

*Public Works Staff*:

- Levee in Aransas Pass reclassified by FEMA as an earthen berm

*Government Staff/Official*:

- Ongoing
- Don't know where flood control would be installed to be effective
- Don't think this is a problem

*Public*:

- Protect our business on Austin St. in downtown Rkpt from flooding.

Summary: Is this needed? How would it be done?

Levee/Floodwall Construction &/or Improvements: Levees and floodwalls serve to provide flood protection to businesses and residents during large storm events. Improvements to existing levees and floodwalls will increase flood protection. If possible, the structure should be designed to FEMA standards to provide 1-percent flood protection providing additional flood insurance benefits.

Levee/Floodwall Construction &/or Improvements	Government Staff/Official	Public Works Staff	Other Critical Advisors	Public	Totals
Relevant	5	0	0	5	10
Not relevant	8	1	2	3	14
Years 1-2	1	0	0	2	3
Years 3-5	4	0	0	0	4
Years 5+	2	0	0	0	2
Highest priority	0	0	0	0	0
Second highest priority	0	0	0	0	0
Third highest priority	0	0	0	0	0
Fourth highest priority	1	0	0	0	1
Fifth highest priority	0	0	0	0	0
Priority dots received	0	0	0	0	0

Notes:

*SIFMAC:*

- I am unaware of any levee systems in Aransas County
- We have any?
- where it would work on Live Oak Peninsula is not clear to me. Any sort of levee type structure will trap rain water and would require large pumping systems to work. Focus should be on improved and resilient passive drainage back to the Bays. A flood event here, until the Bay water levels drop to enable passive runoff, levee structures would be a waste of limited capital

*Government Staff/Official:*

- AP levee reclassified by FEMA as earthen berm
- None in county
- Don't know how or where this would be
- Don't live in A.P.

Summary: N/A. Levee in Aransas Pass has been reclassified by FEMA as an earthen berm.

Promote Infiltration: Convert concrete-lined channels to natural channels to promote infiltration.

Promote Infiltration	Government Staff/Official	Public Works Staff	Other Critical Advisors	Public	Totals
Relevant	9	0	1	4	14
Not relevant	3	0	1	5	9
Years 1-2	0	0	1	1	2
Years 3-5	3	0	0	0	3
Years 5+	4	0	0	1	5
Highest priority	0	0	0	1	1
Second highest priority	1	0	0	0	1
Third highest priority	0	0	0	0	0
Fourth highest priority	0	0	0	0	0
Fifth highest priority	0	0	0	1	1
Priority dots received	0	0	0	1	1

Notes:

*SWMAC:*

- some work done already south of city due to SWMAC
- Embedded in County stormwater regulations
- We have any?
- focus should be on getting storm water back to the bays, not into the water table, which will be saturated in a storm water event anyway.

*Government Staff/Official:*

- most if not all channels are earth-lined.
- No concrete-lined channels
- Definitely needed
- Reverse current standards

*Public:*

- Concrete ditches stay cleaner for faster water movement
- Use natural methods wherever possible.
- Gone back & forth depending on whatever is the current
- Studies already: What will future bring? How will future be different?

Summary: N/A. Most, if not all of the channels are earth-lined, not concrete-lined. Suggest this be maintained. (Vegetation and earth = infiltration = filtering of the water – this is a good thing!) Recommend continuation of the status quo and continue ongoing maintenance.

Relocate Municipal Infrastructure: Acquire Geographic Information System (GIS) to relocate municipal infrastructure (water and sewer lines).

Relocate Municipal Infrastructure	Government Staff/Official	Public Works Staff	Other Critical Advisors	Public	Totals
Relevant	9	0	2	5	16
Not relevant	2	0	0	2	4
Years 1-2	2	0	0	2	4
Years 3-5	0	0	0	0	0
Years 5+	4	0	2	0	6
Highest priority	0	0	0	0	0
Second highest priority	0	0	0	0	0
Third highest priority	2	0	0	1	3
Fourth highest priority	0	0	0	1	1
Fifth highest priority	1	0	0	0	1
Priority dots received	4	0	0	0	4

Notes:

*SWMAC:*

- In part, the reason for location of Public Works Bldg.
- City
- very costly without a clear benefit.

*Government Staff/ Official:*

- Ongoing
- Being done as old infrastructure fails. GIS survey done
- ?

Summary: Is there anything that needs to be moved? Is a study needed to assess the situation?

**Remove Flow Restrictions:** Conduct a preliminary drainage assessment and/or design bridge improvements to reduce and/or alleviate flooding. Bridges typically serve as flow restrictions along streams and rivers. Cleanout and reshaping channel segments at bridge crossings can increase conveyance, reducing the potential for flooding. Replacing or modifying of bridges and other flow restrictions may be necessary to eliminate flooding threats and damages.

Remove Flow Restrictions	Government Staff/Official	Public Works Staff	Other Critical Advisors	Public	Totals
Relevant	10	0	1	8	19
Not relevant	2	2	1	1	6
Years 1-2	2	0	0	2	4
Years 3-5	3	0	1	3	7
Years 5+	0	0	0	0	0
Highest priority	1	0	0	1	2
Second highest priority	1	0	0	0	1
Third highest priority	1	0	0	0	1
Fourth highest priority	0	0	0	0	0
Fifth highest priority	0	0	0	1	1
Priority dots received	1	0	0	0	1

Notes:

*SWMAG:*

- For structures within the City--Tule Creek & other outflows, Bridges remain TxDOT responsibility
- County stormwater Management has addressed this
- City
- redundant Q&A as above

*Public Works Staff:*

- Already addressed in other objective.

*Government Staff/Official:*

- Ongoing
- Could be taken into consideration
- Low priority few bridges
- Bridges include culverts & this is where Aransas County is far behind in maintaining this
- Done

*Public:*

- This applies to culverts & bridges thru 35 hwy south, the water is blocked by hwy & O/D railroad bed
- N/A
- Bridge vs. culvert?

Summary: Very few bridges; but does apply to culverts. Suggest including as a part of proposed "Drainage Maintenance" category, which would include annual maintenance; then, the prioritization of infrastructural improvements to drainage ditches in years 3-5, then starting the work in years 5+.

**Site Hardening:** Locate critical mechanical systems above the base flood elevation. Consider moving electrical systems to higher floors or the roof rather than the basement.

Site Hardening	Government Staff/Official	Public Works Staff	Other Critical Advisors	Public	Totals
Relevant	10	0	2	4	16
Not relevant	2	2	0	2	6
Years 1-2	1	0	1	0	2
Years 3-5	1	0	0	2	3
Years 5+	3	0	0	0	3
Highest priority	0	0	0	0	0
Second highest priority	0	0	0	0	0
Third highest priority	2	0	0	0	2
Fourth highest priority	0	0	0	1	1
Fifth highest priority	0	0	1	0	1
Priority dots received	2	0	1	0	3

Notes:

*SWMAC:*

- City facilities yes, others are AEP
- City
- very logical, but again a bit redundant Q&A with above

*Public Works Staff:*

- Already addressed in other objective.

*Government Staff/Official:*

- Ongoing
- New construction is built above BFE and non-SFHA
- no basements
- N/A

*Other Critical Advisors:*

- Homes & business? Or infrastructure?

*Public:*

- N/A
- Site? = Home, Business, Critical Facility?

Summary: Is this something you want to tackle right now? Could be two angles: 1) regulations; and 2) changes to government facilities.

Storm Water Management: Upgrade combined sewer system to improve storm water management.

Storm Water Management	Government Staff/Official	Public Works Staff	Other Critical Advisors	Public	Totals
Relevant	9	1	2	6	18
Not relevant	2	0	0	1	3
Years 1-2	3	0	1	4	8
Years 3-5	2	0	0	3	5
Years 5+	2	0	0	0	2
Highest priority	1	0	0	0	1
Second highest priority	2	0	1	1	4
Third highest priority	2	0	0	0	2
Fourth highest priority	2	0	0	1	3
Fifth highest priority	0	0	0	0	0
Priority dots received	1	0	1	2	4

Notes:

*SWMAC:*

- Updated Master Plan
- City
- I do not understand the benefit to combine sewer and storm water systems. I would think we should harden the systems and make every effort to isolate them

*Government Staff/ Official:*

- Ongoing
- Stormwater is not part of wastewater system
- Not sure what this means
- Doing

*Public:*

- Controlling & filtering storm water is critical to protection of our valuable natural habitats!

Summary: Done. These systems are already separate.

**Stormwater System and Drainage Improvements (Lg. comm.):** Larger communities generally utilize underground stormwater systems comprising of pipes and inlets to convey runoff. Undersized systems can contribute to localized flooding. Stormwater system improvements may include pipe upsizing and additional inlets. Retention and detention facilities may also be implemented to decrease runoff rates while also decreasing the need for other stormwater system improvements.

Stormwater System and Drainage Improvements (Lg. comm.)	Government Staff/Official	Public Works Staff	Other Critical Advisors	Public	Totals
Relevant	9	0	1	7	17
Not relevant	2	1	1	1	5
Years 1-2	2	0	1	3	6
Years 3-5	4	0	0	3	7
Years 5+	0	0	0	0	0
Highest priority	1	0	0	2	3
Second highest priority	0	0	0	1	1
Third highest priority	1	0	0	2	3
Fourth highest priority	1	0	1	0	2
Fifth highest priority	2	0	0	1	3
Priority dots received	3	0	2	6	11

Notes:

*SWMAC:*

- Updated Master Plan and close coordination with other entities through SWMAC
- County stormwater Management has addressed this
- City
- every effort should be focused on getting storm water to passively drain to our Bays. This issue is discussed above

*Public Works Staff:*

- Applies to ditches, canals, etc. Dealt with on an ongoing basis via maintenance.

*Government Staff/Official:*

- Currently have some upcoming and ongoing projects
- Problem only in a few areas

*Other Critical Advisors:*

- Not a large community

*Public:*

- Aren't these the same (Lg. & Sm. Community Objectives)
- Not as relevant for smaller cities

Summary: N/A. This area qualifies as a "small community."

**Stormwater System and Drainage Improvements (Sm. comm.):** Smaller communities may utilize stormwater systems comprising of ditches, culverts, or drainage ponds to convey runoff. Undersized systems can contribute to localized flooding. Drainage improvements may include ditch upsizing, ditch cleanout and culvert improvements. Retention and detention facilities may also be implemented to decrease runoff rates while also decreasing the need for other stormwater system improvements. Bridges typically serve as flow restrictions along streams and rivers. Cleanout and reshaping of channel segments at bridge crossings can increase conveyance, reducing the potential for flooding.

Stormwater System and Drainage Improvements (Sm. comm.)	Government Staff/Official	Public Works Staff	Other Critical Advisors	Public	Totals
Relevant	12	1	2	10	25
Not relevant	1	0	0	0	1
Years 1-2	3	0	1	4	8
Years 3-5	3	0	1	2	6
Years 5+	0	0	0	0	0
Highest priority	2	0	1	2	5
Second highest priority	1	0	0	0	1
Third highest priority	2	0	0	1	3
Fourth highest priority	2	0	0	2	4
Fifth highest priority	0	0	0	0	0
Priority dots received	5	0	1	3	9

**Notes:**

**SWMAC:**

- Updated Master Plan and close coordination with other entities through SWMAC
- County stormwater Management has addressed this
- Certainly, but a redundant Q&A as above

**Public Works Staff:**

- Applies to ditches, canals, etc. Dealt with on an ongoing basis via maintenance.

**Government Staff/Official:**

- Ongoing
- Currently working on or have planned to work on
- Rockport completed revision of Master Drainage Plan in 2016 & identified future projects.
- Being done, but should be more
- Problem only in a few areas

**Public:**

- Ditches along hwy 35 S don't have a common flow line. Flow line changes with ponding occurring
- So similar to above question. References bridges which is not quite as relevant
- County has Stormwater Master Plan that is being implemented. Daniel Reid Rocksff
- Aren't these the same (Lg. & Sm. Community Objectives)
- Improve overall Drainage Master Plans

**Summary:** Suggest these items could (and should) be addressed as a part of the proposed "Drainage Maintenance" category, which would include annual maintenance; then, the prioritization of infrastructural improvements to drainage ditches in years 3-5, then starting the work in years 5+.

Filtration Facility Upgrade: Add a retention pond to the filtration facility.

Filtration Facility Upgrade	Government Staff/Official	Public Works Staff	Other Critical Advisors	Public	Totals
Relevant	4	0	1	5	10
Not relevant	4	1	0	0	5
Years 1-2	0	0	0	1	1
Years 3-5	0	0	0	1	1
Years 5+	3	0	1	0	4
Highest priority	0	0	0	0	0
Second highest priority	0	0	0	0	0
Third highest priority	1	0	0	0	1
Fourth highest priority	1	0	0	0	1
Fifth highest priority	0	0	0	0	0
Priority dots received	1	0	0	0	1

Notes:

*SWMAC:*

- Tule Creek sediment ponds
- I am not familiar with this concept detail to offer an opinion on benefit

*Public Works Staff:*

- No filtration facility.

*Government Staff/Official:*

- Retention ponds are somewhat ineffective due to ground levels
- N/A

*Public:*

- Municipal? Engineered? Who is running the facility?

Summary: N/A. No filtration facility in county.

**Transportation Drainage Improvements:** Make improvements to roadways and drainage ways to prevent damage to key transportation routes. Utilize geosynthetic products for repair and mitigation of damages. Consider covering of road washouts, culvert sizing headwalls, steep banks, slides, in-road springs, roadway edge armoring, low water crossings, pothole grading, weak foundations, gravel road maintenance, ditch linings, on steep grades, erosion protection, etc.

Transportation Drainage Improvements	Government Staff/Official	Public Works Staff	Other Critical Advisors	Public	Totals
Relevant	10	2	2	7	21
Not relevant	1	0	0	1	2
Years 1-2	1	1	0	3	5
Years 3-5	3	1	2	2	8
Years 5+	4	1	0	1	6
Highest priority	1	0	0	0	1
Second highest priority	1	0	0	2	3
Third highest priority	0	0	0	1	1
Fourth highest priority	0	0	0	0	0
Fifth highest priority	3	0	0	1	4
Priority dots received	1	0	0	2	3

Notes:

*SWMAG:*

- Aw This should an ongoing accountability for Aransas County Road and Bridge crews as well as municipal maintenance crews.
- awareness--TxDOT responsibility

*Public Works Staff:*

- Dealt with along shorelines and roads on an ongoing basis.

*Government Staff/Official:*

- Have issues with current system

*Public:*

- Currently or will improve on
- Now & ongoing
- Ongoing (x2)
- Lesser of two evils: low streets—get flooded & emergency vehicles can't get in...high streets—homes get flooded

**Summary:** Suggest these items could (and should) be addressed as a part of the proposed "Drainage Maintenance" category, which would include annual maintenance; then, the prioritization of infrastructural improvements to drainage ditches in years 3-5, then starting the work in years 5+.

**General notes regarding Goal 4:**

- The regional plan should grow to include San Patricio County

**CHAPTER 9: FORMAL PLAN ADOPTION DOCUMENTS FOR EACH JURISDICTION**

ARANSAS COUNTY RESOLUTION

*Resolution to be added here.*

ARANSAS PASS RESOLUTION

*Resolution to be added here.*

FULTON RESOLUTION

*Resolution to be added here.*

ROCKPORT RESOLUTION

*Resolution to be added here.*