

Region 8 - Lower Brazos

Regional Flood Planning Group

LOWER BRAZOS REGIONAL FLOOD PLANNING GROUP

Thursday, April 27, 2023

10:00 AM

Brazos River Authority

4600 Cobbs Dr., Waco, TX 76710

Region 8 - Lower Brazos

Regional Flood Planning Group

- 1. Call Meeting to Order and Attendance**
- 2. Public Input - Public comments on agenda items or flood planning issues
(limit to 3 minutes each)**

Region 8 - Lower Brazos

Regional Flood Planning Group

3. Consent Agenda

3.1. Approval of Minutes from the March 23, 2023 meeting

3.2. Report, Approval, and Certification of the Finance Report Expenditures

Meeting Minutes

REGION 8 - LOWER BRAZOS REGIONAL FLOOD PLANNING GROUP

Brazos River Authority, 4600 Cobbs Dr. Waco, TX 76710

10:00 a.m. – Thursday, March 23, 2023

Hybrid Meeting via Microsoft Teams

Meeting agenda, materials, and audio recordings are available online at www.lowerbrazosflood.org

1. Call Meeting to Order and Attendance

Alysha Girard presided over the meeting in Waco, TX. Ms. Girard called the meeting to order at 10:00am.

Susan Alford	P	David Lilly	P
Anthony Beach	P	Glenn Lord	P
Carl Burch	P	Matt Phillips	P
Sujeeth Draksharam	P	Mark Vogler	P
Charlotte Gilpin	P	Brandon Wade	P
Alysha Girard	P	Claudia Wright	P

Quorum Present: **Yes**. Quorum is 7 of 12 voting members.

2. Public Input - Public comments on agenda items or flood planning issues (limited to 3 minutes each)

Alysha Girard opened the floor for public comments. No comments were received by the group.

The December 13, 2022 meeting minutes were accepted as presented. Sujeeth Draksharam made the motion to accept the minutes and Glenn Lord seconded the motion. The motion passed unanimously.

3. Consent Agenda

3.1. Approval of Minutes from the January 26, 2023 meeting

3.2. Report, Approval and Certification of the Finance Report expenditures

Alysha Girard opened the floor for approval of the consent Agenda Items. The consent agenda items were approved as presented. Brandon Wade made the motion to approve the consent agenda items and Anthony Beach seconded the motion. The motion passed unanimously.

4. Report, discussion, and possible action on update from Region 8 Technical Consultant as it relates to:

4.1. Update on Tasks 12 and 13

Sam Hinojosa provided an overview of the RFPG's previous discussions and decisions regarding the restriction on recommending FMPs with drainage areas less than 1 square mile. He discussed additional FMPs provided by communities after the Final Regional Flood Plan was submitted.

Chair Alysha Girard commented expressed concern that some communities intentionally did not submit their FMPs since they would not have been recommended under the 1 square mile restriction, so it may be unfair to change this so late in the process. Brandon Wade, Sujeeth Draksharam, and Glenn Lord expressed concern over changing decisions that RFPG established early in the planning cycle. Smaller projects could be reconsidered in the next cycle.

Jenna Blohm provided an overview of the progress to date on the development of a Flood Early Warning System for the Lower Brazos Region. Sam Vernon (City of Bryan) and Jacob Torres presented over the City of Bryan's Flood Early Warning System (B-FEWS).

Ryan Londeen and Hector Olmos provided an update on the Regional Watershed Studies. Sujeeth Draksharam asked if lowering the total flow within Sulphur Creek would provide benefits to the tributaries. Ryan Londeen replied that the confluences of the tributaries and mainstem would likely be benefited by this type of effort. The Consultant Team will further investigate how lowering Sulphur Creek would affect the flooding throughout the Lampasas area.

Sujeeth Draksharam requested that the quantified number of structures at risk be provided to the RFPG. Ryan confirmed that this will be provided for the specific mitigation alternatives at the April 2023 meeting. Chair Alysha

Girard emphasized that the primary intent of these efforts is to get entities better information so that they can determine what solutions may work for their communities.

Sam Hinojosa provided an overview of the budget spent to date and proposed additional work that could be performed within the Task 12 and 13 budgets. Suggested additional FMEs and also converting some FMEs to FMPs. Sujeeth Draksharam asked for clarification on how much budget is being set aside for work on the FEWS investigation. Sam Hinojosa replied that the Technical Consultant Team will bring a breakdown of the budget to the April 2023 meeting. The RFPG approved the Technical Consultant Team to move forward with a mixture of additional FMEs and FMEs to FMPs. Chair Alysha Girard encouraged the team to check in with the communities before pushing anything forward.

Sam Hinojosa provided an overview of the proposed TWDB ranking. Alysha Girard mentioned that she believes the ranking for funding will be like this. Charlotte Gilpin asked if all our FMPs have data for each of the criteria, or if there are in gaps in data that are influencing the ranking. Sam Hinojosa replied that all the requested information was supplied. However, the FMPs for the Lower Brazos Region are primarily in rural areas that do not have high structural or population counts. Sam Hinojosa mentioned that Halff will be submitting comments on the ranking criteria.

Chair Alysha Girard pointed out that there was a metric that the TWDB did not use – Regional Distribution. She believes this would help the ranking more accurately represent regionality. She expressed that without a regionality factor, the restriction on recommendation of FMPs with drainage area of less than 1 square mile could harm the Lower Brazos Region.

The RFPG members asked the TWDB for more clarification on the restriction of recommending FMPs with drainage areas less than 1 square mile. Reem Zoun replied that the 1 square mile restriction was intended to screen out “driveway projects” from the plan. The TWDB gave the regions flexibility in the restriction so that they could represent their region’s characteristics. However, the guidance stands as written in Exhibit C and other documentation. Chair Alysha Girard suggested that the Lower Brazos Region may need to generate some hard rules to help define the “other reasons” to recommend FMPs with drainage areas less than 1 square mile.

Charlotte Gilpin asked if there has been any data aggregated by the TWDB on what metrics the other regions used to determine recommendation for FMPs with drainage areas less than 1 square mile. Reem Zoun replied that the TWDB has not looked into what reasoning the regions used to recommend FMPs with drainage areas less than 1 square mile. The TWDB will investigate this and supply the Lower Brazos RFPG with their findings. Charlotte Gilpin commented that this the criteria for recommending FMPs should be uniform across the regions if the FMPs are going to be ranked directly against each other with no adjustment for different criteria. Sujeeth Draksharam expressed that he believes the BCA should be the primary factor for ranking and allotment of future funding.

5. Report from:

5.1. Texas Water Development Board (TWDB) staff

Ryke Moore provided the TWDB Report to the RFPG.

5.2. Regional Planning Sponsor – No report

5.3. Lower Brazos RFPG Liaisons and Chair

No report from Liaisons, Chair briefly reported on the recent TWDB Chair’s Conference Call.

6. Confirm next meeting date and discuss new business to be considered at next meeting

Next meeting will be the 4th Thursday of April 2023.

7. Adjourn

Alysha Girard adjourned the meeting at 11:52 AM.

Approved by the Region 8 Lower Brazos RFPG at the meeting held on April 27, 2023.

Matt Phillips, Secretary

Alysha Girard, Chair

Brazos River Authority
Region 8 Lower Brazos Regional Flood Planning Group
From 03/01/23 Through 03/31/23

	Current Period	Life to Date	Total Budget	Budget Variance	% Budget Remaining
Revenues					
State Grants	231	1,575,347	2,244,000	668,653	29.80%
Interest Income	-	-			
Total Revenues	231	1,575,347	2,244,000	668,653	29.80%
Reimbursable Expenditures					
Salaries	141	6,590			
Benefits	75	2,880			
Indirect Costs	-	645			
Other Expenditures					
Printing/Publishing					
Public Information/Notices/Ads ¹	-	180			
Misc postage/overnight/Misc/etc. ²	16	814			
Total Other Expenditures	231	11,108	40,000	28,892	72.23%
Voting Planning Member Travel	-	3,881	4,500	619	13.76%
Subcontractors ³	-	1,560,358	2,199,500	639,142	29.06%
Total Reimbursable Expenditures	231	1,575,347	2,244,000	668,653	29.80%
Work in Kind					
Salaries/benefits	154	20,908			
Other	-	32			
Total Work in Kind	154	20,940			
Net Revenue over expenditures	(154)	(20,940)	-	-	

²Agendas, handouts & chair notes

Region 8 - Lower Brazos

Regional Flood Planning Group

4. Report and discussion on update from Region 8 Technical Consultant

REGION 8

LOWER BRAZOS REGIONAL FLOOD PLAN

RFPG Meeting

April 27, 2023



Presentation Outline

- Comments from TWDB
- FMPs and FME for Consideration
- Tasks 12 & 13 Updates: Flood Early Warning System
- Tasks 12 & 13 Updates: Regional Watershed Studies
- Tasks 12 & 13 Updates: FMEs to FMPs
- Budget

Amended RFP – Tasks 12

Timeline



TWDB Comments

Comments on Final Regional Flood Plan

Sam Hinojosa, PE, CFM (Halff)

TWDB Comments

Received Comments from TWDB on 3/29

- Consisted of Level 1 and Level 2 comments
- **Level 1 comments were addressed**, and relevant information resubmitted to TWDB on 4/11
- Level 2 comments are underway
 - Will be addressed within the Amended Regional Flood Plan submittal
- Comments primarily regarding **data reconciliation** between report and geodatabase, and **accessibility** within the report



REGION 8

2023 LOWER BRAZOS

REGIONAL FLOOD PLAN 

Additional FMPs and FME for Consideration

Sam Hinojosa, PE, CFM (Halff)

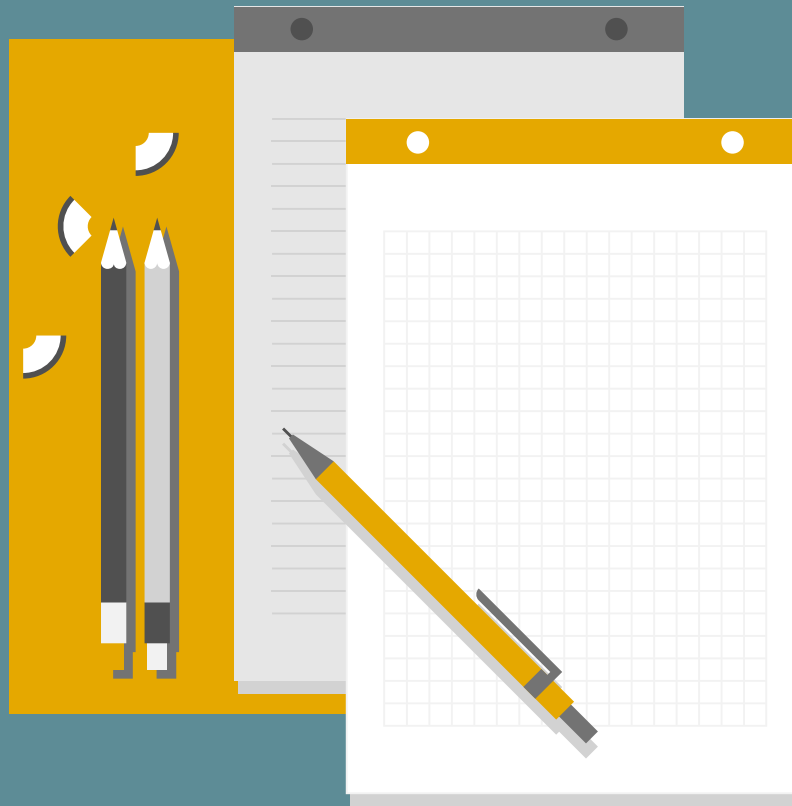
Ryan Londeen, PE, CFM (Halff)

FMXs for Consideration

Item	FMX Type and Name	Brief Description	Proposed Change	Sponsor	FMX Cost	FMX Area (sq mi)
1	FME: Big Sandy Creek – New Year Creek DMP	Determine source and potential mitigation for flooding at identified creeks.	Recommend	Washington County	\$483,000	33.2
2*	FME: Nolanville Drainage Master Plan	Atlas 14 H&H modeling and CIP development. Focus on developing BCA and prioritization plan.	Add & Recommend	Nolanville	\$200,000	3.51
3*	FME: Cedar Park Drainage Master Plan	Atlas 14 H&H modeling and CIP development. Focus on developing BCA and prioritization plan.	Add & Recommend	Cedar Park	\$500,000	25.65
4	FMP: Prairie Wind Alt 1	Channel and crossing improvements.	Add & Recommend	Stephenville	\$5,116,000	1.56
5	FMP: Prairie Wind Alt 2	Channel and crossing improvements.	Add & Recommend	Stephenville	\$6,182,000	1.56
6	FMP: Prairie Wind Alt 3	Channel and crossing improvements.	Add & Recommend	Stephenville	\$3,603,000	1.56
7	FMP: Lingleville Alt 1	Grading and crossing improvements.	Add & Recommend	Stephenville	\$1,587,000	< 1.0
8	FMP: Lingleville Alt 2	Grading and crossing improvements.	Add & Recommend	Stephenville	\$2,014,000	< 1.0
9	FMP: County Road 256 Alt 1	Grading and crossing improvements, raising road.	Add & Recommend	Stephenville	\$4,145,000	4.25
10	FMP: County Road 256 Alt 2	Grading and crossing improvements.	Add & Recommend	Stephenville	\$3,688,000	4.25
11	FMP: Morgan Mill Alt 1	Grading and crossing improvements.	Add & Recommend	Stephenville	\$2,661,000	3.89
12	FMP: Morgan Mill Alt 2	Grading and crossing improvements.	Add & Recommend	Stephenville	\$3,513,000	3.89
13	FMP: Long St Alt 1	New bridge and raising road.	Add & Recommend	Stephenville	\$8,993,000	133
14	FMP: Long St Alt 2	Removing road and grading improvements.	Add & Recommend	Stephenville	\$547,000	133
15	FMP: Long St Alt 3	Signage and barricades.	Add & Recommend	Stephenville	\$345,000	133
16	FMP: Mallard Lane	New channel and storm sewer system.	Add & Recommend	Taylor	\$1,917,000	< 1.0
17	FMP: Annie St – 2 nd St	New storm sewer system.	Add & Recommend	Taylor	\$3,093,000	< 1.0
18	FMP: KBI Pond Improvements	Pond improvements.	Add & Recommend	Taylor	\$227,000	< 1.0
18	FMP: Bel Air Drive	New storm sewer and erosion prevention system.	Add & Recommend	Taylor	\$1,057,000	< 1.0
19	FMP: Davis South St – 2 nd St	New storm sewer system.	Add & Recommend	Taylor	\$5,035,000	< 1.0

*added since original posting of slides

FMXs for Consideration



Additional Requests

- Received notifications of recently completed Category 1 FIF Reports with resulting projects to be included in Lower Brazos RFP
 - 2 FMPs and 1 FMS from City of Gatesville Master Drainage Plan
 - 4 FMPs from City of Eastland Capital Improvement Project List
- All necessary data for inclusion in the RFP should have been developed as part of TWDB requirements for FIF studies

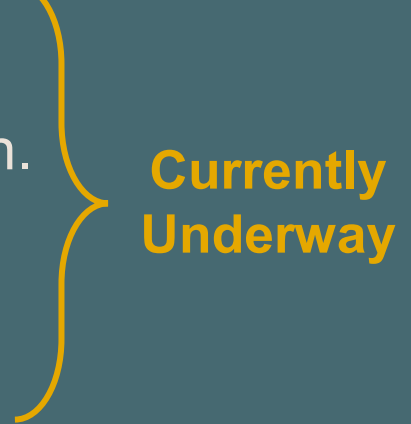
Tasks 12 Update

Flood Warning System Update

Sam Hinojosa, PE, CFM (Half)

Task 12

Flood Warning System: Scope of Work Overview

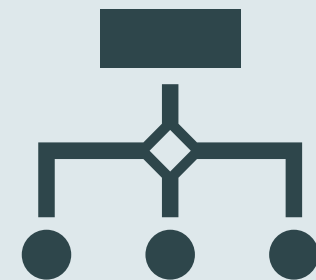
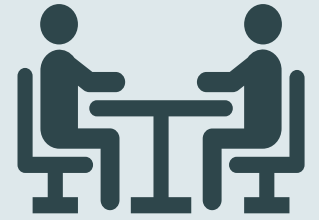
- Review local tools and systems currently available, or in development.
 - Analyze and document USGS gages' period of record for gages in region.
 - Identify what regional tools systems are available.
 - Coordinate with relevant agencies (NWS, InFRM, USGS, TDEM).
 - Recommend gage placement and development of flood alert systems based on hot spot identification information developed in Tasks 1-11.
 - Develop database of flood alert systems currently in Lower Brazos Region.
 - Summarize findings and recommendations.
- 
- Currently Underway**

Flood Warning System

Coordination

National Weather Service

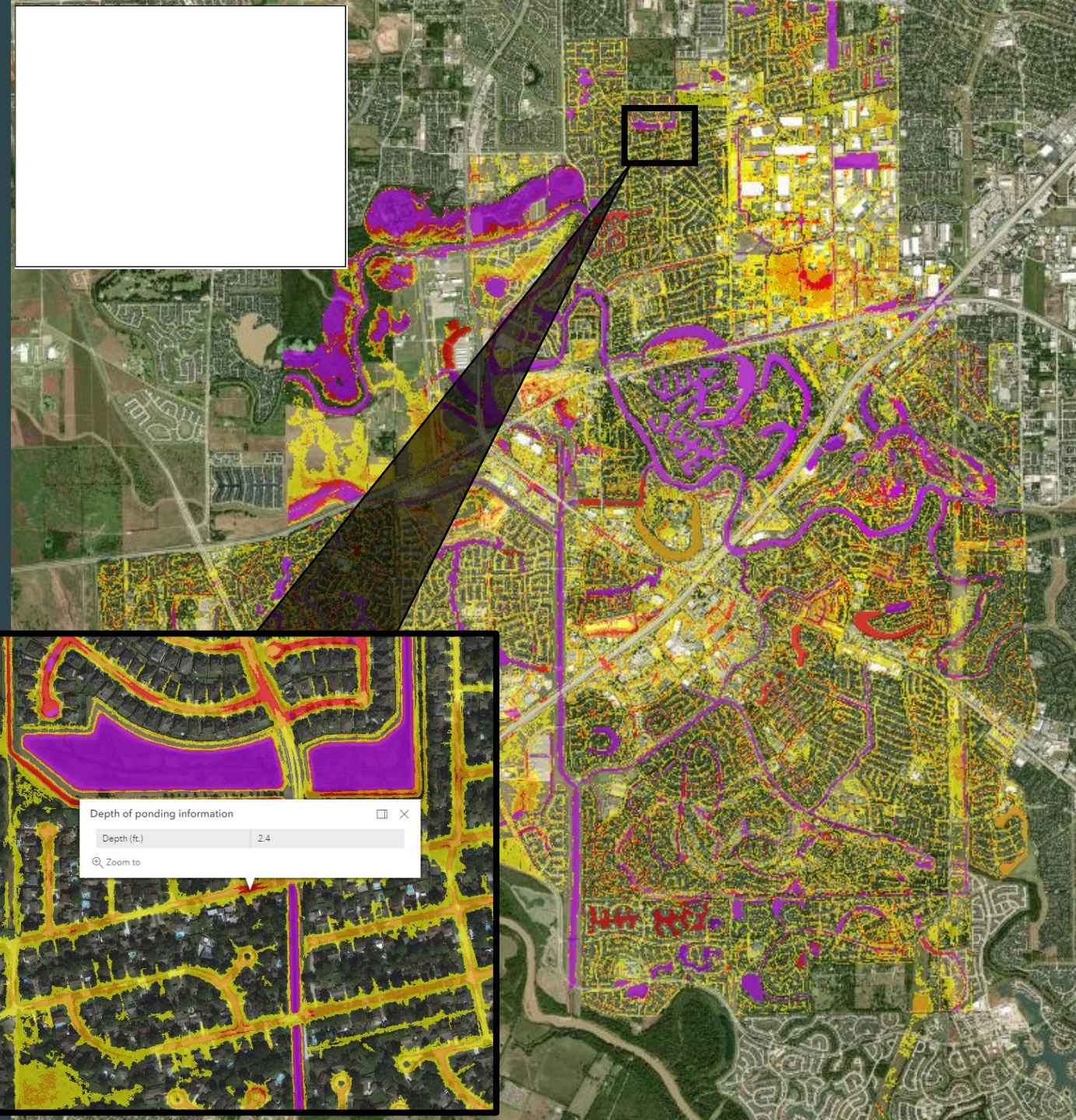
- Discussed what could be leverage in their system
- Received priority list of potential gage locations
 - Cross referencing with our analysis for validation
- Limitations of regional system versus localized systems
 - Do not incorporate localized (urban) flooding information
 - Data and model incorporation can be cumbersome



Flood Warning System

Sugar Land ISWMM

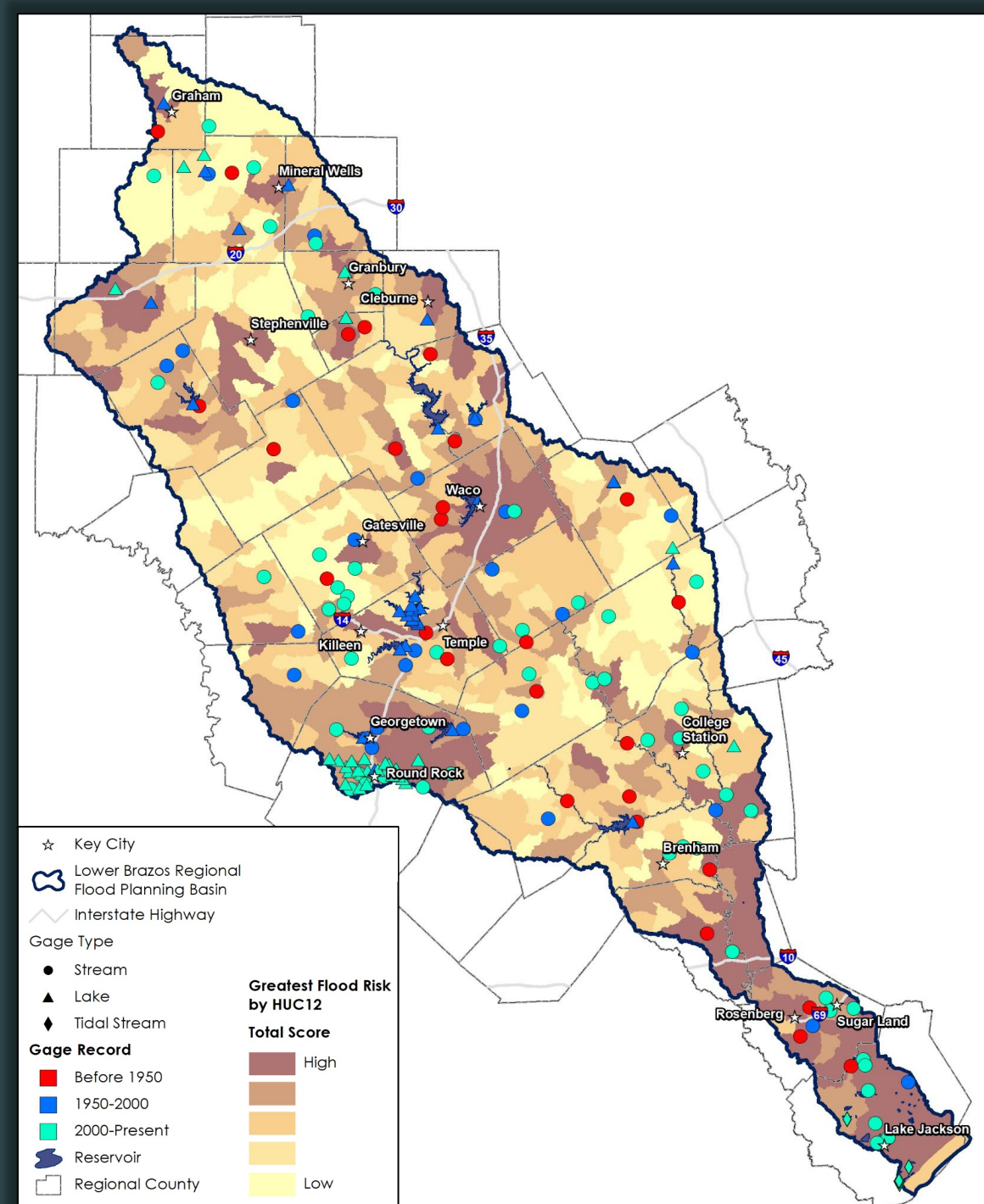
- Provides web-based ponding map for City and public
 - Display flood depths from pre-simulated modeling that best matches live rainfall gage information
- Assists in identification and prioritization of CIP projects
- Emergency Response Plan
 - Determine ponding depths at any location
 - Provide live information to staff and residents
 - Plan evacuation routes



Flood Warning System

Flood Risk versus Gage Data

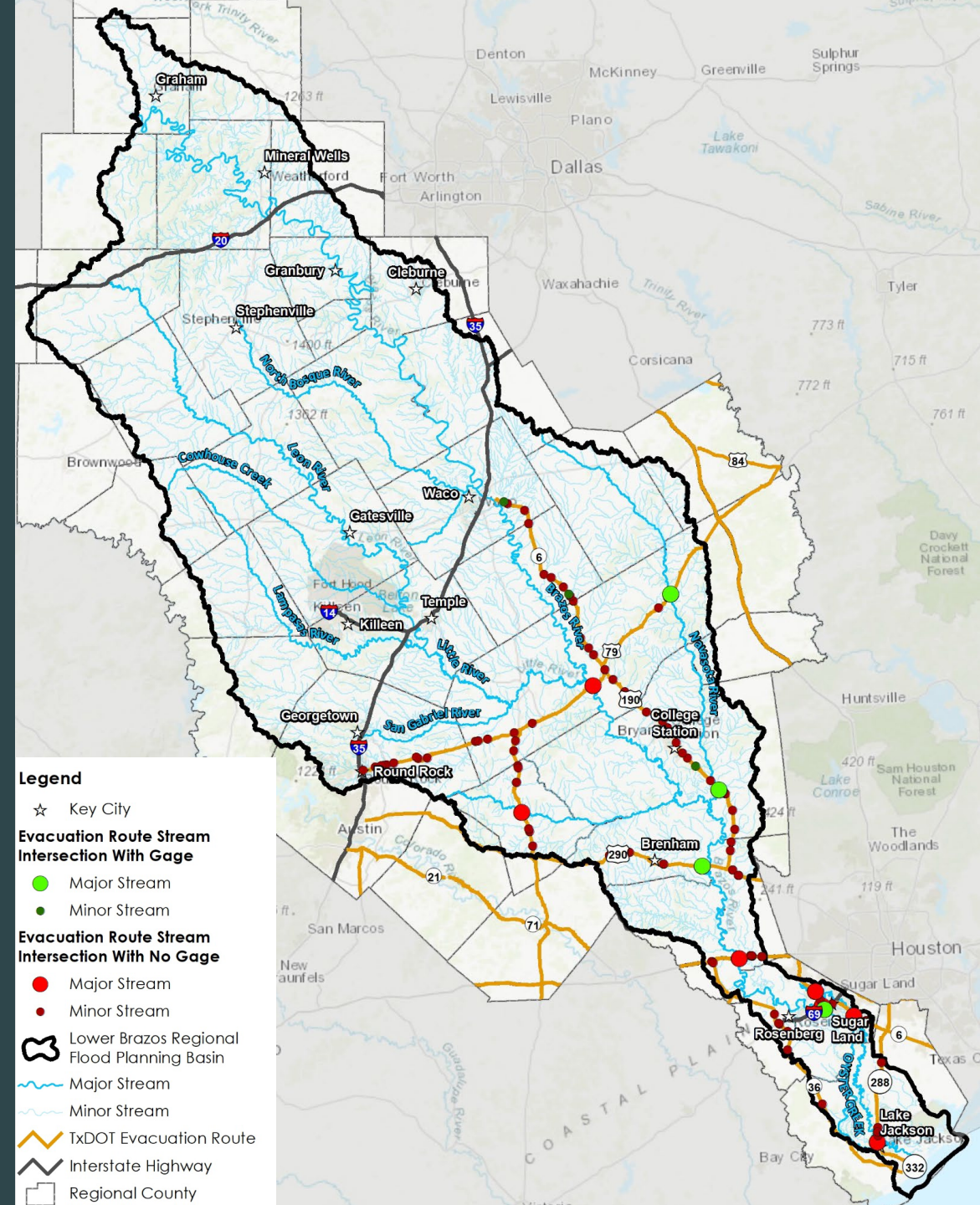
- Identifying areas of high flood risk where there are gaps in gage coverage
- Will incorporate localized systems to further investigate where there is already coverage



Flood Warning System

Evacuation Routes versus Gage Data

- Identifying areas where creeks and rivers cross evacuation routes
- Looking for crossings without adequate gage coverage



Tasks 12 Update

Regional Watershed Studies

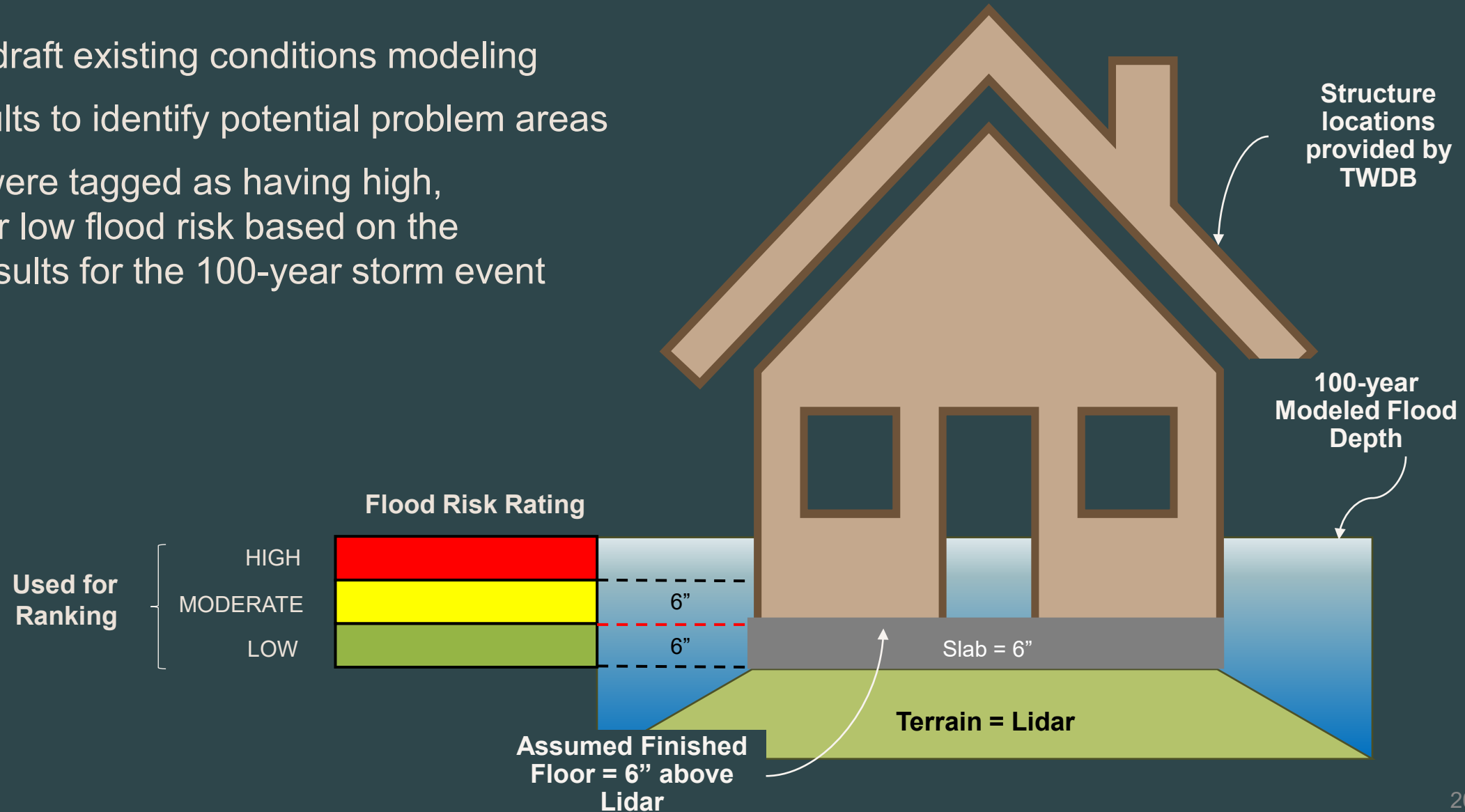
Ryan Londeen, PE, CFM (Halff)

Hector Olmos, PE, CFM (FNI)

Regional Watershed Studies

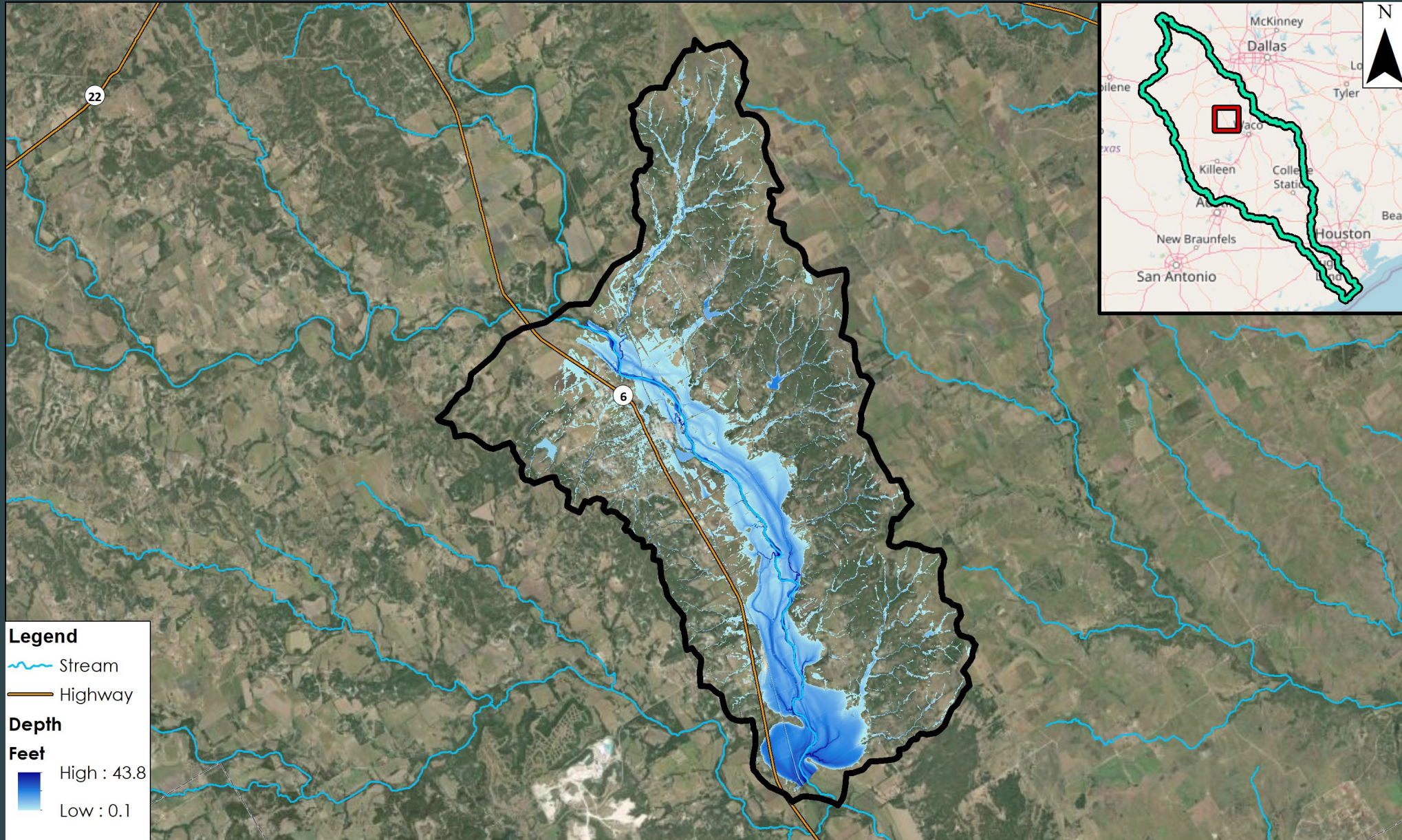
Existing Conditions & Potential Problem Areas

- Completed draft existing conditions modeling
- Utilized results to identify potential problem areas
- Structures were tagged as having high, moderate, or low flood risk based on the modeling results for the 100-year storm event



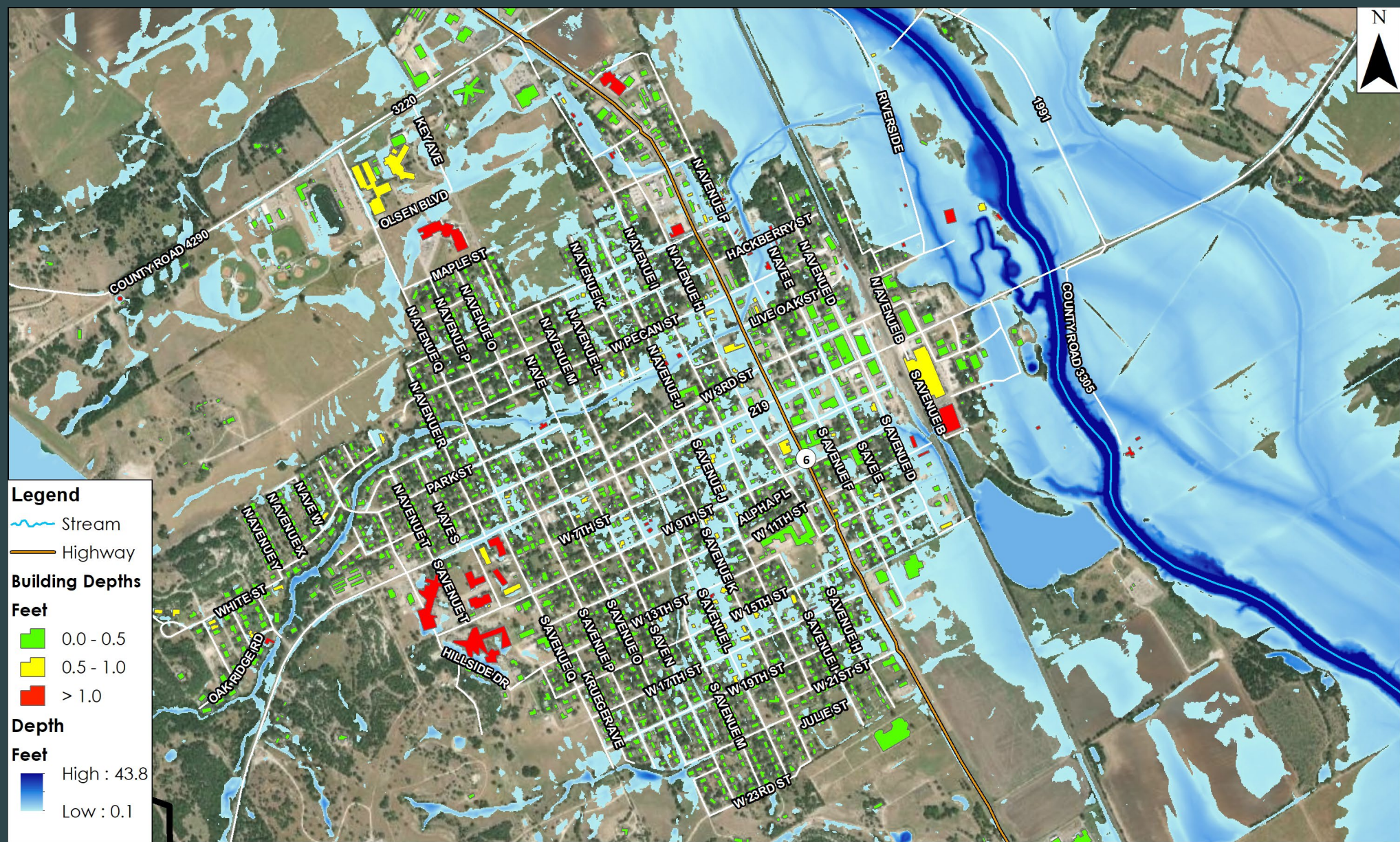
Regional Watershed Studies

Clifton Existing Conditions **DRAFT**



Regional Watershed Studies

Clifton Preliminary Hot Spots **DRAFT**






Existing conditions complete



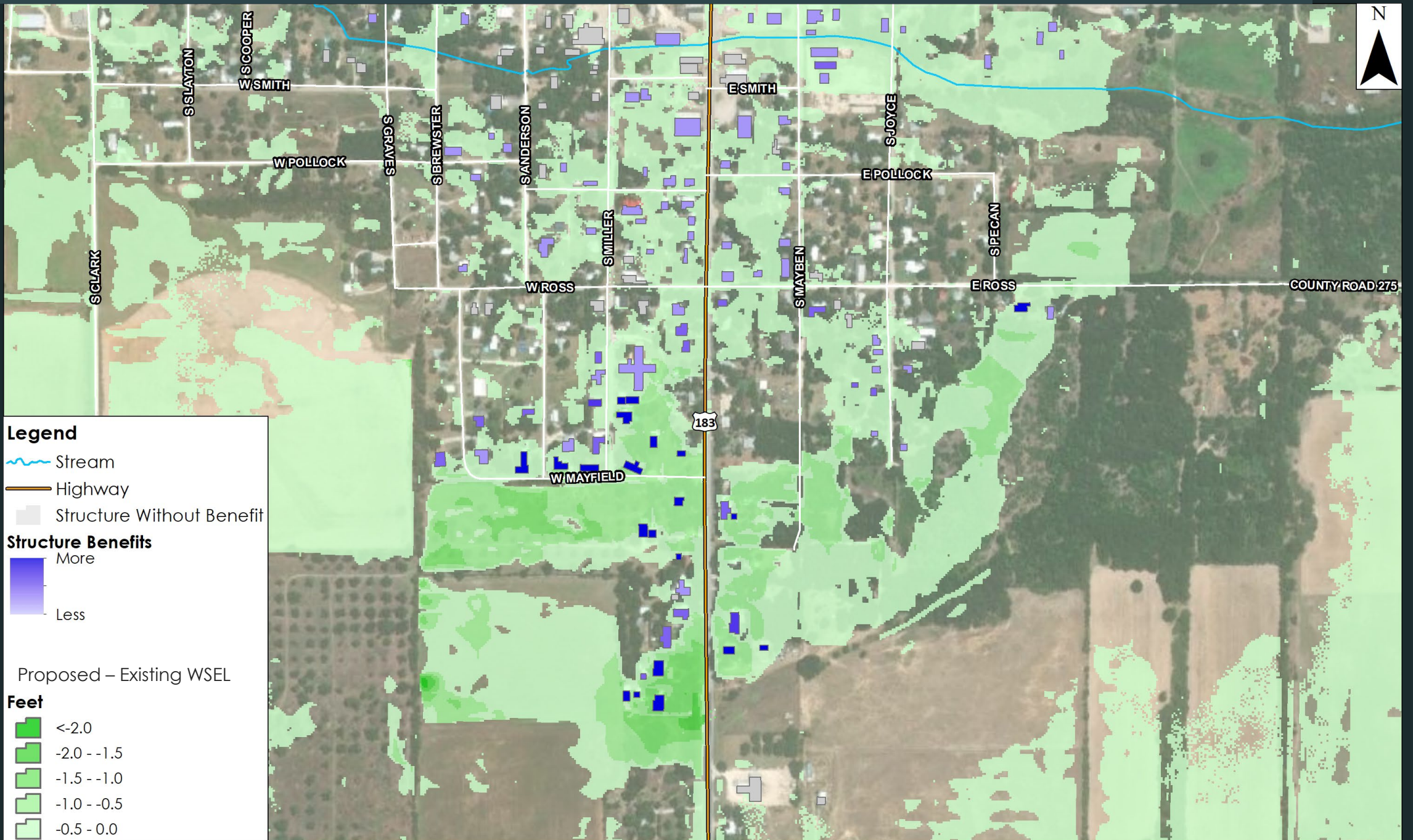
W ROSS ST

US HWY 281

Mitigation Solutions

-  Channel Improvement
-  Berm
-  Crossing Improvement

Copperas Creek Potential Mitigation Solution – Rising Star, Texas **DRAFT**



Lampasas-Sulphur Potential Mitigation Solution – Lampasas, Texas **DRAFT**

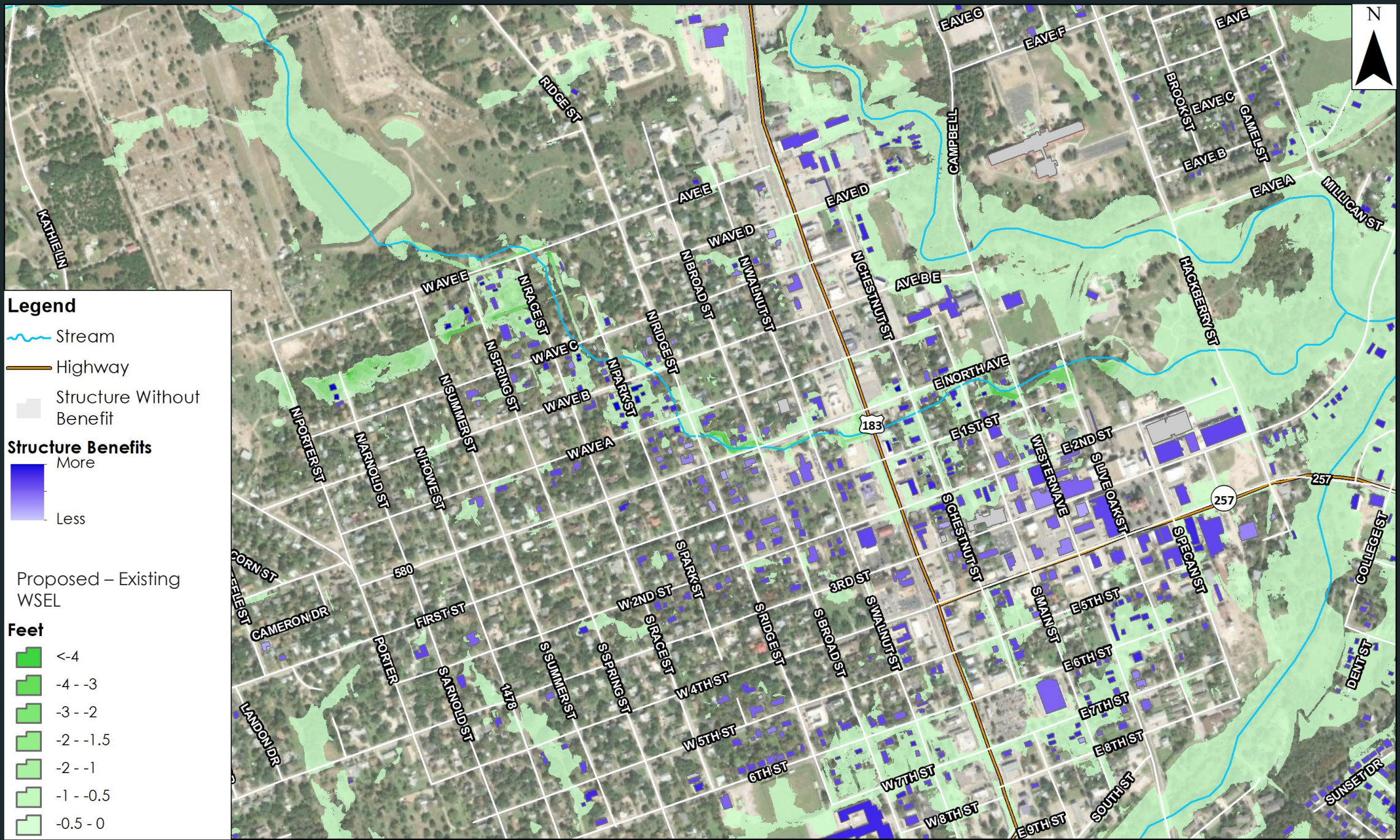
Existing conditions complete



Mitigation Solutions

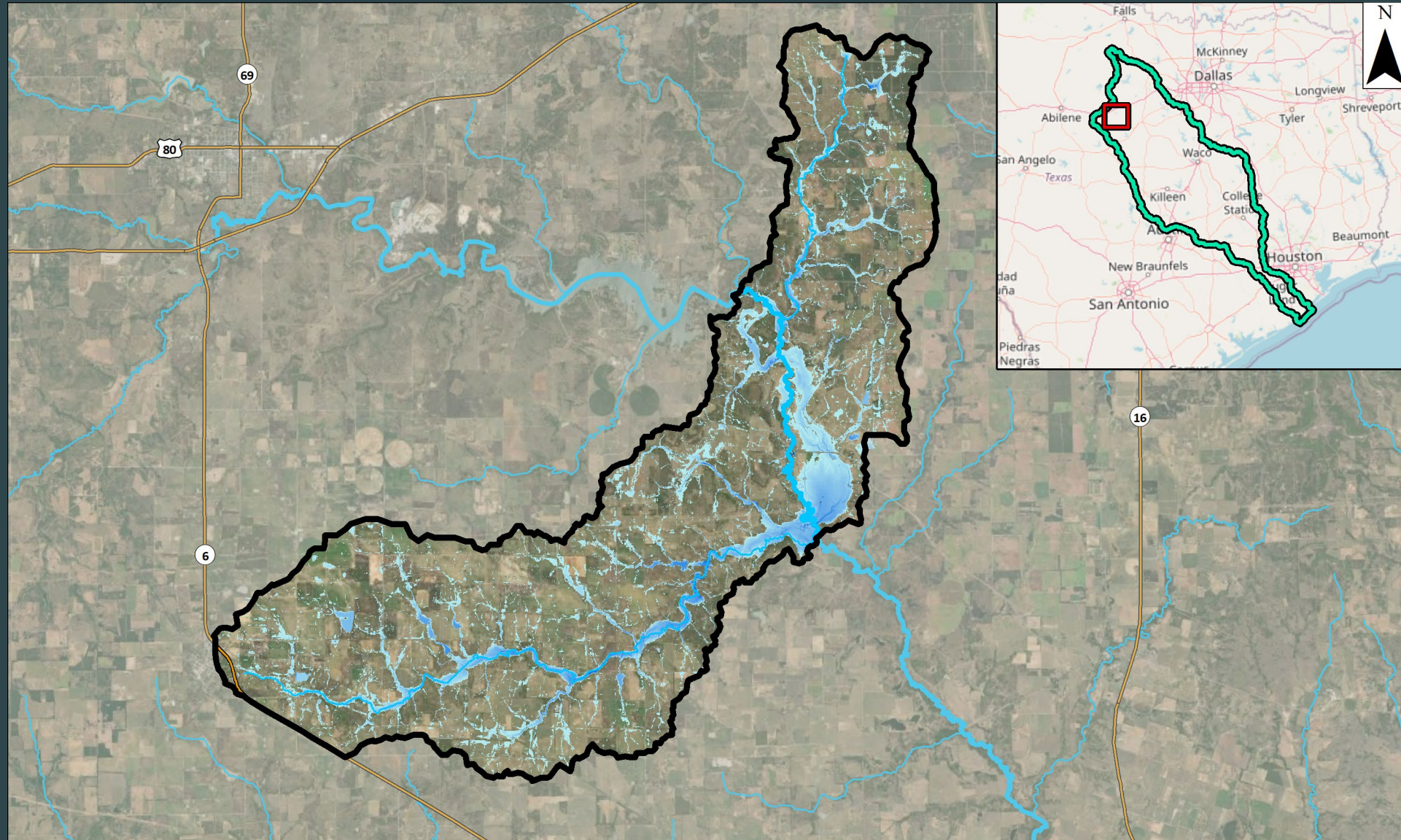
- Channel Improvement
- Berm
- Crossing Improvement

Lampasas-Sulphur Potential Mitigation Solution – Lampasas, Texas **DRAFT**



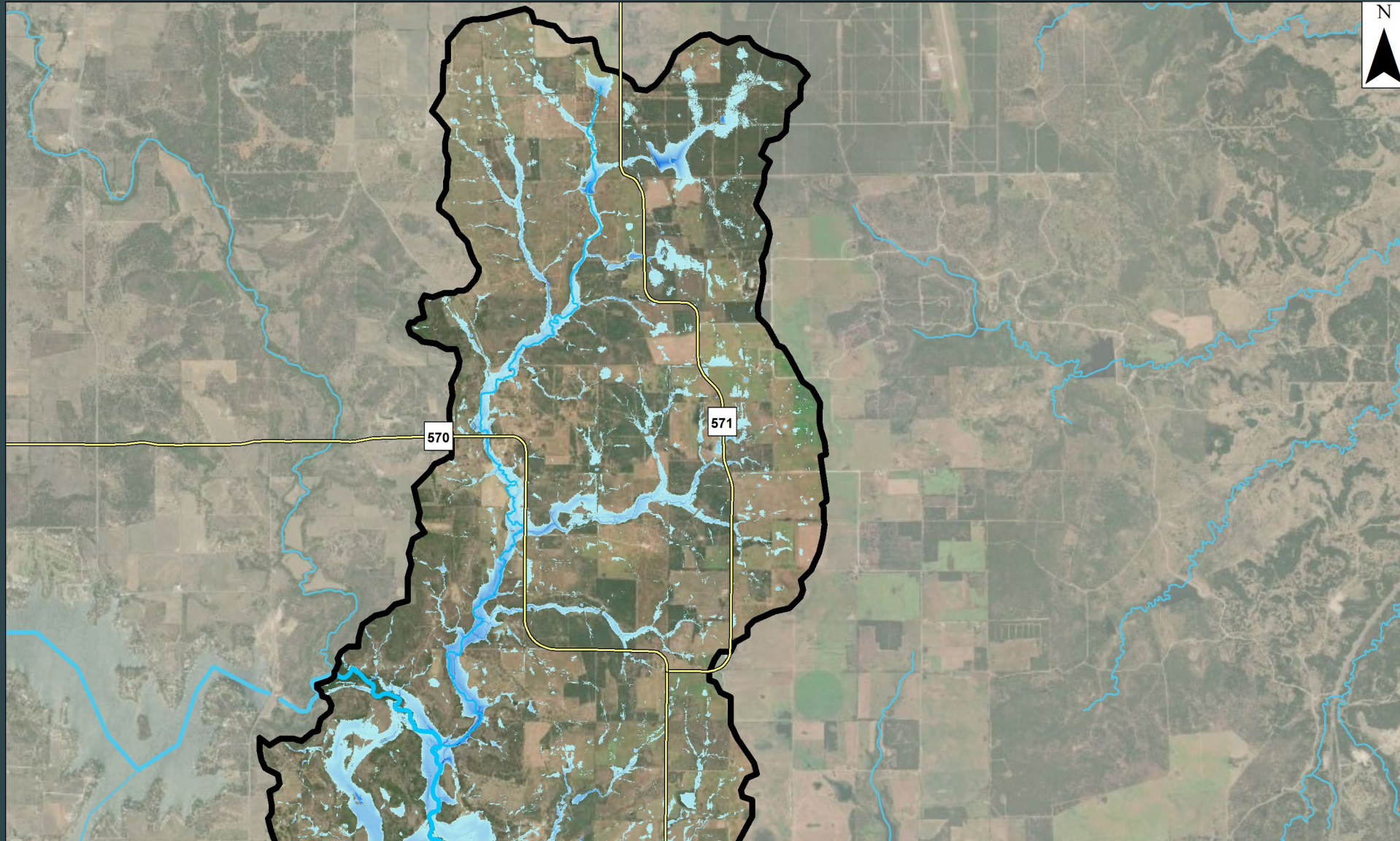
Regional Watershed Studies

Nash Creek-Leon Existing Conditions **DRAFT**



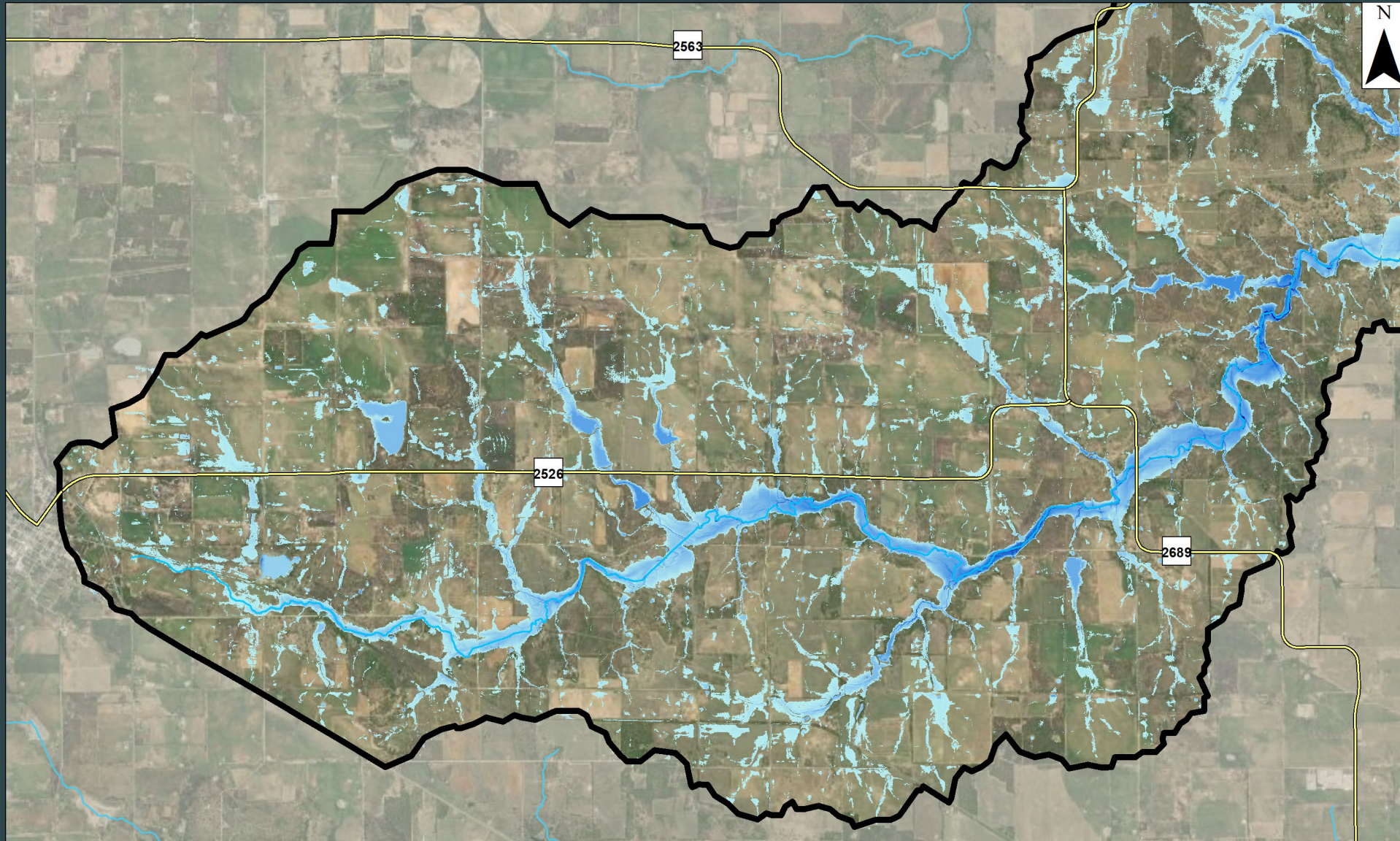
Regional Watershed Studies

Nash Creek-Leon Preliminary Hot Spots **DRAFT**



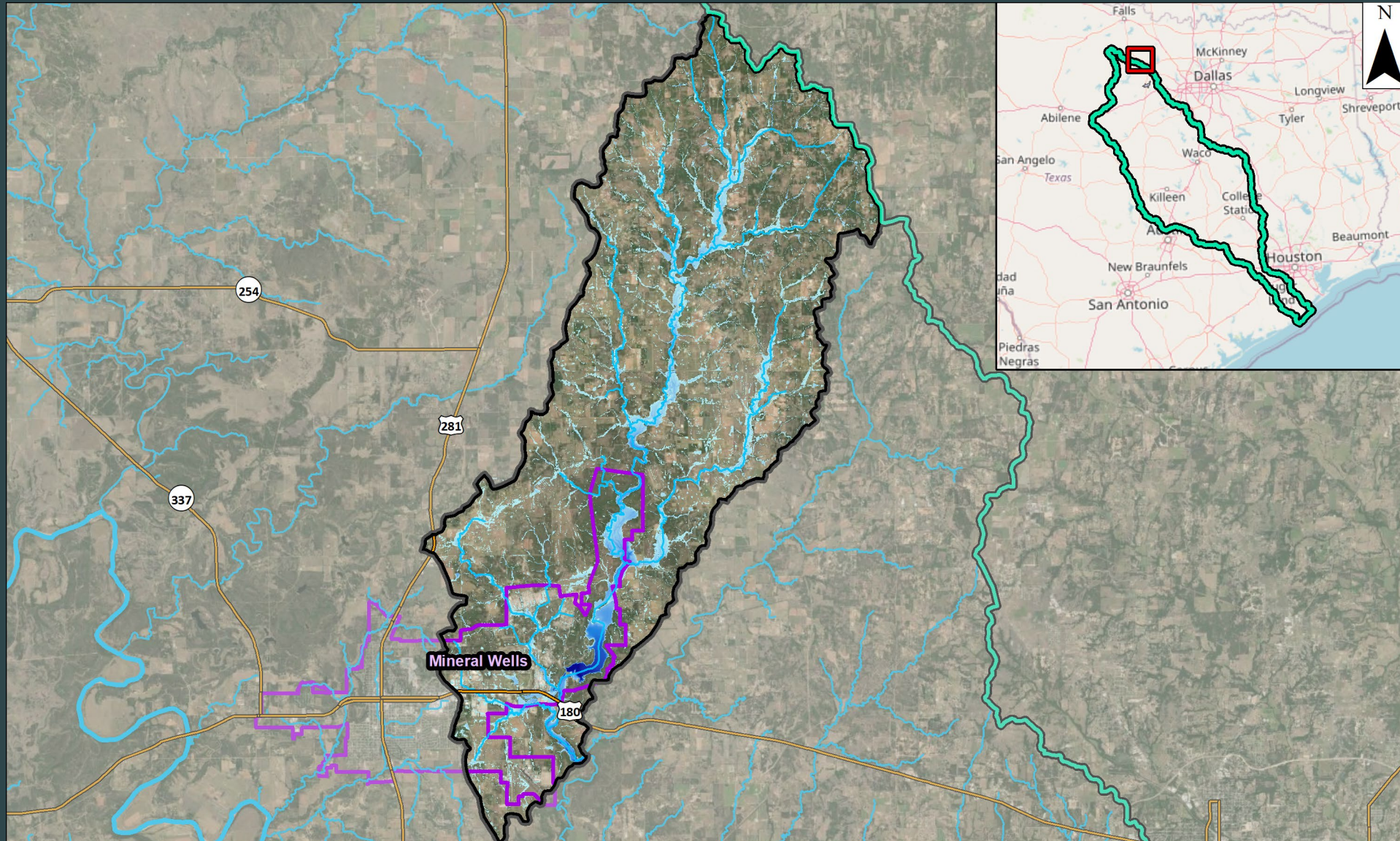
Regional Watershed Studies

Nash Creek-Leon Preliminary Hot Spots **DRAFT**



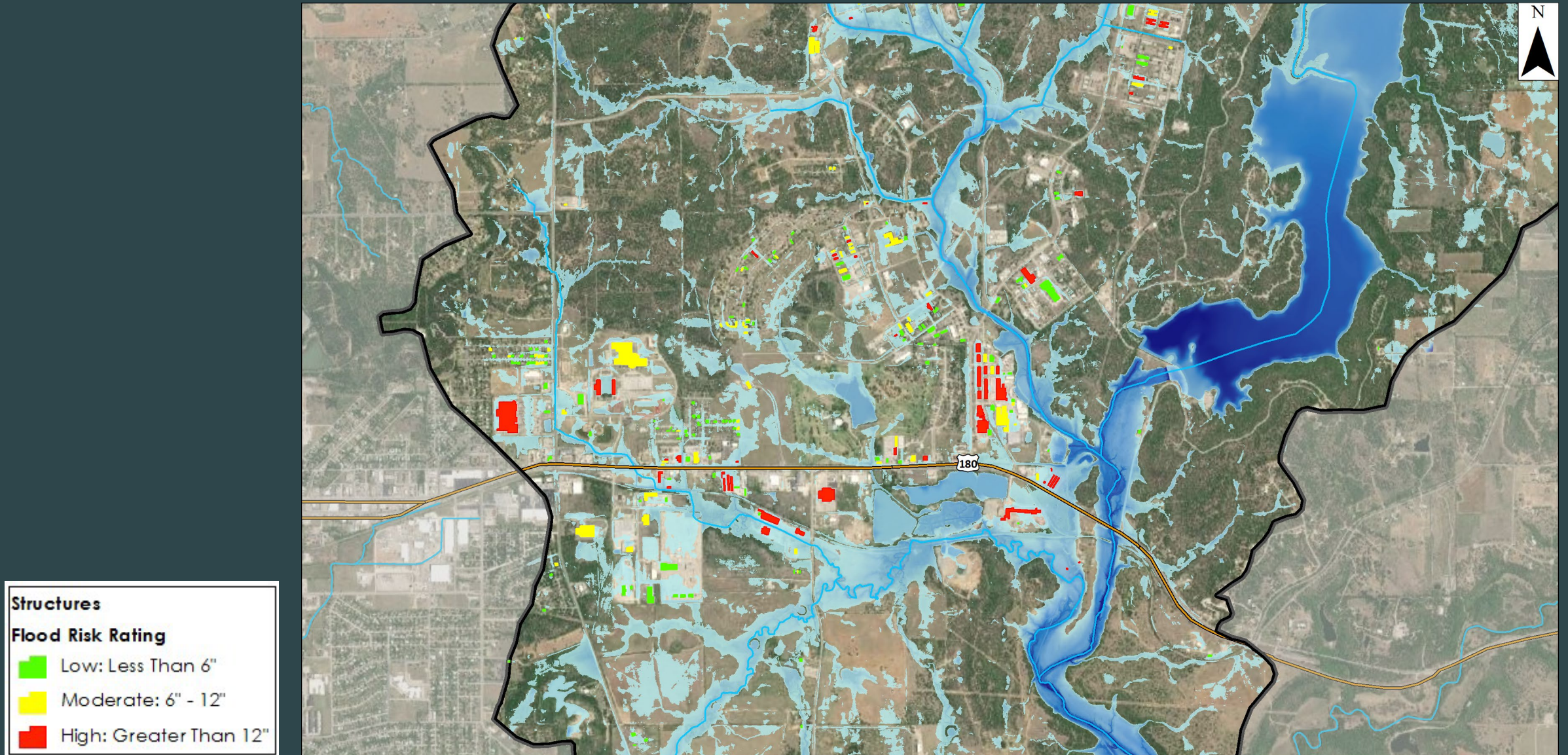
Regional Watershed Studies

Middle Rock Creek Existing Conditions **DRAFT**



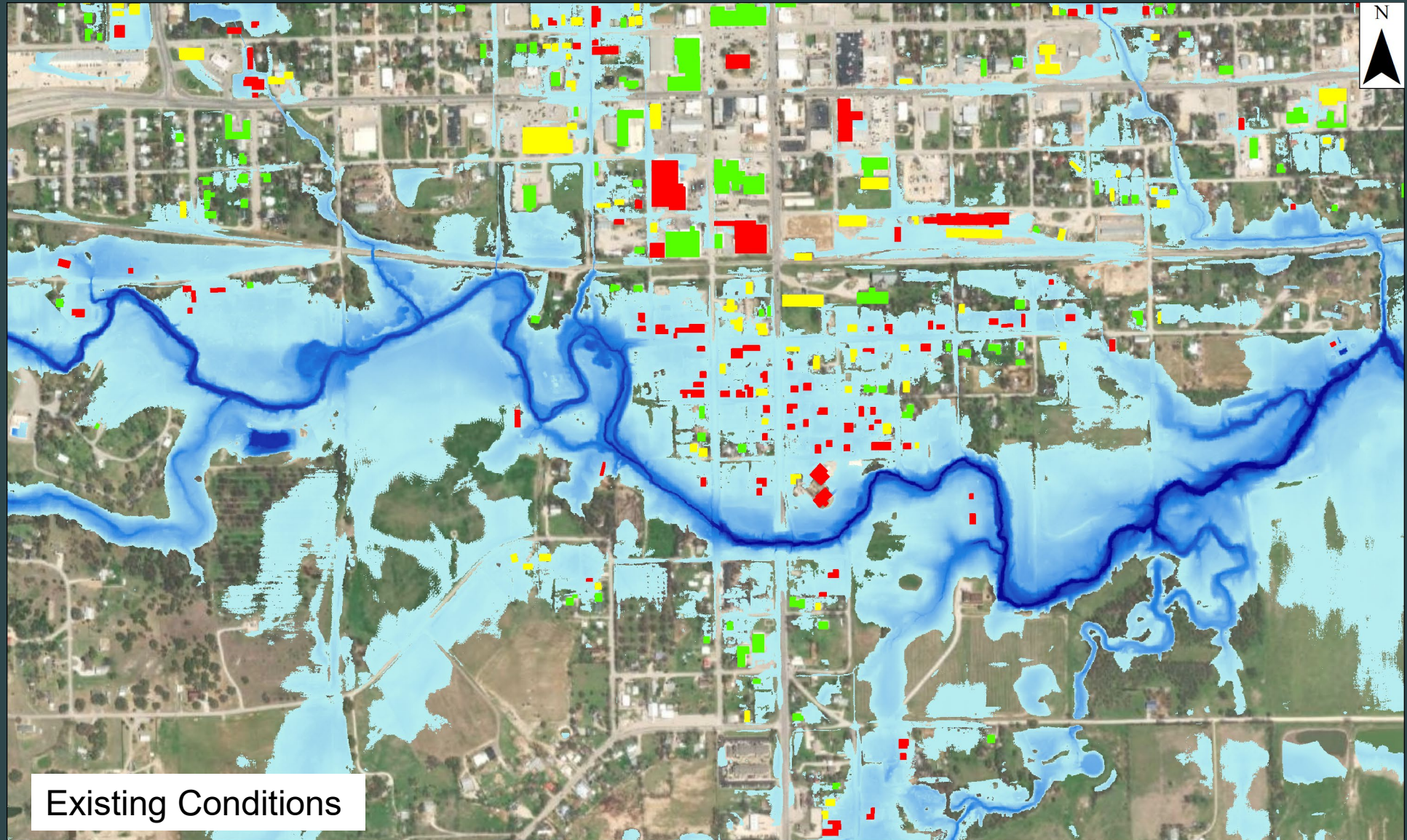
Regional Watershed Studies



Middle Rock Creek Preliminary Hot Spots **DRAFT**



Regional Watershed Studies

Comanche-Indian Creek Potential Mitigation Solution **DRAFT**

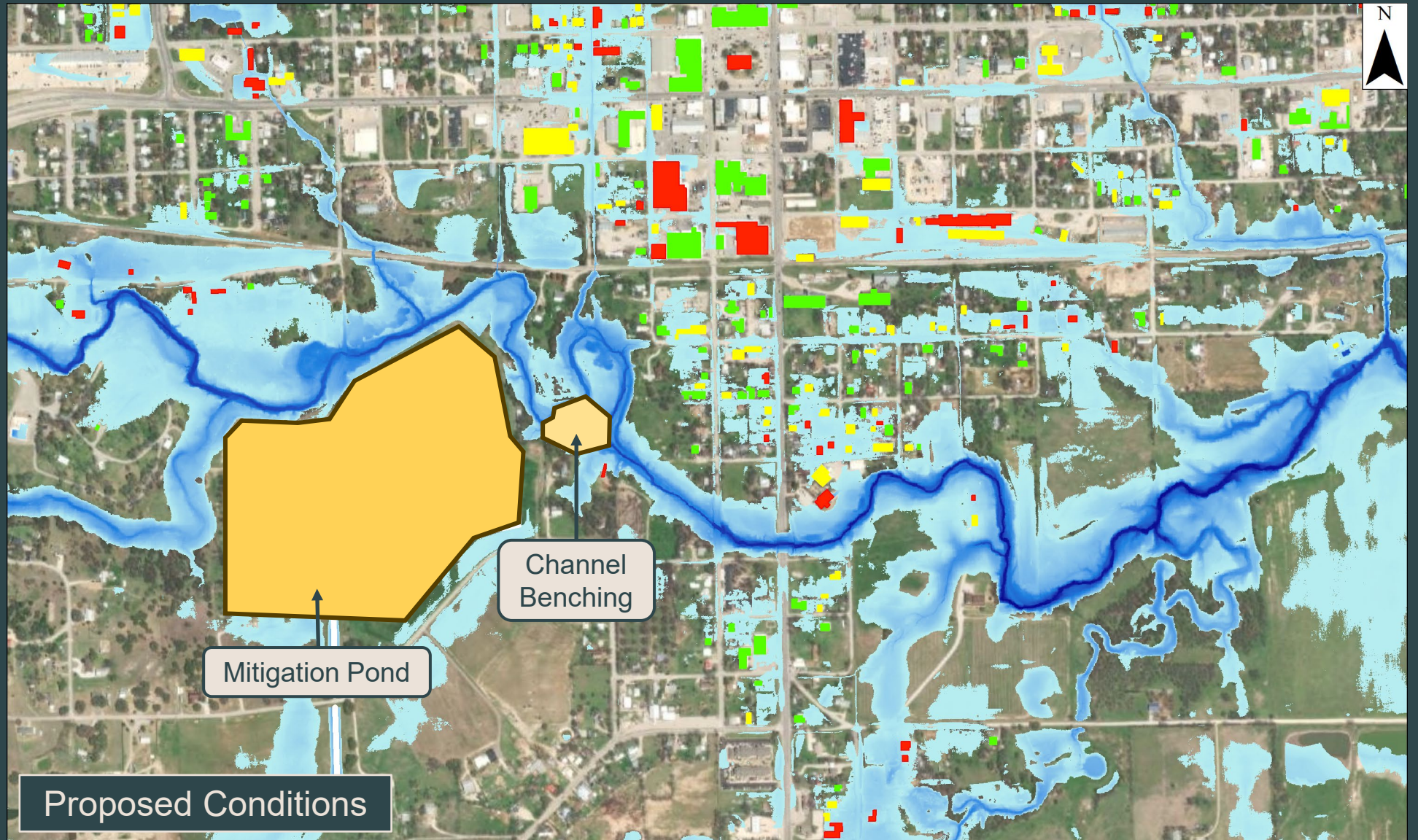


Structures	
Flood Risk Rating	
	Low: Less Than 6"
	Moderate: 6" - 12"
	High: Greater Than 12"

Existing Conditions

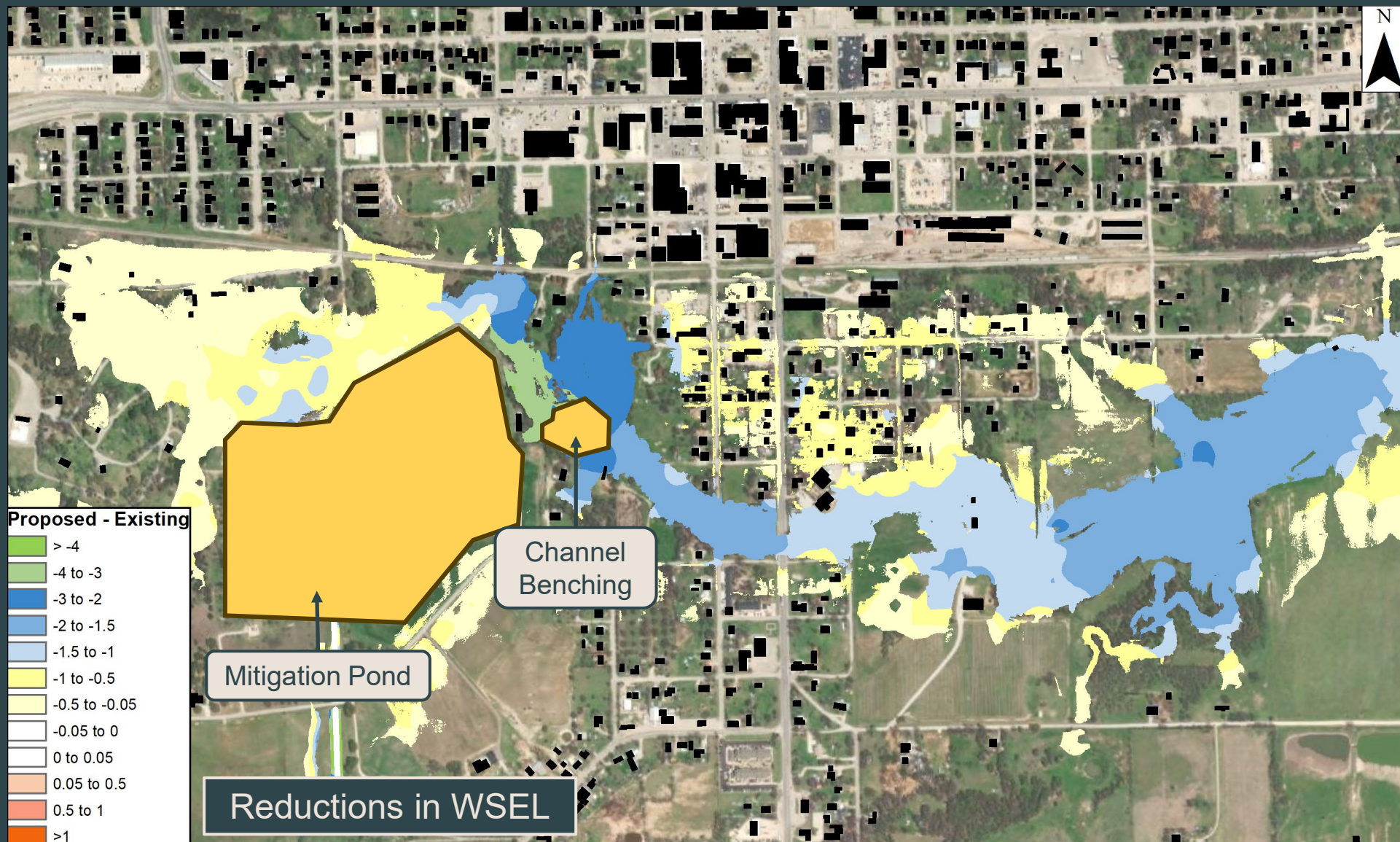
Regional Watershed Studies

Comanche-Indian Creek Potential Mitigation Solution **DRAFT**



Regional Watershed Studies

Comanche-Indian Creek Potential Mitigation Solution **DRAFT**



Tasks 12 Update

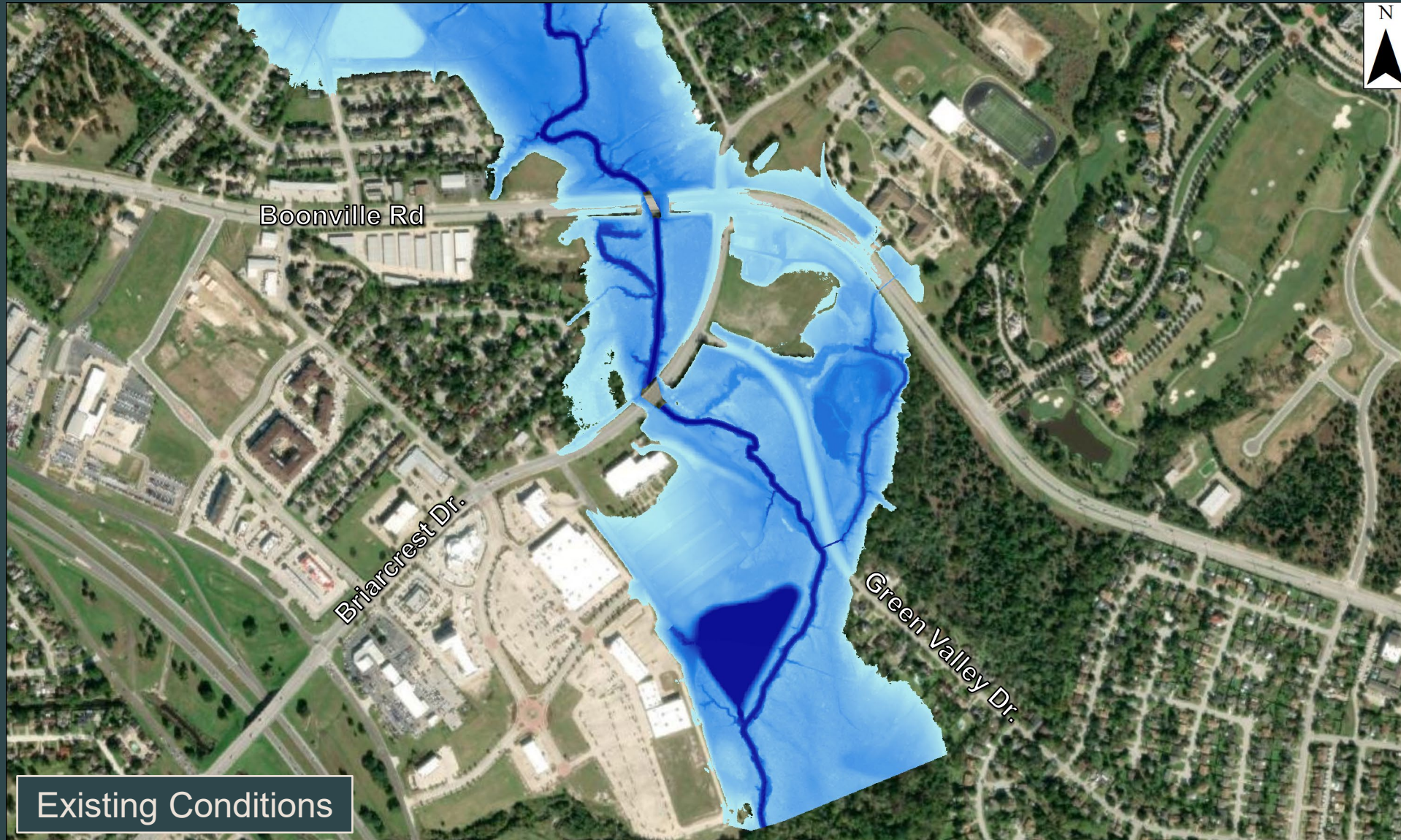
FME to FMP

Ryan Londeen, PE, CFM (Halff)

Hector Olmos, PE, CFM (FNI)

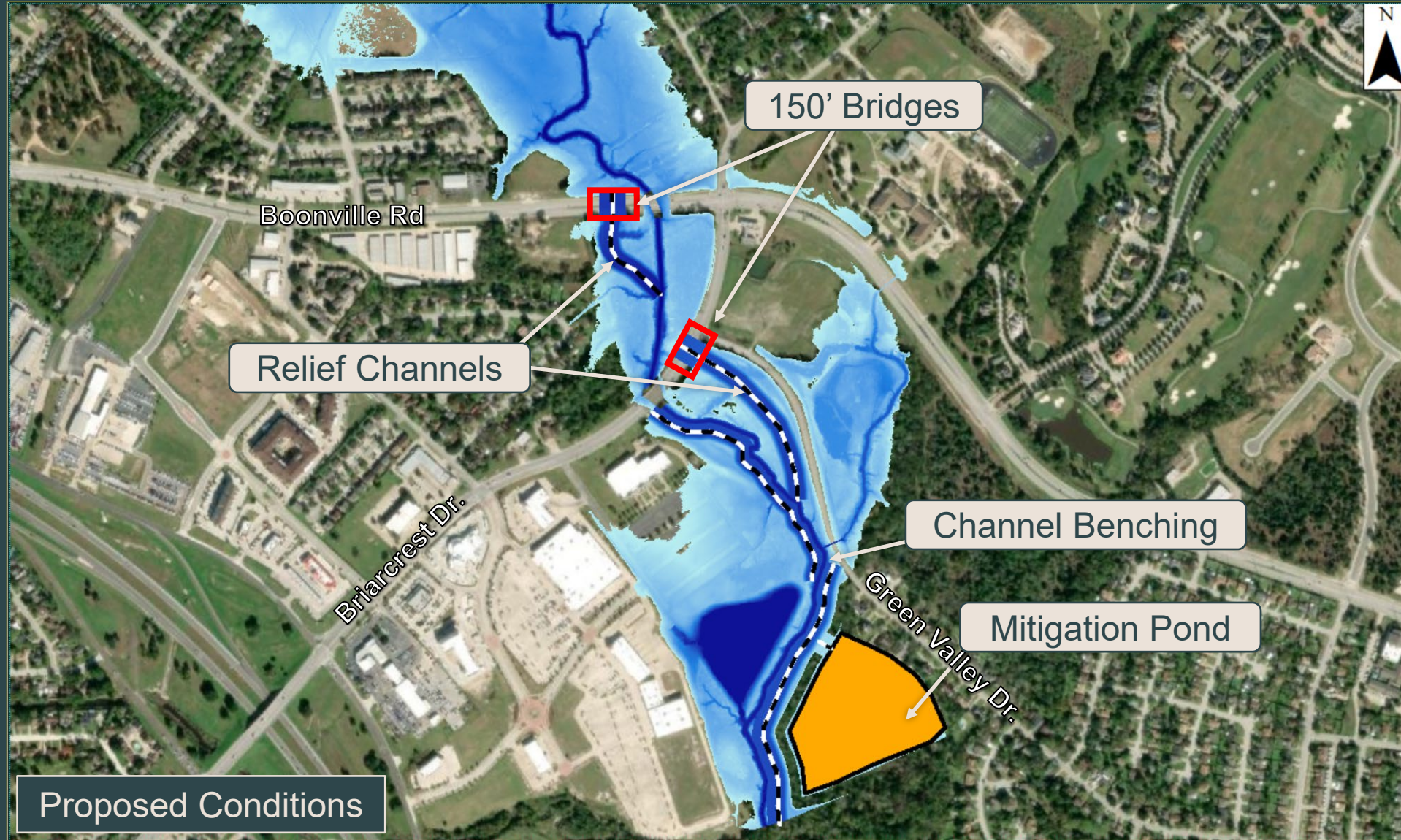
Regional Watershed Studies

City of Bryan Potential Mitigation Solution **DRAFT**



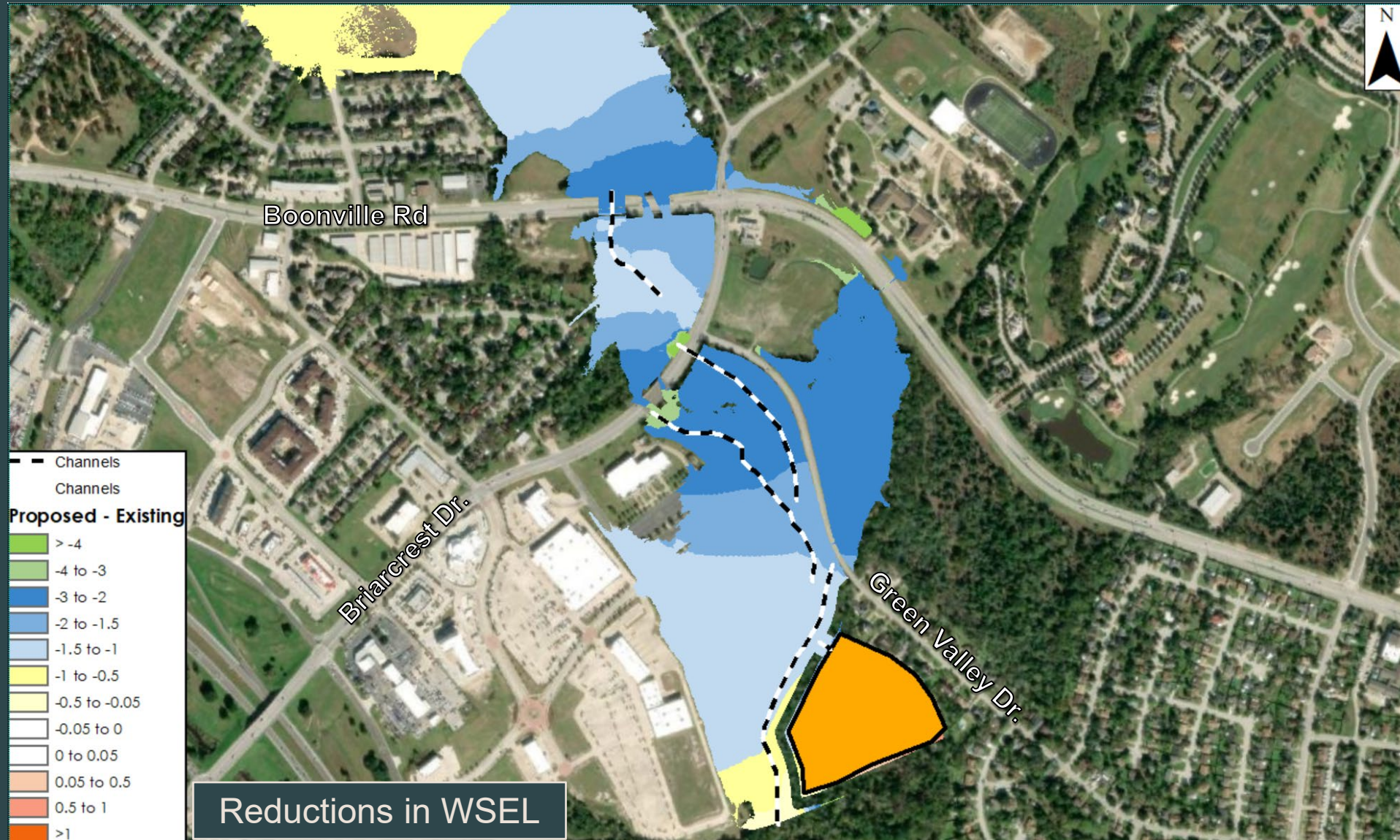
Regional Watershed Studies

City of Bryan Potential Mitigation Solution **DRAFT**



Regional Watershed Studies

City of Bryan Potential Mitigation Solution **DRAFT**



Tasks 12 and 13 Budget

Budget Breakdown

Sam Hinojosa, PE, CFM (Half)

Tasks 12 & 13

Budget Breakdown

- Budget broken down into 3 overarching tasks
 - Task 12 – Flood Early Warning System development
 - Task 12 – Perform FMEs (Regional Watershed Studies and FME to FMP)
 - Task 13 – Update Final Regional Flood Plan to incorporate Task 12 changes
- Other amendment tasks include addressing TWDB comments and routine correspondence with RFPG members, sponsor, and regional stakeholders

Budget Component	Budget Amount
Task 12 – Flood Early Warning System	\$50,000
Task 12 – Perform FMEs	\$412,685
Task 13	\$189,625
Total	\$652,310

Looking Ahead

May 2023 Meeting

- Task 12 Results
 - Regional Watershed Studies
 - FMEs to FMPs
 - Flood Early Warning System
- Approve Task 12 FMPs for inclusion in the Lower Brazos Regional Flood Plan
- Approve Additional FMEs/FMPs provided by regional entities

June 2023 Meeting

- Approval of Amended Lower Brazos Regional Flood Plan



**QUESTIONS OR
COMMENTS?**



Region 8 - Lower Brazos

Regional Flood Planning Group

5. Consider the appointment of a Technical Committee

The Chair proposes a committee for an in depth evaluation of the criteria that recommended projects have a contributing drainage area of at least a 1 square mile.

Area of Focus: Limited Exceptions to the 1 Square Mile drainage area criteria

Duration: Short-term. Reporting back to the full group at the May meeting.

Region 8 - Lower Brazos

Regional Flood Planning Group

Consider the appointment of a Technical Committee (Continued)

Specific Questions:

1. Should the LBFG consider allowing additional exceptions to the 1 sq mi rule beyond those specifically listed by the TWDB?
2. If yes, what additional specific criteria are recommended to ensure the original intent of “regional” is met and the exceptions are consistently applied?
3. If yes, when should the LBRFPG consider allowing projects with the recommended criteria? This cycle? Next?
4. Any other information discovered in the efforts that would be beneficial for the full RFGP to consider regarding this topic.

Committee:

Recommended Chair: Anthony Beach

Recommended Members: Charlotte Gilpin and any other interested group members.

Technical Assistance is to be provided by the Halff technical consultant team.

Region 8 - Lower Brazos

Regional Flood Planning Group

6. Report from:

6.1. Texas Water Development Board (TWDB) staff

6.2. Regional Planning Sponsor

6.3. Lower Brazos RFPG Liaisons and Chair

Region 8 - Lower Brazos

Regional Flood Planning Group

7. **Confirm next meeting date and discuss new business to be considered at next meeting**

Region 8 - Lower Brazos

Regional Flood Planning Group

8. Adjourn