Region 2 Lower Red-Sulphur-Cypress Regional Flood Planning Group Meeting
November 3, 2022
2:00 pm
at
Northeast Texas Community College
Community Room - (Hum 101),
2886 FM 1735, Chapel Hill Road,
Mount Pleasant, TX 75455
or
Via teleconference/webinar
Use the following information to register for the meeting:
https://us06web.zoom.us/meeting/register/tZIkf-qvpj8tG91y7388xrDlH8eD_4pRo3Kb
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 on October 6, 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.
    - Update on Draft Regional Flood Plan
        - Review TWDB comments
        - *Consider approving the Technical Consultant to submit preliminary responses to these comments to TWDB
    - Task 12- Perform Identified FME, Identify, Evaluate, and Recommend Additional FMPs
        - Update on studies
        - Review revised Technical Consultant (TC) recommendations
            - Discuss Potential FMPs
            - *Consider approval of TC recommended list.
    - Schedule
        - Revised Draft RFP submittal to RFPG
        - Select December meeting date

- Final RFP due to TWDB on Jan 10, 2023
- Task 12 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
October 6, 2022
2:00 p.m.
at
Ark-Tex Council of Governments, Transportation Facility, 240 SE 10th Street, (Building 5), Paris, TX 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	
Troy Hudson	Public	
R. Reeves Hayter	River authorities	X
Kelly Mitchell	Small business	X
(Vacant)	Water districts	
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	
Darrell Dean	Texas Department of Agriculture	
Tony Resendez	Texas State Soil and Water Conservation Board	
Trey Bahm	General Land Office	
Anita Machiavello	Texas Water Development Board (TWDB)	X
Michelle Havelka	Texas Commission on Environmental Quality	X
Darlene Prochaska	USACE, Fort Worth District	
Travis Wilsey	USACE, Tulsa District	
Randy Whiteman	RFPG 1 Liaison	
Richard Brontoli	Red River Valley Association	X
Jason Dupree	TxDOT – Atlanta District	X
Dan Perry	TxDOT – Paris District	X

Quorum:
Quorum: **Yes**
Number of voting members or alternates representing voting members present: **6**
Number required for quorum per current voting membership of **9**: **5**

Other Meeting Attendees: **
Kathy McCollum - ATCOG
Paul Prange – ATCOG
Joshua McClure – Halff Associates Team
David Rivera – Halff Associates Team
Parker Moore – Halff Associates Team
David Weidman – Franklin County Water District

**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 2:00 p.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. Six voting members were present and five non-voting members were also present.

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 meetings held Thursday, September 1, 2022, and Thursday, September 22, 2022.
Reeves Hayter opened the floor for discussion and approval of the minutes from the previous meetings. A motion was made by Greg Carter and was seconded by Susan Whitfield to approve the minutes as presented. The motion carried unanimously.

AGENDA ITEM NO. 6: *Consider approval of invoices submitted by Halff Associates, Inc. and the Ark-Tex Council of Governments
Reeves Hayter opened the floor for discussion of the invoices and asked Paul Prange if the invoices accurately reflect the work performed to date. Mr. Prange stated, yes, that the invoices have been reviewed by the ATCOG finance staff and appear to be accurate. The invoices from Halff Associates, Inc. will be paid by ATCOG and the invoices from ATCOG will be submitted to the TWDB for reimbursement once the Region 2 Flood Planning Group approves them. Reeves Hayter made a motion to approve the invoices and the motion was seconded by Greg Carter. The motion carried unanimously.

AGENDA ITEM NO. 7: *Consider approval of application submitted by Mr. David Weidman, to serve as a voting member on the Region 2 Flood Planning Group, representing the category of *Water Districts*
Reeves Hayter announced that the Executive Committee of the Region 2 Flood Planning Group met just prior to this meeting and agreed to recommend Mr. David Weidman to serve as a voting member of the Region 2 Flood Planning Group, in the category of *Water Districts*. Mr. Hayter presented Mr. Weidman's resume to the group for consideration as a new voting member and provided testimony of his achievements and experience. Mr. Hayter also stated that his application was submitted in a timely fashion and no other applications were received for this position. Mr. Hayter then made a motion to nominate Mr. David Weidman to fill the vacant position representing *Water Districts* on the Region 2 Flood Planning Group Board of Directors. Laura-Ashley Overdyke seconded the motion and the motion carried unanimously. Mr. Weidman announced his appreciation to the board members and stated that he looks forward to working together in the future.

PRESENTATIONS

AGENDA ITEM NO. 8: Texas Water Development Board Update:
Reeves Hayter turned the floor over to Anita Machiavello who announced that the TWDB recently sent out a stakeholder survey and encouraged the members of the flood planning group to revisit the TWDB website and review the September newsletter which contains guidance relating to the regional flood plans.

AGENDA ITEM NO. 9: Region 1 Canadian-Upper Red Regional Flood Planning Group Updates:
Reeves Hayter asked for any updates relating to Region 1 flood planning activities. Region 1 liaison, Randy Whiteman was not present so Joshua McClure and David Rivera announced that Region 1 is on approximately the same schedule as Region 2 and did not have any additional information to share at this time.

TECHNICAL CONSULTANT UPDATE

AGENDA ITEM NO. 10: Technical Presentation by Halff Associates, Inc.

- **Update on Draft Regional Flood Plan**
    1. **Review any comments received**
- **Update on Task 12 – Perform Identified FME, Identify, Evaluate, and Recommend Additional FMPs**
    2. **Review revised Technical Consultant (TC) recommendations**
    3. **Discuss Potential FMPs for City of Paris and City of Atlanta**
    4. ***Discussion/Action on TC recommended list**
- **Review upcoming meeting schedule**
    5. **Select December meeting date**

Reeves Hayter turned the floor over to Joshua McClure who began discussion of the comments received from the U. S. Army Corps of Engineers (USACE) and the Texas Parks and Wildlife Department (TPWD) regarding the Draft Regional Flood Plan. The USACE comments were fairly, generic in nature and primarily focused on urban population centers located within the state. Mr. McClure highlighted a few of the comments for discussion among the Region 2 Flood Planning Group. One comment addressed the potential need for non-regulatory regional flood control or drainage districts. ATCOG plans to establish a Regional Flood Drainage Manual to be included in the Regional Flood Plan for use as a template by communities located within Region2. Reeves Hayter stated that he is in favor of ATCOG creating this template for Region 2. Language will also be added to the plan, emphasizing that counties actually have floodplain regulatory authority, even though some counties may not exercise this authority. Laura- Ashely Overdyke stated that she hopes that the TWDB considers the importance of the USACE comment regarding many small communities not being capable of dealing with the complexities of floodplain management. Ms. Overdyke also mentioned that she is very concerned about the potential for over-designing flood projects which may negatively impact the natural environment and certain wildlife species and suggested that some guidance may be required from the TWDB regarding these matters. Mr. McClure then presented two additional comments relating to the development of future land use plans and conditions utilizing future flows for regulation of floodplains and development of FMPs. Discussion took place among the group regarding the comments from USACE.

Joshua McClure then presented the comments from TPWD and their recommendations to consider when developing a floodplain management project. The TPWD is particularly concerned about potential impacts to Rare, Threatened and Endangered Species including, paddlefish, freshwater mussels, and alligator snapping turtles when culverts are installed in waterbodies. Mr. McClure stated that these comments could be addressed in our regional criteria manual. Laura-Ashley Overdyke encouraged the planning group to insert specific language into the flood plan addressing these concerns, so that rural communities have access to this information while developing any future projects. Discussion took place among the group. Mr. McClure provided information to the group relating to culvert design and placement practices currently being utilized. Ms. Overdyke stated that there is definitely a disconnect between current project design strategies and the latest best practices. Mr. McClure stated that generic language could be added to the plan stating that "all designs, where necessary, consider aquatic species migration and stream geomorphology to ensure proper floodplain function." David Rivera stated that he agrees with the inclusion of this type of language in the flood plan, and it should be noted that this is a recommendation from the planning group for flood project design. Additional discussion took place among the group focusing on the level of detail needed in the flood plan relating to environmental knowledge and engineering design recommendations, to help close the gap. Greg Carter provided details of the drainage design located at a SWEPCO plant located within the region, as an example of environmental considerations. Reeves Hayter mentioned that the comments from USACE and TPWD should be added to the language in Chapter 10 of the Region 2 Flood Plan, and that project sponsors are encouraged to incorporate these practices into the design of their projects. Mr. McClure stated that the comment letters from both agencies will be included in the flood plan and the recommendations could either be added to existing FMSs, or a new FMS could be developed focusing specifically on these recommendations.

Joshua McClure presented the upcoming schedule of activities which include Reviewing and Responding to Public/TWDB Comments in late October and Adoption of the Regional Flood Plan by the Region 2 Flood Planning Group before January 10, 2023. Anita Machiavello announced that the TWDB is on schedule to send out formal comment letters by the end of October. Mr. McClure stated that numerous FMEs were identified but only a few FMPs were selected by the Region 2 Executive Committee due to the strict guidelines imposed by the TWDB relating to upstream and downstream negative impacts. Mr. McClure then turned the presentation over to David Rivera for discussion of Task 12 (FMEs->FMPs). Mr. Rivera presented two tables containing all the potential FMPs that were selected by the Region 2 Executive Committee for consideration by the flood planning group. Discussion took place among the group. Mr. McClure stated that Halff Associates, Inc. is requesting approval from the planning group to move forward with the FMEs/FMPs in the tables for inclusion in the Region 2 Flood Plan. Reeves Hayter announced that he has no problem with this particular list, but he is concerned that the City of Paris, TX has not been adequately addressed, regarding their potential FMEs/FMPs. Mr. McClure stated that he would meet further with the City of Paris, TX to identify and prioritize their projects to be included in the Region 2 Flood Plan. A motion was made by Greg Carter to approve the FMEs/FMPs which have been submitted and highlighted in "green" in the tables. The FMEs/FMPs highlighted in "yellow" in the tables, need follow-up discussion and screening analysis with the sponsors prior to approval. Reeves Hayter seconded the motion. The motion carried unanimously.

Joshua McClure then presented the Region 2 Flood Planning Group Schedule consisting of; October 31 – Receive TWDB Comments (1 month to address comments), December 1 – Submit Draft Final RFP to RFPG2 (Minimum 14 day review period), December 15 – RFPG2 Meeting (Meet to discuss comments and Approve submission to TWDB), January 5 – RFPG2 Meeting, and January 10 – Submit Final RFP to TWDB.

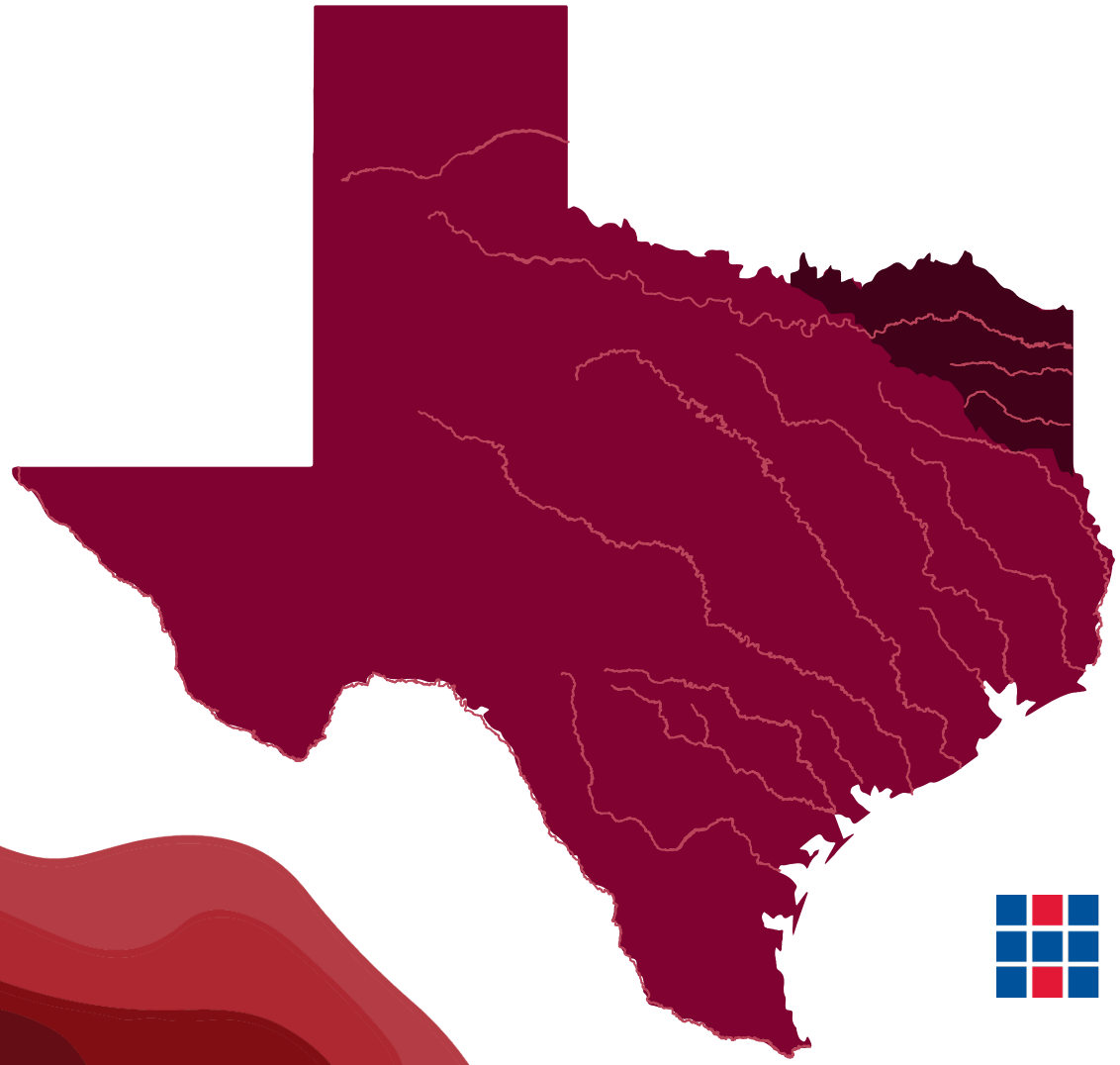
OTHER BUSINESS

AGENDA ITEM NO. 11: Update from Planning Group Sponsor
Reeves Hayter turned the floor over to Paul Prange who announced that the ATCOG has no updates to provide at this time.

AGENDA ITEM NO. 12: 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 Region 2 Flood Planning Group Board of Directors Meeting on Thursday, November 3, 2022, at 2:00 p.m. at a location to be determined and via webinar/teleconference.

AGENDA ITEM NO. 13: Adjourn
The meeting was adjourned at 3:11 p.m. by Reeves Hayter.
Approved by the Region 2 Lower Red-Sulphur-Cypress RFPG at a meeting held on 11/03/2022.

_____
Reeves Hayter, CHAIR



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

November 3, 2022

HALFF

FREESE AND NICHOLS

MTG engineers & surveyors

H2O PARTNERS

Agenda

- Draft RFP Comments Received from TWDB
- Task 12 Tech Committee Recommendations for FME->FMP
- Schedule

TWDB Comments Received

Task 12 – FME->FMP

Update on Task 12 Studies

- Paris- TC met with City on 11/20
  - Tributary 4 & 6- keep as FMP, working to obtain additional files
  - Stormwater Master Plan projects- leave as FME
- Nash- met with MTG on 11/17 for proposed FMP
  - MTG searching for existing study in project area
  - No defined project at this point
- Texarkana- met with MTG on 11/17 for Cowhorn Creek East
  - MTG to discuss internally for additional files
- Denison- City's consultant working to develop potential projects
- Bonham- working to set up meeting to discuss projects
- Atlanta- TC has reached out and awaiting to hear back

Review Table of Potential FMPs

Schedule

Schedule

- Oct 24 - Received TWDB Comments
  - 1 month to address comments
- Dec 1 – Submit Draft Final RFP to RFPG
  - Minimum 14 day review period
- December 15 or 22 – RFPG Meeting
  - Meet to discuss comments
  - Approve submission to TWDB
- Jan 5, 2023 – RFPG Meeting
- Jan 10, 2023 – Submit Final RFP to TWDB

Response to TWDB C

Region 2 Lower Red-

DRAFT Version October 31

Level	Num.	Task
1	1	General
1	2	Task 1
1	3	Task 1
1	3	Task 1
1	4	Task 1
1	5	Task 1
1	6	Task 2A
1	7	Task 2A
1	8	Task 2A
1	8	Task 2A
1	8	Task 2A

1	9	Task 2A
1	10	Task 2A
1	11	Task 2A
1	12	Task 2B
1	13	Task 2B
1	14	Task 2B
1	15	Task 2B
1	16	Task 4B
1	17	Task 4B
1	18	Task 5
1	19	Task 6
1	20	Task 7
2	21	General

2	22	Task 1
2	22	Task 1
2	22	Task 1
2	23	Task 1
2	24	Task 1
2	25	Task 2A
2	26	Task 2A
2	27	Task 2A
2	28	Task 2A
2	29	Task 2A
2	30	Task 2B
2	31	Task 2B
2	31	Task 2B
2	32	Task 2B
2	33	Task 3A

2	34	Task 4A
2	35	Task 4A
2	36	Task 4B
2	37	Task 4B
2	37	Task 4B
2	38	Task 4B
2	39	Task 4B
2	40	Task 4B
2	40	Task 4B
2	40	Task 4B
2	41	Task 4B
2	42	Task 4B
2	43	Task 5

2	44	Task 5
2	45	Task 5
2	46	Task 5
2	46	Task 5
2	46	Task 5
2	47	Task 5
2	48	Task 9

Comments

Sulphur-Cypress Basins Draft Regional Flood Plan

., 2022

Comment
1. Please ensure that all “Submittal requirements” identified in each of the Exhibit C Guidance document sections are submitted in the final flood plan. Appendix 2 appears to be missing from the submittal. Please
2. Proposed or Ongoing Flood Mitigation Projects, Text: Table 1.20 Proposed Projects by Type and the accompanying Chapter 1.3 text appears to describe about 31 flood mitigation projects of differing type compiled from survey results, however, Exhibit C Table 2 and the ExFldProjs feature class appear to be blank. Regional flood plans shall include a tabulated list and GIS map of proposed or ongoing flood mitigation projects currently under construction, being implemented; and with dedicated funding to construct and the expected year of
3. Proposed or Ongoing Flood Mitigation Projects, (Exhibit C Table 2): a. Please review and revise information in Chapter 1.3, Table 2, and the ExFldProjs feature class. There appear to be inconsistencies on whether there are existing or proposed projects identified by the data collection survey. Table 1.20 Proposed Projects by Type and the accompanying Chapter 1.3 text appears to describe about 31 flood mitigation projects of differing type compiled from survey results, however, Exhibit C Table 2 and the ExFldProjs feature class appear to be blank.
b. Appendix 2 does not appear to be included with the draft plan submission. Please ensure that all referenced maps, tables, and appendices are included with the final plan. [31 TAC §361.32].
4. Proposed or Ongoing Flood Mitigation Projects GIS Feature Class, ExFldProjs: Please review and revise information in Chapter 1.3, Exhibit C Table 2, and the ExFldProjs feature class. There appear to be inconsistencies on whether there are existing or proposed projects identified by the data collection survey. Table 1.20 Proposed Projects by Type and the accompanying Chapter 1.3 text appears to describe about 31 flood mitigation projects of differing type compiled from survey results, however, Exhibit C Table 2 and the ExFldProjs feature class appear to be blank. Please populate all required fields with valid entries per Exhibit D Table 8. Please leave NULL to represent either “not applicable” or “unknown”.
5. Existing Flood Infrastructure GIS Feature Class, ExFldInfraPt: Please include all low water crossings (LWCs) identified during the flood planning process in this feature layer. The ExFldExpAll feature class contains 253 LWCs, and the ExFldInfraPt feature class contains only 133 LWCs. Note: This is required in contrast to the optional LWC feature class. See Exhibit D Table 7 for a list of valid entries [31 TAC §361.31].
6. Existing Condition Flood Hazard GIS Feature Class, ExFldHazard: Streams with multiple data sources should be combined in such a way that the 0.2% is not within a 1% floodplain. Using both the BLE and Cursory floodplain data has created a floodplain that has 1% of Cursory floodplain extending beyond the .02% of the BLE. This potential overlap affects structure count and other analysis. Please review and revise as appropriate. [31 TAC §361.33(b)].
7. Existing Condition Flood Hazard (Exhibit C, Map 4): Please review and revise all Existing Hazard maps to reflect the corrected ExFldHazard feature class (see previous comment). [31 TAC §361.33(b)(4)].
8. Existing Condition Flood Exposure Analysis, Text: a. Please check that the population count in Table 3 is the maximum of day and night population. The population count in Table 3 appears to match the total night population from the ExFldExpAll feature class, however, the total day population from the feature class appears to be higher. "Population (daytime)" and "Population (nighttime)" columns are not included in the table but can be added to the left of "Population" in Table 3 to facilitate this check.
b. The Structure and Residential Structure counts in Table 3 do not appear to match the ExFldExpAll feature class counts. Please review and reconcile.
c. The Hazard area in Table 3 does not appear to match the ExFldExpAll feature class. Please review and reconcile. [31 TAC §361.33 & Exhibit C 2.2.A.3].

9. Existing Condition Flood Vulnerability GIS Feature Class, ExFldExpAll: If the 'CRITICAL' field contains a "No" entry, then please leave ‘CRIT_TYPE’ as NULL.
10. Existing Condition Flood Hazard Analysis, Text: Please include total land areas (square miles) of each flood risk by flood risk type, county, region, and frequency as per guidance document (page 24): Submittal
11. Existing Condition Flood Risk Analyses, Text: Please include a reference to Exhibit C Table 3 in the text. As per guidance document (page 27): Once Task 2A Existing Condition Flood Risk Analyses is complete, RFPGs must include a summary table with findings summarizing flood risk by county (Exhibit C Table 3).
12. Future Condition Flood Vulnerability, GIS Feature Class, FutFldExpAll: If the 'CRITICAL' field contains a "No" entry, then please leave ‘CRIT_TYPE’ as NULL [31 TAC §361.33(c) & Exhibit D 3.6.2].
13. Future Condition Flood Vulnerability (Exhibit C Map 12): There is no legend on the index maps and upon review it appears to reference the wrong data set. Please review and revise as appropriate per [31 TAC §361.34(d) & Exhibit C 2.2.B.2].
14. Future Condition Flood Hazard Analysis, Text: Please include total land areas (square miles) of each flood risk by flood risk type, county, region, and frequency as per guidance document (page 33), Submittal requirement
15. Future Condition Flood Risk Analyses, Text: Please include a reference to Exhibit C Table 5 in the text. As per guidance document (page 35): Once Task 2B Future Condition Flood Risk Analyses is complete, RFPGs must include a summary table with findings summarizing flood risk by county (Exhibit C Table 5).
16. Flood Management Evaluations (FME) GIS Feature Class, FME: Please review FME_ID 021000002 as the description states "Update remainder of the County to Zone AE", however, the spatial extent appears to cover the entire county. Please revise to more specifically depict what geographic area needs to be updated.
17. Flood Mitigation Projects (FMP) (Exhibit C Table 13): Please provide a Benefit Cost Ratio (BCR) for FMP_ID: 023000001 as required per [31 TAC §361.38(c-e) & Exhibit C 2.4.B].
18. Flood Management Evaluation (FME) Recommendations, Text: Please review the table included within the map. Based on Table 16 there appear to be 9 FMPs recommended in the flood plan, however, the table included in this map appears to indicate only 5 FMPs are recommended [31 TAC §361.39(c) & (f)].
19. Flood Mitigation Project (FMP) Recommendations, GIS Feature Class, FMP: Please provide a Benefit Cost Ratio for FMP_ID: 023000001 as required per [31 TAC §361.39 & Exhibit C 2.5.B].
20. Flood Mitigation Project (FMP) Recommendations, Text: Each recommended FMP must be accompanied with an associated model or supporting documentation to show no negative impact. Please confirm that this was done and provide reference to supporting materials. As per the draft report (page 5-9), “A preliminary comparison of pre-and post-project conditions for the 1 percent ACE event (100-year flood) was performed for each potentially feasible FMP to determine if the FMP conforms to the no negative impacts requirements. This preliminary comparison was based on planning level information found in supporting studies and associated H&H model results when available. Based on this planning level review, it was determined that all potentially feasible FMPs would require mitigation measures to offset potential impacts downstream and conform to the no negative impact requirements. It is anticipated that mitigation measures will be incorporated in the design phases of the FMPs. However, the local sponsor will ultimately be responsible for proving the final project design has no negative flood impact before initiating construction.” For each recommended FMP, please identify in the plan how no negative impact was determined as required by Exhibit C Section 3.6.A (page 108), either via a model, a study or engineering judgement, and submit the associated model, include the model name, study
21. To better align with our agency’s preferred nomenclature, please consider using the name, “Cursory Floodplain Data” instead of “Fathom” or Cursory Fathom Data” throughout the regional flood plan.

22. Planning Area Description, Text: a. It appears that a reference to Figure 1.12 on page 1-28 should instead reference Figure 1.13. Please consider revising as appropriate.
b. It appears that a reference to Figure 1.13 on page 1-38 should instead reference Figure 1.14. Please consider revising as appropriate.
c. It appears that a reference to Figure 1.14 on page 1-39 should instead reference Figure 1.15. Please consider revising as appropriate.
23. Watersheds GIS Feature Class, Watersheds: Please ensure that watersheds referenced in FMEs are included in the Watersheds feature class. For example, the stream referenced in FME_ID 021000021 does not appear to
24. Existing Flood Infrastructure, Text: Please provide a description of how Low Water Crossings were identified within the text of Chapter 1.
25. Existing Condition Flood Exposure, GIS Feature Class, ExFldExpPt: Please ensure that critical facilities are not duplicated in the point and polygon feature classes. It is preferred for critical features to be shown in the polygon feature class (ExFldExpPol).
26. Existing Condition Flood Exposure GIS Feature Class, ExFldExpPol: The agricultural coverage layers appear to have irregular triangle and rectangular features that may be a result of the conversion of a raster to polygon. Please review and revise, as appropriate.
27. Existing Condition Flood Exposure, (Exhibit C Map 6): Please consider reviewing and revising Map 6B with regard to legibility including differentiations between Roadway Segments and Gas Pipelines.
28. Existing Condition Flood Vulnerability, Text: Chapter 2 does not appear to discuss identifying the vulnerabilities of critical facilities by looking at factors such as proximity to a floodplain, proximity to other bodies of water, past flooding issues, emergency management plans, and location of critical systems like primary and back-up power. Please summarize the resilience of critical facilities identified in the existing condition hazard area [31 TAC §361.33].
29. Model Coverage, Text: Please consider including a table of the relevant models that are currently available for the region.
30. Future Condition Flood Vulnerability Analysis, Text: Chapter 2 does not appear to discuss identifying the vulnerabilities of critical facilities by looking at factors such as proximity to a floodplain, proximity to other bodies of water, past flooding issues, emergency management plans, and location of critical systems like primary and back-up power. Please summarize the resilience of critical facilities identified in the future condition hazard area.
31. Future Condition Flood Vulnerability, GIS Feature Class, FutFldExpAll: a. It appears that some critical facilities may not be included in the dataset (e.g., LH Rather Jr. High School). Please review and confirm that the inclusion of critical facilities such as hospitals, schools, and fire stations.
b. Some points along the Louisiana border do not appear to have SVI values. Please consider reviewing and verify SVI availability for points with NULL values.
32. Future Condition Flood Exposure GIS Feature Class, FutFldExpPol: The agricultural coverage layers appear to have irregular triangle and rectangular features that may be a result of the conversion of a raster to polygon. Please review and revise, as appropriate.
33. Existing Floodplain Management Practices, Text: Please consider revising Table 3.1 to use 1% and 0.2% instead of the occurrence interval year.

34. Greatest Gaps Map (Exhibit C Map 14): Please consider including score values or numerical values for the colors related to Flood Risk.
35. Greatest Risks Map (Exhibit C Map 15): Please consider including score values or numerical values for the colors related to Flood Risk.
36. Flood Management Evaluations (FME), Text: For county-wide watershed FMEs where a majority of the county falls outside of the Flood Planning Region boundary, please consider including justification for how the FME benefits the region and please coordinate with other RFPGs to make sure the efforts are not duplicated. For example, FME_ID 021000004.
37. Flood Management Evaluations (FME) GIS Feature Class, FME: a. Please consider revising descriptions to describe the flood study or proposed study of flood prone area needed in order to assess flood risk and/or determine if there are potentially feasible FMSs or FMPs.
b. Please consider providing more description on the FME_IDs: 021000045-021000053. Based on current information, it is difficult to determine if these are projects or studies, and if so, what they entail.
38. Flood Management Evaluations (FME) (Exhibit C Map 15): Please consider including TWDB-funded FIF Category 1 studies in indication of a previously studied area.
39. Flood Mitigation Projects (FMP) GIS Feature Class, FMP: Please consider developing a FMP_HazPost feature class showing an updated hazard area that accounts for the impact of recommended FMPs.
40. Flood Management Evaluations (FME) (Exhibit C Map 17): a. Please consider increasing legibility for example, by outlining rather than shading HUC12s.
b. Please consider including an inset map of the FMP locations.
c. Please consider reviewing the FMP titles to improve the legibility of the map.
41. Flood Management Strategies (FMS) GIS Feature, FMS: Please consider reviewing FMSs to ensure correct categorization. For example, FMS_IDs 022000052, 022000070 include emergency response systems which could potentially be categorized as an FMP- Nonstructural.
42. Flood Mitigation Strategies (FMS) (Exhibit C Map 18): Please consider increasing legibility of the Flood Planning Region boundary and text.
43. Flood Management Evaluation (FME) Recommendations, Text: Please verify that FMEs do not duplicate the efforts of any TWDB-funded, FIF Category 1 studies, and state how any such FMEs will expand on the existing study. For example, FME_ID 02100013 appears that it may be able to use data from FIF ID 40058 (Sabine River Authority Flood Protection Planning for Watersheds - Upper Sabine River Basin) and/or FME_ID 02100003 from FIF ID 40027 (Hunt County Countywide Drainage Study).

44. Flood Management Evaluation (FME) Recommendations, (Exhibit C Table 15): Please verify that FMEs do not duplicate the efforts of any TWDB-funded, FIF Category 1 studies, and state how any such FMEs will expand on the existing study. For example, FME_ID 02100013 appears that it may be able to use data from FIF ID 40058 (Sabine River Authority Flood Protection Planning for Watersheds - Upper Sabine River Basin) and/or FME_ID 02100003 from FIF ID 40027 (Hunt County Countywide Drainage Study).
45. Flood Management Evaluation (FME) Recommendations (Exhibit C Map 19): Please consider improving the legibility of the Flood Planning Region boundary and text.
46. Flood Mitigation Project (FMP) Recommendations (Exhibit C Map 20): a. Please consider increasing legibility for example, by outlining rather than shading HUC12s.
b. Please consider including an inset map of the FMP locations.
c. Please consider reviewing the FMP titles to improve legibility of the map.
47. Flood Management Strategy (FMS) Recommendations (Exhibit C Map 21): Please consider improving the legibility of the Flood Planning Region boundary and text.
Flood Infrastructure Financing Analysis, Text: Please consider providing the supporting basis and calculation for the following text in the report “Overall, there is an estimated $51,970,000 in state and federal funding projected to be needed to implement the recommended FMEs, FMSs, and FMPs in this Regional Flood Plan.”

Response	Status
Digital versions of Appendix 2 were submitted in the Draft. Hard copies will be submitted with the final verison.	
Table 1.20 shows the types of projects that survey respondents said that they engage in, but were not specific projects. No specific projects were provided. Will clarify the language in the text and table heading.	
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Exposed polygons (such as ag land) and lines (such as roads) within 15' of actual LWC points were also marked as LWC, we will remove.	
Per our prioritization matrix, we prioritized Zone AE and BLE over Fathom data; therefore, any 0.2% BLE/AE overrode 0.1% Fathom. The Fathom data was added as supplemental information on upland flooding risks beyond the BLE data. Changing the data as requested would lose accuracy and/or the data source.	
See comment 6 response.	
Will add daytime populations. Will review if full replacement makes sense.	
These do seem to match. (10/28/22 -GC)	
The hazard area was not captured in ExFldExpAll but it appears ExFldHazard areas match Table 3. (10/28/22 -GC)	

This is currently the way data is populated. (10/28/22 -GC)	
Will add text or tables within text.	
Will add.	
This is currently the way data is populated. (10/28/22 -GC)	
We do not believe this comment references Maps 12A & 12B, will review further.	
Will add text or tables within text.	
Will add.	
FME description will be edited as follows: "Update or improve County to Zone AE"	
Will reconcile.	
This comment appears to be an error. If it is referring to FMPs, we only have 3 recommended in Chapter 5. Please provide clarification.	
Will reconcile.	
We will add commentary about how this was determined. In some cases the models have been lost over time, so most will be references to a report or engineering judgement.	
Will change	

Will correct	
Will correct	
Will correct	
Will reconcile.	
Will provide.	
Verify, did not find duplicates, but one power plan only as point and not polygon.	
Evaluating	
Will revise.	
This will not be addressed. Little is know about most of these facilities and collecting the needed data on every critical facility would be extremely time consuming.	
No models models were obtained for developing the flood quilt. FEMA and TWDB have models availabel for the Effective Zone AE floodplain and BLE data, but only the BLE data is readily accessible. We will consider including a reference the BLE data models.	
This will not be addressed. Little is know about most of these facilities and collecting the needed data on every critical facility would be extremely time consuming.	
"L H Rather" was in ExFldExpAll. Will change name to include "Jr. High School"	
Will revise.	
Reviewing to determine feasibility of revising	
Table 3.1 will be updated as recommended.	

Color codes reflect Flood Risk Knowledge Gaps primarily based on the "Areas Without Adequate Inundation Maps" criteria (See Table 4.4 in Chapter 4). We will include the score shown in Table 4.4 to the levels in the legend to add clarity.	
Consideirng adding subjective number ratings to colors.	
Countywide FMEs were only recommended if more than 50% of the County area is within Region 2. Any recommended countywide evaluation will benefit the portion of the county within the Lower-Red-Sulphur-Cypress region's jurisdiction. Coordination with adjacent regions has already started and it will be an ongoing process. TC will verify if Region 1 and 4 are following a similar approach and review recommended FMEs along region boundaries for completeness and potential duplication.	
FME descriptions will be reviewed and updated as necessary to provide better description of scope of work	
FME_ID 021000045 is a comprehensive stormwater plan update and it is the only recommended FME from this list. FME_IDs 46 to 53 where specific projects within the current plan, but the RFPG decided not to recommend them as individual studies and lumped them into FME_ID 45. Descriptions will be improved in Table 5.2 (TWDB Table 15) to clarify.	
TWDB-funded FIF Category 1 study areas will be used to indicate previously studied areas.	
None of the FMPs have detailed modeling and inundation areas for proposed conditions; therefore, none will be added.	
Will review and revise if possible.	
Will revise.	
Will review and revise if possible.	
The listed FMSs will be reconsidered as non-structural FMPs, if adequate data has been provided by the Sponsor.	
Will review and revise if possible.	
Every recommended FME will leverage any existing studies and H&H models and expand the analysis as necessary to achieve the FME goal. The above general statement could be added as a new paragraph in Chapter 4 under the "Comparison and Assessment of Flood Mitigation Evaluations" section .	

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Will review and revise if possible.	
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Will review and revise if possible.	
Will review and revise if possible.	
Will review and revise if possible.	
This estimated total was calculated based on the data provided in Table 19 (Appendix 9-1).	

Lower Red-Sulphur-Cypress - Task 12 - FME to FMP Candidates (For discussion and approval during Nov/3/2022 RFPG Meeting)

FME ID	FME Name	Description	Sponsor	Potential candidate to elevate from FME to FMP?	Data Available to support FMP	Level of Effort to Elevate to FMP	Communication with Sponsor
021000026	Anderson Creek WWTP Flood Study	WWTP was impacted by flooding from Anderson Creek. Study to evaluate whether existing berm meets 100-year protection and to evaluate the needs for sump pumps and lift station.	City of De Kalb	YES	None	Moderate	YES (Jan/2022)
021000030	City of Hooks Infrastructure	Widen ditches to increase the volume capacity of flash flood waters	City of Hooks	YES	None	High	YES (Jan/2022) Will require initial high level master planning effort to identify specific FMP.
021000032	Cowhorn Creek East	Extend current H&H study limits to the upstream detention pond. Evaluate existing flooding and develop mitigation actions.	City of Texarkana	YES	Engineering Report, Cost Estimates, Study Areas, H&H Models	Low	YES (Oct/17) Confirmed area of concern for City. They are willing to sponsor.
021000040	City of Atlanta Eleanor St and Red Bluff St. Project/Phase No. 3	Replace culvert crossings	City of Atlanta	Potentially	None	Low	YES (Oct/28) Pending response from Sponsor
021000041	City of Atlanta Park View St and Jefferson St. Project/Phase No. 4	Install culvert crossing	City of Atlanta	Potentially	None	Low	YES (Oct/28) Pending response from Sponsor
021000042	City of Paris Big Sandy Cr Tribs 4 and 6 Improvements	Re-grade channel downstream of Clarksville Ave. and establish concrete channel upstream of Clarksville Ave. Channel improvements in the upper portion of Tributary 4. Tributary 6 channel improvements and culvert replacement.	City of Paris	YES	Engineering Report, Cost Estimates, Study Areas	High	YES (Oct/20) Confirmed areas of concern for the City. TC recommeds to submit both projects as one FMP. City is willing to sponsor.
021000060	City of Texarkana Gauges	Install depth gauges and radio-controlled guard arms at three flood-prone underpasses and warning lights and a “Do Not Enter” sign at flood-prone residential intersection.	City of Texarkana	YES	None	Low	YES (Sep/28) City is interested and willing to sponsor.
021000064	Pecan to Waggoner Creek Channel Improvements	Channel improvements east of Pecan to Waggoner Creek.	City of Nash	YES	Study Area	High	YES (Oct/17) Confirmed area of main concern for City. They are willing to sponsor.
021000066	Pig Branch Watershed Culvert Study Update	Study to provide the city with updated drainage information to alleviate existing and potential flood damages for various crossings.	City of Bonham	YES	Engineering Report, Study Areas, Survey, 1D BLE	High	YES (Oct/28) City expressed interest in suporting project. Meeting with City's Consultant for further details is currently being coordinated.

Yes	7
Potentially	2