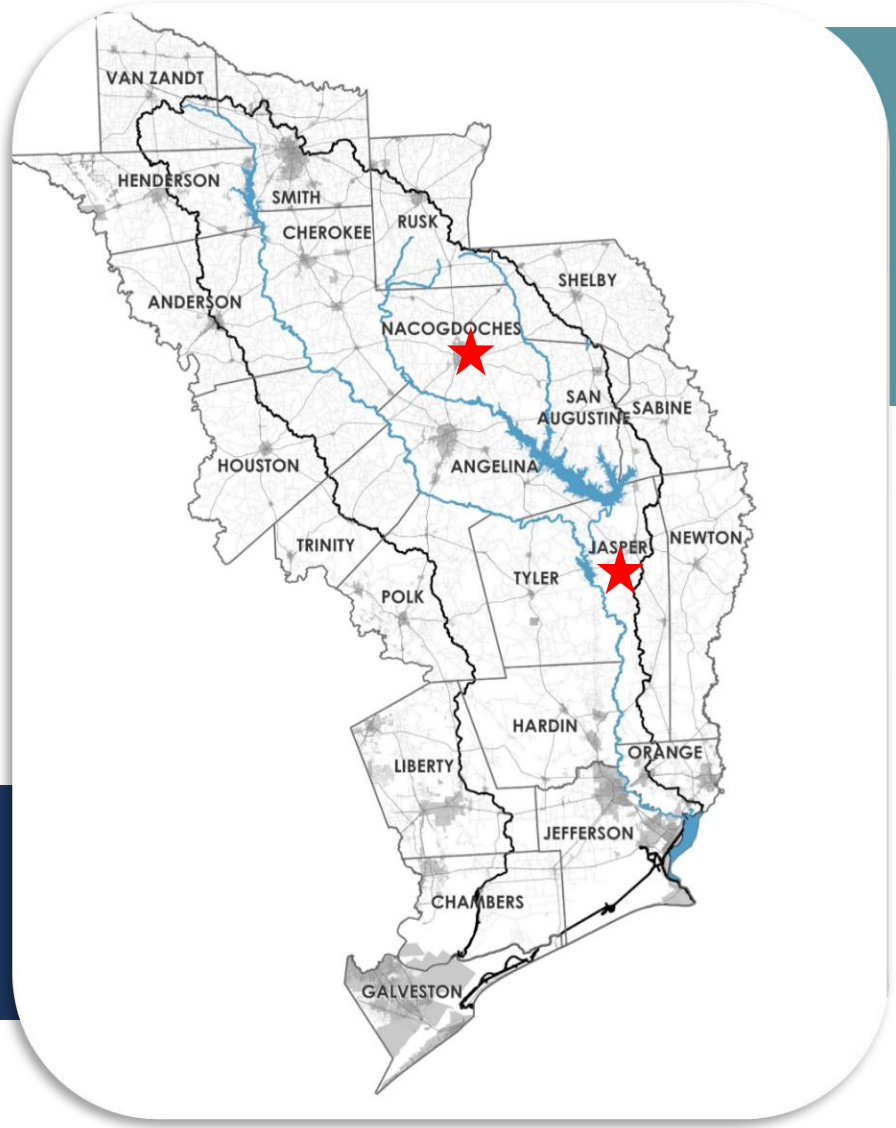
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Region 5 – Neches – Task 5B
FMEs for Small Communities Update

November 19, 2026

Agenda

- Introduction
- Progress Update
- Next Steps
- Schedule
- Q&A

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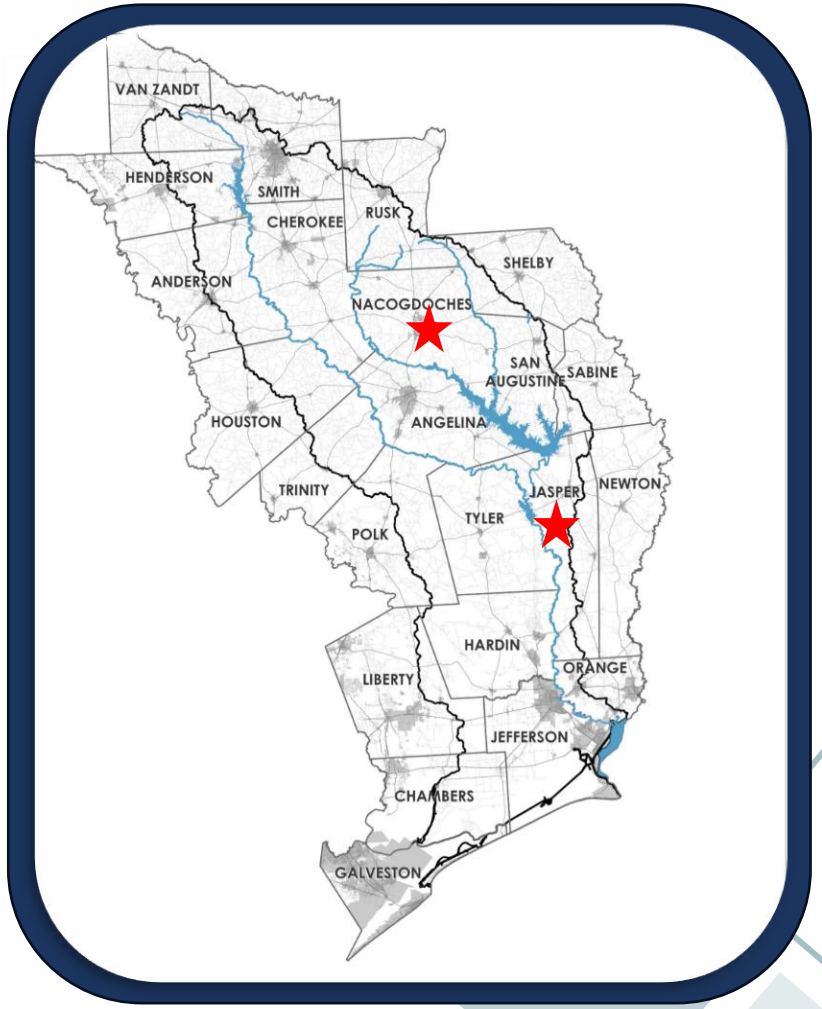
REGION 5 – FMEs for SMALL COMMUNITIES

NACOGDOCHES COUNTY MASTER DRAINAGE PLAN

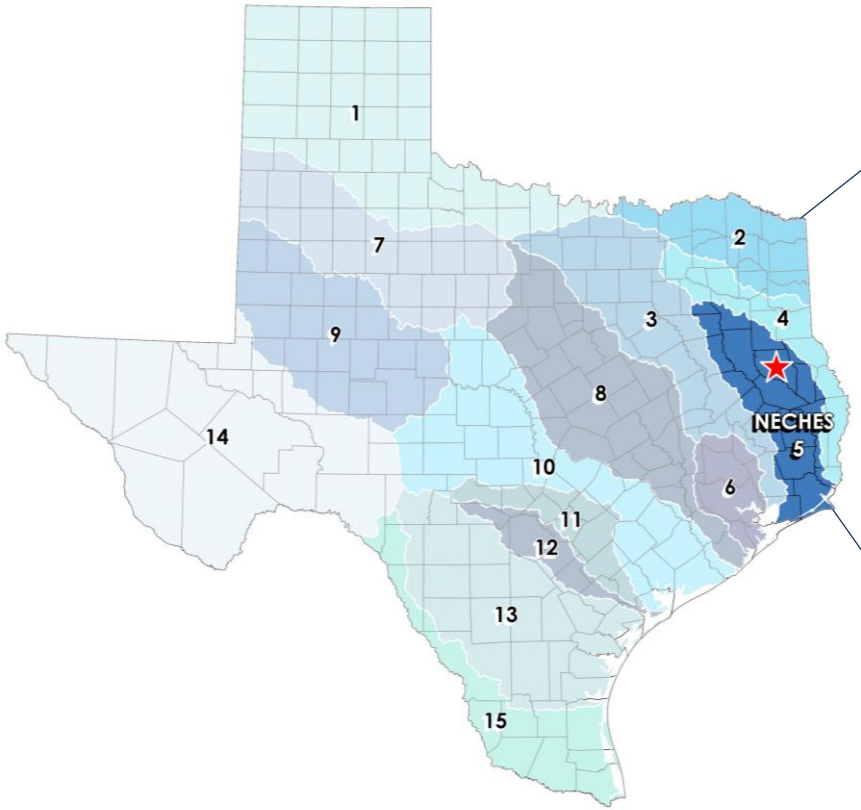
- Estimated 12,187 people, 1,409 structures, 22 critical facilities at 100-year flood risk
- Areas of Interest = City of Nacogdoches

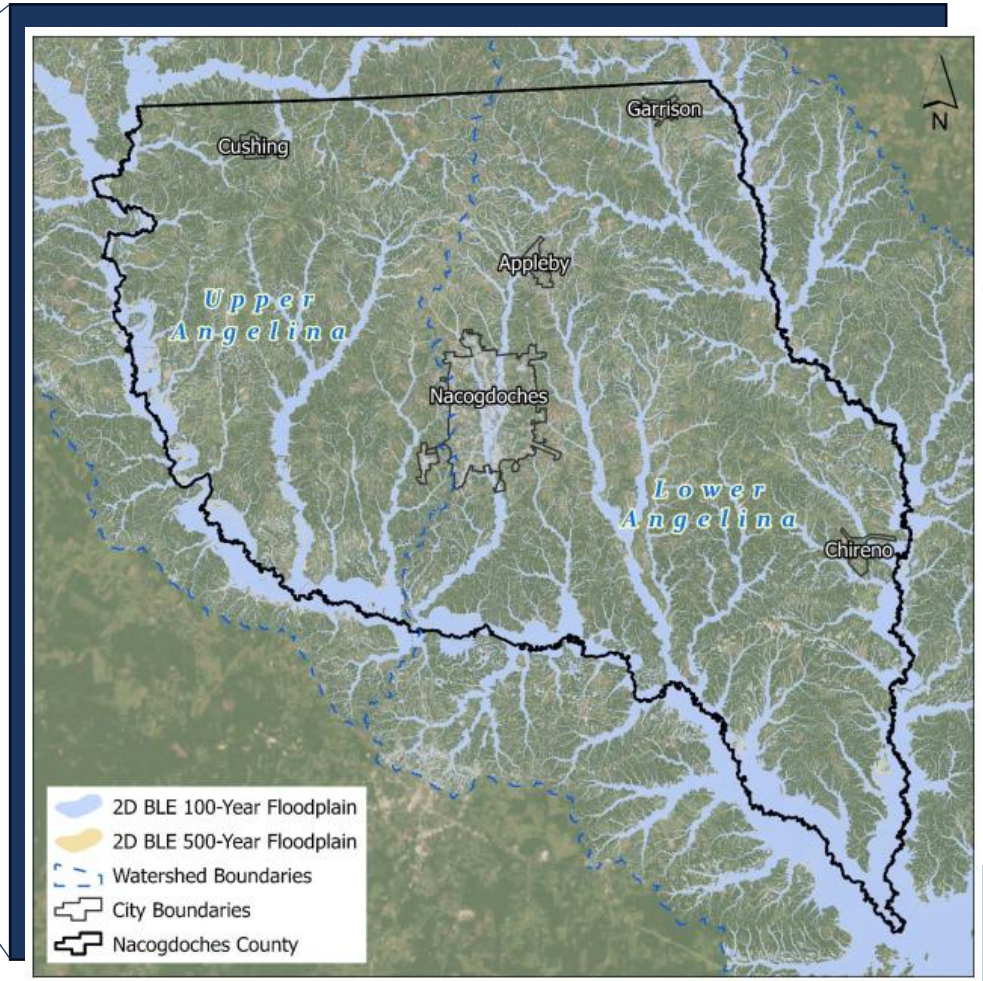
JASPER COUNTY MASTER DRAINAGE PLAN

- Neches River portion of county
- Estimated 4,576 people, 1,480 structures, and 62 critical facilities at 100-year flood risk
- Areas of Interest = City of Browndell / Mill Creek



STUDY AREA – NACOGDOCHES COUNTY





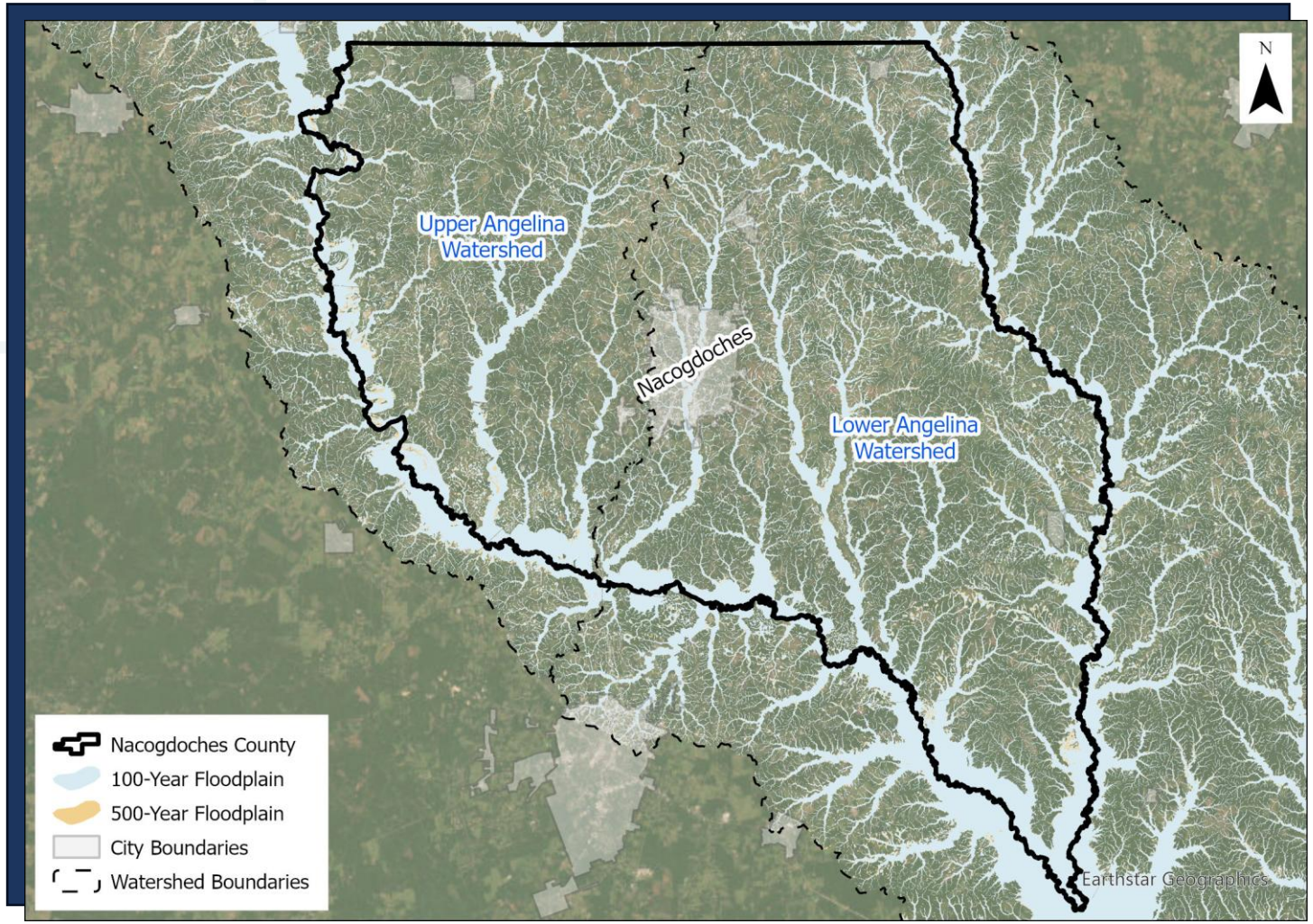
DATA COLLECTION – NACOGDOCHES COUNTY

BLE Floodplain Data

- 2D BLE – TWDB 2026
- Areas of Mitigation Interest

Vulnerability Factors

- Population
- Critical Facilities
- Homes & Other Buildings
- Low Water Crossings



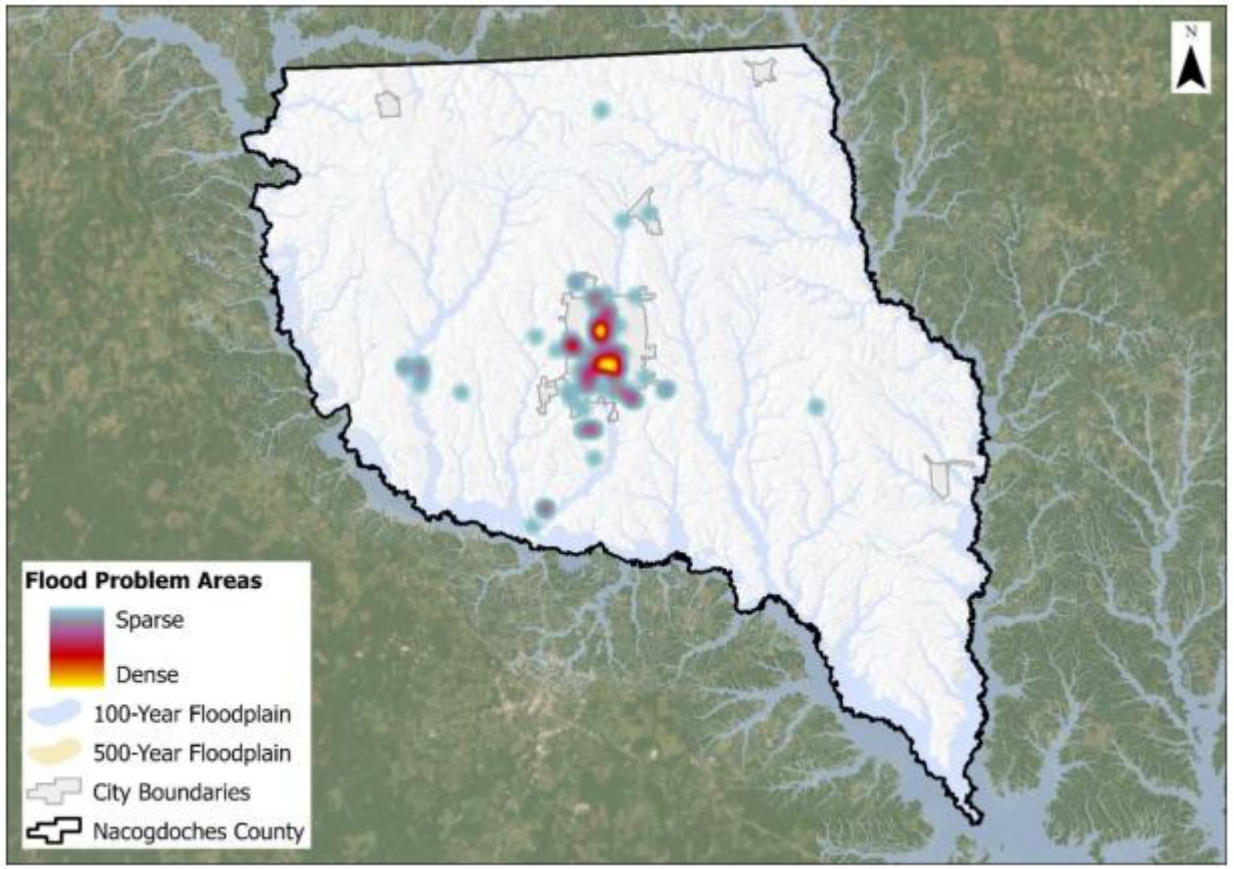
FLOOD PROBLEM AREAS – NACOGDOCHES COUNTY

Hot Spot Analysis

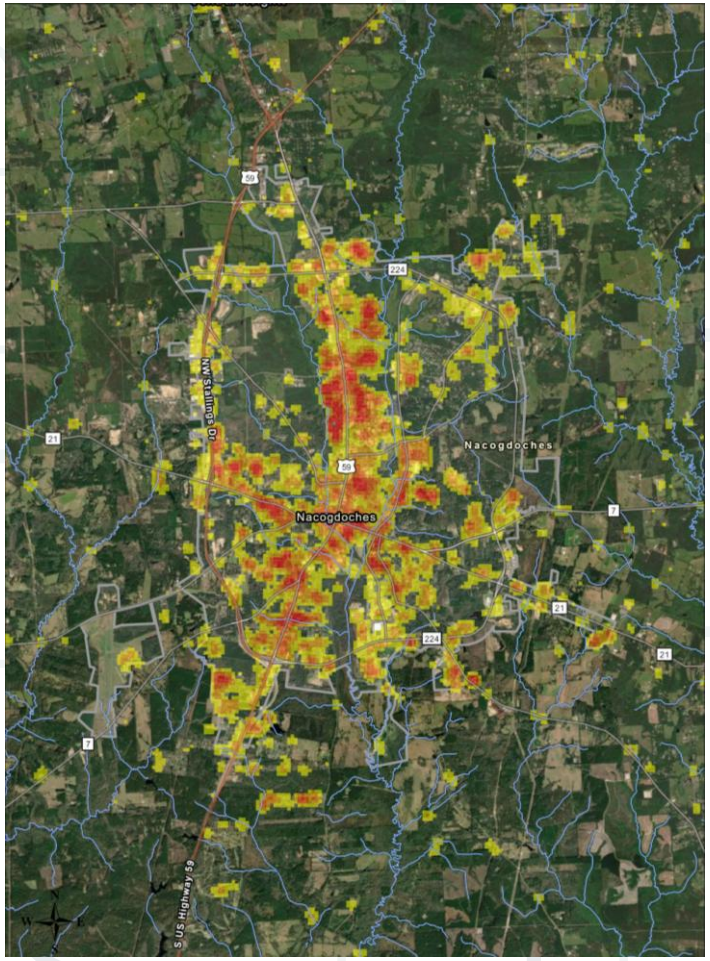
- Identify areas where flood risk and community consequences are most concentrated
- Combine known floodplain data and the collected vulnerability factors to develop a density map
- The results help us understand where “flooding hot spots” are located across the county

Field Visit

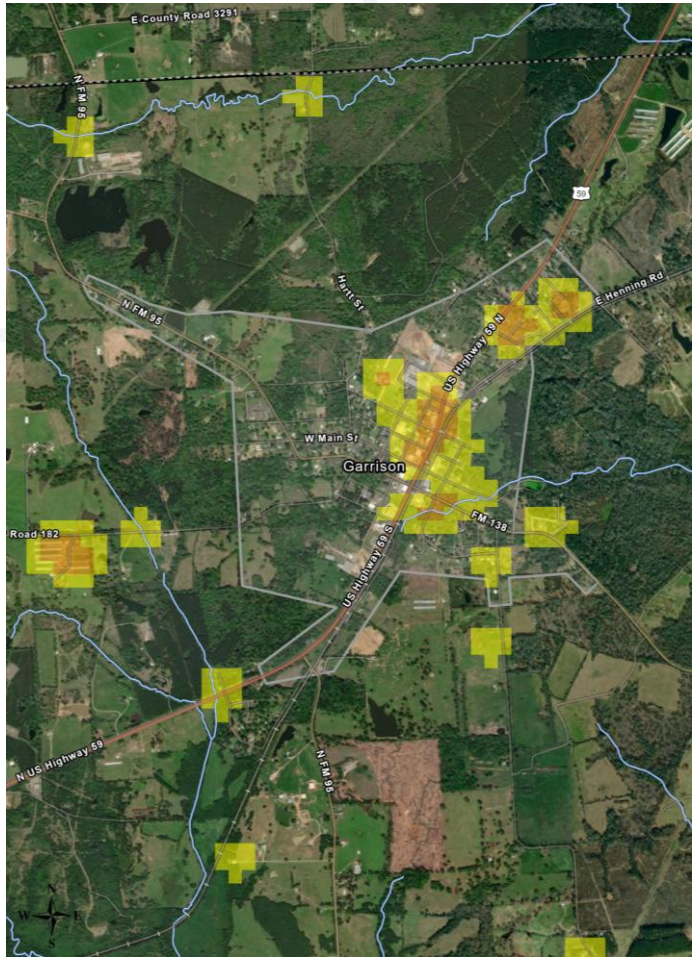
- Performed the week of October 19th



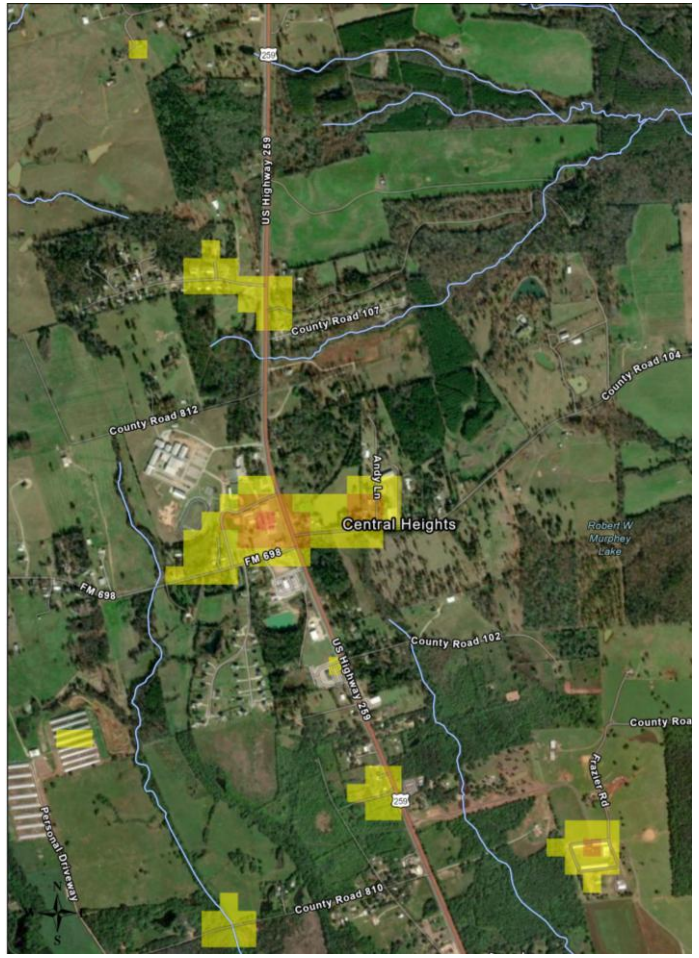
HOT SPOT ANALYSIS – NACOGDOCHES COUNTY



Nacogdoches

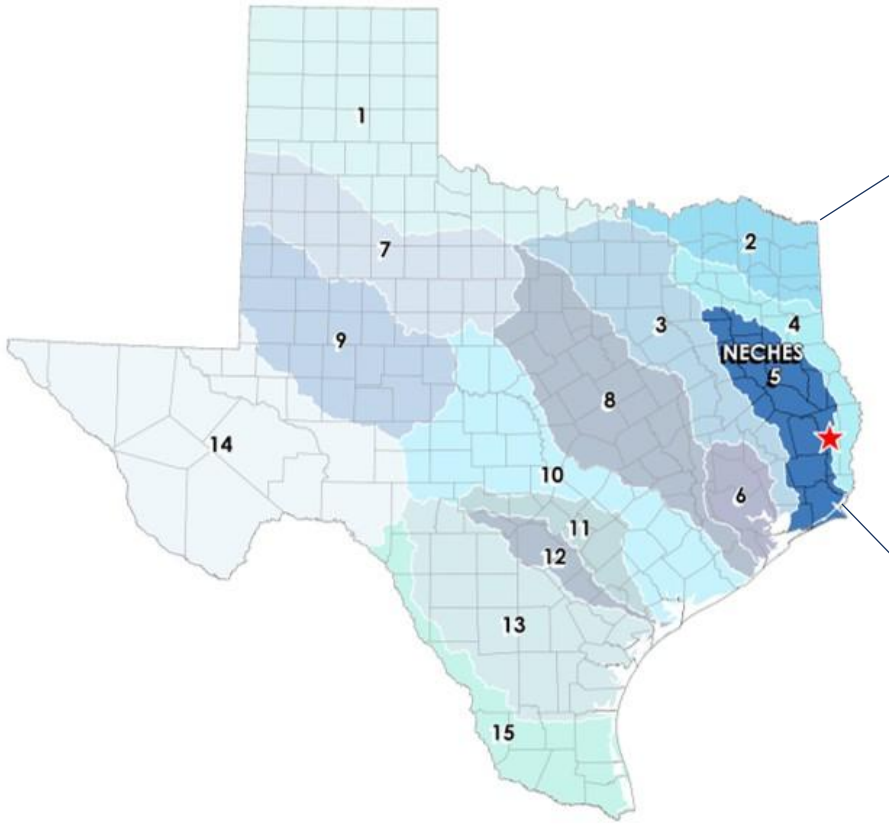


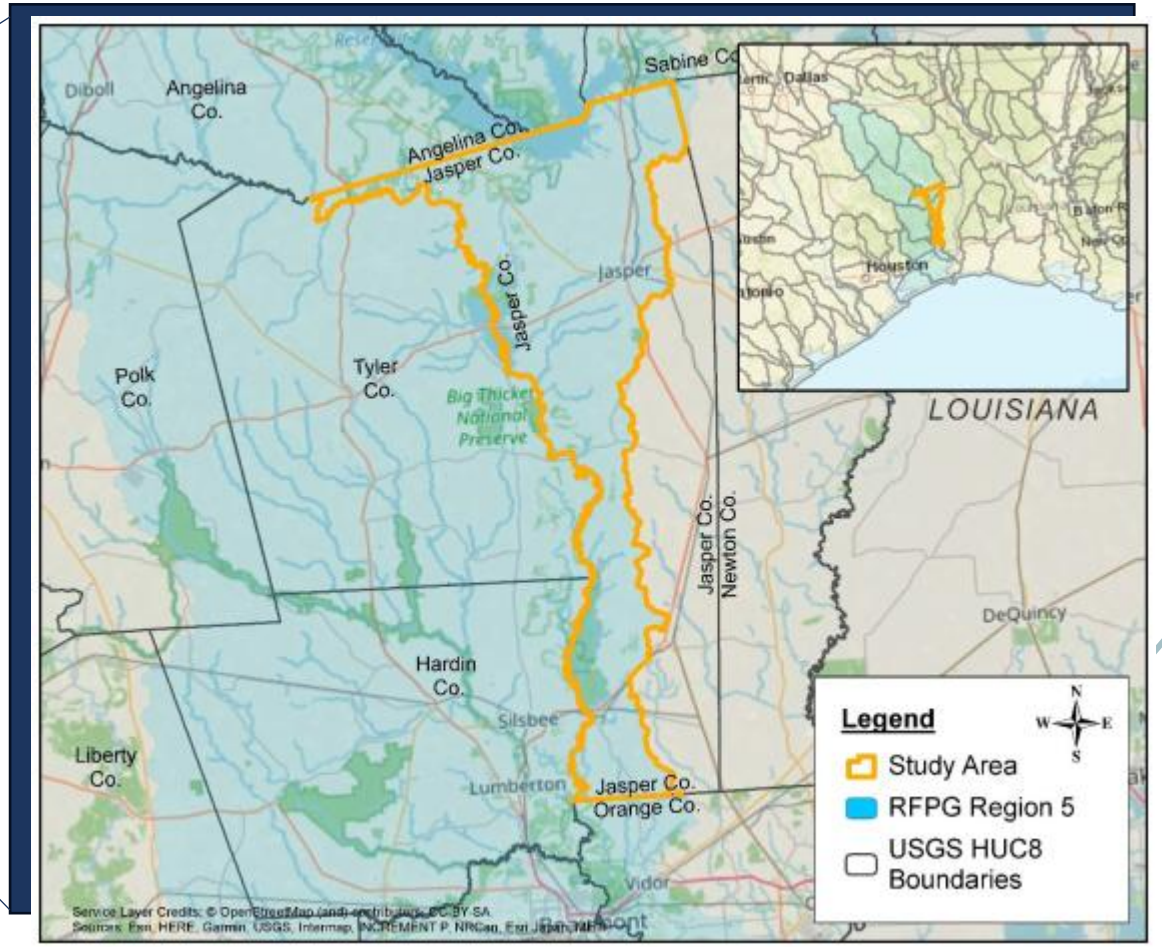
Garrison



Central Heights

STUDY AREA – JASPER COUNTY (NECHES BASIN)



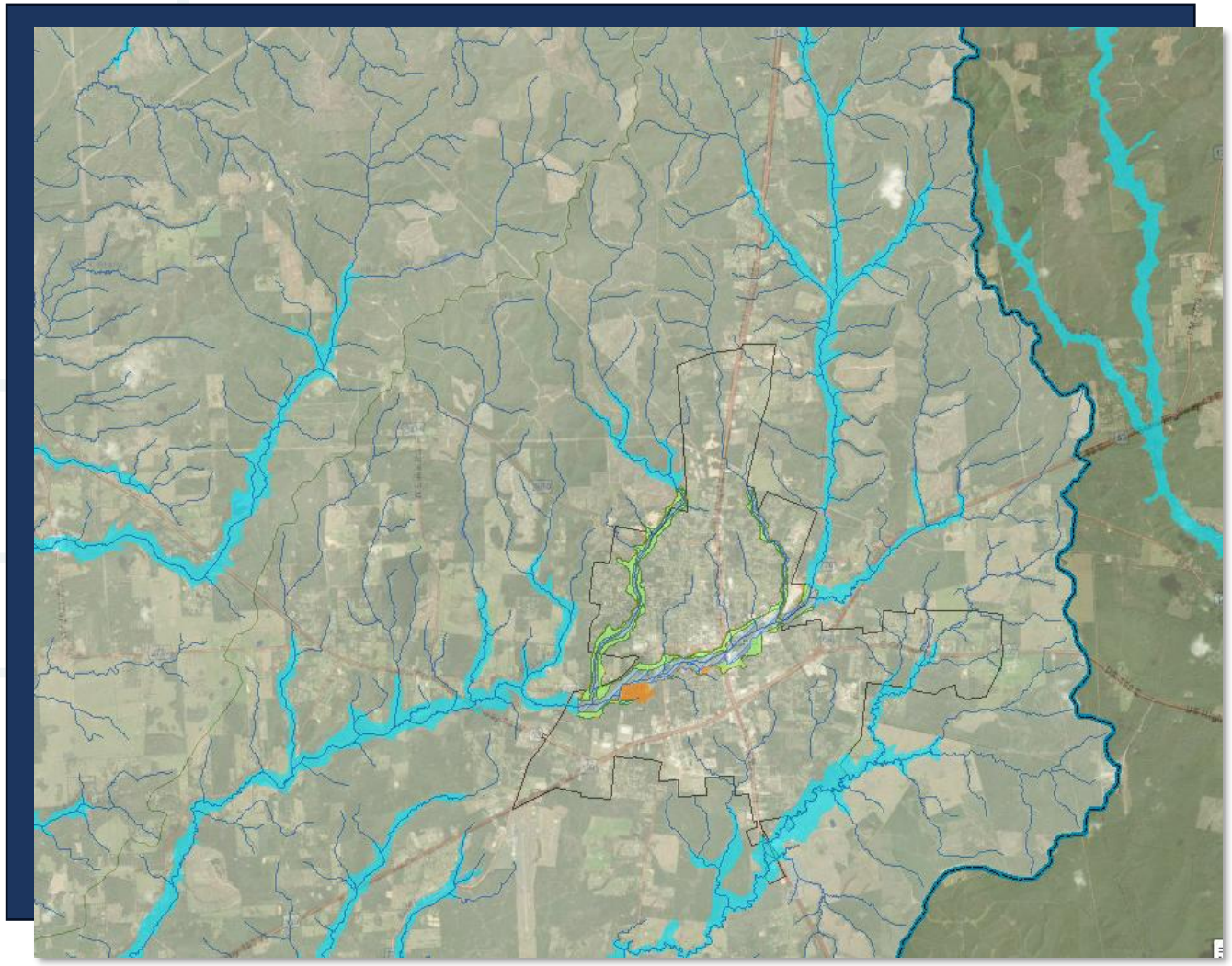


DATA COLLECTION – JASPER COUNTY

Reviewed previous studies and information of nearby projects

- Region 5 RFP Study, 01/2023
- TWDB Sandy Creek Mitigation Modeling
- 1D BLE, 09/2019
- 2D BLE, 2026

Gathered available spatial data within study vicinity



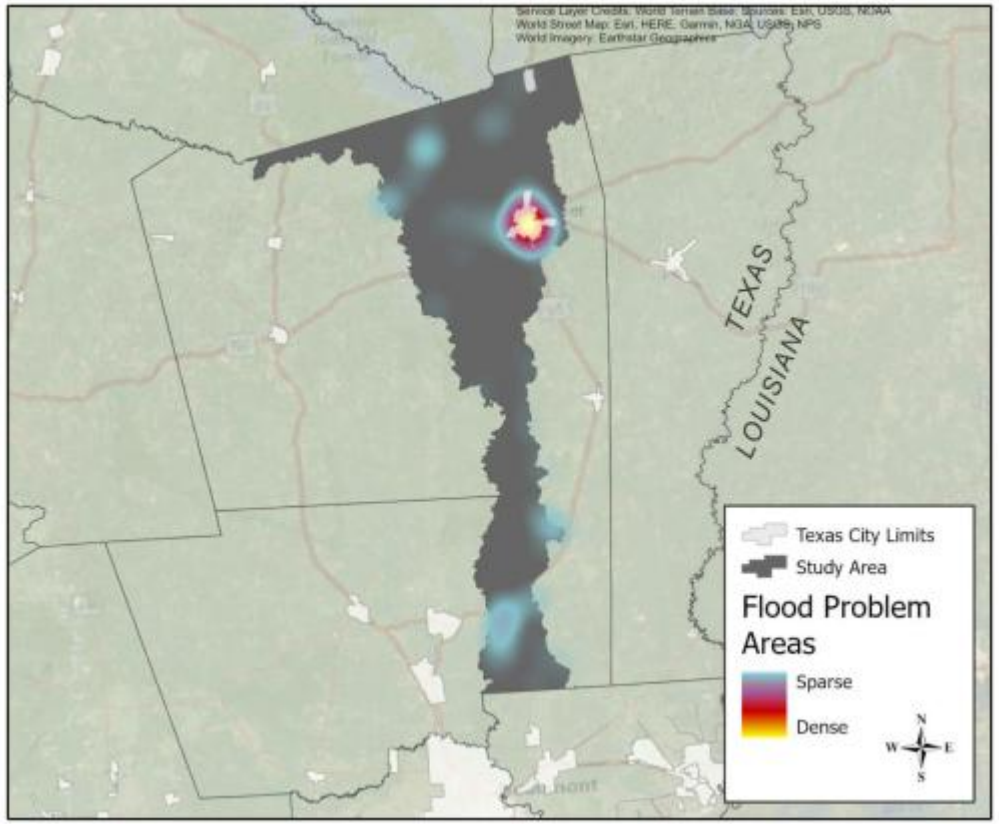
FLOOD PROBLEM AREAS – JASPER COUNTY

Hot Spot Analysis

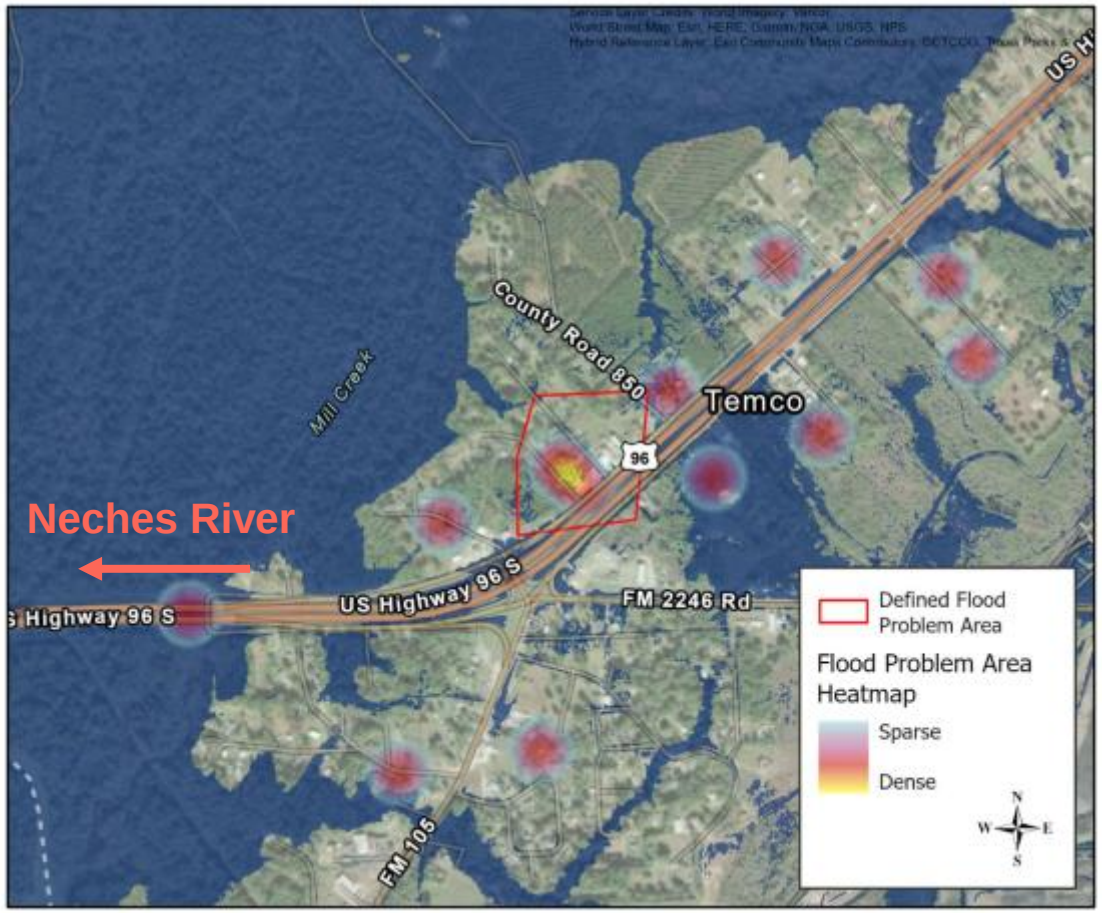
- Identify areas where flood risk and community consequences are most concentrated
- Combine known floodplain data and the collected vulnerability factors to develop a density map
- The results help us understand where “flooding hot spots” are located across the county

Field Visit

- Performed the week of November 2nd



HOT SPOT ANALYSIS – JASPER COUNTY



Evadale

FLOOD PROBLEM AREA EVALUATION

Flood Problem Areas based on:

- Flooded Areas
- Flooded Parcels
- Flooded Buildings
- Flooded Critical facilities
  - Fire Stations
  - Hospitals
  - Schools
  - Public Safety Stations,
  - Emergency Operations Centers
- Flooded roadways, LWCs, Railroads
- Nighttime Population
- Social Vulnerability Index
- Previously modeled floodplains / AOMIs

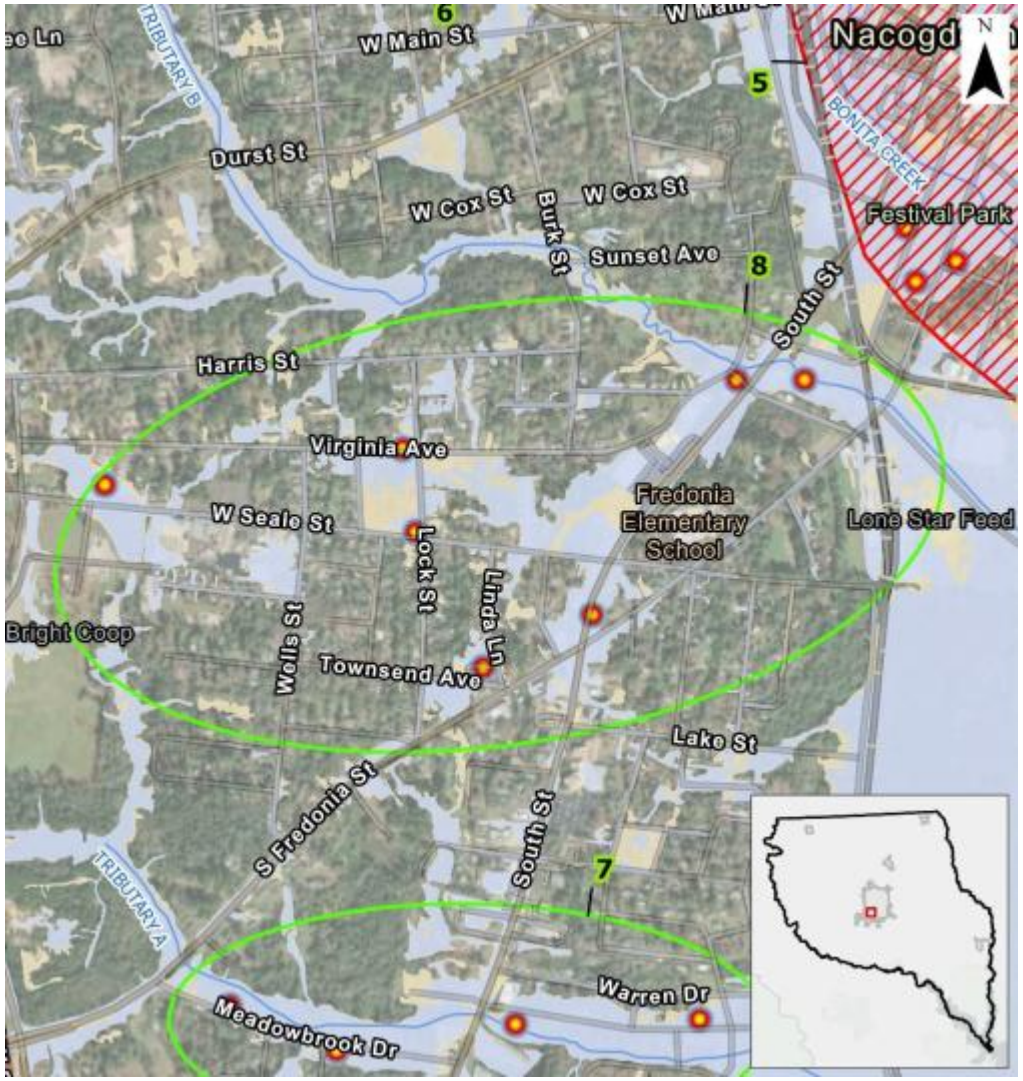
Evaluation Metric	Purpose
Flooded Area within FPA	Represents the total extent of mapped 1% ACE inundation within the FPA, providing a measure of the overall spatial extent of the flood hazard.
Flooded Parcels	Represents the number of properties intersected by the mapped floodplain, providing a measure of the geographic extent of flood impacts to private and public property.
Flooded Buildings	Represents the number of physical structures intersecting the mapped floodplain, providing a direct measure of structural exposure.
Flooded Critical Facilities	Represents flood exposure to facilities that support essential community services and emergency response.
Flooded Roadways	Represents length of roadway crossings affected by flooding, providing a measure of impacts to mobility, access, and emergency response.
Flooded Railroad	Identifies FPAs where floodplains affect the Burlington Northern Santa Fe Railway, accounting for potential impacts to regional transportation infrastructure.
Percent Flooded	Represents the portion of the defined FPA that is within the mapped floodplain, providing a relative measure of flood exposure that accounts for differences in FPA size.
Nighttime Population	Represents the estimated population associated with flooded building footprints.
Average SVI	Represents the average Social Vulnerability Index associated with the population assigned to flooded buildings.
KDE High-Density Points	Represents the concentration of high-ranking flood risk indicators, providing continuity between the initial FPA screening and subsequent prioritization.
BLE-Identified AOMIs	Represents areas of mitigation interest previously identified through the BLE studies.

IDENTIFIED AREAS OF CONCERN – NACOGDOCHES

Flood Problem Areas

- 38 FPAs identified based Initial Hot Spot Assessment
- Top Ranked Flood Problem Areas to Advance

Rank	FPA ID	Jurisdiction	Source of Flooding	Potential Mitigation Solution
1	8	City of Nacogdoches	Local	Storm Drain Improvements
2	7	City of Nacogdoches	Riverine	Storm Drain Improvements; Crossing Improvements
3	15	City of Nacogdoches & Nacogdoches County	Local	Stormwater Collection & Conveyance Improvements
4	28	City of Nacogdoches	Local	Storm Drain Improvements
5	31	City of Nacogdoches	Local	Storm Drain Improvements



City of Nacogdoches – South Street, Virginia Ave, W. Seale St, S. Fredonia St – Local Flooding

IDENTIFIED AREAS OF CONCERN – NACOGDOCHES



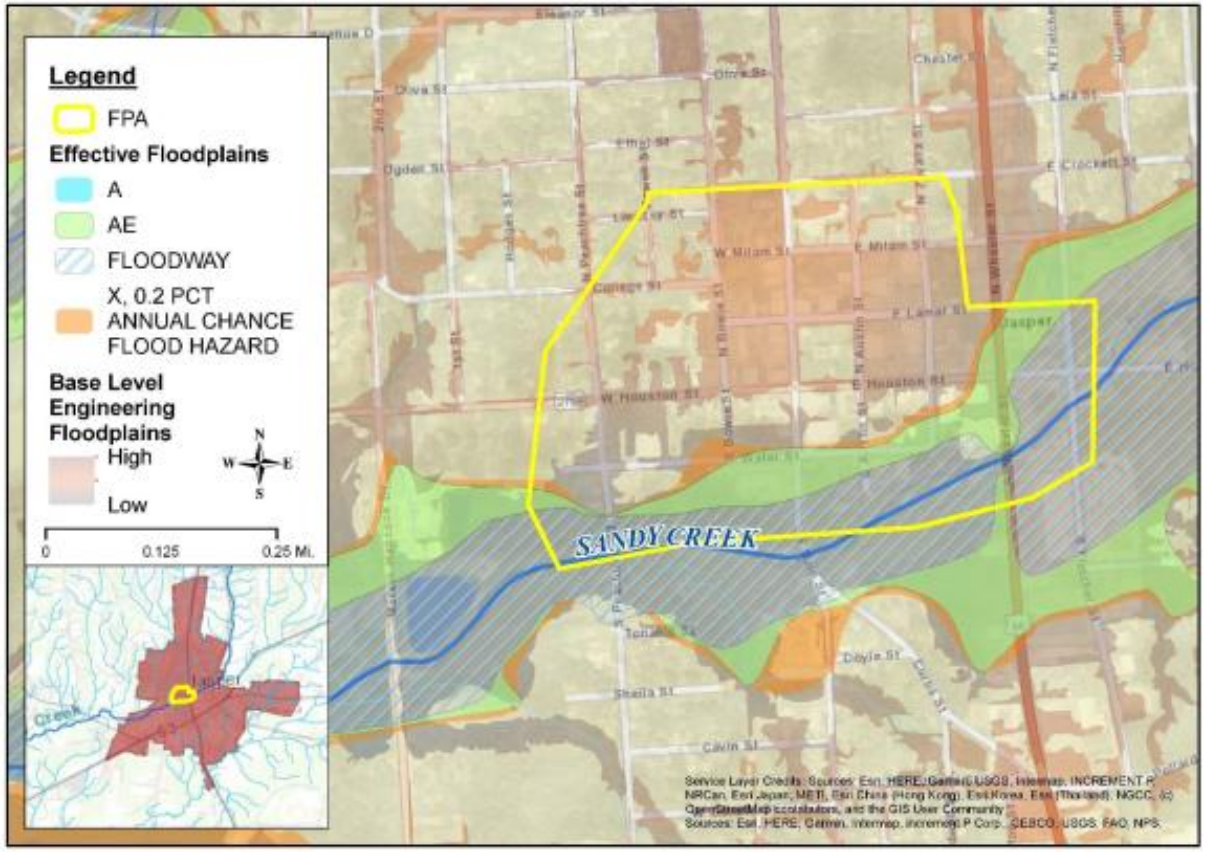
City of Nacogdoches & Nacogdoches County – Scarlet Oak Street, Shumard Oak Street, Willow Oak Street, and Bluff Oak Street – Local Flooding

IDENTIFIED AREAS OF CONCERN – JASPER

Flood Problem Areas

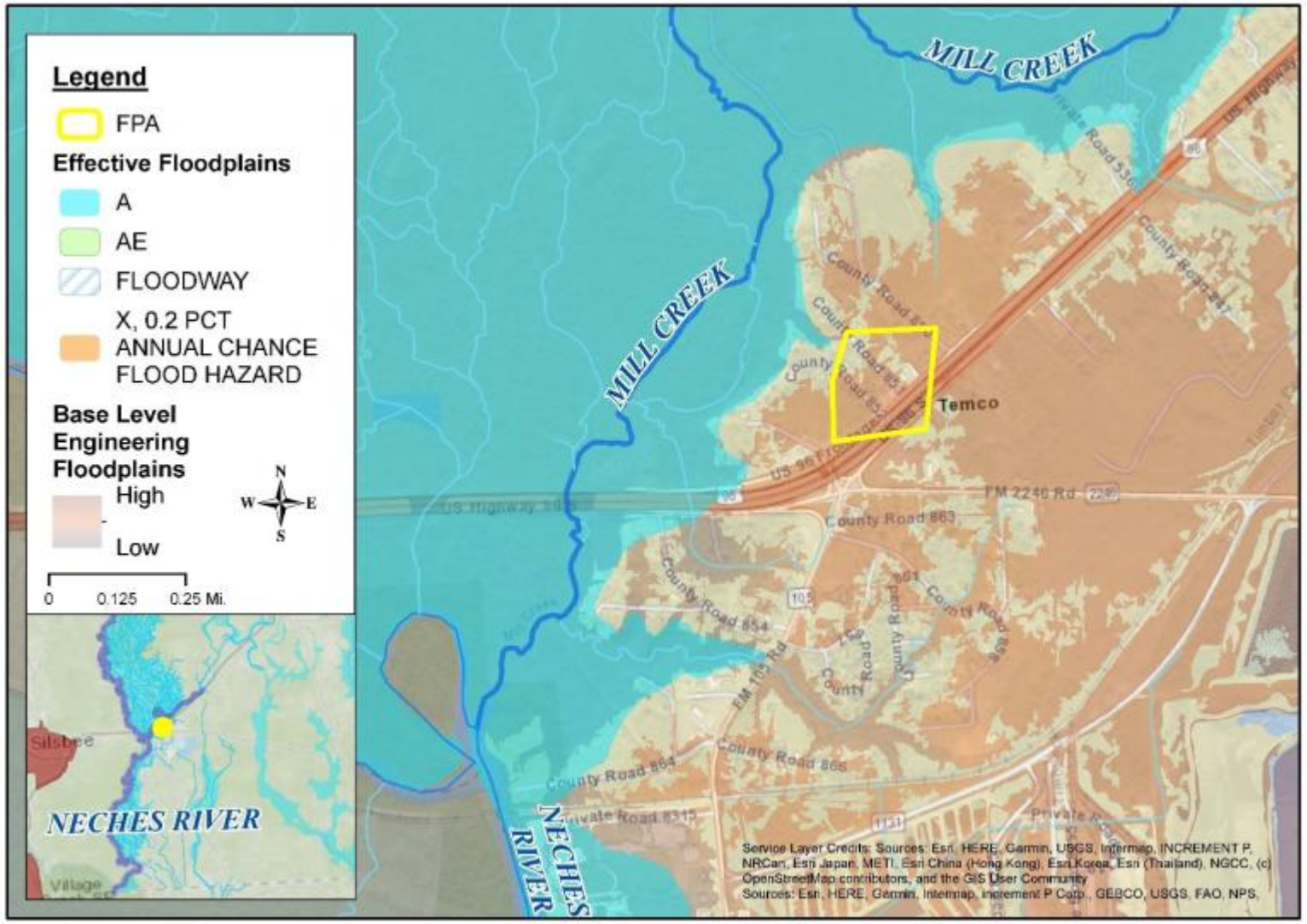
- 44 FPAs identified based Initial Hot Spot Assessment
- Top Ranked Flood Problem Areas to Advance

Rank	FPA-ID	Jurisdiction	Source of Flooding	Potential Mitigation Solution
1	MA_44a	City of Jasper	Riverine/Local	Conveyance Improvements - Bridges
2	MA_44b	City of Jasper	Local	Conveyance Improvements - Storm Sewer
3	MA_22	City of Jasper	Riverine	Conveyance Improvements - Bridges
4	MA_09	City of Jasper	Riverine/Local	Conveyance Improvements - Culverts
5	MA_27	City of Jasper	Local	Conveyance Improvements - Culverts
6	MA_13	Jasper County	Local	Conveyance Improvements – Roadside Ditch and Culverts



City of Jasper – Northern Bank of Sandy Creek near N Wheeler Street – Local & Riverine Flooding

IDENTIFIED AREAS OF CONCERN – JASPER



Jasper County – Evadale & Highway 96 near Mill Creek and Neches River – Local Flooding

MID-POINT SUBMITTAL

- Technical Memorandum
- Identification of Flood Problem Areas & Potential Solutions
  - 38 Flood Problem Areas identified for **Nacogdoches County**
    - **5 Locations** will be evaluated for flood mitigation projects
  - 44 Flood Problem Areas identified for **Jasper County**
    - **6 Locations** will be evaluated for flood mitigation projects





NEXT STEPS

- Final Data Collection and Coordination with RFPG / Overlapping Projects
- Existing Conditions Hydrologic & Hydraulic Modeling
- Alternatives Analysis
  - 5 locations for Nacogdoches County MDP
  - 6 locations for Jasper County MDP
- Community Outreach
  - Nacogdoches County – Week of January 11, 2027 (Tentative)
  - Jasper County – Week of January 18, 2027 (Tentative)
- Reporting





PROJECT SCHEDULE

FME for Small Communities

Task No.	TASK NAME	2026						2027				
		Q3			Q4			Q1			Q2	
		J	A	S	O	N	D	J	F	M	A	
1	Project Management and Meetings											100% Report Due - April 19, 2027
2	Data Collection and Review											
3	Survey / Field Work											
4	Coordination with RFPGs for Overlap											
5	Screening Assessment and ID of FPAs											
6	Detailed H&H Analysis											
7	Alternatives Analysis											
8	Community Outreach											
9	Quality Control											
10	Reporting					50%			90%		100%	

Questions & Comments

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