Region 2 Lower Red-Sulphur-Cypress Regional Flood Planning Group Meeting
April 13, 2023
2:00 pm
at
Northeast Texas Community College
Community Room - (Hum 101),
2886 FM 1735, Chapel Hill Road,
Mount Pleasant, TX 75455
and
Via teleconference/webinar
Use the following information to register for the meeting:
https://us06web.zoom.us/meeting/register/tZAscegpqj4tG9AQP7F7Ao6OTt5CufaJ_1hB
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 March 2, 2023

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 of RFPG Submittal
        - *Discuss/Consider vote on response to TWDB's FMX ranking criteria
    - Task 12 Update
        - *Consider vote for recommended FMPs for inclusion in the Amended Regional Flood Plan
    - 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
March 2, 2023
2:00 p.m.
at
Northeast Texas Community College, Community Room – (Hum 101), 2886 FM 1735, Chapel Hill Road, 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	X
Andy Endsley	Counties	X
W. Greg Carter	Electric generating utilities	X
Laura-Ashley Overdyke	Environmental interests	X
Casey Johnson	Industries	X
Dustin Henslee	Municipalities	
Troy Hudson	Public	
R. Reeves Hayter	River authorities	X
Kelly Mitchell	Small business	
David Weidman	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	
Trey Bahm	General Land Office	
Anita Machiavello	Texas Water Development Board (TWDB)	X
Michelle Havelka	Texas Commission on Environmental Quality	X
Lisa M. Mairs	USACE, Galveston District	
Travis Wilsey	USACE, Tulsa District	
Randy Whiteman	RFPG 1 Liaison	
Richard Brontoli	Red River Valley Association	
Jason Dupree	TxDOT – Atlanta District	
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
Parker Moore – Halff Associates Team
Maddie Smithers – Halff Associates Team

**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 2:10 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. Eight voting members were present along with three non-voting members.

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, December 15, 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 Casey Johnson 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 presented the invoices from Halff Associates, Inc. received in November and December of 2022 totaling approximately $35,000.00 and the invoices from the Ark-Tex Council of Governments (ATCOG) from November, 2022 through February, 2023 totaling approximately $3,100.00. Chris Brown announced that the budget may need to be amended before the end of the planning period in order to expend all of the funds and provided a description of how the funds will be utilized. Mr. Hayter asked for a motion to approve the invoices from Halff Associates, Inc. Greg Carter asked if the approval needs to include any sub-contractors' invoices and Mr. Brown stated that those invoices are included only as a reference of their expenses under the agreement with Halff Associates, Inc. ATCOG, as the Sponsor, only has a contract with Halff Associates, Inc. Mr. Hayter made a motion to approve the invoices from Halff Associates, Inc. and the motion was seconded by Greg Carter. The motion carried. Mr. Hayter then asked for a motion to approve the invoices from the Ark-Tex Council of Governments. A motion was made by David Weidman and seconded by Laura-Ashley Overdyke. The motion carried.

AGENDA ITEM NO. 7: *Discuss and Consider nominations for election of Region 2 RFPG Officers to include Chair, Vice Chair, Secretary and Executive Committee per Article VIII, Section 2(b) of the Bylaws
Reeves Hayter opened the floor for discussion and Greg Carter asked for confirmation of the existing officers. The Chair is Reeves Hayter, Vice Chair is Greg Carter, Secretary is Laura-Ashley Overdyke, Kelly Mitchell and Andy Endsley are the two at-large voting members on the executive committee. Greg Carter made a motion to continue with the same executive committee membership and the motion was

seconded by Casey Johnson. The motion carried. Reeves Hayter thanked the officers for choosing to serve on the board for another year.

PRESENTATIONS

AGENDA ITEM NO. 8: Texas Water Development Board Update:
Reeves Hayter turned the floor over to Anita Machiavello, who encouraged the flood planning group to read the TWDB December newsletter which contains some important topics. Ms. Machiavello also announced the Terms of Office and that the terms of all initial voting members will expire on July 10, 2023. All voting members will need to draw lots for terms of two years or five years. Ms. Machiavello also announced that the TWDB sent out an email this morning seeking public feedback on methods for ranking FMEs, FMPs and FMSs in the 2024 State Flood Plan. Discussion took place among the group concerning the ranking of FMXs and the submission of comments.

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 and Parker Moore did not have any updates available for the flood planning group.

TECHNICAL CONSULTANT UPDATE

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

- **Update of RFPG Submittal**
- **Task 12 Update**
- **Schedule**

Reeves Hayter turned the floor over to Parker Moore who introduced Maddie Smithers to help present updates on Task 12. Mr. Moore announced that the Region to Final Flood Plan was submitted to TWDB during the first week of January, 2023 and hard copies of the plan will be provided to Region 2 in April. Mr. Moore and Ms. Smithers then began presenting updates to Task 12. Screening level assessment for nine FME Candidates is in progress and include the cities of DeKalb, Hooks, Texarkana, Atlanta, Paris, Bonham, and Nash.

Maddie Smithers discussed the Anderson Creek WWTP Flood Study to evaluate the need for a levee to protect the WWTP during the 100-Year flood event. This project would likely meet the ”No Negative Impact” requirement.

Parker Moore discussed the City of Hooks Infrastructure study to address flooding along several creeks and announced that a field visit had been conducted in February, BLE models are being updated to verify flooding issues, and that “No Negative Impact” determination is currently unknown. Reeves Hayter asked what the project is that is being proposed and Mr. Moore stated that a project has not currently been selected.

Maddie Smithers discussed the Cowhorn Creek East FME to develop mitigation alternatives for flooding in the Diamond Circle Subdivision by updating existing conditions models. "No Negative Impact" determination is currently unknown.

Maddie Smithers discussed the City of Atlanta Eleanor St. and Red Bluff St. Project to replace culvert crossings. Additional information was requested on February 17th and an evaluation is not being performed.

Maddie Smithers discussed the City of Atlanta Park View St. and Jefferson St. Project to install culvert crossings. Additional information was requested on February 17th and an evaluation is not being performed.

Parker Moore discussed the City of Paris Big Sandy Creek Improvements to reduce the risk of flooding along streams. Existing conditions models have been obtained, three alternatives have been incorporated into one project, and "No Negative Impact" determination is currently unknown. Reeves Hayter announced that some property near this project has recently been rezoned and Mr. Moore stated that he would follow up on that with the City of Paris.

Parker Moore discussed the City of Texarkana Gauges Project to install flood warning gauges for flood-prone areas. Preliminary locations have been established and a meeting is currently being scheduled with the City of Texarkana. This FMP would likely meet the "No Negative Impact" requirement.

Parker Moore discussed the Pecan to Waggoner Creek Channel Improvements Project in the City of Nash to reduce risk of flooding for structures downstream of N. Pecan St. BLE models are currently being updated with preliminary mitigation options and "No Negative Impact" determination is currently unknown.

Maddie Smithers discussed the Pig Branch Watershed Culvert Study in the City of Bonham to alleviate existing and potential flood damages for various crossings. Existing conditions models are being updated, potential mitigation options are being investigated, and a 100-Year level of service may not be feasible. "No Negative Impact" determination is currently unknown.

Brief discussion took place among the group regarding these FMEs. Reeves Hayter spoke about the 100-Year level of service mentioned in a couple of the FMEs.

Parker Moore announced the schedule of upcoming deliverables which included: March, 2023 –Initial FMEs completed and collecting new FMXs; April 13, 2023 – RFPG2 Meeting to discuss FME results and potential for FMPs, and to discuss new FMXs received; April-May 2023 – Prepare Amended RFP; May 4, 2023-RFPG2 Meeting to recommend FMPs and new FMEs for inclusion in the plan, and provide update on the amended plan; May 11, 2023 – Submit Amended RFP for public comment (Minimum 14 days before vote); June 1,2023 – Public Meeting to Review and Approve Amended RFP; June 15, 2023 – Public Comment Period closes; July 14, 2023 – Amended RFP Due to TWDB.

OTHER BUSINESS

AGENDA ITEM NO. 11: Update from Planning Group Sponsor

Reeves Hayter turned the floor over to Chris Brown who announced that he did not have any updates 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, April 13, 2023, at 2:00 p.m. at a location to be determined and via webinar/teleconference. Mr. Hayter then suggested that the Region 2 Flood Planning Group conduct an in-person meeting at some point during the first planning cycle.

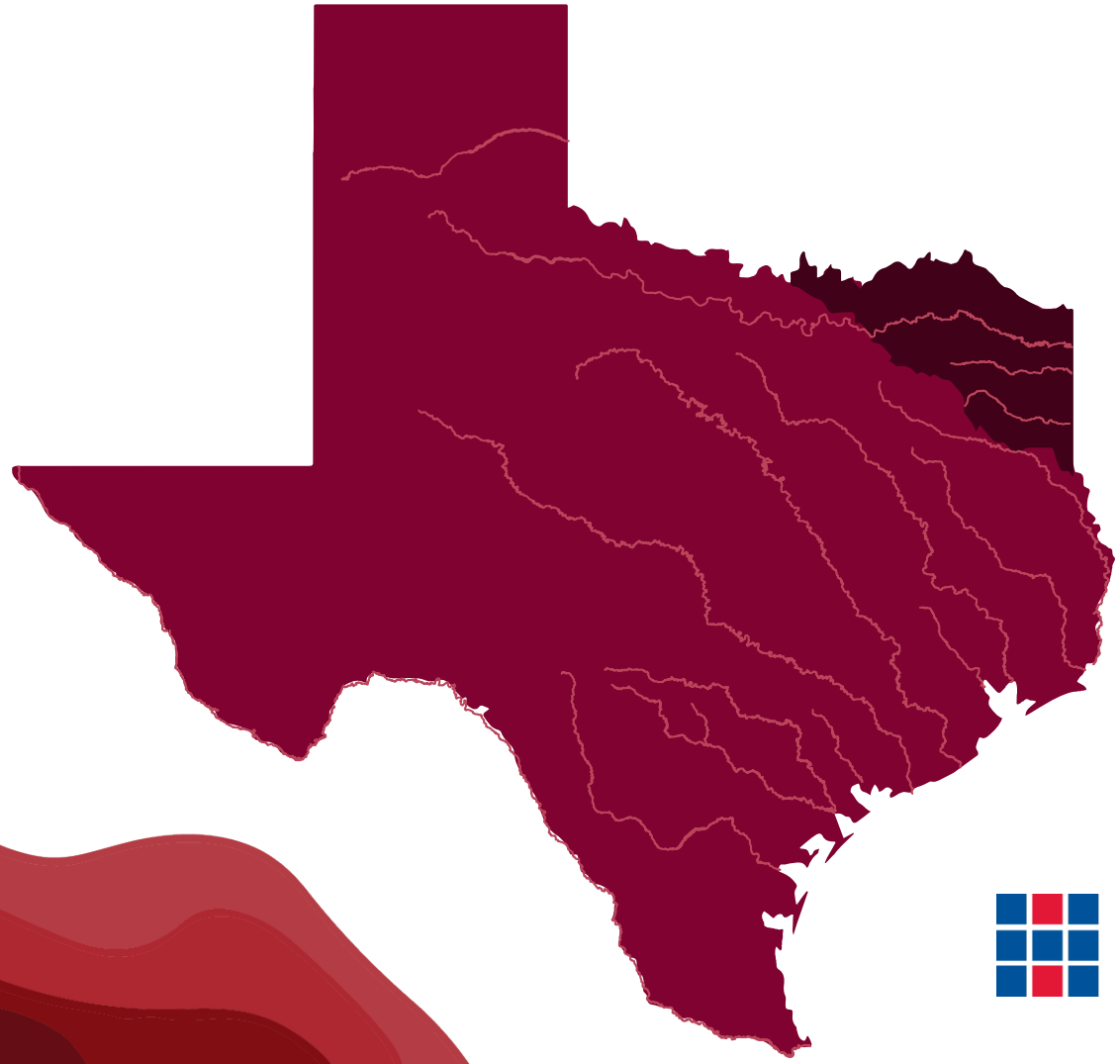
AGENDA ITEM NO. 13: Adjourn

Reeves Hayter called for the meeting to be adjourned. The meeting was adjourned at 2:54 p.m.

Approved by the Region 2 Lower Red-Sulphur-Cypress RFPG at a meeting held on 4/13/2023.

_____

Reeves Hayter, CHAIR



Draft Regional Flood Plan Presentation
Regional Flood Planning Group 2 Meeting
Lower Red-Sulphur-Cypress

April 13, 2023

HALFF

FREESE AND NICHOLS

MTG engineers & surveyors

H2O PARTNERS

Agenda

- Update on RFP Submittal
- Task 12 Update
- Schedule

Update on RFP Submittal

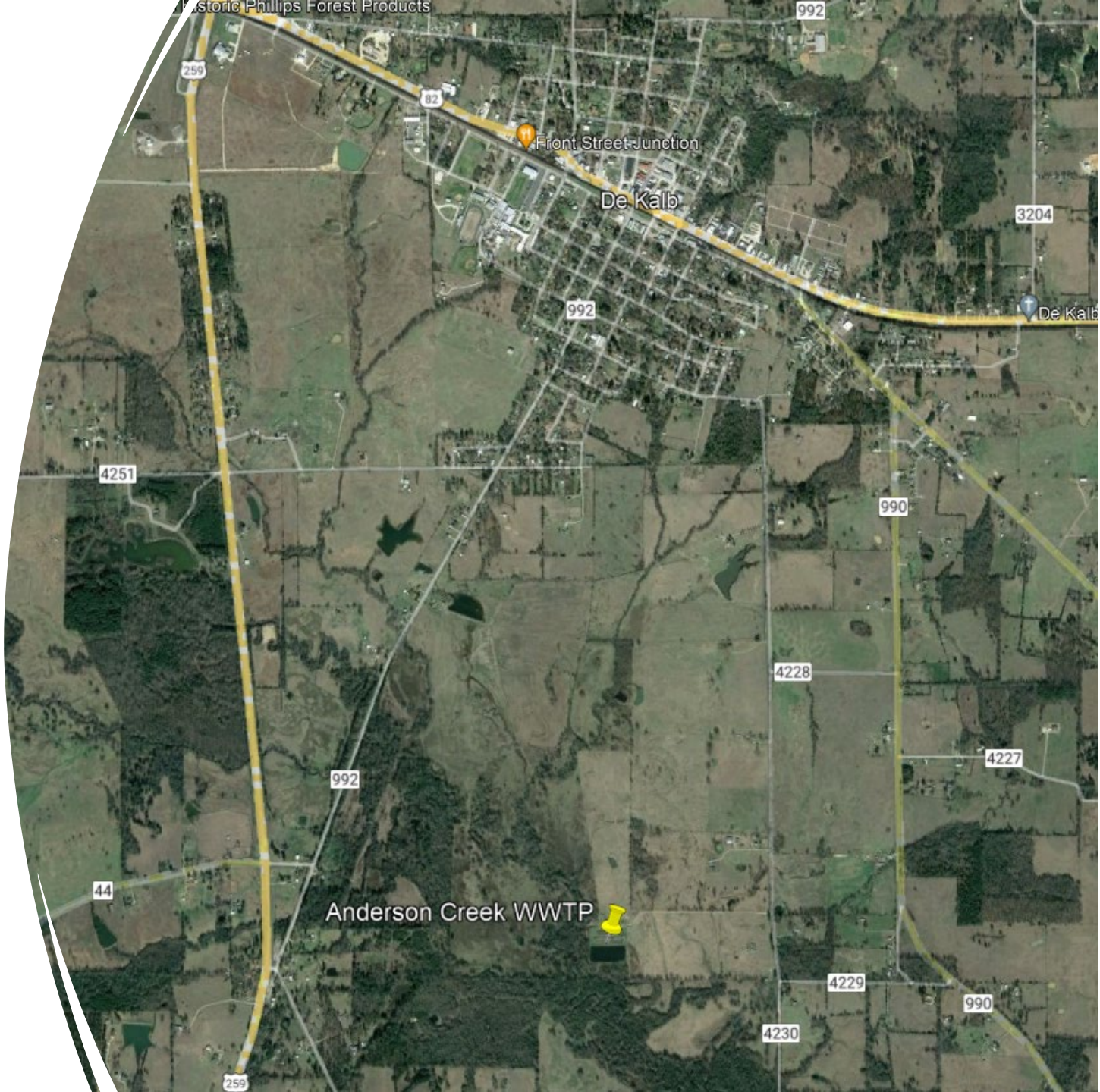
- TWDB's FMX ranking criteria
  - Discuss/consider vote on responses
- TWDB's RFP Comments

Task 12 Update

- Further assessment for nine (9) FME Candidates in progress
- Included cities:
  - Dekalb
  - Hooks
  - Texarkana
  - Atlanta
  - Paris
  - Bonham
  - Nash
  - Hunt County

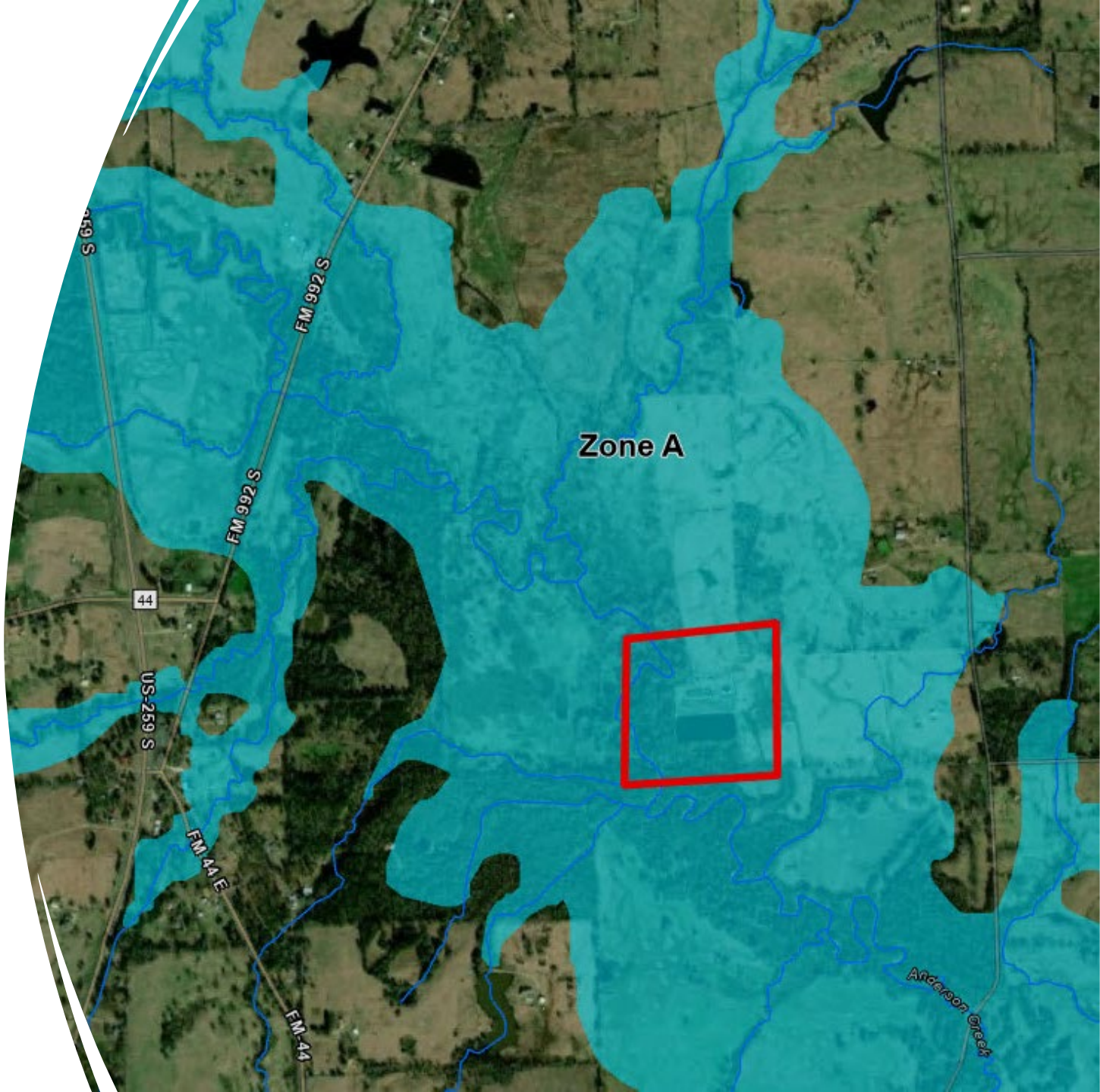
FME 26 – Anderson Creek Wastewater Treatment Plant Study

- Sponsor: City of De Kalb
- WWTP is impacted by flooding from Anderson Creek
- Evaluate whether berm meets 100-year protection
- Identify and test berm improvements



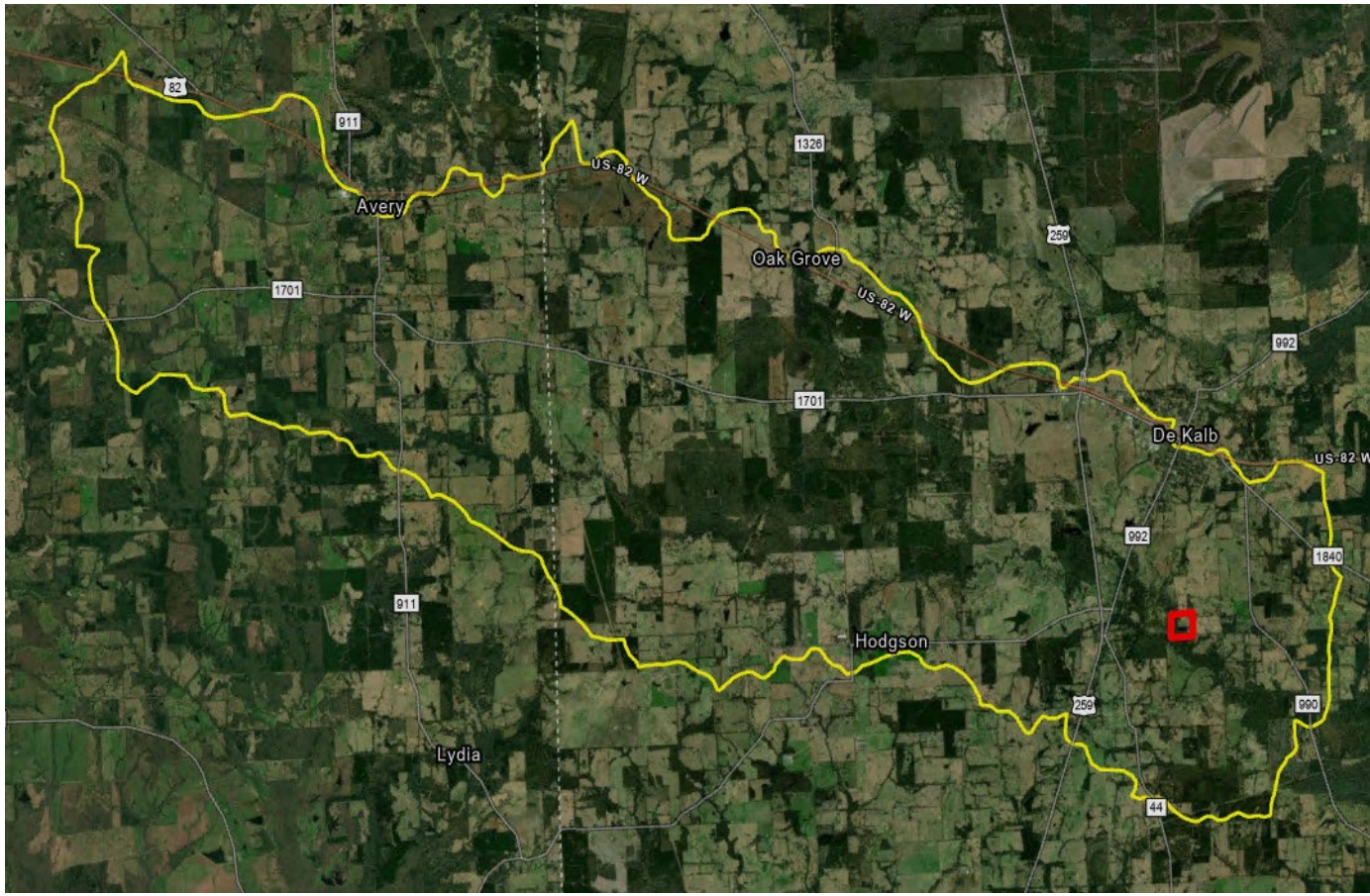
FME 26 – Anderson Creek Wastewater Treatment Plant Study

- WWTP is in FEMA Zone A
- Hydrologic and hydraulic models needed to define floodplain extents and water surface elevations



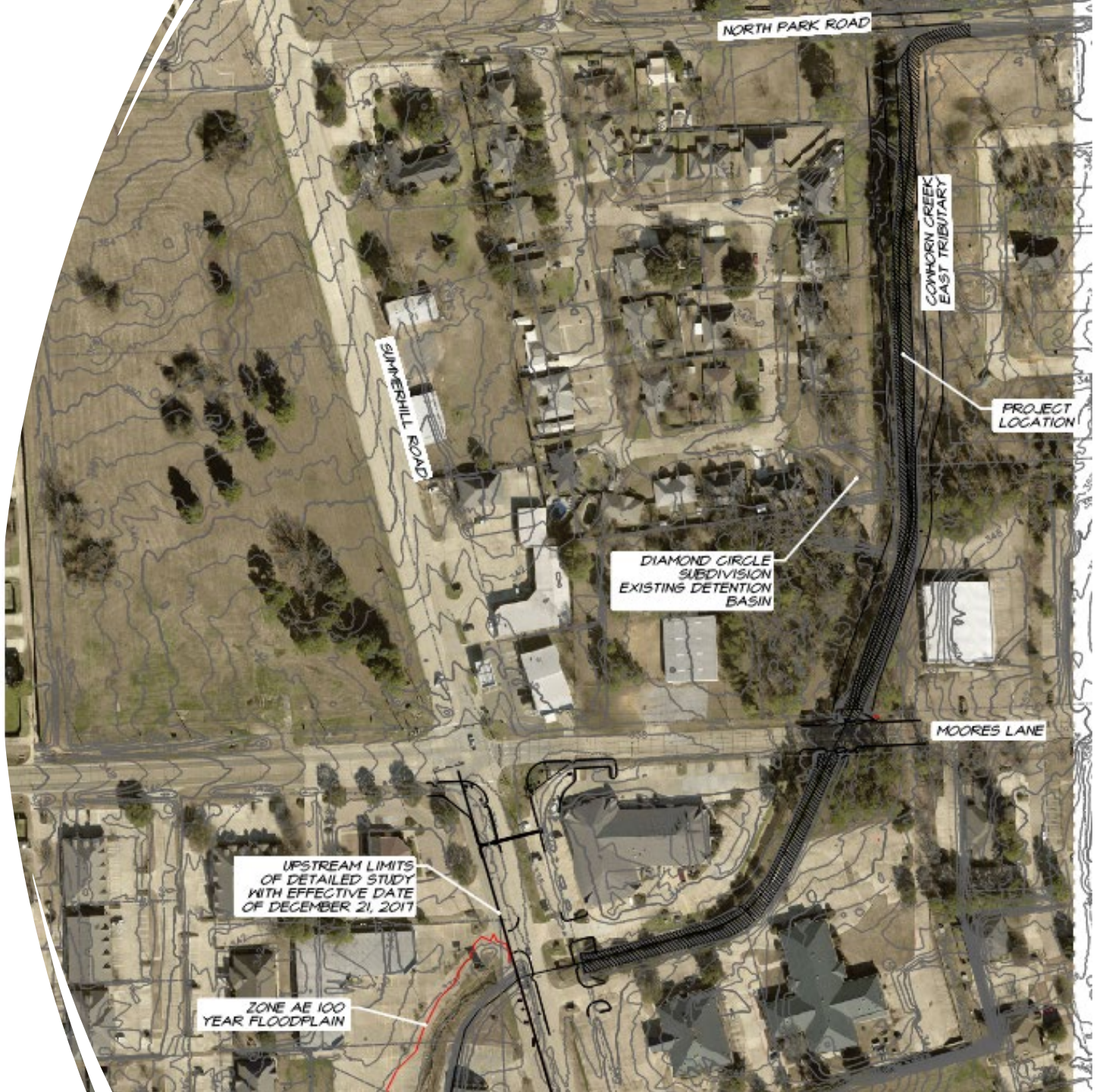
FME 26 – Anderson Creek Wastewater Treatment Plant Study

- Currently developing hydrologic model for Upper Anderson Creek
- FMP Feasibility is still pending, but expected to meet TWDB requirements
- Recommendation: Continue FME analysis



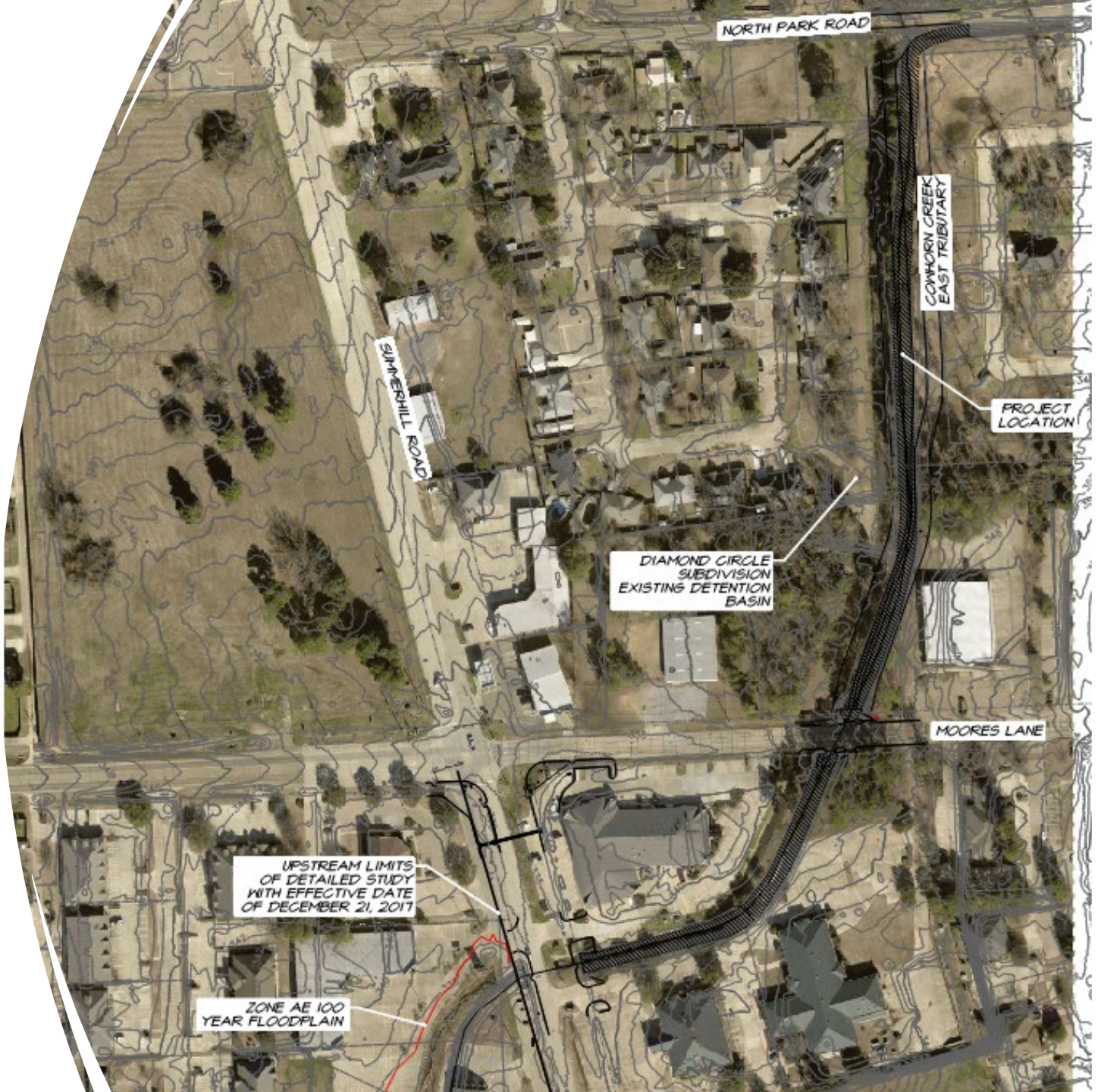
FME 32 – Cowhorn Creek East

- Sponsor: City of Texarkana
- Channel improvements to reduce flooding risks in adjacent community



FME 32 – Cowhorn Creek East

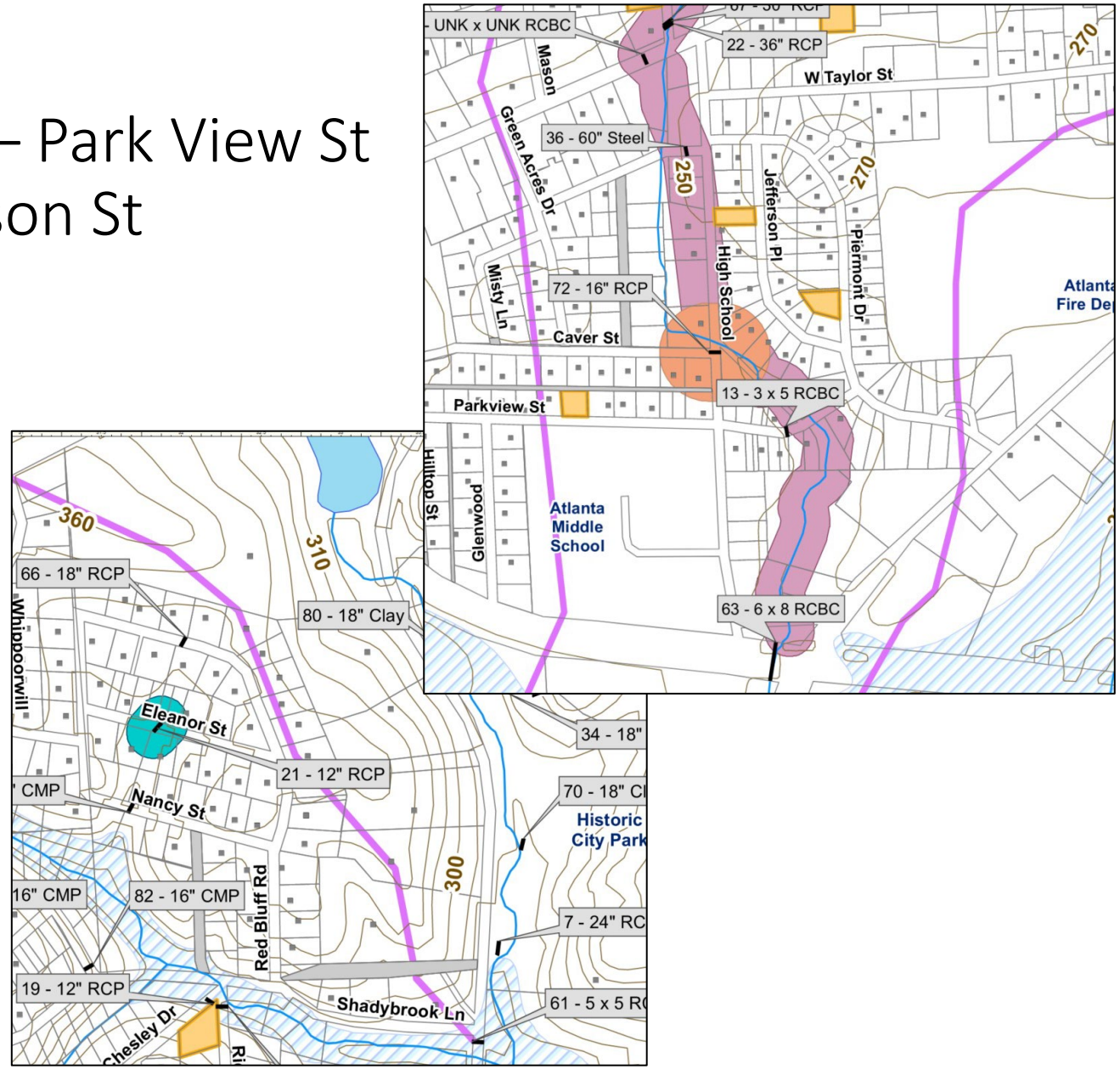
- Meeting with MTG to discuss potential alternative solutions (Mar/17/2023)
- Alternatives are limited and provide a low level of service
- Project benefits appear to be minimal – BCR will likely be very low
- Screening assessment concluded that FMP is unlikely to meet No Negative Impacts requirements
- No further analysis is recommended for this FME



FME 40 – Elanor St & Red Bluff St Phase 3

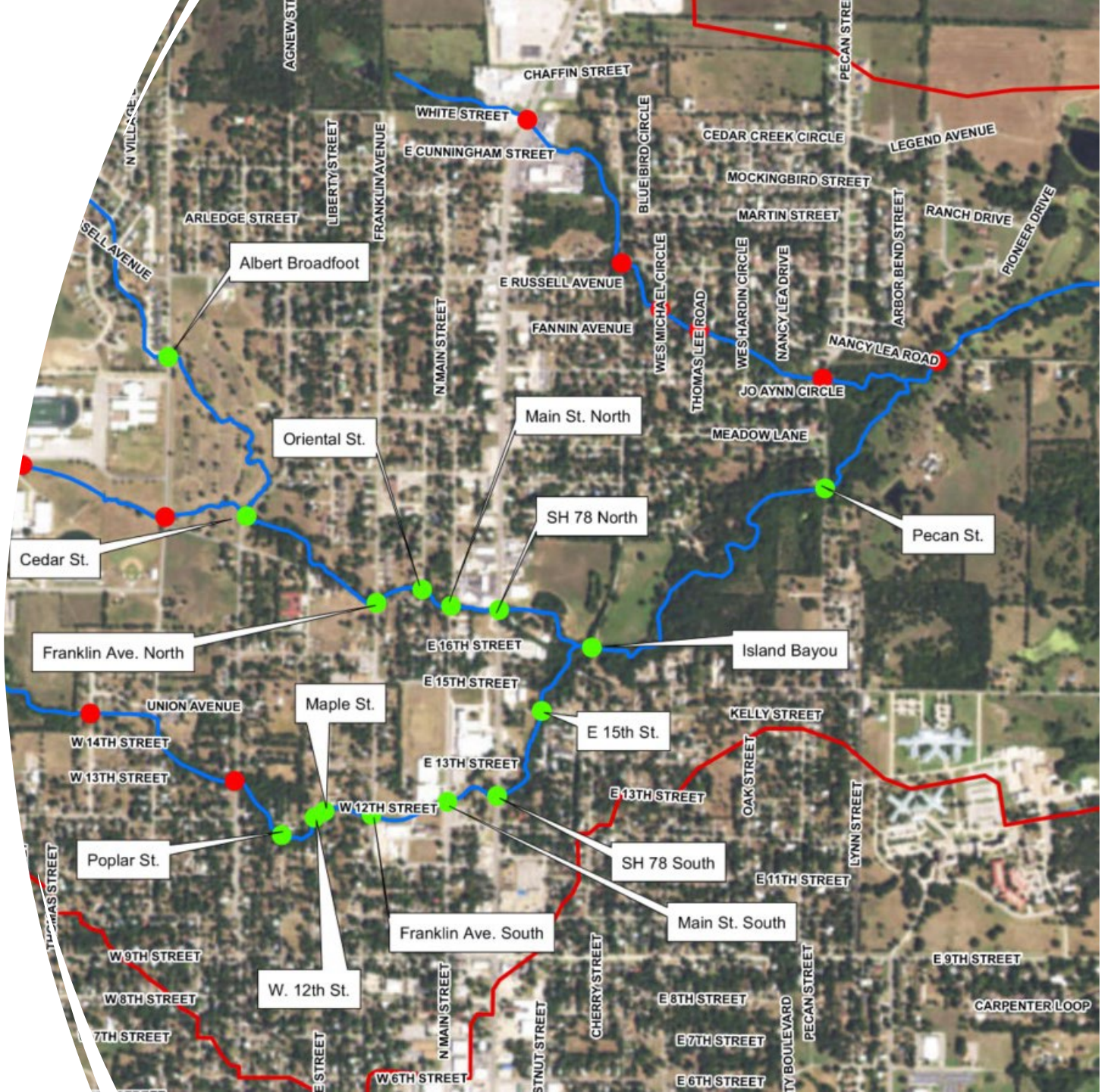
FME 41 – Park View St & Jefferson St Phase 4

- Sponsor: City of Atlanta
- CIP proposed replacing/installing culvert crossings
- No additional information has been obtained from Sponsor
- No further analysis is recommended for this FME

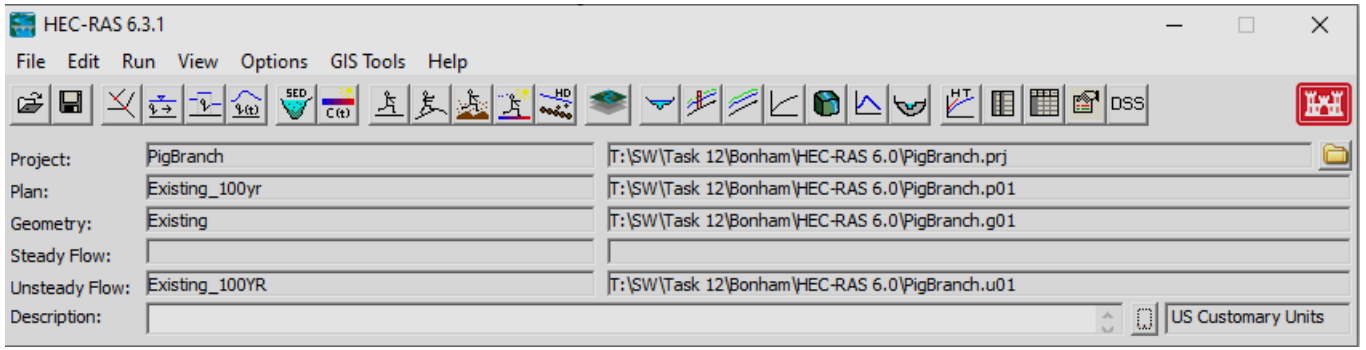


FME 66 – Pig Branch Watershed Culvert Study Update

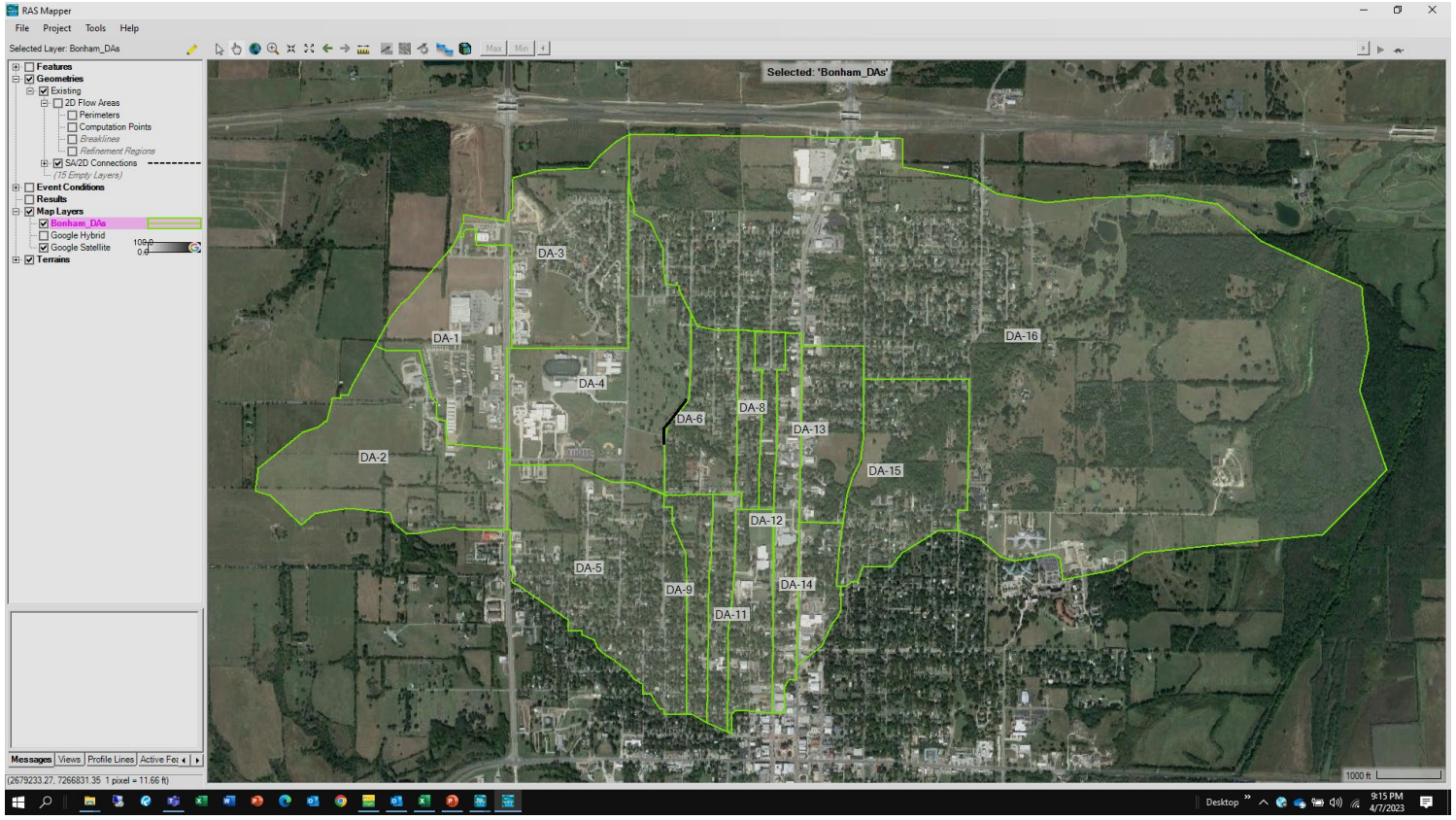
- Sponsor: City of Bonham
- Analysis of multiple culverts and channel improvements



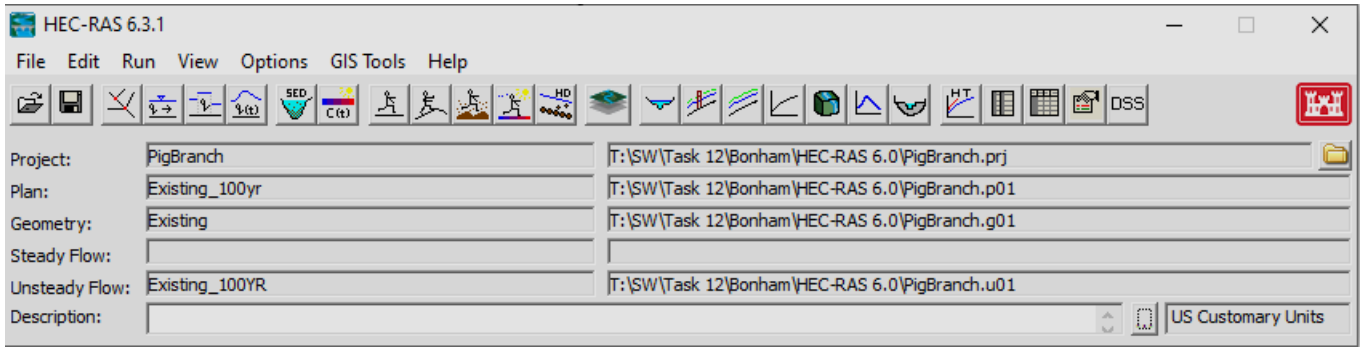
FME 66 – Pig Branch Watershed Culvert Study Update



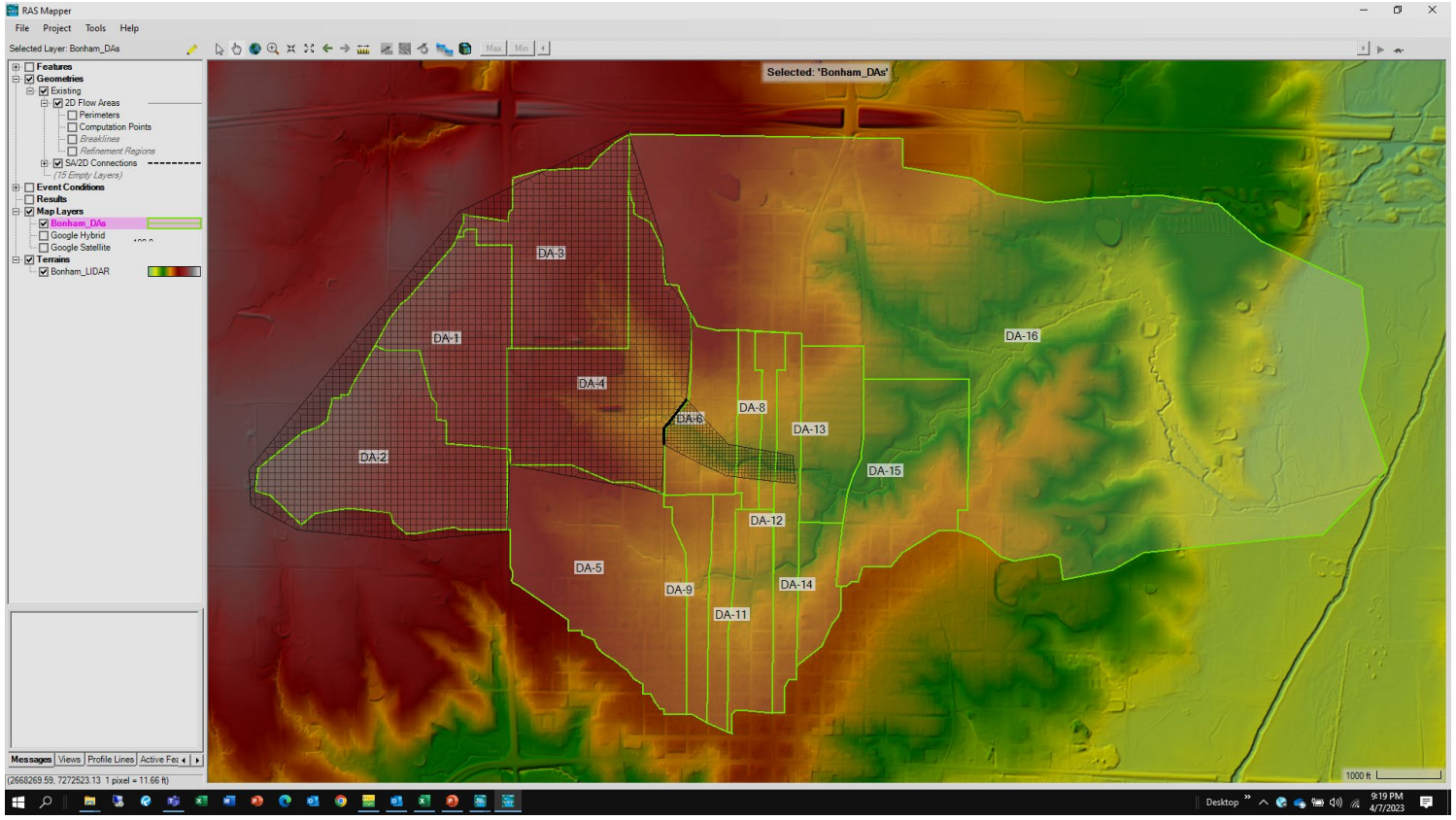
- Hydrologic and hydraulic models are currently being developed
- Drainage areas and other hydrologic parameters adopted from previous study



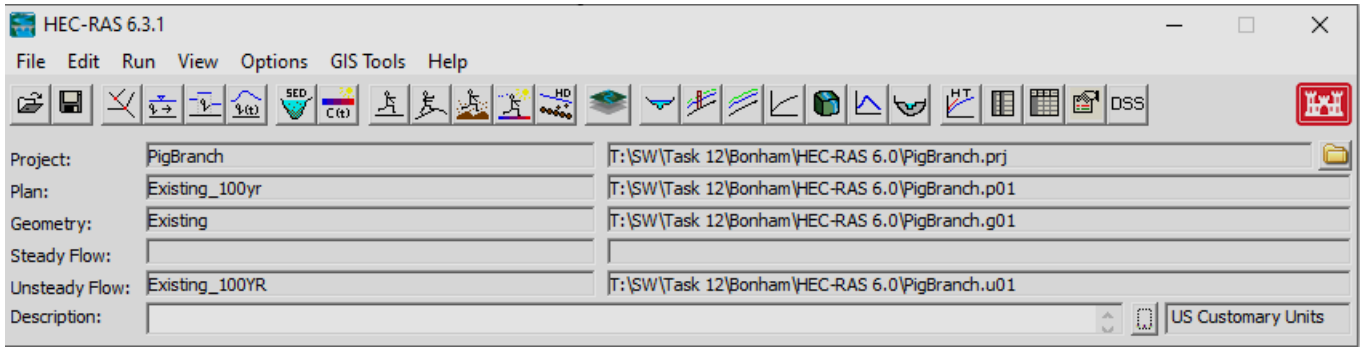
FME 66 – Pig Branch Watershed Culvert Study Update



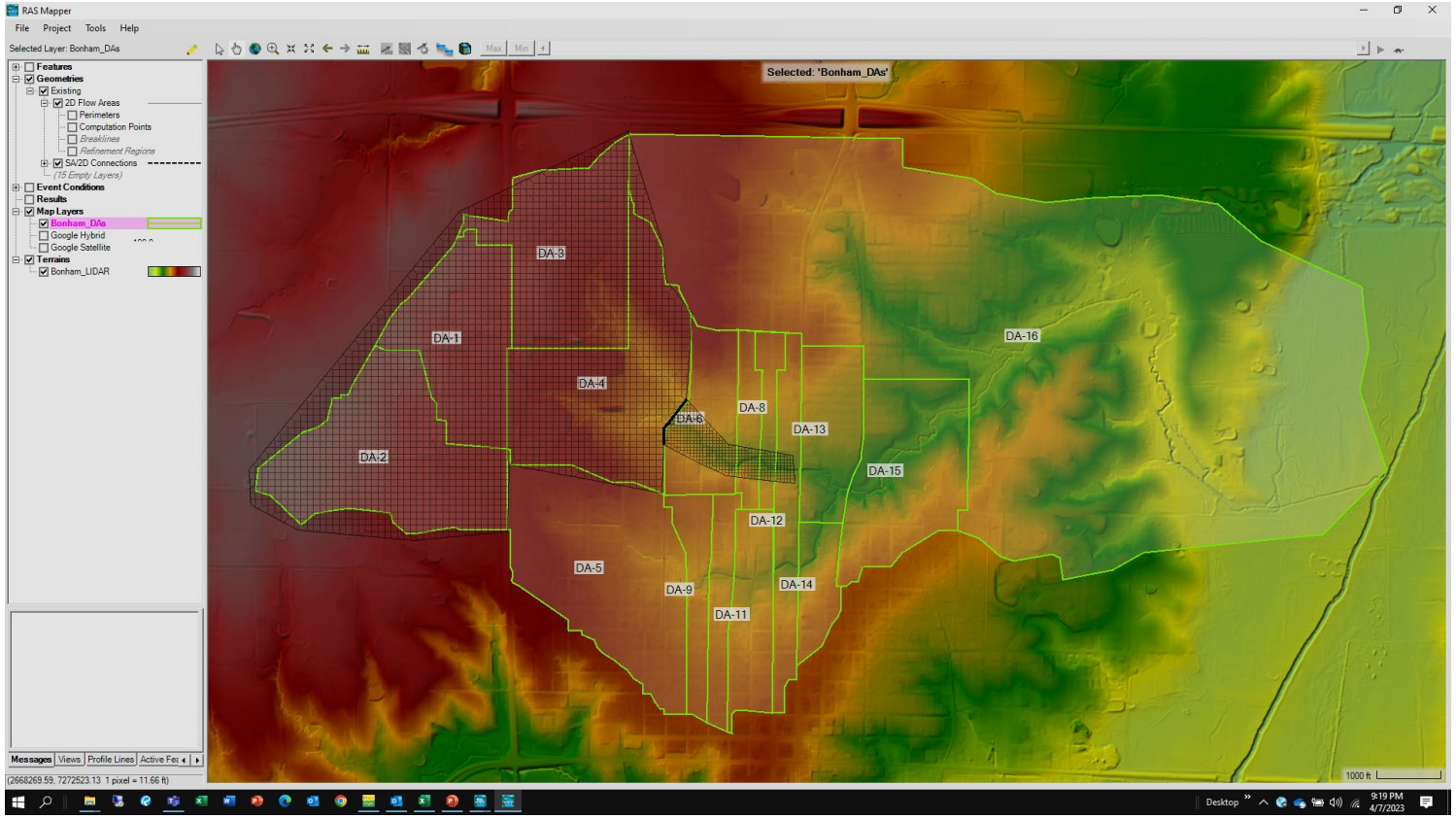
- Hydraulic modeling approach
  - 2D Model
  - Rain-on-Mesh for overland and channels
  - HEC-HMS for urban areas using data from previous study
- Model will focus on culvert upgrades and channel improvements
- Model may include a detention pond alternative



FME 66 – Pig Branch Watershed Culvert Study Update

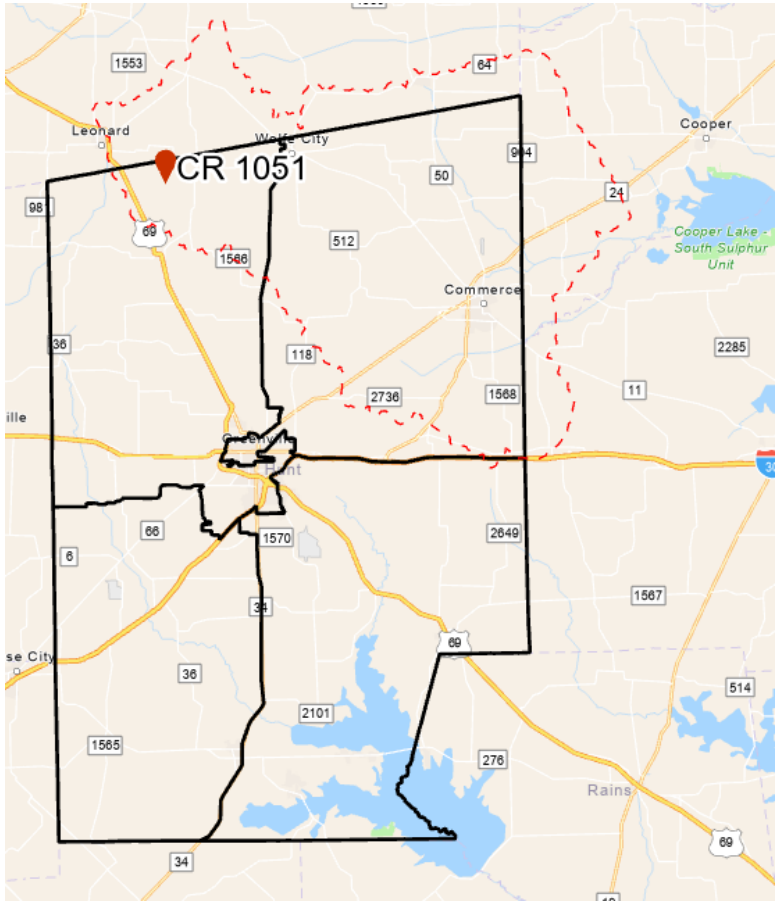


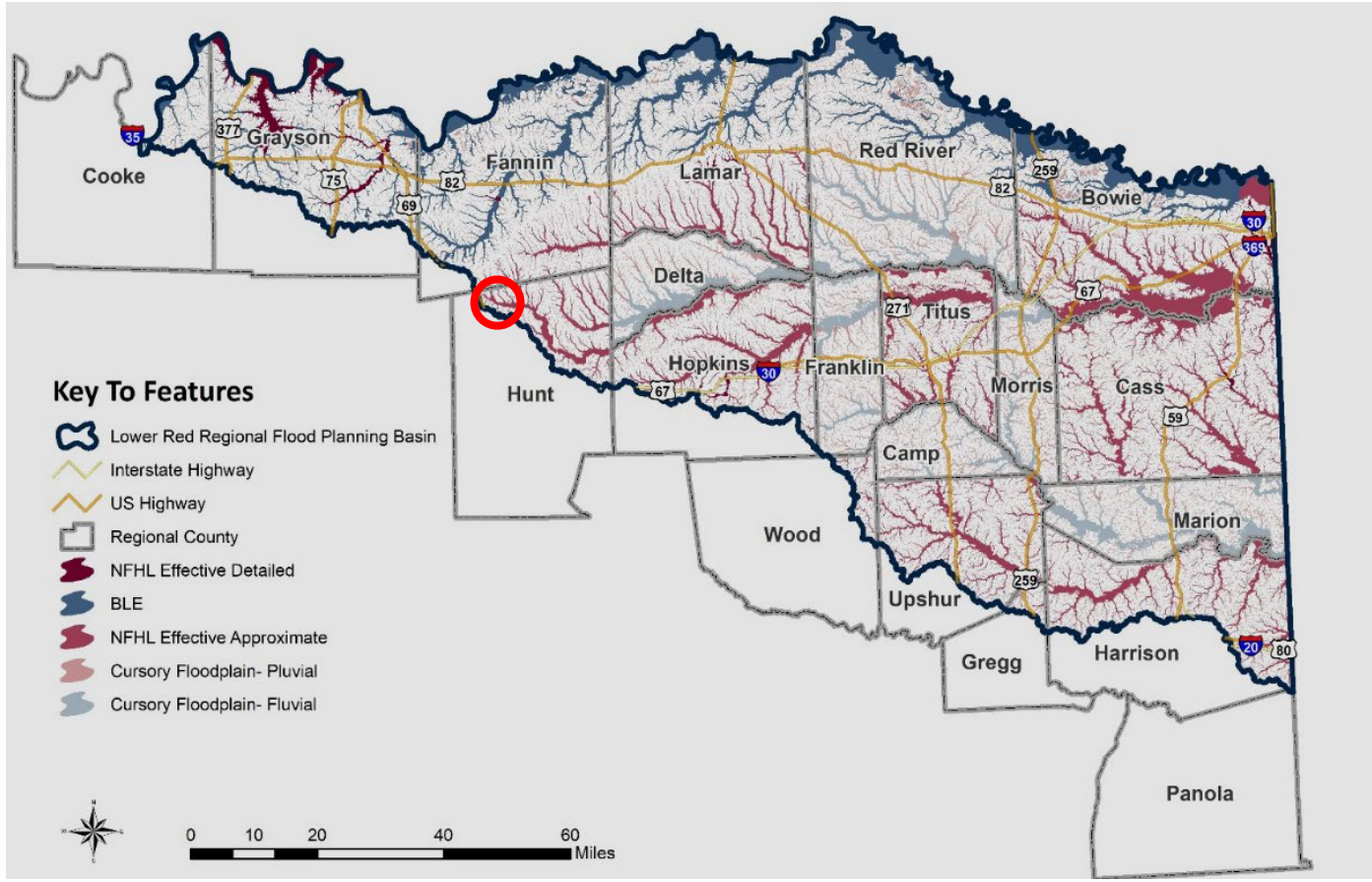
- FMP Feasibility is still pending
  - Level of Service?
  - Project benefits?
  - No Negative Impacts?
- Recommendation: Continue FME analysis



Hunt County
County Road 1051

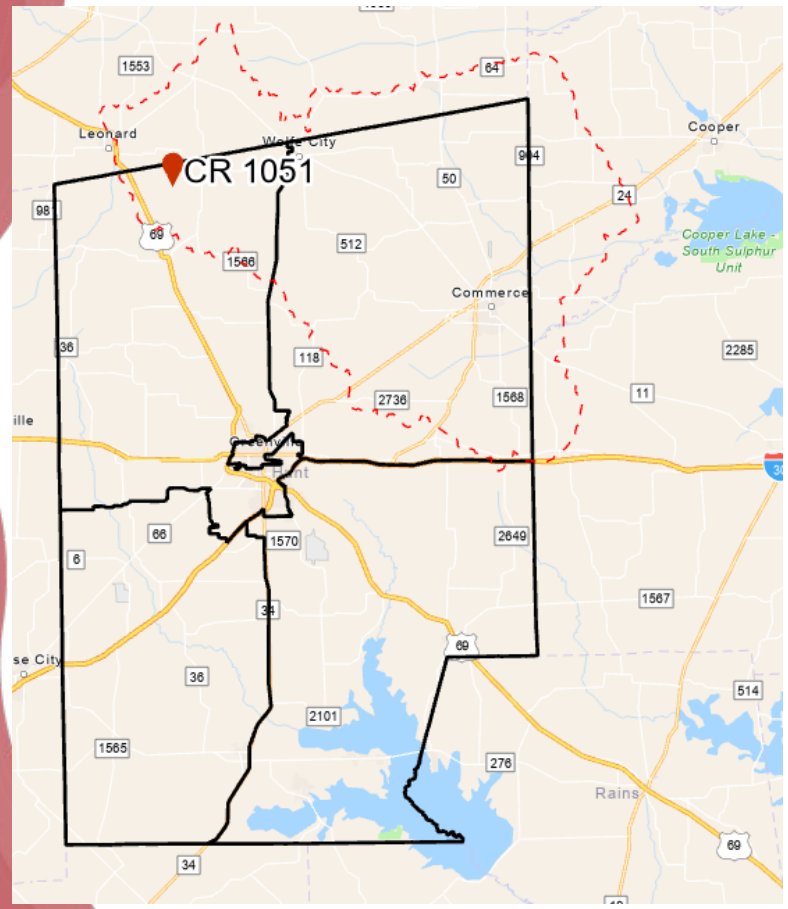
- Sponsor: Hunt County
- New FMP submitted to Region 2
- FMP developed under the Hunt County Countywide Drainage Study
- TWDB Proj. #40027



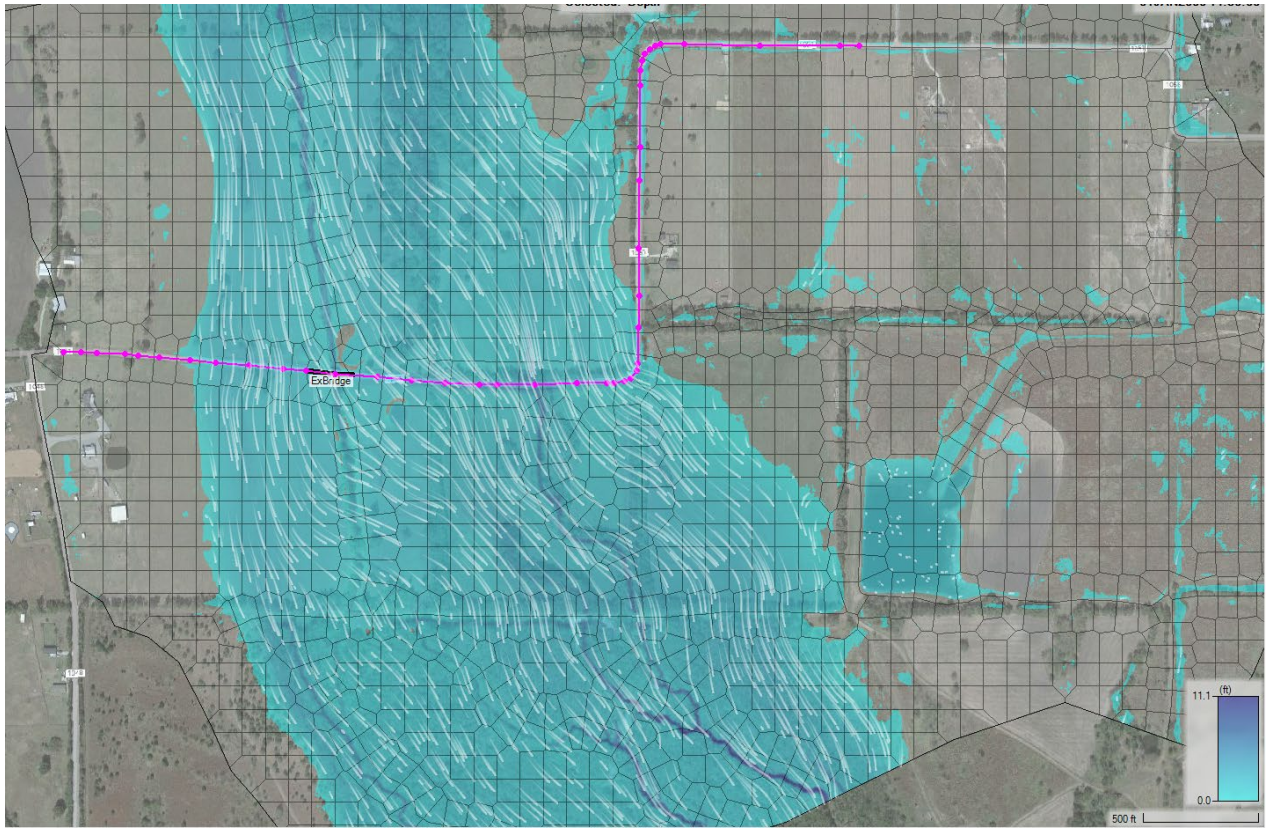


Hunt County
County Road 1051

- Major arterial identified in Hunt County Thoroughfare plan
- Undersized bridge crossing
- Road elevation is lower than bridge
- Significant road overtopping
- 2’ to 3’ depth of flooding over the road for the 2-yr event
- Approximately 2,000 feet of floodplain

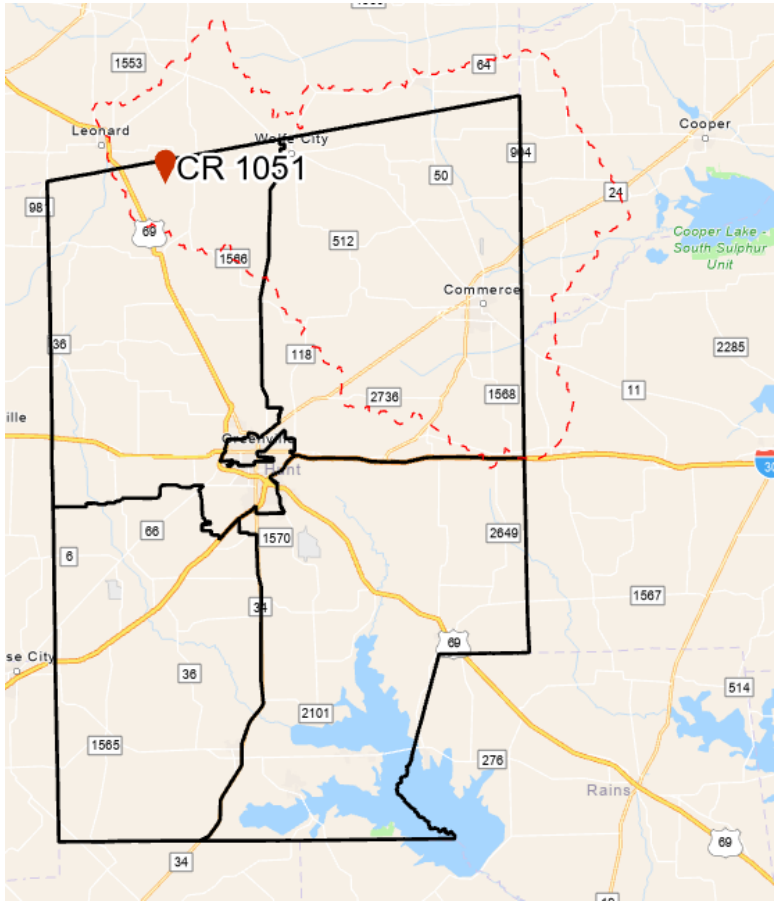


Existing Conditions

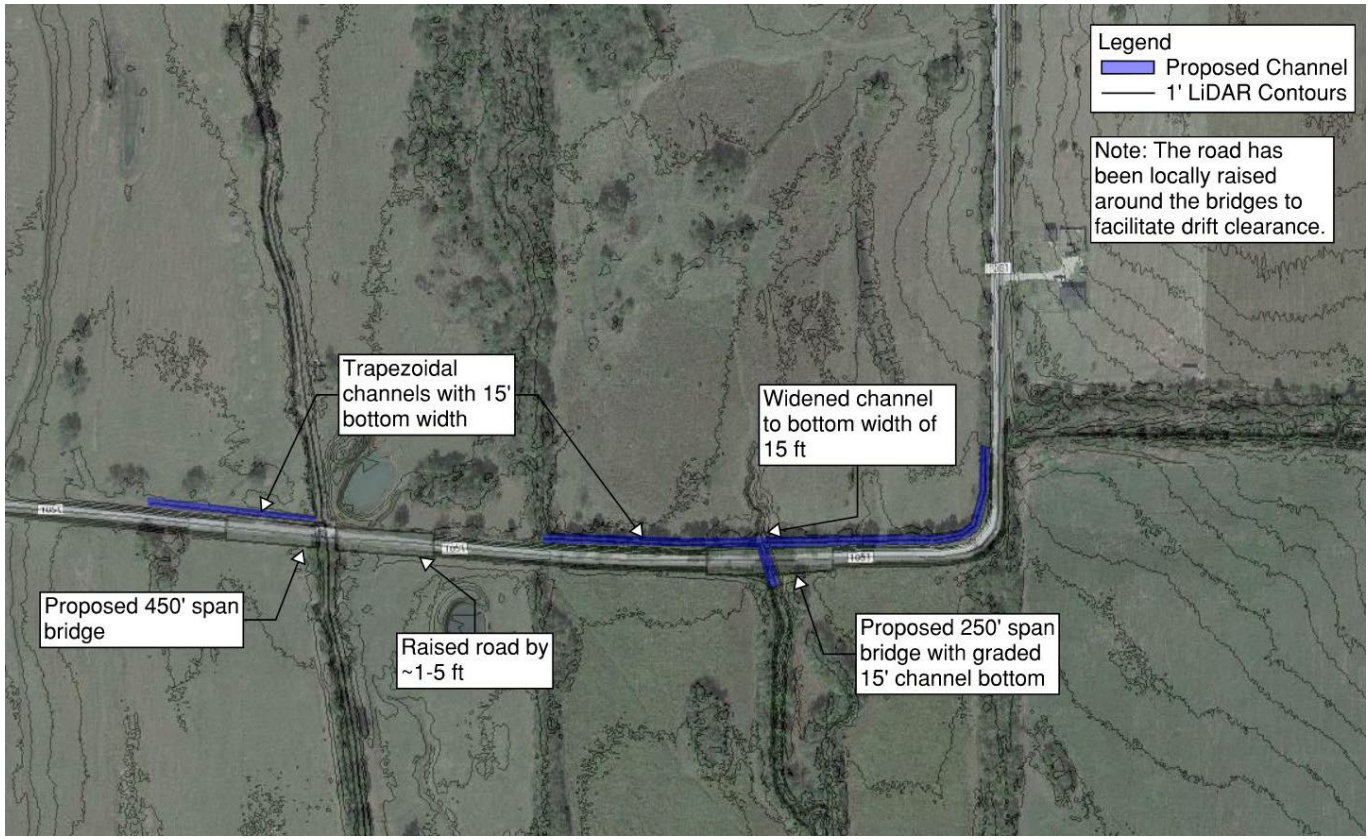


Hunt County
County Road 1051

- Two new bridge crossings
- Raise road between 1’ to 5’
- Side channel improvements
- Estimated Cost: $6.5 million

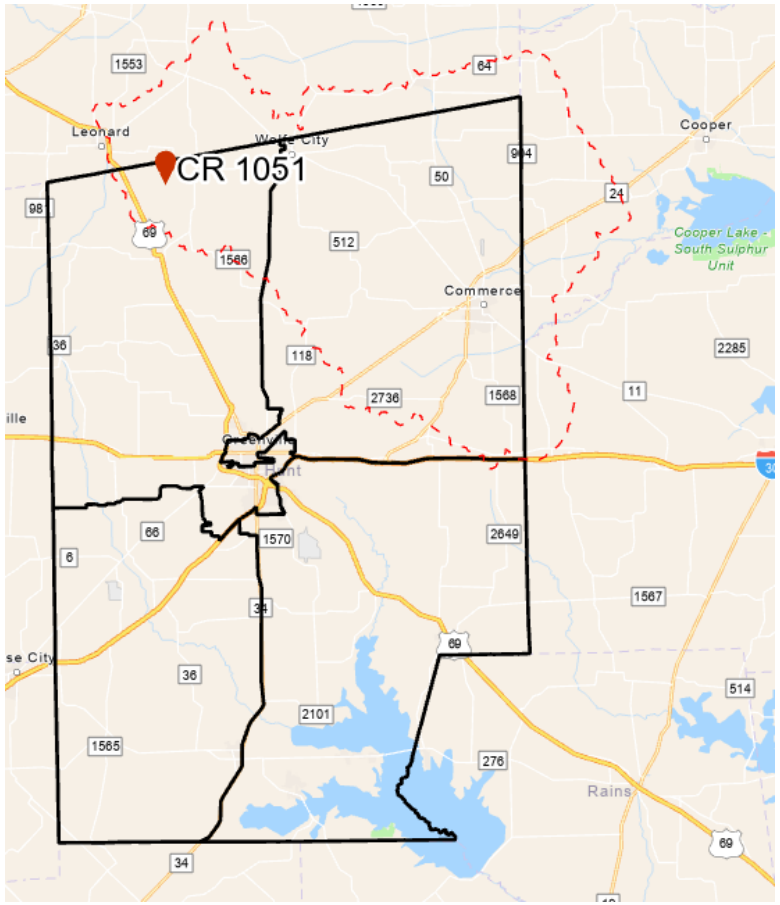


Proposed Improvements

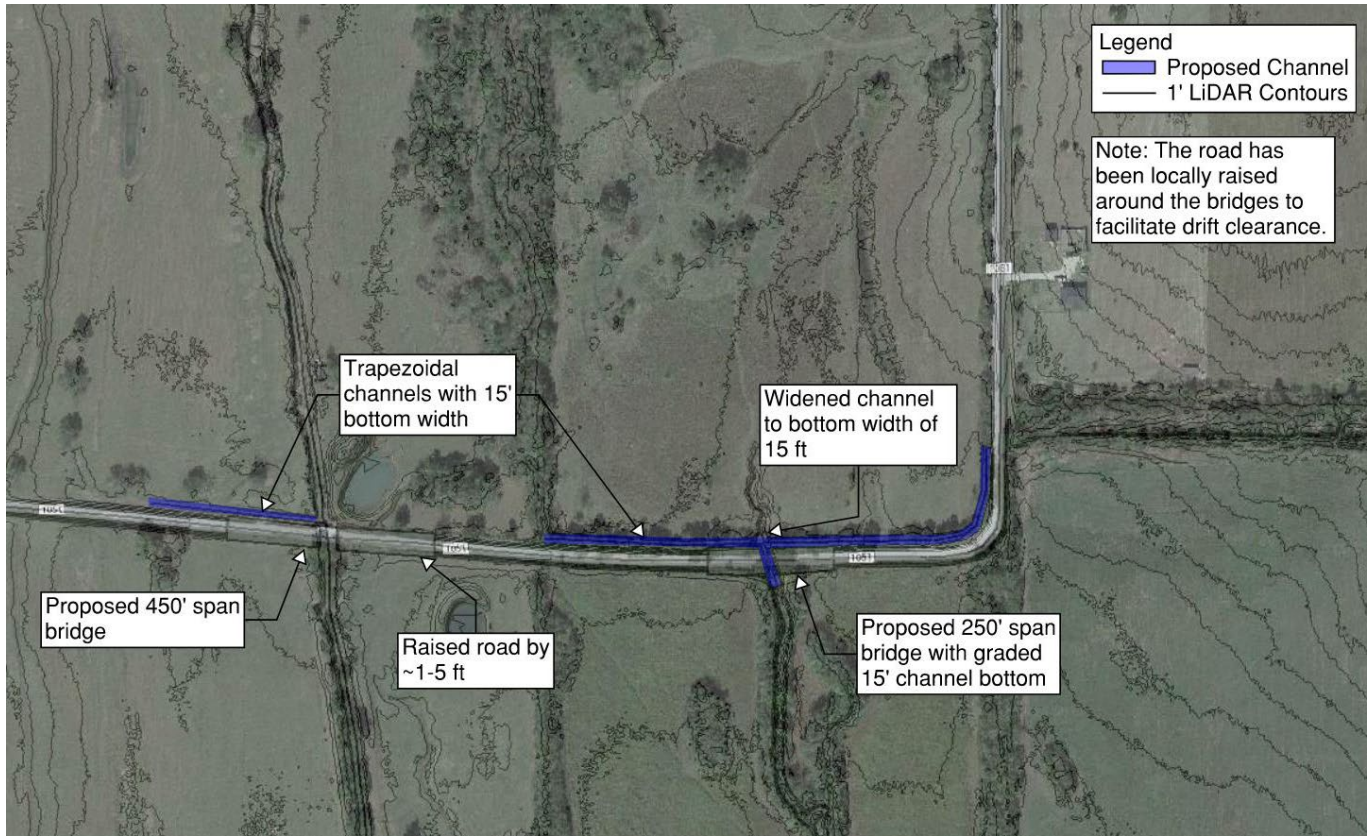


Hunt County
County Road 1051

- BCA in progress
- No negative impacts are anticipated
- Level of Service: 10-yr
- All FMP data and other TWDB requirements will be provided to RFGP

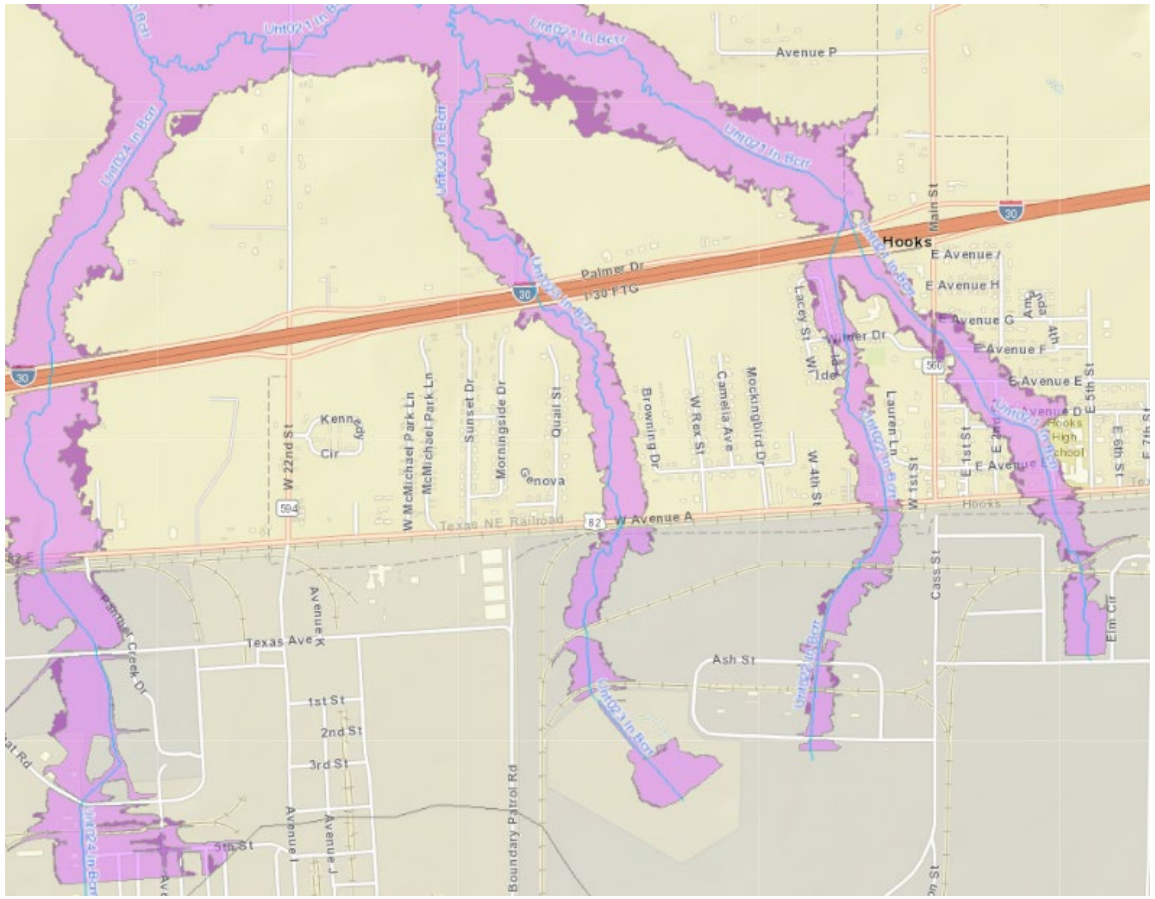


Proposed Improvements



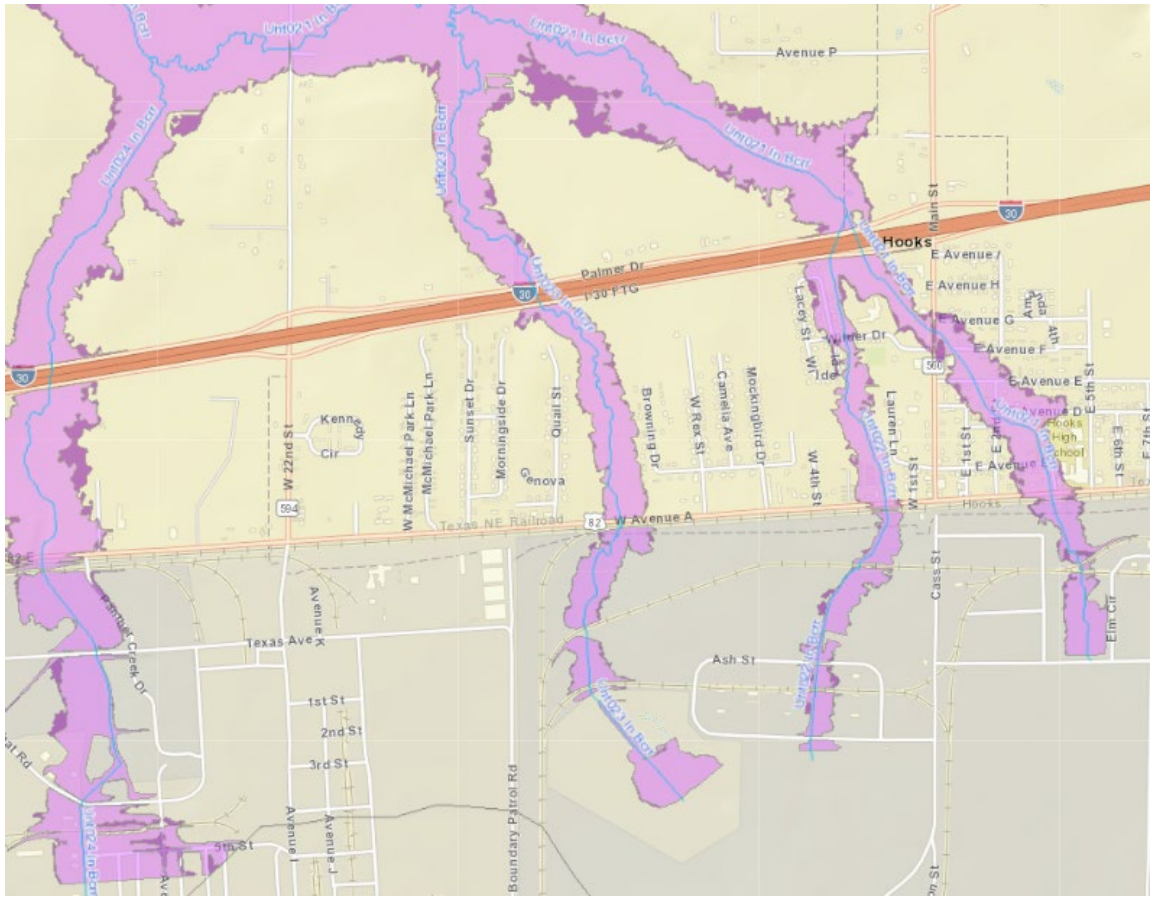
FME 30 - City of Hooks Infrastructure

- Sponsor: City of Hooks
- Address flooding along the creeks in Hooks
- Screening level Assessment:
  - Conducted field visit February 16
  - Updating BLE models to verify flooding issues
  - “No negative impact” determination unknown



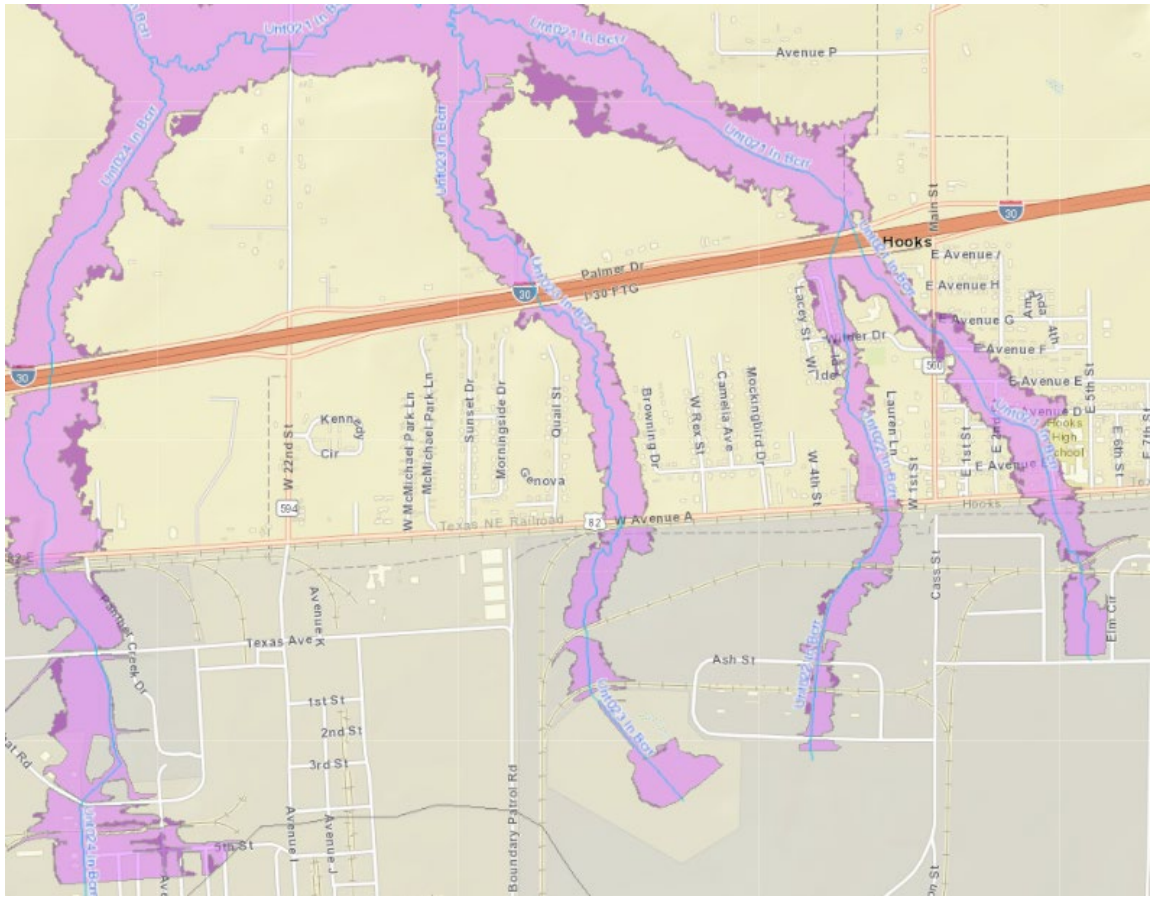
FME 30 - City of Hooks Infrastructure

- Developed updated hydrologic and hydraulic model
  - Drainage areas and other hydrologic parameters calculated
  - Hydraulic analysis modified from existing BLE models
- Analysis is currently in QA/QC



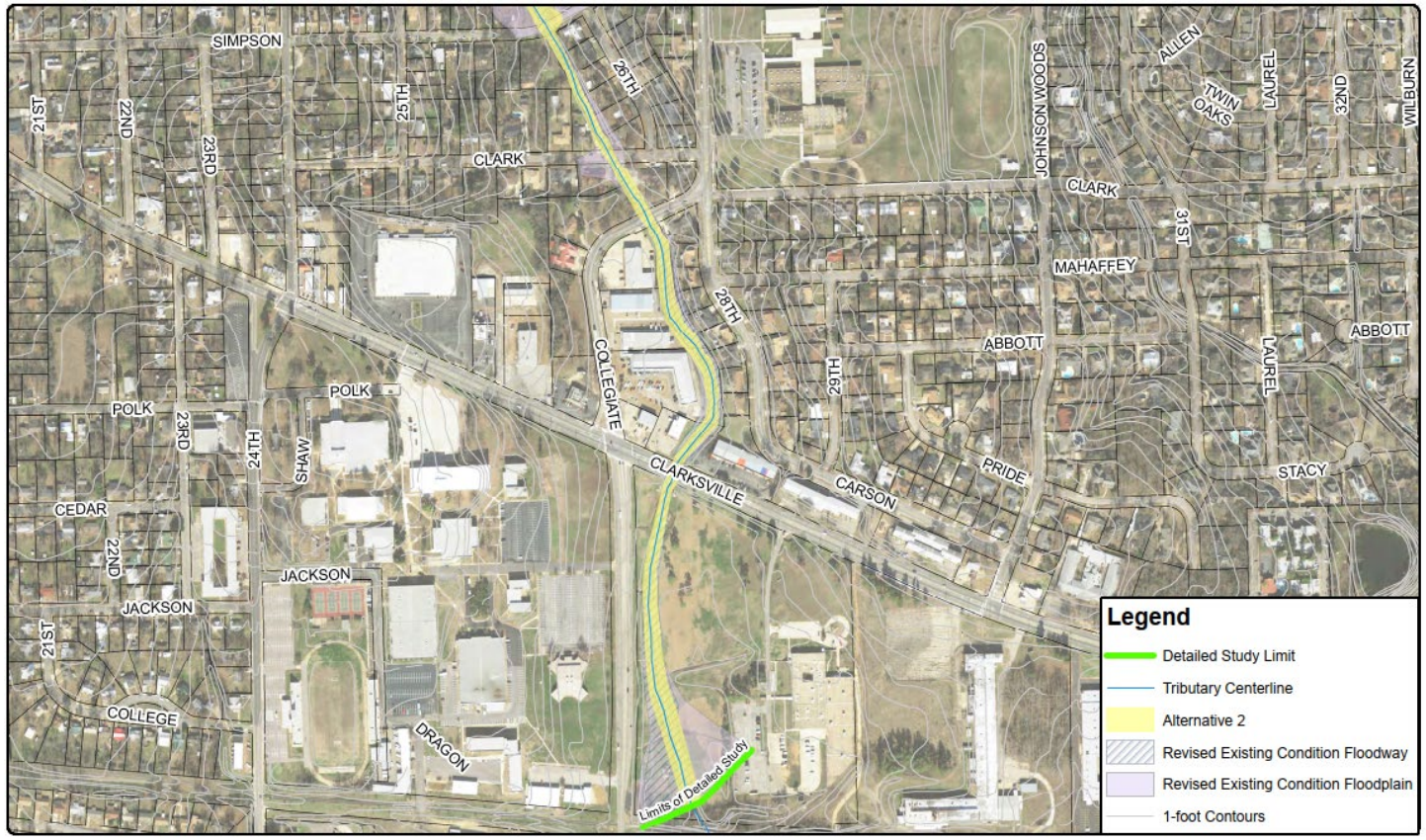
FME 30 - City of Hooks Infrastructure

- FMP Feasibility is still pending
  - Level of Service?
  - Project benefits?
  - No Negative Impacts?
- Recommendation: Continue FME analysis



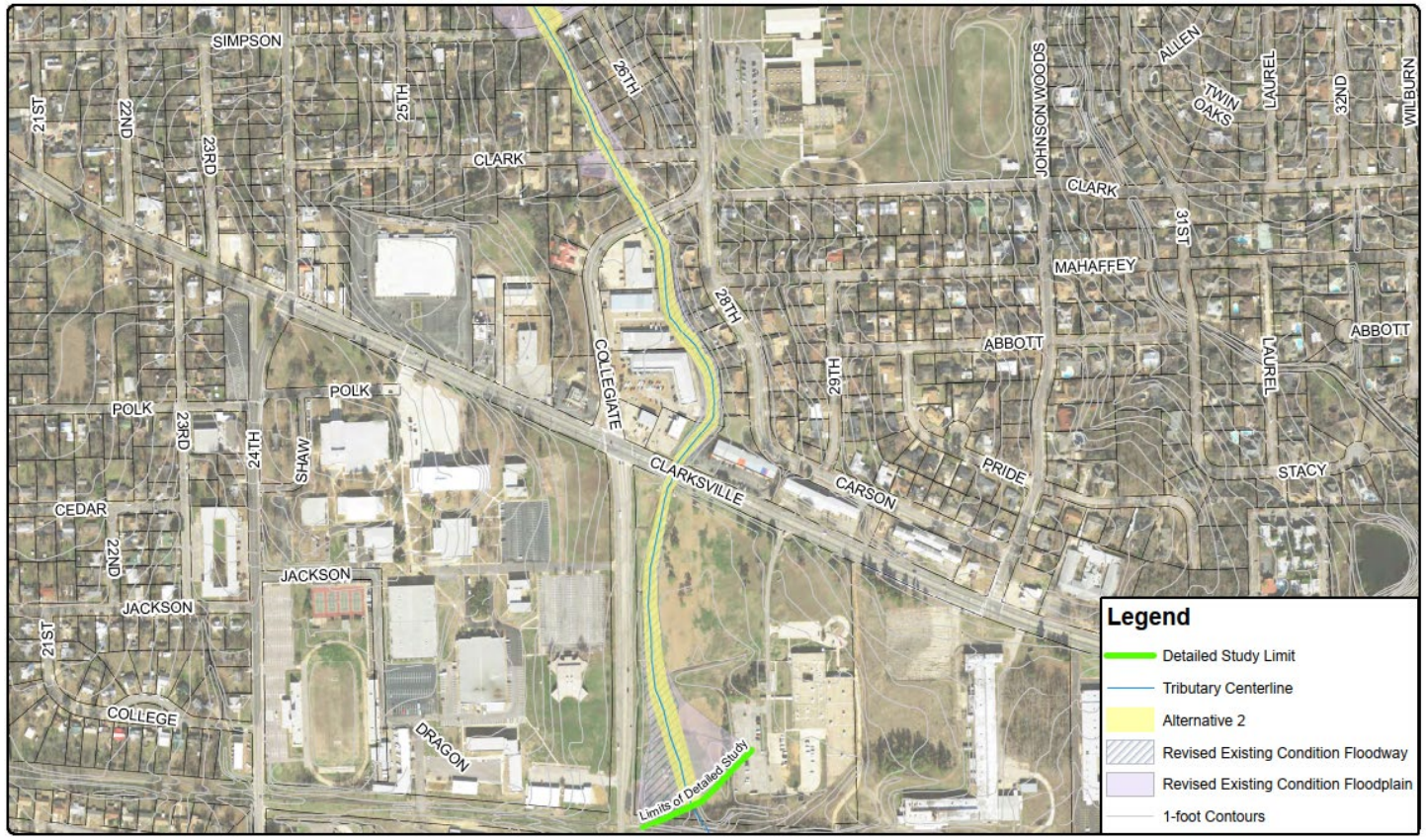
FME 42 - City of Paris Big Sandy Creek Tribs 4 and 6 Improvements

- Sponsor: City of Paris
- Reduce risk of flooding along streams
- Screening level Assessment:
  - Obtained existing conditions models
  - Incorporating three (3) alternatives into one project
  - “No negative impact” determination unknown



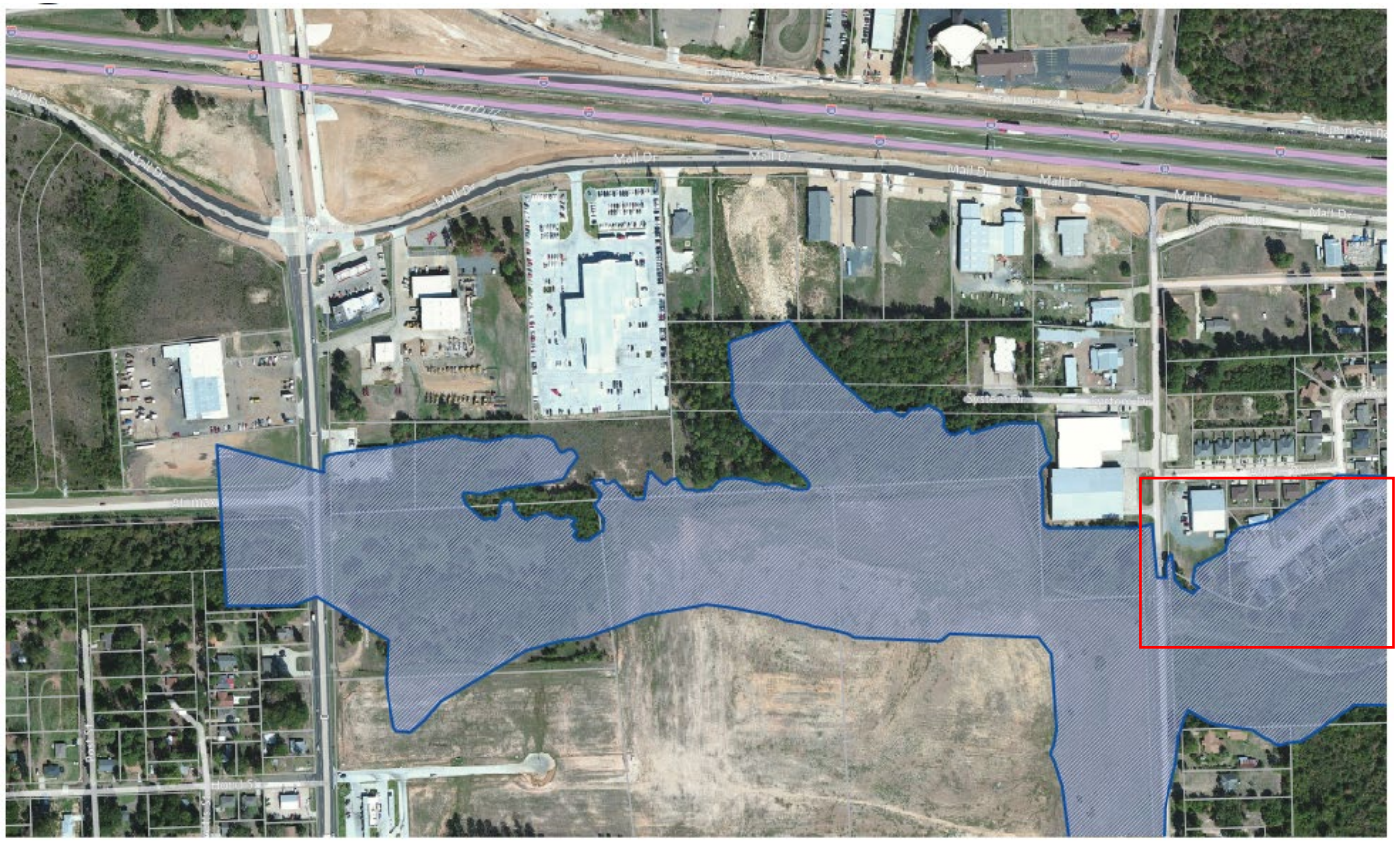
FME 42 - City of Paris Big Sandy Creek Tribs 4 and 6 Improvements

- FMP Feasibility is still pending
  - Level of Service?
  - Project benefits?
  - No Negative Impacts?
- Recommendation: Continue FME analysis



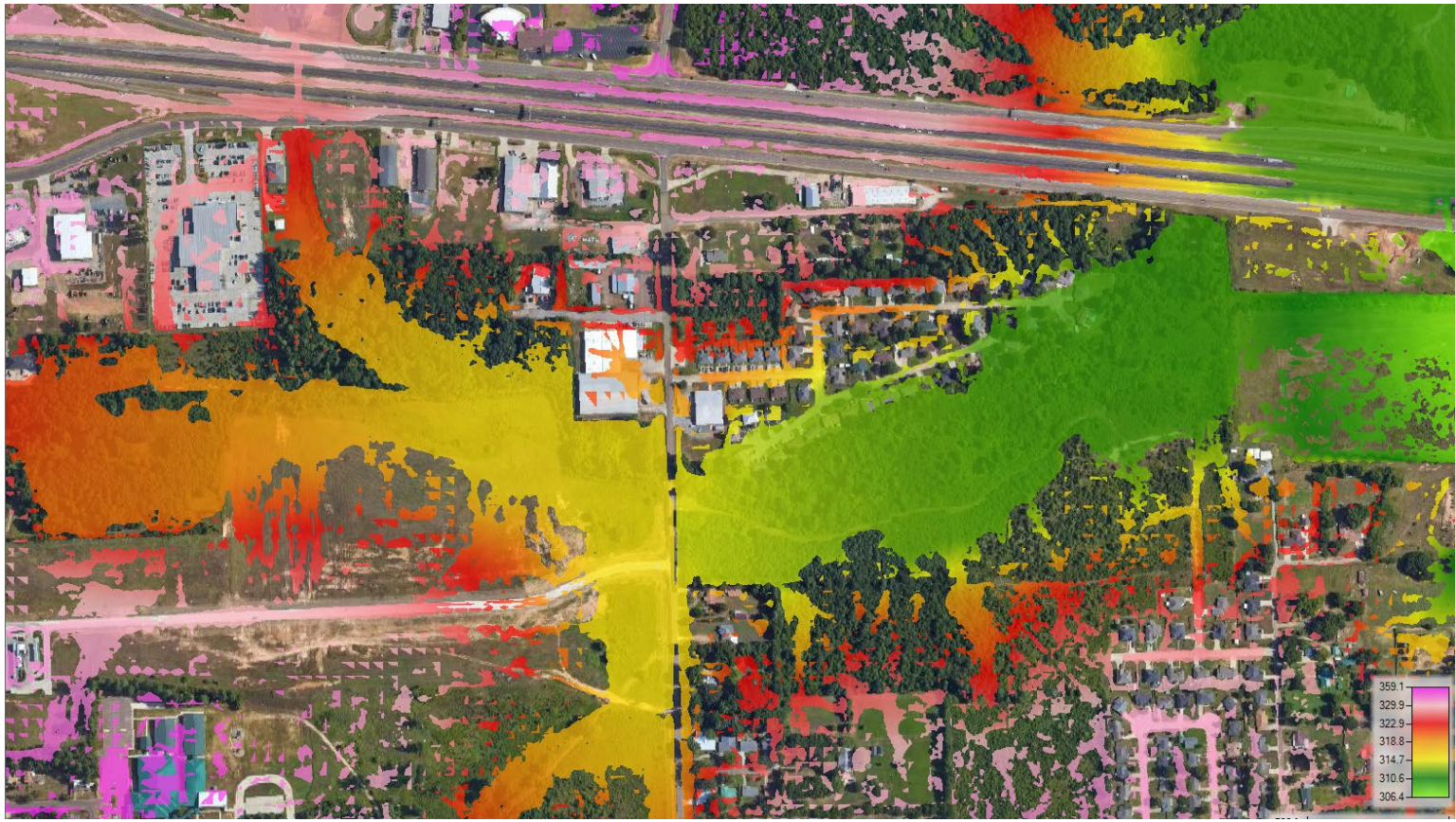
FME 64 - Pecan to Waggoner Creek Channel Improvements

- Sponsor: City of Nash
- Reduce risk of flooding for structures downstream of N. Pecan St.
- Screening level Assessment:
  - Updating BLE models with preliminary mitigation options
  - “No negative impact” determination unknown



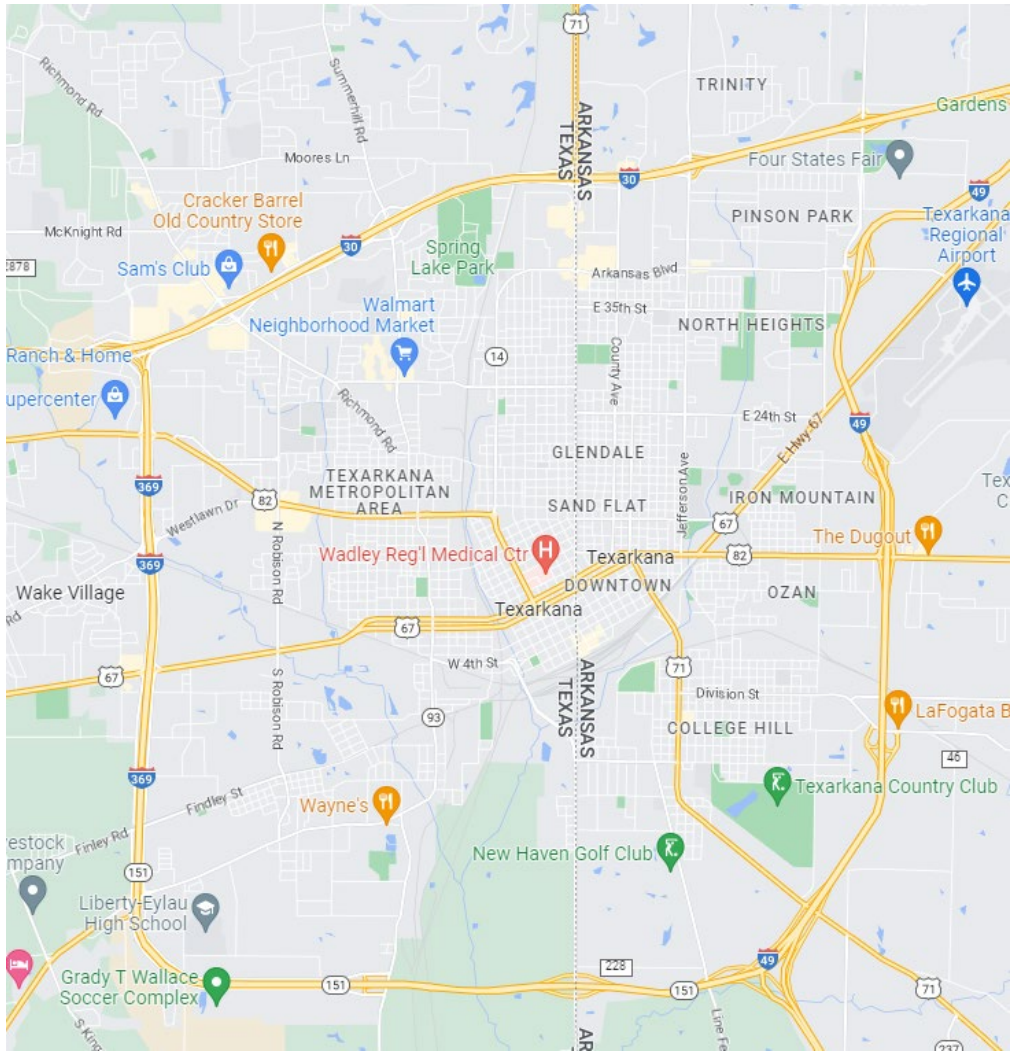
FME 64 - Pecan to Waggoner Creek Channel Improvements

- Alternatives are limited and provide a low level of service
- Little area for required detention
- Screening assessment concluded that FMP is unlikely to meet No Negative Impacts requirements
- No further analysis is recommended for this FME

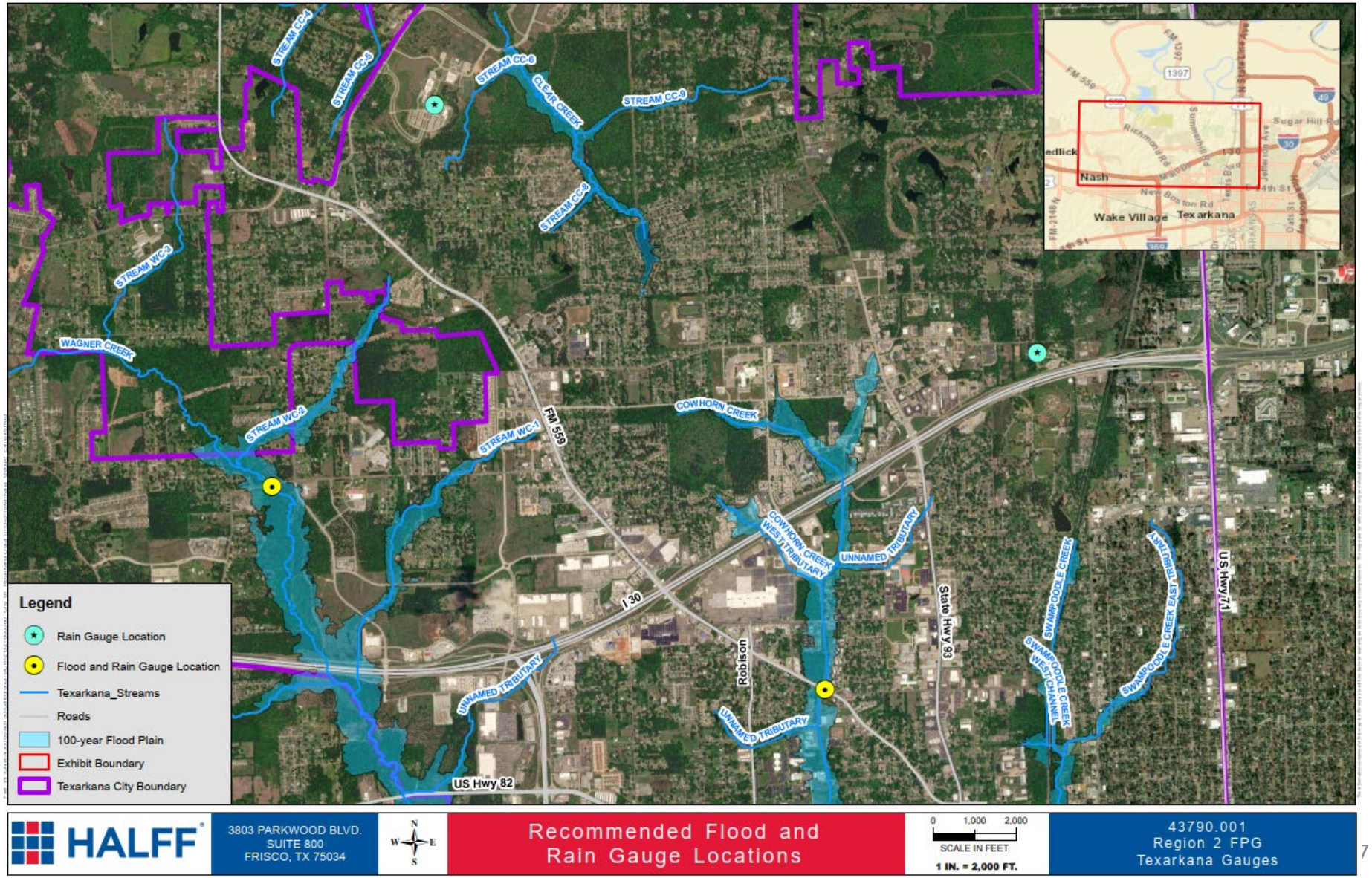


FME 60 - City of Texarkana Gauges

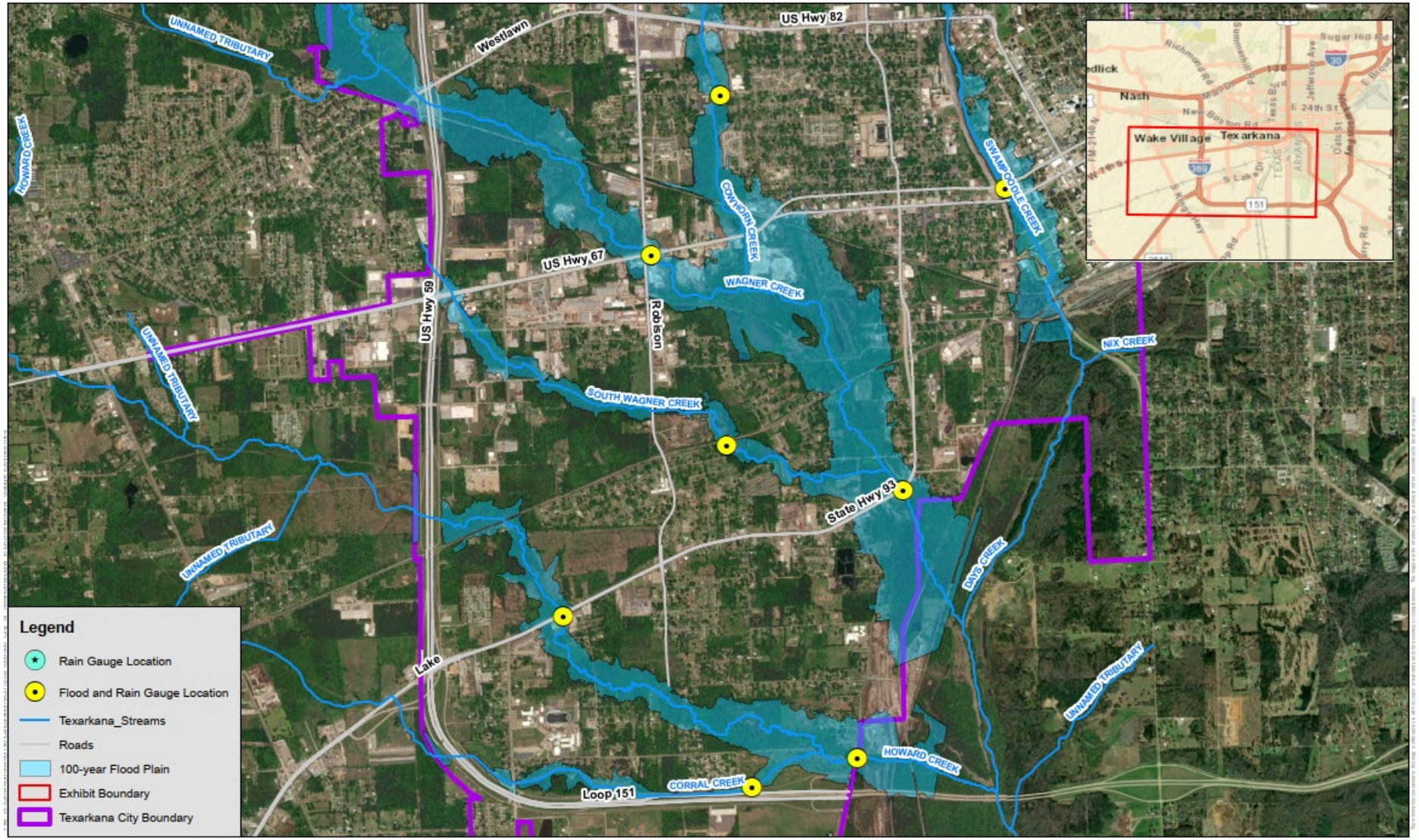
- Sponsor: City of Texarkana
- Install flood warning gauges for flood-prone areas
- Screening level Assessment:
  - Preliminary locations established
  - Scheduling meeting with City
  - FMP would likely meet the “No Negative Impact”
- Recommendation: Continue FME analysis



FME 60 - City of Texarkana Gauges



FME 60 - City of Texarkana Gauges



Schedule

- April 13 – RFPG Meeting
  - Discuss FME Results and potential for FMPs
  - Discuss new FMXs received
- April – May - Prepare Amended RFP
- May 4 – RFPG Meeting
  - Recommend FMPs and new FMEs for inclusion in the plan
  - Update on Amended Plan
- May 11 – Submit Amended RFP for public comment (min 14 days before vote)
- June 1 – Public Meeting, Review and Approve Amended RFP
- June 15 – Public comment period closes
- July 14, 2023 - Amended RFP Due to TWDB

Attachment 1

Texas Water Development Board
Flood Planning Division

DRAFT

Proposed 2024 State Flood Plan Flood Management Evaluation (FME), Flood Mitigation Project (FMP) and Flood Management Strategy (FMS) Ranking Criteria and Weight

Texas Water Code Sec. 16.061, "(b) The state flood plan must include: … (2) a statewide, ranked list of ongoing and proposed flood control and mitigation projects and strategies necessary to protect against the loss of life and property from flooding…"
TWDB rules state that the state flood plan shall incorporate "a statewide, ranked list of recommended FMEs, FMSs, and FMPs that have associated one-time capital costs derived from the Board-approved RFPs (31 TAC §362.4 (c)(5)).
* All flood risk and risk reduction information are for 1% annual chance storm.

		Criteria Name	Criteria Type	Criteria Grouping	FME Ranking Criteria	FME Ranking Weight	FME Grouping Weight	FMP Ranking Criteria	FMP Ranking Percent Weight	FMP Grouping Weight	FMS Ranking Criteria	FMS Ranking Percent Weight	FMS Grouping Weight
REPORTED DATA FROM FME, FMP and FMS FEATURE CLASSES	1	Emergency Need (Y/N)	Other		No	0.0%		No	**0.0%**		No	0.0%	
	2	Estimated number of structures at 100yr flood risk	Flood Risk	Life, Safety and Structures	Yes	15.0%	80.0%	No	**0.0%**	0.0%	Yes	10.0%	45.0%
	3	Residential structures at 100-year flood risk	Flood Risk		Yes	10.0%		No	**0.0%**		Yes	5.0%	
	4	Estimated Population at 100-year flood risk	Flood Risk		Yes	15.0%		No	**0.0%**		Yes	10.0%	
	5	Critical facilities at 100-year flood risk (#)	Flood Risk		Yes	20.0%		No	**0.0%**		Yes	10.0%	
	6	Number of low water crossings at flood risk (#)	Flood Risk		Yes	20.0%		No	**0.0%**		Yes	10.0%	
	7	Estimated number of road closures (#)	Flood Risk	Mobility	Yes	5.0%	15.0%	No	**0.0%**	0.0%	Yes	5.0%	15.0%
	8	Estimated length of roads at 100-year flood risk (Miles)	Flood Risk		Yes	10.0%		No	**0.0%**		Yes	10.0%	
	9	Estimated farm & ranch land at 100-year flood risk (acres)	Flood Risk	Agriculture	Yes	5.0%	5.0%	No	**0.0%**	0.0%	Yes	5.0%	5.0%
	10	Number of structures with reduced 100yr (1% annual chance) Floodplain	Flood Risk Reduction	Life, Safety and Structures				Yes	**5.0%**	50.0%	No	0.0%	20.0%
	11	Number of structures removed from 100yr (1% annual chance) Floodplain	Flood Risk Reduction					Yes	**5.0%**		Yes	10.0%	
	12	Percent of structures removed from 100yr (1% annual chance) Floodplain (**Calculated** by TWDB from reported data)	Flood Risk Reduction					Yes	**10.0%**				
	13	Residential structures removed from 100yr (1% annual chance) Floodplain	Flood Risk Reduction					No	**0.0%**		No	0.0%	
	14	Estimated Population removed from 100yr (1% annual chance) Floodplain	Flood Risk Reduction					Yes	**10.0%**		Yes	10.0%	
	15	Critical facilities removed from 100yr (1% annual chance) Floodplain (#)	Flood Risk Reduction					Yes	**10.0%**		No	0.0%	
	16	Number of low water crossings removed from 100yr (1% annual chance) Floodplain (#)	Flood Risk Reduction					Yes	**10.0%**		No	0.0%	
	17	Estimated reduction in road closure occurrences	Flood Risk Reduction	Mobility				No	**0.0%**	5.0%	No	0.0%	0.0%
	18	Estimated length of roads removed from 100yr floodplain (Miles)	Flood Risk Reduction					Yes	**5.0%**		No	0.0%	
	19	Estimated farm & ranch land removed from 100yr floodplain (acres)	Flood Risk Reduction	Agriculture				Yes	**5.0%**	5.0%	No	0.0%	0.0%
	20	Cost per structure removed from 100-year floodplain	Other					No	**0.0%**		No	0.0%	
	21	Percent Nature-based Solution (by cost)	Other					Yes	**2.5%**		Yes	5.0%	
	22	Benefit-Cost Ratio	Other					Yes	**2.5%**				
	23	Water Supply Benefit (Y/N)	Other					Yes	**5.0%**		Yes	10.0%	
		Subtotal			**100.0%**			**70.0%**			**100.0%**		
FMP PROJECT DETAILS SCORING (COMPUTED BY RFPG, SOME DUPLICATION MAY EXIST)	24	Score 1: Severity - Pre-Project Average Depth of Flooding (100-year)	Flood Risk					Yes	**5.0%**				
	25	Score 2: Severity - Community Need (% Population)	Flood Risk					No	**0.0%**				
	26	Score 3: Flood Risk Reduction	Flood Risk Reduction					See above	**0.0%**				
	27	Score 4: Flood Damage Reduction	Flood Risk Reduction					Yes	**2.5%**				
	28	Score 5: Critical Facilities Damage Reduction	Flood Risk Reduction					No	**0.0%**				
	29	Score 6: Life and Safety	Flood Risk Reduction					Yes	**5.0%**				
	30	Score 7: Water Supply	Other Benefits					Yes	**5.0%**				
	31	Score 8: Social Vulnerability	Other					Yes	**2.5%**				
	32	Score 9: Nature-Based Solution	Other Benefits					See above	**0.0%**				
	33	Score 10: Multiple Benefits	Other Benefits					Yes	**2.5%**				
	34	Score 11: O&M	Other					Yes	**2.5%**				
	35	Score 12: Admin, Regulatory Obstacles	Other					No	**0.0%**				
	36	Score 13: Environmental Benefit	Other Benefits					Yes	**2.5%**				
	37	Score 14: Environmental Impact	Other Benefits					No	**0.0%**				
	38	Score 15: Mobility	Other Benefits					Yes	**2.5%**				
	39	Score 16: Regional (Geographic Distribution)	Other Benefits					No	**0.0%**				
		Subtotal			**0.0%**			**30.0%**			**0.0%**		
		Total			**100.0%**			**100.0%**			**100.0%**		

Working document generated for stakeholder feedback.

Please refer to RFP Exhibit C (pages 114 - 135) for definition of Project Details Scoring:

Exhibit C: Technical Guidelines for Regional Flood Planning

1 Severity Ranking - Pre-Project Average Depth of Flooding (100-year): Ranking of severity based on the baseline/pre-project average 100-year flood depth.
2 Severity Ranking - Community Need (% Population): Ranking of severity based on a community's need by percentage of project community affected by population.
3 Flood Risk Reduction: Ranking of reduced flood risk by percentage of structures removed from the 100-year floodplain in post- project condition.
4 Flood Damage Reduction: Ranking of flood risk reduction (property protection) by a percentage of 100-year damage reduction calculation.
5 Critical Facilities Damage Reduction: indication of reduced flood risk by percentage of critical facilities removed from the 100-year floodplain in post-project condition.
6 Life and Safety Ranking (Injury/Loss of life): Ranking project based on life/injury risk percentage using estimates of area hazard rating, area vulnerability rating, and historical loss of life injury data for project.
7 Water Supply Ranking: Ranking project based on a project's water supply benefits to direct or indirect water availability and/or supply.
8 Social Vulnerability Ranking: A ranking based on the Center for Disease Control SVI data for Texas, by calculating an average project SVI by census tract and classifying the vulnerability level.
9 Green/Nature-Based Solution Ranking: Ranking by the percentage of project cost that qualifies as green/nature based as reported by RFPG.
10 Multiple Benefit Ranking: Ranking a project based on the reporting of significant, measurable, expected benefits to: recreation, transportation, social and quality of life, local economic impacts, meeting sustainability goals, and/or project resilience goals.
11 Operations and Maintenance Ranking: Project ranking by expected level of O&M needs and annual costs provided.
12 Administrative, Regulatory, and other implementation obstacles/difficulty ranking: Ranking based on anticipated project limitations and/or requirements in terms of administrative, regulatory, and other implementation obstacles.
13 Environmental Benefit Ranking: Ranking of expected level of environmental benefits to be delivered by project to water quality, cultural heritage, habitat, air quality, natural resources, agricultural resources, and soils/erosion and sedimentation.
14 Environmental Impact Ranking: Ranking of expected level of adverse environmental impacts due to project affecting water quality, cultural heritage, habitat, air quality, natural resource protection, agricultural resources, and erosion and sedimentation.
15 Technical Complexity Ranking: Ranking of estimated project design, modeling, and construction requirements.
16 Mobility Ranking: Ranking project improvement and protection of mobility during flood events, with particular emphasis on emergency service access and major access routes.

Region 2 Lower Red-Sulphur-Cypress Regional Flood Plan

Comment No.	SOW Task No.	Task Name	Item Type	Ex C Item	Ex D Table No.	Ex D feature class	Level 1	Level 2	RFPG Response
1	10	Files Submitted					PDF files for Appendices 1 and 2 do not appear to be included in the submittal. Please submit these documents.		
2	10	Adequately provides for the preservation of life and property						Please include a statement as to whether the RFP adequately provides for the preservation of life and property and the development of water supply sources, where applicable.	
3	10	Public Comments addressed						Page 10-8 appears to contain the word "deigning" rather than "designing". Please consider revising.	
4	1	Existing Infrastructure	Map 1	Section 2.1				Please consider including page numbers in the appendices.	
5	4B	FMP	GIS feature class		25	FMP_HazPost		Layer titled FMP_HazPost is found, but there is no accompanying information.	
6	5	FME Recs	GIS feature class		23	FME	Please populate required field 'SOURCE'.		
7	5	FME Recs	GIS feature class		23	FME	In the FME feature class, 38 FMEs appear to have a higher total population than the max of day and night populations. Please reconcile.		
8	5	FMP Recs	Table	Table 16			Cumulative Area in 100yr (1% annual chance) floodplains is 11 square miles in the geodatabase as opposed to 6 square miles in the Exhibit C Table 16. Please reconcile.		
9	5	FMP Recs	Table	Table 16			Cumulative Estimated number of structures in 100yr (1% annual chance) floodplains is 1,511 in the geodatabase as opposed to 715 in the Exhibit C Table 16. Please reconcile.		
10	5	FMP Recs	Table	Table 16			Cumulative Residential structures in 100yr (1% annual chance) floodplains is 1,095 in the geodatabase as opposed to 471 in the Exhibit C Table 16. Please reconcile.		
11	5	FMP Recs	Table	Table 16			Cumulative Estimated length of roads in 100yr (1% annual chance) floodplains is 71 miles in the geodatabase as opposed to 36 miles in the Exhibit C Table 16. Please reconcile.		
12	5	FMP Recs	Table	Table 16			Cumulative Estimated farm & ranch land in 100yr (1% annual chance) floodplains is 70 acres in the geodatabase as opposed to 0 acres in the Exhibit C Table 16. Please reconcile.		
13	5	FMP Recs	Table	Table 16				Cumulative Estimated Population removed from 100yr (1% annual chance) floodplains is 654 in the geodatabase as opposed to 635 in the Exhibit C Table 16. Please reconcile.	
14	5	FMP Recs	GIS feature class		24	FMP	***Please populate required field 'BC_RATIO' for all recommended FMPs. For example, FMP ID 023000001 appears to be blank.		
15	5	FMP Recs	GIS feature class		24	FMP	Cumulative Area in 100yr (1% annual chance) floodplains is 11 square miles in the geodatabase as opposed to 6 square miles in the Exhibit C Table 16. Please reconcile		
16	5	FMP Recs	GIS feature class		24	FMP	Cumulative Estimated number of structures in 100yr (1% annual chance) floodplains is 1,511 in the geodatabase as opposed to 715 in the Exhibit C Table 16. Please reconcile.		

*** Level 1 comment(s) that had been made during the TWDB review of draft regional flood plans that do not appear to have been fully addressed in the final plan.

Region 2 Lower Red-Sulphur-Cypress Regional Flood Plan

Comment No.	SOW Task No.	Task Name	Item Type	Ex C Item	Ex D Table No.	Ex D feature class	Level 1	Level 2	RFPG Response
17	5	FMP Recs	GIS feature class		24	FMP	Cumulative Residential structures in 100yr (1% annual chance) floodplains is 1,095 in the geodatabase as opposed to 471 in the Exhibit C Table 16. Please reconcile.		
18	5	FMP Recs	GIS feature class		24	FMP	Cumulative Estimated length of roads in 100yr (1% annual chance) floodplains is 71 miles in the geodatabase as opposed to 36 miles in the Exhibit C Table 16. Please reconcile.		
19	5	FMP Recs	GIS feature class		24	FMP	Cumulative Estimated farm & ranch land in 100yr (1% annual chance) floodplains is 70 acres in the geodatabase as opposed to 0 acres in the Exhibit C Table 16. Please reconcile.		
20	5	FMP Recs	GIS feature class		24	FMP		In the FMP feature class, the cumulative sum of POP100 in 100yr (1% annual chance) floodplains for recommended FMPs is 4510 while the cumulative sum of the maximum between day and night population is 7387. Please check that the POP100 values are as intended.	
21	5	FMP Recs	GIS feature class		24	FMP		Cumulative Estimated Population removed from 100yr (1% annual chance) floodplains is 654 in the geodatabase as opposed to 635 in the Exhibit C Table 16. Please reconcile.	
22	5	FMP Details	Table	Section 3.9 Tables 23-40			FMP_Details was submitted in the geodatabase, however, an excel table was not provided in the submission. Please submit the FMP Details excel workbook to accompany the geodatabase.		
23	5	FMP Details	GDB	3.10.C		3.11.3 [FMP_Details]	The sum of structures in 100yr (1% annual chance) floodplains (Pre-Project) is 1,511 in the FMP feature class as opposed to 123 in FMP_Details. Please reconcile.		
24	5	FMP Details	GDB	3.10.C		3.11.3 [FMP_Details]	Total number of structures with reduced 1% Annual Chance Flood Risk is 0 in the FMP feature class as opposed to 7 in FMP_Details. Please reconcile		
25	5	FMP Details	GDB	3.10.C		3.11.3 [FMP_Details]	All three FMPs appear to have discrepancies in the population at risk in the 100yr (1% annual chance) floodplains between the FMP feature class and FMP_Details. Please reconcile.		
26	5	FMP Details	GDB	3.10.C		3.11.3 [FMP_Details]		All three recommended FMPs appear to have discrepancies in SVI values between the FMP feature class and the FMP_Details table. Please reconcile.	
27	5	FMP Details	GDB	3.10.C		3.11.3 [FMP_Details]		There appears to be discrepancies in the Pre-Project Level-of-Service and Post-Project Level-of-Service between the FMP feature class and the FMP_Details table. Please reconcile.	
28	5	FMP Recs	Table					Please include a no negative impact table listing each recommended FMP (template attached).	
29	5	FMS Recs	Table	Table 17				Cumulative Strategy Project Area (sqmi) is 49,168 in the geodatabase as opposed to 49,170 in the Exhibit C Table 17. Please reconcile.	
30	5	FMS Recs	Table	Table 17				Cumulative Estimated number of structures at 100yr flood risk is 72,923 in the geodatabase as opposed to 72,926 in the Exhibit C Table 17. Please reconcile.	
31	5	FMS Recs	Table	Table 17				Cumulative Residential structures at 100-year flood risk is 43,981 in the geodatabase as opposed to 43,984 in the Exhibit C Table 17. Please reconcile.	

*** Level 1 comment(s) that had been made during the TWDB review of draft regional flood plans that do not appear to have been fully addressed in the final plan.

Region 2 Lower Red-Sulphur-Cypress Regional Flood Plan

Comment No.	SOW Task No.	Task Name	Item Type	Ex C Item	Ex D Table No.	Ex D feature class	Level 1	Level 2	RFPG Response
32	5	FMS Recs	Table	Table 17				Cumulative Estimated Population at 100-year flood risk is 293,527 in the geodatabase as opposed to 293,529 in the Exhibit C Table 17. Please reconcile.	
33	5	FMS Recs	Table	Table 17				Cumulative Estimated farm & ranch land at 100-year flood risk (acres) is 948,167 in the geodatabase as opposed to 948,191 in the Exhibit C Table 17. Please reconcile.	
34	7	Flood Response	Text	Section 2.7				Language for some definitions appear to have portions copied directly from another source without any reference documentation. Please consider adding reference(s).	
35	All	Accessibility			Section 2.2			Figures alternative text and other elements alternative text failed in accessibility check. Please consider adding alternative text as appropriate.	
36	All	Accessibility			Section 2.2		We noted 18 failures when reviewing the PDF submittal with the Adobe Acrobat accessibility full check. At a minimum, please ensure that the following document properties are satisfied. PDF documents must have a very good document title, the primary language must be set to English, and the primary view must be set to document title. PDFs must also be tagged documents.		

*** Level 1 comment(s) that had been made during the TWDB review of draft regional flood plans that do not appear to have been fully addressed in the final plan.