Region 2 Lower Red-Sulphur-Cypress Regional Flood Planning Group
June 2, 2022
2:00 pm
at
Ark-Tex Council of Governments
EOC Room,
4808 Elizabeth Street,
Texarkana, TX 75503
or
Via teleconference/webinar
Use the following information to register for the meeting:
https://us06web.zoom.us/meeting/register/tZ0pc-2srDMqHNZDMmyccd3EJoW3qrj2OmwS
After registering, you will receive a confirmation email containing information about joining the meeting.

If you experience issues while registering or do not have access to a computer, please contact Paul Prange no less than two (2) workdays prior to the meeting at 903.255.3519 or pprange@atcog.org.

Agenda:

1. Call to Order
2. Welcome
3. Confirmation of attendees / determination of quorum
4. Public comments – limit 3 minutes per person
5. *Consider approval of minutes for the meeting held May 5, 2022

Presentations

6. Texas Water Development Board Update
7. Region 1 Canadian-Upper Red Regional Flood Planning Group Update

Technical Consultant Update

8. Technical Presentation by Halff Associates, Inc.

- Chapter 6- Impacts of Regional Flood Plan and impacts to State Water Plan
    - Chapter 6 is attached for review before the meeting. If possible, please provide comments directly in the Word document and send to the technical team by 6/1 for evaluation.
    - Present material.
    - Discuss adjusting impact numbers to reflect partial adoption of FMS/E/Ps.
    - Discuss comments
- Chapter 8- Administrative, Regulatory, and Legislative Recommendations
    - Chapter 8 is attached for review before the meeting. If possible, please provide comments directly in the Word document and send to the technical team by 6/1 for evaluation. These recommendations are numerous and not always region specific. We may want to add or subtract to better reflect our local issues.
    - Present materials.
    - Discuss comments
- Chapter 9- Flood Infrastructure Financing Analysis

- Show survey that has been distributed to FMX sponsors.
- Discuss outreach efforts.
  Schedule

Other Business

9. Update from Planning Group Sponsor
10. Consider date and agenda items for next meeting
11. Adjourn

***Denotes Action Items**

If you wish to provide written comments prior to or after the meeting, please email your comments to pprange@atcog.org and include "Region 2 RFPG Meeting" in the subject line of the email – OR – you may mail your comments to Region 2 RFPG, c/o ATCOG – Paul Prange, 4808 Elizabeth St, Texarkana, TX 75503.

If you wish to provide oral public comments at the meeting, please submit a request via email to pprange@atcog.org , include "Region 2 RFPG Meeting Public Comment Request" at least 2 hours prior to the meeting, and follow the registration instructions at top of page 1 of the Agenda.

Additional information may be obtained from: www.texasfloodregion2.org, or by contacting Paul Prange at pprange@atcog.org, 903-832-8636, -or- Region 2 RFPG, c/o ATCOG, 4808 Elizabeth St, Texarkana, TX 75503

All meeting agendas and notices will be posted on our website at www.texasfloodregion2.org. If you wish to be notified electronically of RFPG activities, please submit a request to pprange@atcog.org, include "Request for notification of Region 2 RFPG activities". This request will be honored via email only unless reasonable accommodations are needed.

Meeting Minutes
Region 2 Lower Red-Sulphur-Cypress Flood Planning Group Meeting
May 5, 2022
2:00 p.m.
Small Business Development Center, The Community Room – (2nd Floor), 105 N. Riddle Avenue, Mount Pleasant, TX 75455 and Via Zoom Webinar/Teleconference

Roll Call:

Voting Member	Interest Category	Present (x) /Absent ( ) / Alternate Present (*)
Preston Ingram (William)	Agricultural interests	
Andy Endsley	Counties	X
W. Greg Carter	Electric generating utilities	X
Laura-Ashley Overdyke	Environmental interests	X
Casey Johnson	Industries	
Dustin Henslee	Municipalities	X
Kirby Hollingsworth	Public	
R. Reeves Hayter	River authorities	X
Kelly Mitchell	Small business	X
Joseph W. Weir III	Water districts	X
Susan Whitfield	Water utilities	X

Non-voting Member	Agency	Present(x)/Absent( )/ Alternate Present (*)
James (Clay) Shipes	Texas Parks and Wildlife Department	
Andrea Sanders	Texas Division of Emergency Management	X
Darrell Dean	Texas Department of Agriculture	
Tony Resendez	Texas State Soil and Water Conservation Board	X
Trey Bahm	General Land Office	
Anita Machiavello	Texas Water Development Board (TWDB)	X
Michelle Havelka	Texas Commission on Environmental Quality	
Darlene Prochaska	USACE, Fort Worth District	
Travis Wilsey	USACE, Tulsa District	
Randy Whiteman	RFPG 1 Liaison	X
Richard Brontoli	Red River Valley Association	X
Jason Dupree	TxDOT – Atlanta District	X
Dan Perry	TxDOT – Paris District	

Quorum:
Quorum: **Yes**
Number of voting members or alternates representing voting members present: **8**
Number required for quorum per current voting membership of **11**: **6**

Other Meeting Attendees: **
Chris Brown - ATCOG
Kathy McCollum - ATCOG
Paul Prange – ATCOG
Joshua McClure – Halff Associates Team
David Rivera – Halff Associates Team
Parker Moore – Halff Associates Team
Laura Haverlah – Halff Associates Team
David Jones – Hunt County
James Bronikowski – TWDB

**Meeting attendee names were gathered from those who entered information for joining the Zoom meeting.

All meeting materials are available for the public at:
http://www.twdb.texas.gov/flood/planning/regions/schedule.asp.

AGENDA ITEM NO. 1: Call to Order
Reeves Hayter called the meeting to order at 2:00p.m.

AGENDA ITEM NO. 2: Welcome
Reeves Hayter welcomed members and attendees to the Region 2 Lower Red-Sulphur-Cypress Flood Planning Group meeting.

AGENDA ITEM NO. 3: Confirmation of attendees / determination of a quorum
Reeves Hayter asked ATCOG staff member, Paul Prange, to conduct a roll call of attendees. Each present voting and non-voting member of the Region 2 Lower Red-Sulphur-Cypress RFPG introduced themselves, establishing that a quorum had been met. Eight voting members were present and seven non-voting members were absent.

AGENDA ITEM NO. 4: Public comments – limit 3 minutes per person
Reeves Hayter opened the floor for public comments. No public comments were received.

AGENDA ITEM NO. 5: *Consider approval of minutes for the meeting held Thursday, March 3, 2022.
Reeves Hayter opened the floor for discussion and approval of the minutes from the previous meeting. A motion was made by Joseph Weir and was seconded by Laura-Ashley Overdyke to approve the minutes as presented. The motion carried unanimously.

PRESENTATIONS

AGENDA ITEM NO. 6: Texas Water Development Board Update:
Reeves Hayter turned the floor over to Anita Machiavello who announced that the technical memorandum submitted to TWDB in March is undergoing review by TWDB staff and informal comments will be provided to the Region 2 Flood Planning Group in May of 2022. Also, the next Technical Consultants' Conference call has been scheduled for May 24, 2022 and the next Chairs' conference call has been scheduled for May 25, 2022. Ms. Machiavello encouraged the members of the flood planning group to visit the TWDB website and review the latest newsletter which contains guidance relating to voting on FMXs.

AGENDA ITEM NO. 7: Region 1 Canadian-Upper Red Regional Flood Planning Group Updates:
Reeves Hayter asked for any updates relating to Region 1 flood planning activities. Randy Whiteman announced that Freese & Nichols staff presented an update of Region 2's activities at the last Region 1 meeting, so he expected that they would also provide an update for Region 1 activities to Region 2, as well. Mr. Whiteman did announce that Region 1 has submitted their recommendations for Chapter 8 to the TWDB for review.

TECHNICAL CONSULTANT UPDATE

AGENDA ITEM NO. 8: Technical Presentation by Halff Associates, Inc.

1. **Tech Memo and Addendum Status Update**
2. **Chapter 1-Planning Description**

   a. **Discuss comments**
3. **Chapter 4-Flood Mitigation Needs Analysis & Identification and Evaluation of Potential FMEs, FMSs and FMPs**
   a. **Discuss Comments**
4. **Chapter 5-Recommendation of FMEs, FMSs and FMPs**
   a. **Present Sub-Committee Recommendations**
5. **Chapter 7-Flood Response Information and Activities**
   a. **Discuss Comments**
6. **Schedule**

Reeves Hayter turned the floor over to Joshua McClure who presented information regarding the Tech Memo Addendum, Chapter 4, Chapter 5 and Chapter 7. Mr. McClure stated that Chapter 1 will be discussed next month at the June meeting. Mr. McClure then announced that the initial Tech Memo was submitted to TWDB on January 7, 2022 and the final Tech Memo was submitted to TWDB on March 7, 2022 where it was administratively approved on March 22, 2022. Mr. McClure stated that he received informal comments for the January Tech Memo submittal from TWDB on April 18, 2022 and he will provide them to be included in the minutes of this meeting.

Joshua McClure conducted a presentation focusing on Chapters 4 and 5 – FMEs, FMPs and FMSs. Mr. McClure announced that he received comments from Reeves Hayter, Laura-Ashley Overdyke and Tony Resendez. Discussion took place among the group relating to comments and Reeves Hayter asked Mr. McClure about the TWDB requirement that projects could not allow/cause an increase in downstream flow of over .5 percent. Mr. McClure then explained that the TWDB does not want to fund a project that may create a flooding issue downstream. A channelization project would require flow mitigation practices to be implemented, such as detention facilities. Mr. Hayter stated for the record, that he opposes this TWDB requirement of a blanket approach to limit the increase in flows and this defeats the whole purpose of the program. Mr. McClure stated that there is an exception for allowing increases in flows if residents downstream of a project sign off on it and provide their approval, however most conveyance improvement projects would not likely meet the criteria. Anita Machiavello did not have any comment on this requirement by TWDB, when asked by Mr. McClure. More discussion took place among the group relating to this requirement. David Rivera stated that there are some allowances for increasing flow, if no negative impact can be established, and he provided an example of a similar project in the Trinity region. Mr. McClure stated that this is one of the items that will be addressed in Chapter 8. Additional discussion took place among the group relating to comments from Laura-Ashley Overdyke regarding the Cypress Valley Navigation District and FMEs versus FMSs. Discussion took place among the group relating to dam ratings in Region 2 and Tony Resendez commented on this topic, focusing on structural integrity studies, repair projects and matching fund requirements.

Joshua McClure then introduced Laura Haverlah, with H2O Partners, to conduct a presentation of Chapter 7 – Flood Response Information and Activities, focusing on the nature and types of flood response preparations and the recovery capabilities within the Flood Planning Region. Ms. Haverlah stated that there are four phases of emergency management which include; Preparedness, Response, Recovery, and Mitigation and provided a list of entities involved. Reeves Hayter asked about Flood Control Districts and Local Levee Owner/Operators being included in the list of entities, since there are no active Flood Control Districts located within Region 2. Mr. McClure and Ms. Haverlah stated that

these entities appear to exist on paper, but in reality no one is performing this function within Region 2 and suggested that we note this in the Regional Flood Plan. Mr. Hayter stated that there is a Levee District located along the Red River within Region 2 and Mr. McClure concurred. Ms. Haverlah then discussed the various types of Plans to consider such as; Hazard Mitigation Action Plans, Emergency Management Plans, Zoning and Ordinances, and Land Use Regulations. Floodplain Management Practices within Region 2 are not particularly strong and adoption of higher standards is recommended. Mr. Hayter commented on Red River County being listed as having strong floodplain management practices, despite having no FEMA maps and requested that the technical consultants review all of the data for Region 2 pertaining to floodplain management practices and the ranking system. Discussion took place among the group. Ms. Haverlah then presented information relating to regulations and development codes that exist within Region 2 for the purpose of managing flood risk for developments. A map depicting Floodplain Management Regulations indicated that 18 of the 20 counties within Region 2 have some type of regulations and Mr. Hayter stated that it is misleading. David Rivera stated that he agreed with Mr. Hayter's assessment and Discussion took Place among the group, with Andy Endsley commenting on the regulations existing within Hopkins County. Ms. Haverlay then presented information on Types of Mitigation Actions from Hazard Mitigation Action Plans. Discussion took place among the group. Mr. McClure asked Mr. Endsley about the Reverse 9-1-1 System in Hopkins County and Greg Carter mentioned Code Red capabilities in the City of Mount Pleasant, TX. Additional discussion took place and Mr. McClure stated that he would revisit the early warning systems within our region and provide updated information to be included with the Regional Flood Plan. Ms. Haverlay concluded her presentation of Chapter 7 and stated that Region 2 and one other region in Texas are lacking data collection due to the rural nature of the regions. Chris Brown and Andrea Sanders discussed data included within Hazard Mitigation Plans which may be useful to include within the Region 2 Flood Plan.

Joshua McClure then presented the schedule of upcoming activities including Task1-4A, Task4B, Task 5, Tasks 6A and 6B, Task 7, Task 8, Task 9, and Task 10. In June, discussion of comments on Chapters 1, 6, 8, and 9 will occur and the Draft Regional Flood Plan will be submitted for review. In July, discussion of comments and voting on Draft Regional Flood Plan will occur and submission of the revised Draft Regional Flood Plan to TWDB is anticipated.

OTHER BUSINESS

AGENDA ITEM NO. 9: Update from Planning Group Sponsor

Reeves Hayter turned the floor over to Chris Brown who announced that the next meeting of the Region 2 Flood Planning Group will be held at the Ark-Tex Council of Governments building in Texarkana. Mr. Brown also stated that ATCOG has posted the notice that we will be accepting applications to fill the vacant "Public" voting member position on the Region 2 Board of Directors. Mr. Brown announced that ATCOG has received a reimbursement payment from the TWDB and he mentioned that Kathy McCollum conducted a flood planning presentation to increase public outreach at the last ATCOG Board of Directors meeting on April 28, 2022. Mr. Brown also mentioned that the RFPG2 will need to conduct an Executive Committee meeting in June to nominate a person to fill the vacant "Public" voting member position. Discussion took place and the flood planning group selected Wednesday, June 22, 2022 for the Executive Committee to meet.

AGENDA ITEM NO. 10: Consider date and agenda items for next meeting

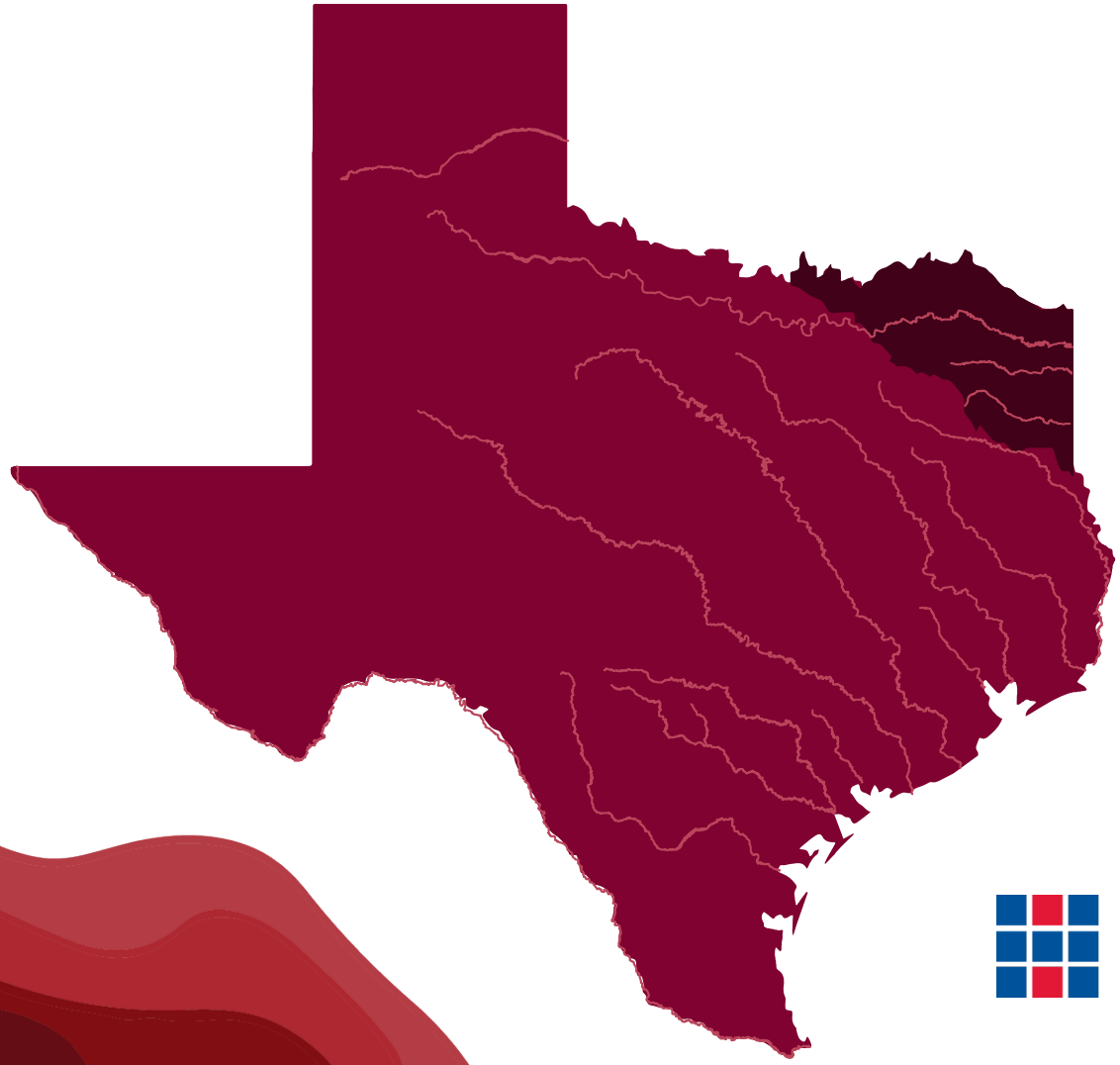
Reeves Hayter opened the floor for discussion. The Region 2 RFPG board members agreed to conduct the next meeting on Thursday, June 2, 2022 at 2:00p.m. in Mount Pleasant, TX and via webinar/teleconference.

AGENDA ITEM NO. 11: Adjourn

Reeves Hayter opened the floor to adjourn the meeting.
A motion was made by Joseph Weir and was seconded by Greg Carter.
The vote to adjourn was passed by unanimous consent.
The meeting was adjourned at 3:47p.m. by Reeves Hayter.
Approved by the Region 2 Lower Red-Sulphur-Cypress RFPG at a meeting held on 06/02/2022.

_____

Reeves Hayter, CHAIR



Regional Flood Planning Group 2 Meeting Lower Red-Sulphur-Cypress

June 2, 2022

HALFF

FREESE AND NICHOLS

MTG engineers & surveyors

H2O PARTNERS

Outline/Agenda

- Chapter 6- Impacts of Regional Flood Plan and impacts to State Water Plan
  - Present material
  - Discuss adjusting impact numbers to reflect partial adoption of FMS/E/Ps.
  - Discuss comments
- Chapter 8- Administrative, Regulatory, and Legislative Recommendations
  - Present materials.
  - Discuss comments
- Chapter 9- Flood Infrastructure Financing Analysis
  - Show survey that has been distributed to FMX sponsors.
  - Discuss outreach efforts.
- Schedule

Chapter 6- Impacts of Regional Flood Plan and impacts to State Water Plan

Chapter 6A – Impacts of the Regional Flood Plan

1. a region-wide summary of the relative reduction in flood risk that implementation of the Regional Flood Plan would achieve within the region including with regard to life, injuries, and property.
2. a statement that the FMPs in the plan, when implemented, will not negatively affect neighboring areas located within or outside of the FPR.
3. a general description of the types of potential positive and negative socioeconomic or recreational impacts of the recommended FMSs and FMPs within the FPR.
4. a general description of the overall impacts of the recommended FMPs and FMSs in the Regional Flood Plan on the environment, agriculture, recreational resources, water quality, erosion, sedimentation, and navigation.

Chapter 6A – Key Assumptions

- Assumed entire plan was implemented
  - Does not reflect the interim goals
- Assumed maximum effectiveness
  - Actual benefits will decrease if slowly implemented
- Complex relationships between actions not considered
- Impacts to deaths, injuries, environment, erosion, sedimentation, etc. are qualitative due to lack of quantitative data on benefits

FMP Summary of Impacts

Flood Exposure	Existing Conditions		After FMP Implementation		Exposure Reduction from FMPs	
	1% ACE	0.2% ACE	1% ACE	0.2% ACE*	1% ACE	0.2% ACE*
Exposed Structures	13,438	15,023	13,331	N/A	107	N/A
Exposed Population	20,723	23,805	20,069	N/A	654	N/A
Exposed LWC	266	270	266	N/A	-	N/A

*** 0.2% ACE impacts were not provided by FMP sponsor**

FMS Impacts - Regulatory and Guidance

- Description: Strategies that improve regulation of development to decrease current and future flood risks.
- Example FMSs: NFIP Participation, Stormwater Management Criteria Development, Floodplain Management Staff Acquisition and Training
- Typical Positive Impacts:
  - Reduce number of structures and roadways built in the floodplain
  - Minimize expansion of future floodplains.
  - Protect riparian areas from development, which protects the environment, water quality, erosion, and sedimentation.
- Provides more regulatory certainty and consistency across the Region
  - Potential Negative Impacts:
  - Increases regulatory burden on citizens
  - Increases staff workloads for communities.

FMS Impacts - Property Acquisition and Structural Elevation

- Description: Acquire or raise properties to protect against flooding.
- Example FMSs: Infrastructure flood-proofing, Land acquisition to protect open space, or buy-outs of flood prone structures
- Typical Positive Impacts:
  - Reduce number of structures in the floodplain and increased protection of citizens
  - Minimize expansion of future floodplains.
  - Protect riparian areas from development, which protects the environment, water quality, erosion, and sedimentation.
  - Allow those in the floodplain to “escape” without losing their investment
- Potential Negative Impacts:
  - Increases regulatory burden on citizens
  - Increases staff workloads for communities
  - Can cause “blight” in certain neighborhoods if not handled appropriately
  - Can be politically objectionable in some circumstances

FMS Impacts – Education and Outreach

- Description: Education and outreach to citizens and other stakeholders to increase awareness of flooding issues, risks, and regulations.
- Example FMSs: Turn Around, Don’t Drown Campaigns; Flood Safety Education
- Typical Positive Impacts:
  - Reduce violations of floodplain regulations which can decrease flood risks
  - Increase awareness of flood hazard areas
  - Increase awareness of imminent flood events which can help with early evacuations and mitigation measures to prevent damages and save lives
  - Minimize risky behavior during floods which can reduce deaths, especially while driving
- Potential Negative Impacts:
  - Increases staff workloads for communities

FMS Impacts - Flood Measurement and Warning

- Description: Installation and operation of rainfall and flow measurement devices and predictive systems to predict flooding and potentially provide barricades and warnings.
- Example FMSs: Flood Gauges, Early Alert Systems, Flood Warning Systems
- Typical Positive Impacts:
  - Allow people at risk of flooding to prepare, mitigate damages, and evacuate
  - Prevent cars from driving on flooded roads, which can save lives
  - Allow community staff to close roads and evacuate flooded areas before the flood begins
- Potential Negative Impacts:
  - Increases staff workloads for communities
  - Potential for false alarms or failed warnings if system is not properly maintained and calibrated

FMS Summary of Impacts

Flood Exposure	Existing Conditions		Future Conditions (no RFP)		Future Conditions with RFP Implemented		Protected through RFP FMSs	
	1% ACE	0.2% ACE	1% ACE	0.2% ACE	1% ACE	0.2% ACE	1% ACE	0.2% ACE
Exposed Structures	13,438	15,023	15,023	23,624	13,438	15,023	1,585	8,601
Exposed Population	20,723	23,805	23,805	40,935	20,723	23,805	3,082	17,130
Exposed Area (Square Miles)	2,821	2,936	2,936	3,299	2,821	2,936	115	363
Exposed LWC	266	270	266	284	266	270	-	14

FME Impacts - Preparedness

- Description: Evaluations pertaining to preparing for flood events.
- Example FMSs: Gages, Barriers, Debris/Vegetation Removal and Channelization
- Typical Positive Impacts:
  - Gages will help alert people to impending flooding, allowing them to protect their property and evacuate flood prone areas
  - Debris removal restores conveyance and reduces flooding
- Potential Negative Impacts:
  - Debris removal can lead to erosion and increase downstream flows. These impacts will have to be evaluated as part of the FME.
  - Increases staff workloads for communities.

FME Impacts – Project Planning

- Description: Conducting up to 30% design for specific projects and flood mitigation measures that were previously identified by sponsors.
- Example FMSs: Storm sewer upgrades, flood protection projects, and channel modifications.
- Typical Positive Impacts:
  - Projects can reduce flooding and exposure to flooding
  - Reduce impact of flooding on existing facilities
- Reduce roadway overtopping
- Potential Negative Impacts:
  - All conveyance improvement projects have the potential to increase flooding downstream. Mitigation measures will need to be considered during the FME.

FME Impacts – Watershed Planning

- Description: Conduct watershed studies to establish accurate floodplain modeling and mapping and evaluate potential flood mitigation measures.
- Example FMSs: Flood Insurance Studies, watershed master plans, and project prioritization studies.
- Typical Positive Impacts:
  - Accurate flood maps allow for risk avoidance, better regulations, and better planning
  - Understanding the needs for flood reduction in a watershed allow for better allocation of resources
  - Provide design details needed for converting an FME into an FMP that can be funded and implemented.
  - Projects that come from these FMEs can reduce flooding and exposure to flooding
- Potential Negative Impacts:
  - All conveyance improvement projects have the potential to increase flooding downstream. Mitigation measures will need to be considered during the FME.
  - More projects than funding are usually identified.

FME Impacts - Other

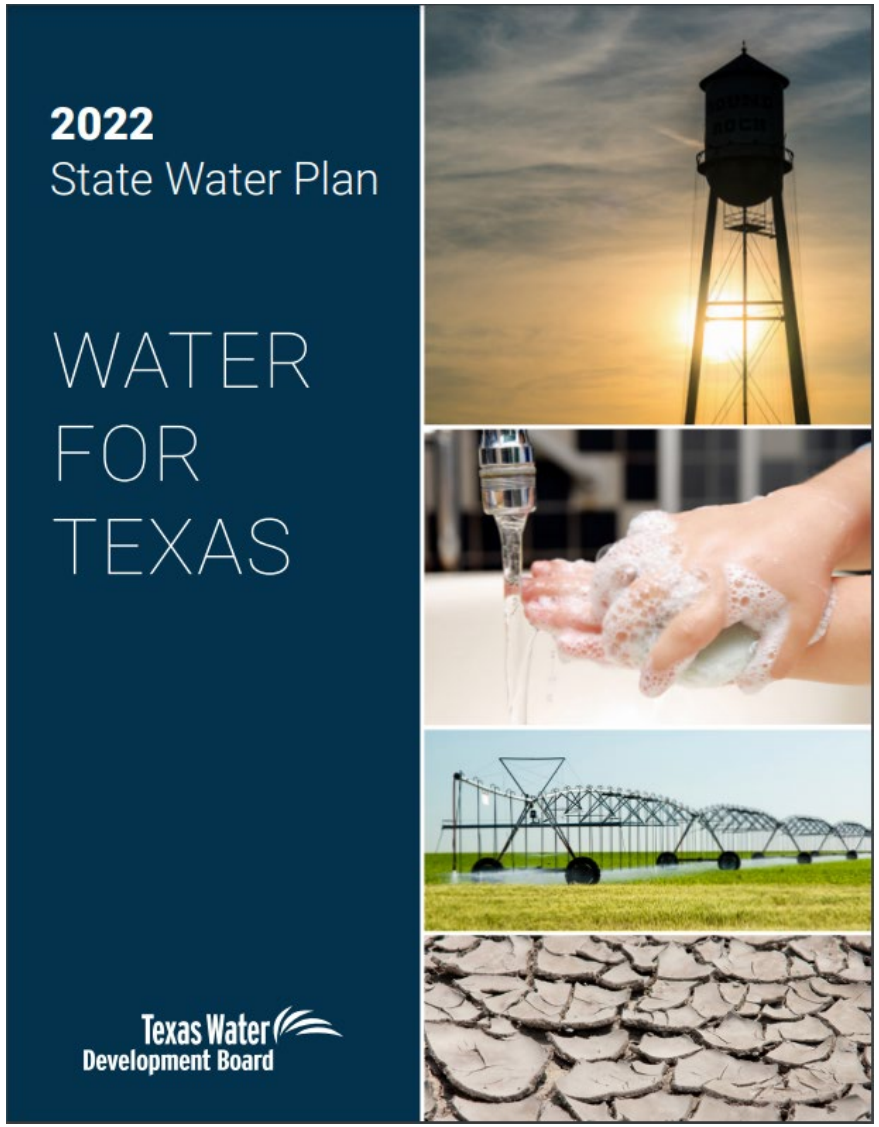
- Description: Miscellaneous studies that do not fall in the other categories above.
- Example FMSs: Property acquisition and buy-out programs.
- Typical Positive Impacts:
  - Projects can reduce flooding and exposure to flooding through acquisition of flood prone properties.
  - Allow people to offload their flood risks without losing the investment in their property
  - Potentially provide public space and recreation areas
- Potential Negative Impacts:
  - Property acquisition can face political resistance to those not wanting to leave an area.
  - If not handled well, the vacant properties can “blight” a neighborhood.

FME Summary of Exposures

Flood Mitigation FME Exposures	
Structures	5,831
Population	32,443
Ag Land (Acres)	942
Critical Facilities	73
Road Length (miles)	151

Task 6B Overview

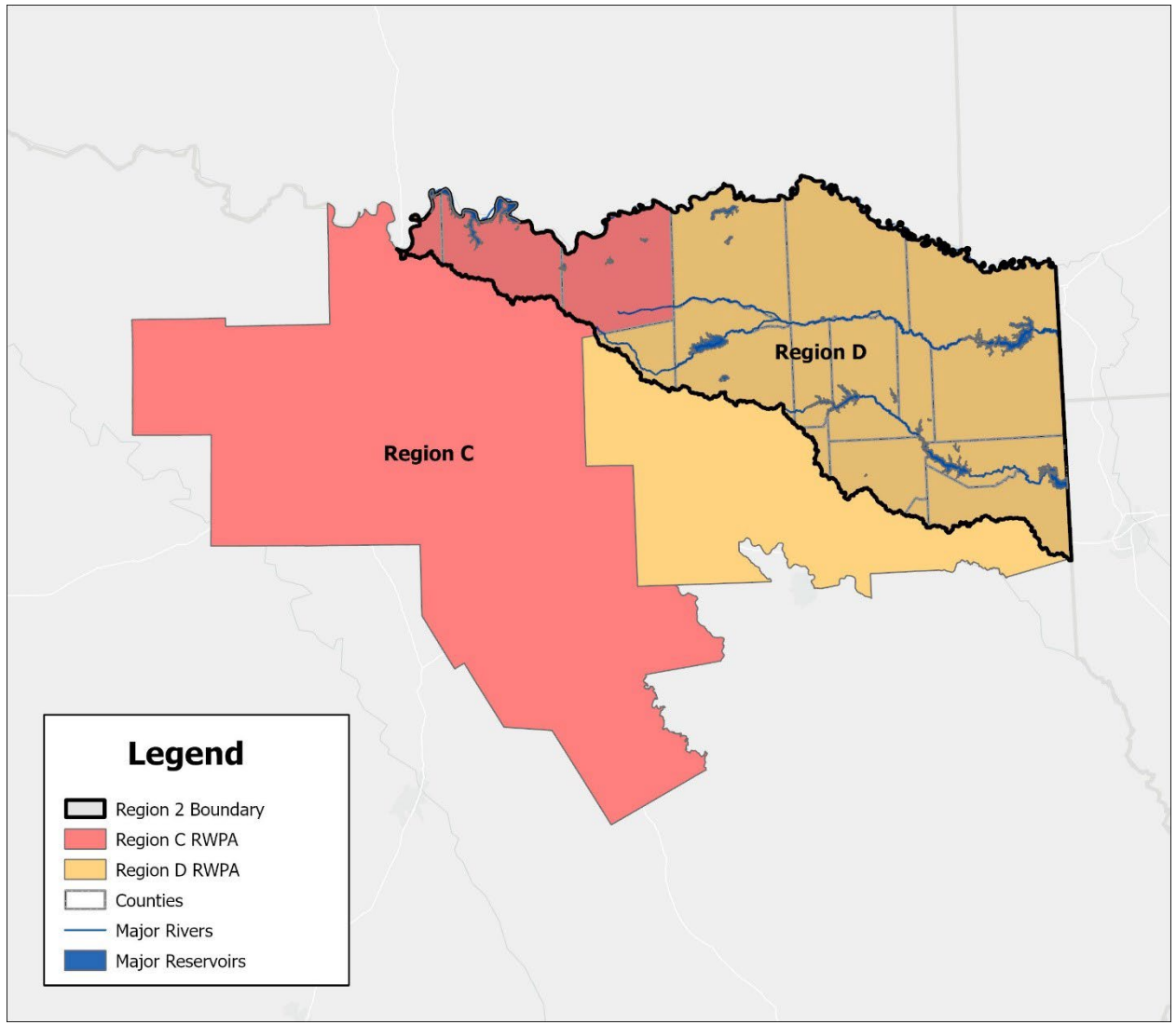
- Flood planning process was established by the state legislature.
- Process was modeled after the Water Planning process.



Task 6B - Contributions/Impacts on State Water Plan

Analyze impacts of State Flood Plan on State Water Plan

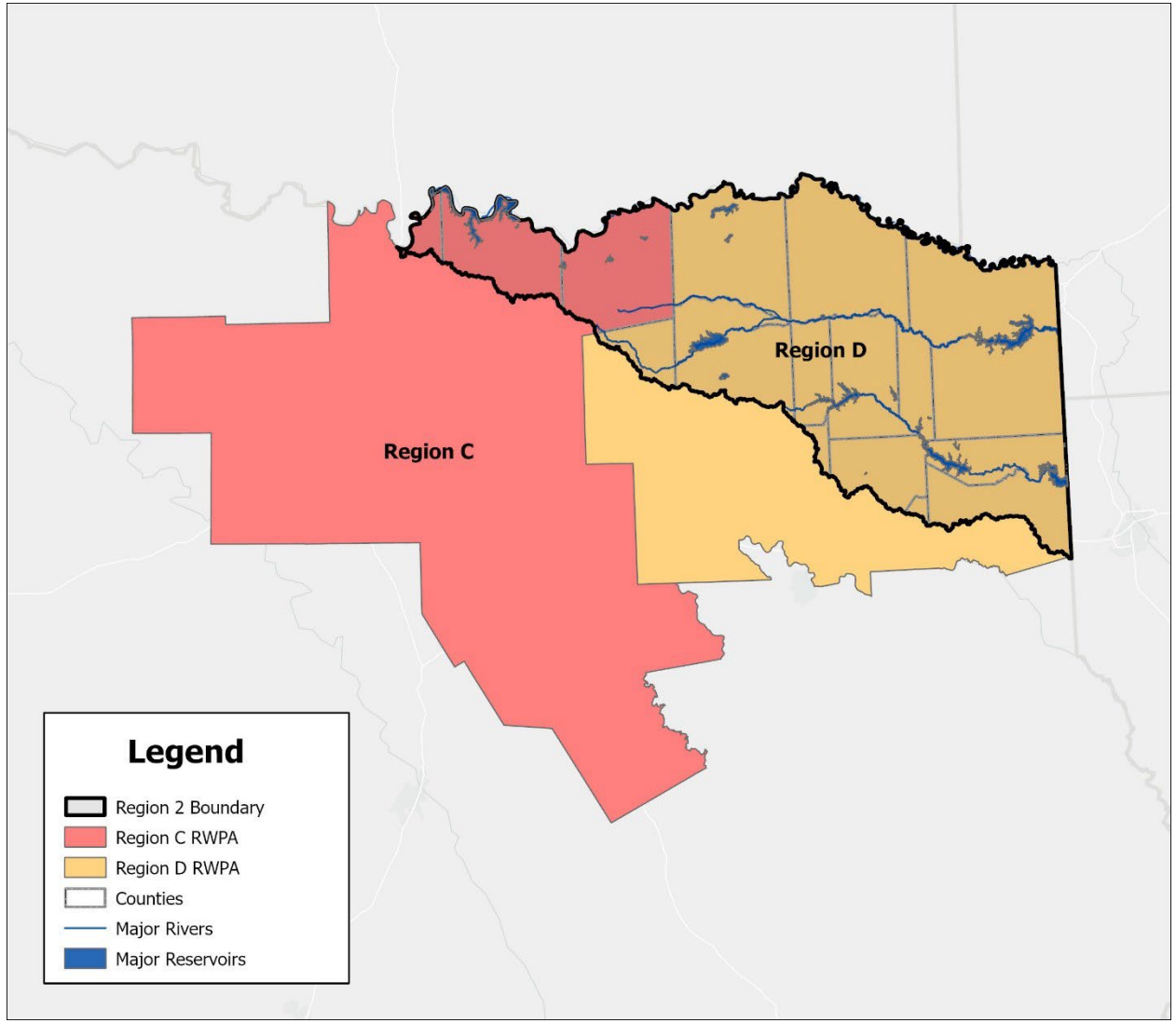
- RWPA
  - Region D
  - Region C
- RFP contribution to water supply development
- Measurable positive or negative impacts to:
  - Water supply
  - Water availability



Task 6B - Contributions/Impacts on State Water Plan

Analyze impacts of State Flood Plan on State Water Plan

- None of the recommended actions will have a measurable impact on:
  - Water supply
  - Water availability



Discuss Comments

Chapter 6A – Key Assumptions

- Assumed entire plan was implemented
  - Does not reflect the interim goals
- Assumed maximum effectiveness
  - Actual benefits will decrease if slowly implemented
- Complex relationships between actions not considered
- Impacts to deaths, injuries, environment, erosion, sedimentation, etc. are qualitative due to lack of quantitative data on benefits

Chapter 8 - Legislative, Administrative, and Regulatory Recommendations

Legislative Recommendations

ID	Specific Recommendation Statements	Reason for Recommendation
8.1.1	Increase state funding to counties to maintain drainage and stormwater infrastructure in unincorporated areas.	Counties have floodplain and drainage related responsibilities in the State of Texas without a current way to fund projects.
8.1.2	Develop state strategies to aid in acquiring federal funds.	Entities in Texas do not qualify for some federal funding programs due to minimal or no state participation, such as FEMA's Building Resilient Infrastructure and Communities (BRIC) Grant.
8.1.3	Develop and allocate State funding to assist dam owners with the costs associated with repairing, maintaining, and upgrading dam structures, as well as decommissioning studies, where applicable.	A number of privately-owned dams that were originally constructed in rural areas are now surrounded by developments. Therefore, the potential impact of flood damages resulting from dam failure has increased significantly. Often, the cost of maintenance is far too high for a private entity to take on.
8.1.4	Provide funding and/or technical assistance to develop regulatory floodplain maps.	Several entities who have outdated maps or no mapping at all are not able to fund the projects necessary to update or create those maps.

Legislative Recommendations

ID	Specific Recommendation Statements	Reason for Recommendation
8.1.5	Provide additional grant funding to the RFPGs to enable them to continue to function during the interim timeframe between planning cycles	In the interim of the planning cycles, not only could RFPGs continue adding FMEs, FMPs, and/or FMSs to the Regional Flood Plan, but they could also implement RFPG-sponsored flood management activities, outreach, and stay informed on regional flood-related occurrences.
8.1.6	Establish a levee safety program similar to the dam safety program.	Levees are often constructed to protect a specific commodity; however, they do not have a safety program like dams do, despite being an equal flood risk.
8.1.7	Extend Local Government Code, Title 13, Subtitle A, Chapter 552 to allow counties the opportunity to establish and collect drainage utilities/fees in the unincorporated areas.	Counties have floodplain- and drainage-related responsibilities in the State of Texas. Currently, counties do not have the ability to establish and collect stormwater utility fees, thus limiting their ability to fund stormwater or drainage projects, despite having the responsibility to do so.
8.1.8	Provide for alternative sources of funding. Expand eligibility for and use of funding for stormwater and flood mitigation solutions (Local, State, Federal, Public/Private Partnerships, etc.)	Flood mitigation studies/projects do not generate revenue, which makes them more challenging to fund at the local level.

Regulatory or Administrative Recommendations

ID	Specific Recommendation Statements	Reason for Recommendation
8.2.1	Review and revise as necessary all state infrastructure entities (i.e. TxDOT) standards and practices for legislative and regulatory compliance with stormwater best practices.	State entities should be cognizant of the drainage and stormwater standards in the areas where they are active. State entities should be held to the same standards that the local entities uphold.
8.2.2	Develop resources for and educate city and county officials regarding the respective entities' ability/authorization to establish and enforce higher development standards.	City and county officials are often unaware of their authority to establish and enforce stormwater regulations. (Texas Local Government Code Title 7, Subtitle B.; Texas Water Code Chapter 16, Section 16.315) Flooding and drainage component of city and county officials' training is often inadequate for their level of responsibility.
8.2.3	Provide measures to encourage and allow jurisdictions to work together towards regional flood mitigation solutions.	Flooding does not recognize jurisdictional boundaries. Allowing and encouraging entities to work together towards common flood mitigation goals would be beneficial to all involved.
8.2.4	Develop a publicly available, statewide database and tracking system to document flood-related fatalities.	In order to more accurately address the health, safety, and welfare of the public, high flood-risk areas should be tracked and reported. Doing so would increase awareness of the area, both so the public could be cognizant of the risks, and so elected officials and decision-makers could institute solutions to reduce the risk in those areas.

Regulatory or Administrative Recommendations

ID	Specific Recommendation Statements	Reason for Recommendation
8.2.5	Develop a publicly available, statewide database and tracking system to document dam inspection reports and conditions.	The RFPG cannot easily identify why the standard inspection reports of dams across the state are not publicly available or at least easily requested. TXDOT has a database for crossings due for repair or improvement. There should be a similar database for dams.
8.2.6	Revise the scoring criteria for funding associated with stormwater and flood-related projects that benefit agricultural activities.	The traditional benefit-cost analysis tools prevent agricultural projects from competing with municipal benefit-cost ratios.
8.2.7	Provide financial or technical assistance to smaller/rural jurisdictions.	The former Office of Rural Affairs/Texas Department of Rural Affairs was intended to assist and work with rural entities, however the department was disbanded. Actions such as maintaining a department specifically for smaller/rural entities, incentivizing consultants to pursue work for smaller or rural entities or adjusting BCAs to rank small/rural entities equally are all ideas towards this goal.

Regulatory or Administrative Recommendations

ID	Specific Recommendation Statements	Reason for Recommendation
8.2.8	Simplify all funding application processes.	Current funding applications require significant time and resources to prepare a project for consideration, as well as complete the application itself, especially for jurisdictions with limited resources. Thus, jurisdictions that need the funding the most typically do not apply for current opportunities, despite having need.
8.2.9	Address the concern of “takings” with regards to floodplain development regulations, comprehensive plans, land use regulations and zoning ordinances.	Jurisdictions should be allowed to regulate development in a responsible manner that reduces future flood risk exposure without the fear of legal action by property owners.

Flood Planning Recommendations

ID	Specific Recommendation Statements	Reason for Recommendation
8.3.1	Update the scope of work, guidance documents, rules, checklists, etc. based on the adjustments made to these planning documents during the first cycle of planning.	During the first cycle of the State Flood Plan, multiple amendments and additions to the TWDB documents and the TWDB's interpretation of its documents occurred. Moving forward, the TWDB documents provided at the onset of each new planning cycle should reflect what is ultimately required of the RFPGs.
8.3.2	Develop a fact sheet and/or other publicity measures to encourage entities to participate in the Regional Flood Planning effort.	Many entities were unaware of the Regional and State Flood Plan efforts despite the RFPG outreach efforts. Some entities are still requesting information regarding the Flood Planning process and do not understand the benefits of participating. Other entities did not want to participate due to perceived lack of benefits.
8.3.3	Host "lessons learned" discussions with RFPG members, sponsors and technical consultants following the submittal of the final regional plans.	Opening dialogue among these participants to discuss proposed improvements to the regional planning process will streamline and improve future regional flood planning cycles.

Flood Planning Recommendations

ID	Specific Recommendation Statements	Reason for Recommendation
8.3.4	Develop an amendment process similar to the Regional Water Planning Process to efficiently amend their approved regional flood plans to incorporate additional recommended FMEs, FMPs and FMSs. Include language to allow the RFPG to advance the recommended FMEs to FMPs based on the results provided at the conclusion of an FME.	Amending the Regional Flood Plan, as seen with the Technical Memorandum Addendum, can be an extensive process. Amendments to move FMEs to FMPs and incorporate new flood management solutions should have a quicker turn-around time in order to efficiently include them in the Regional Flood Plan. Recommend utilizing the Regional Water Planning Process amendment process as a go-by.
8.3.5	Implement an invoice review and advancement request process that provides for timely reimbursements.	Several regions experienced extensive delays in their billing cycles which can delay planning efforts.

Flood Planning Recommendations

ID	Specific Recommendation Statements	Reason for Recommendation
8.3.6	Include the reimbursement of costs for audio and visual (A/V) equipment expenses required to support hybrid and/or virtual meetings for the Regional Flood Planning Group Grants	Many RFPGs have had to rent or purchase A/V equipment in order to uphold the Texas Open Meetings Act (TOMA) guidelines while supporting hybrid meetings. Given the area spanned by the regions and today's technology, RFPG members prefer to offer hybrid meetings to reduce travel time and to increase the opportunity for public participation in the regional flood planning process. Expenses accrued to maintain TOMA standards – set in place by the State – should be eligible for reimbursement.
8.3.7	Reduce the amount of information required to escalate potentially feasible flood mitigation evaluations (FMEs) to flood mitigation projects (FMPs).	Some data currently requested for FMPs is more detailed than traditional planning level data. TWDB recommended leaving those cells blank in Table 13, which would likely result in lower scoring for the project, and a lower probability to garner funding. QED, certain FMPs were submitted as FMEs or FMSs despite having sufficient data to produce a project.

Flood Planning Recommendations

ID	Specific Recommendation Statements	Reason for Recommendation
8.3.8	Revise the criteria for the “No Adverse Impact” Certification required for FMPs.	The current criteria gives thresholds for increases in flow, water surface elevation, and inundation extents. Though good to consider, the current criteria does not allow for projects that exceed these thresholds but account for the impact through design or downstream accommodations.
8.3.8	Clarify the phrase “flood-related authorities or entities”, who that includes, and what that entails.	The phrase is used in the TWDB planning documents multiple times and is a central part of multiple tasks. TWDB originally provided the RFPG with a list of entities that were thought to have flood-related responsibilities. During outreach efforts, many of those entities informed the RFPG that they did not have flood responsibilities and did not believe they should be part of the flood planning effort. Therefore, the RFPG removed these entities from the plan. Clarification is requested regarding the intent of this phrase.

Flood Planning Recommendations

ID	Specific Recommendation Statements	Reason for Recommendation
8.3.9	Streamline the data collection requirements, specifically those identified in Task 1. Focus on collecting the data that was most useful to the regional flood plan development.	This first round of planning proved that very few entities have the data requested as part of the Flood Planning process readily available in a GIS format. Of those entities who did have GIS data, most were unable to share that information. Furthermore, some of this data was not used or was used minimally to develop potentially feasible and recommended FMEs, FMPs and FMSs.
8.3.10	Provide applicable data sources and a methodology to determine infrastructure functionality and deficiencies in the next cycle of the Flood Planning Process. Consider the lack of readily available local data when developing the methodology.	Most entities do not have information regarding the functionality and deficiency of their infrastructure. Some fields required by the TWDB-required tables in the Regional Flood Plans are based on data that is not available to entities without extensive field work.
8.3.11	Review and revise the geodatabase submittal attributes and elements.	Normalizing the geodatabase with relationships would allow for cross-referencing of data elements and attributes. More domains for attributes need to be developed.

Flood Planning Recommendations

ID	Specific Recommendation Statements	Reason for Recommendation
8.3.12	Reconsider the use of Social Vulnerability Index (SVI) to evaluate community resiliency.	In Region 2, many of the communities with the lowest SVI (presumably most able to recover from a flood) had the lowest populations and the least number of taxpayers. As a result, the communities cannot plan, regulate, or recover from flooding as well as larger communities with higher SVIs.
8.3.13	Use FEMA's Social Vulnerability Index (SVI) when available instead of the CDC's SVI in future planning cycles.	FEMA's SVI is reasoned to be more relevant to flood resiliency and risk than the CDC's SVI. SVI should not be the primary component considered when allocating funding.
8.3.14	Use consistent HUC reporting requirements throughout the TWDB-required tables.	The RFPG Guidance requires HUC-8 in some tables, HUC-10 in other tables, HUC-12 in yet other tables. Some tables require multiple HUCs to be provided. The RFPG recommends that the TWDB require HUC-8 in all TWDB-required tables for consistency and to correspond to FEMA's base level watershed planning granularity.

Flood Planning Recommendations

ID	Specific Recommendation Statements	Reason for Recommendation
8.3.15	Develop a statewide bridge inventory with bridge deck elevations.	The availability of statewide LiDAR provides the opportunity to more accurately describe the risk at riverine crossings (i.e. overtopping elevation). The creation of a statewide database would further simplify this data.
8.3.16	Improve upon flood risk identification and exposure process with regards to building footprints and population at risk.	While the building footprints are helpful, without the first floor elevations of each structure, it is difficult to determine the actual extent of flood risk per structure. If structure is sufficiently elevated above the BFE, for example, the footprint still shows the structure in the floodplain and the corresponding population is considered “at risk” though the structure meets NFIP standards. This overestimates the population at risk quantification.

Flood Planning Recommendations

ID	Specific Recommendation Statements	Reason for Recommendation
8.3.1	Update the scope of work, guidance documents, rules, checklists, etc. based on the adjustments made to these planning documents during the first cycle of planning.	During the first cycle of the State Flood Plan, multiple amendments and additions to the TWDB documents and the TWDB's interpretation of its documents occurred. Moving forward, the TWDB documents provided at the onset of each new planning cycle should reflect what is ultimately required of the RFPGs.
8.3.2	Develop a fact sheet and/or other publicity measures to encourage entities to participate in the Regional Flood Planning effort.	Many entities were unaware of the Regional and State Flood Plan efforts despite the RFPG outreach efforts. Some entities are still requesting information regarding the Flood Planning process and do not understand the benefits of participating. Other entities did not want to participate due to perceived lack of benefits.
8.3.3	Host "lessons learned" discussions with RFPG members, sponsors and technical consultants following the submittal of the final regional plans.	Opening dialogue among these participants to discuss proposed improvements to the regional planning process will streamline and improve future regional flood planning cycles.

Discuss Comments

Ch. 9 Flood Infrastructure Financing Analysis

Task 9 – Potential Sponsor Financing Survey

Table 19: FMS, FMP, FME funding survey template format (with illustrative examples)

RFPG Number	Sponsor Entity Name	FMS or FMP or FME	FMS FMP FME - Name	Regional plan's unique FMS/FMP/FME identification number	Target year of full implementation	Estimated costs in plan			Estimated percent (share) of total FMS, FMP, or FME estimated cost			
									Sponsor Funding		Other Funding Needed (including state, federal and/ or other funding)	TOTAL (auto) sum must = 100%
						Non-construction costs	Construction-related costs	Total estimated cost	ANTICIPATED SOURCE of Sponsor funding (e.g., taxes; general revenue; dedicated revenue incl. fees)	FUNDING TO BE FINANCED BY SPONSOR (including local, county, or regional mechanisms available but not yet fully utilized)		
21	City of Howdy	FMP	Widen main downtown channel	2003	2028	$3,484,000	$8,129,000	$11,613,000	stormwater fees	75%	25%	100%
21	Major River Authority	FMP	Levee improvements	3001	2030	$37,544,000	$212,754,000	$250,298,000	fees	50%	50%	100%
21	James County	FME	Study southeast county flooding along Colorado River to identify solutions	4409	2024	$722,000	$0	$722,000	taxes	50%	50%	100%
21	James County	FMS	Study to develop county-wide floodplain development policy	4409	2024	$200,000	$0	$200,000	taxes	100%	0%	100%

These are minimum reporting requirements however, an RFPG may present more information gathered and/or utilized in the development of their plan. For example, this assessment could also include information about what existing funding mechanisms sponsors already have available or plan to implement to support the funding and implementation of recommended projects in the regional flood plan.

Chapter 9 – Flood Infrastructure Financing Analysis

- Survey emails started to go out on June 1, 2022
- Follow up with phone calls to the Potential Sponsors

Hello "Potential Sponsor",

We are reaching out to you because there are one or more actions for your community that will be listed in the Lower Red-Sulphur-Cypress Regional Flood Plan and we need your help to identify how much state or federal funding you may need to implement these projects.

Please reply to this email and fill out the drop-down menu in the table below for each of your entities' Flood Mitigation Actions. Please note the percent funding financed by sponsor and other funding needed must equal 100%. For more information regarding your Flood Mitigation Actions, visit the following link: RFP - Region 2 Flood Infrastructure Financing Analysis.

The Texas Water Development Board (TWDB) designated 15 regional flood planning areas each of which began with a designated regional flood planning group that will develop a regional flood plan for their region by January 2023. TWDB will bring the regional flood plans together to produce the first State Flood Plan by September 1, 2024. Entities must have their project listed in the State Flood Plan to receive state funding for a proposed flood project. As part of the regional flood planning process, RFPGs must indicate how sponsors will propose to finance recommended Flood Mitigation Actions included in the Flood Plan[1]. Flood Mitigation Actions include Flood Management Evaluation (FME), Flood Mitigation Strategy (FMS), and Flood Mitigation Project (FMP)[2].

There is no commitment associated with being a sponsor for an action in the plan, this is just a planning level study.

Flood Mitigation Action ID	Flood Mitigation Action Type[2]	Flood Mitigation Action Name	Flood Mitigation Action Description	Flood Mitigation Action Total Estimated Cost*	Sponsor Funding		Other Funding Needed** (including state, federal and/or other funding)
					Anticipated Source of Sponsor Funding	Percent Funding to be Financed by Sponsor**	
021000002	FME	Grayson County FIS	Update remainder of county to Zone AE	$2,313,000	Choose an item.	Choose an item.	Choose an item.
021000057	FME	Grayson County Buyout of Repetitive Flood Properties	Work with local jurisdiction in the buyout of repetitive flood properties. This includes any structures found to be located in flood areas that are in incorporated and unincorporated areas.	$4,818,000	Choose an item.	Choose an item.	Choose an item.

**Costs are based on high level engineering estimates and assumptions.*

***Percent funding financed by sponsor and other funding needed MUST equal 100%*

[1]For more information about funding opportunities visit the Texas Flood Clearing House.

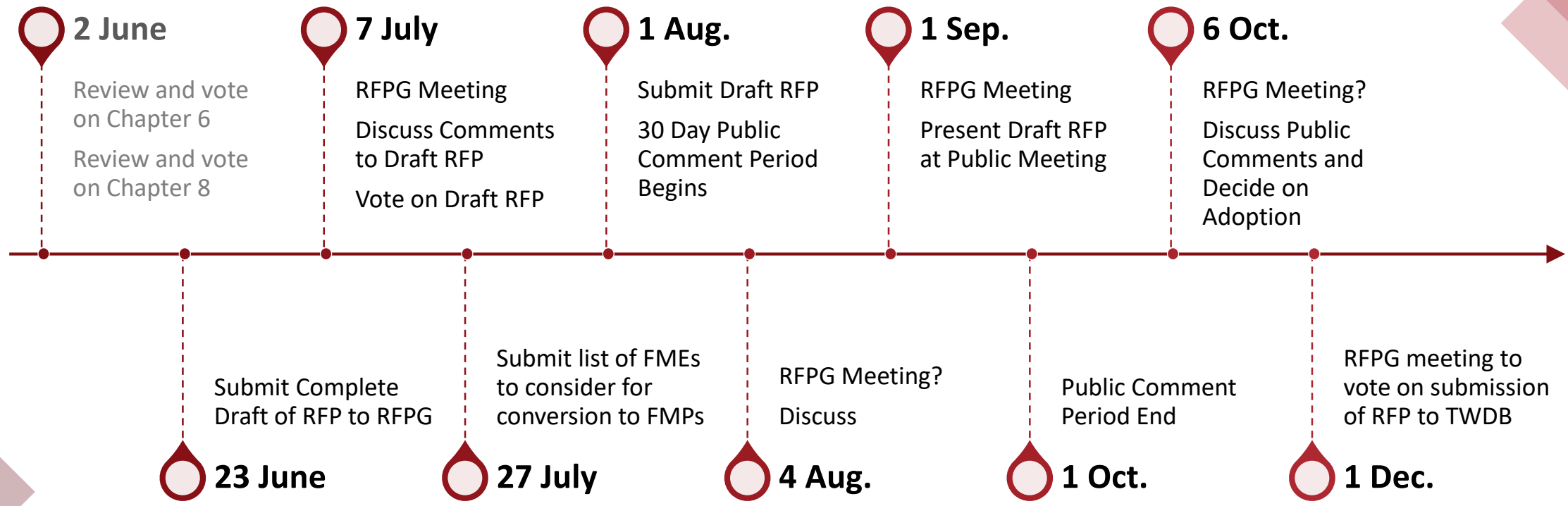
[2]Flood Mitigation Actions definitions:

- Flood Management Evaluation (FME): A proposed flood study of a specific, flood-prone area that is needed to assess flood risk and/or determine whether there are potentially feasible FMSs or FMPs.
- Flood Management Strategy (FMS): A proposed plan to reduce flood risk or mitigate flood hazards to life or property.
- Flood Mitigation Project (FMP): A proposed project, either structural or non-structural, that has non-zero capital costs or other non-recurring cost and when implemented will reduce flood risk, mitigate flood hazards to life or property.

What’ Left

- Task 1-8 – Address RFPG Comments
- Task 9 – Flood Infrastructure Financing Analysis
- Task 10 – Finalize Regional Flood Plan (RFP)
- Review and Vote on Draft RFP
- 60 Days of Public Comments – Minimum
- Address Public Comments

Schedule


2 June
Review and vote on Chapter 6
Review and vote on Chapter 8
7 July
RFPG Meeting
Discuss Comments to Draft RFP
Vote on Draft RFP
1 Aug.
Submit Draft RFP
30 Day Public Comment Period Begins
1 Sep.
RFPG Meeting
Present Draft RFP at Public Meeting
6 Oct.
RFPG Meeting?
Discuss Public Comments and Decide on Adoption
Submit Complete Draft of RFP to RFPG
23 June
Submit list of FMEs to consider for conversion to FMPs
27 July
RFPG Meeting?
Discuss
4 Aug.
Public Comment Period End
1 Oct.
RFPG meeting to vote on submission of RFP to TWDB
1 Dec.