



Update from Consultant Team

Neches Regional Flood Planning Group

October 15, 2026

1

Agenda

- Task 1 – Historical Storm Events
- Task 4C – Performance of FMEs
- Task 5A – Recommendation of FMEs, FMSs, and FMPs
- Task 7 – Flood Response Information and Activities



2

5

Task 1 – Planning Area Description (Historical Storm Events)

3

Tropical Storm Edouard

- Storm made landfall on September 1st and impacted several areas in SE Texas
 - Hardin County
 - Kountze
 - Lumberton
 - Polk County
 - Corrigan
 - Indian Springs
 - Tyler County
 - Woodville



4

Kountze

5

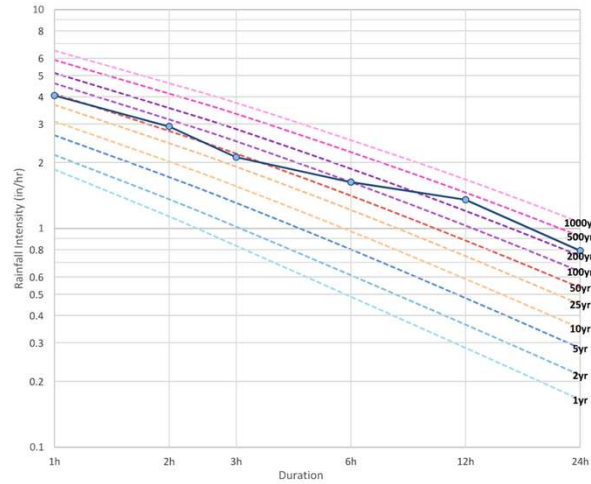
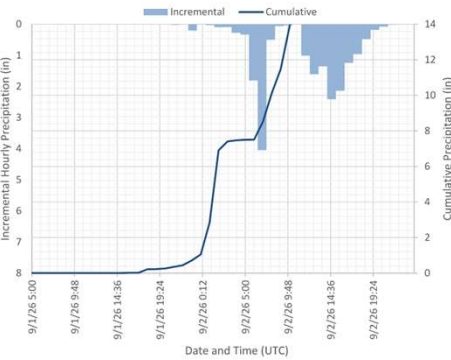
Start (UTC) 9/1/26 0:00

End (UTC) 9/2/26 19:00

HRAP cell 666,198

Location 30.45076°N
94.32371°W

Duration	Total (in)	Intensity (in/hr)
1h	4.05	4.05
2h	5.85	2.92
3h	6.35	2.12
6h	9.76	1.63
12h	16.22	1.35
24h	18.97	0.79
2d	18.97	0.40
3d	18.97	0.26
4d	18.97	0.20
7d	18.97	0.11
10d	18.97	0.08
20d	18.97	0.04
30d	18.97	0.03



5

Woodville

5

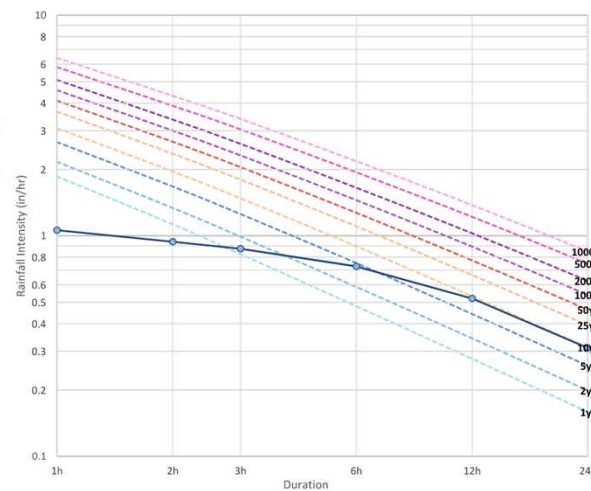
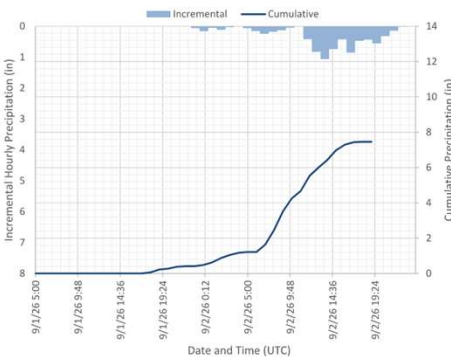
Start (UTC) 9/1/26 0:00

End (UTC) 9/2/26 19:00

HRAP cell 662,207

Location 30.78278°N
94.41513°W

Duration	Total (in)	Intensity (in/hr)
1h	1.06	1.06
2h	1.88	0.94
3h	2.62	0.87
6h	4.36	0.73
12h	6.24	0.52
24h	7.44	0.31
2d	7.44	0.16
3d	7.44	0.10
4d	7.44	0.08
7d	7.44	0.04
10d	7.44	0.03
20d	7.44	0.02
30d	7.44	0.01



6

Lumberton

5

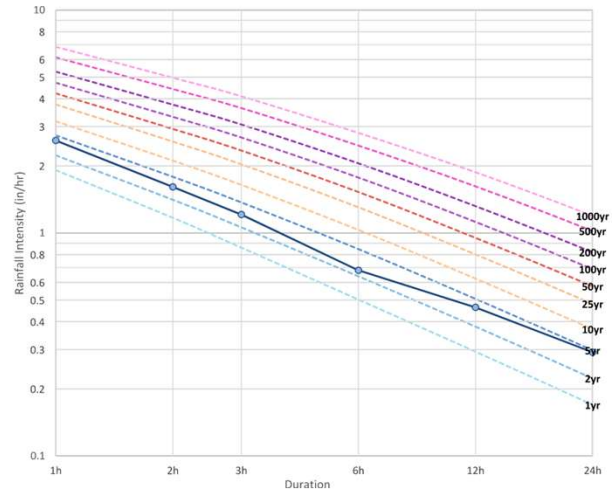
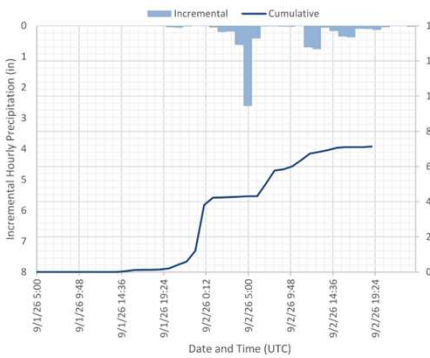
Start (UTC) 9/1/26 0:00

End (UTC) 9/2/26 19:00

HRAP cell 670,193

Location 30.25527°N
94.20364°W

Duration	Total (in)	Intensity (in/hr)
1h	2.60	2.60
2h	3.22	1.61
3h	3.63	1.21
6h	4.08	0.68
12h	5.57	0.46
24h	7.01	0.29
2d	7.01	0.15
3d	7.01	0.10
4d	7.01	0.07
7d	7.01	0.04
10d	7.01	0.03
20d	7.01	0.01
30d	7.01	0.01



7

Kountze

5

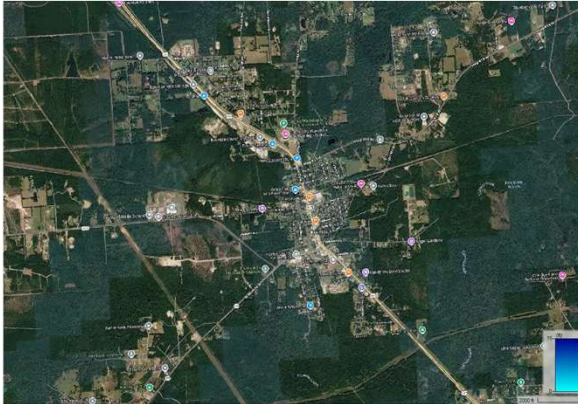


8

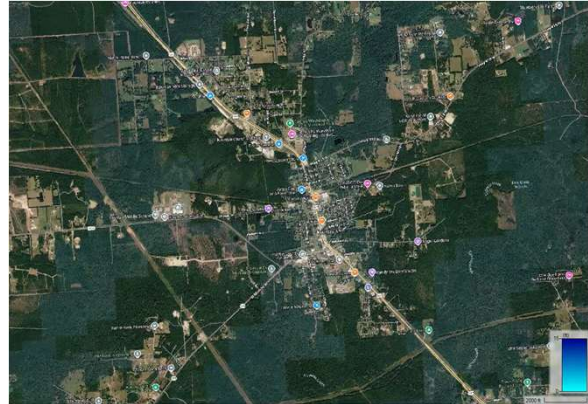
Kountze (GLO Village Creek Model)

5

100YR Existing Conditions



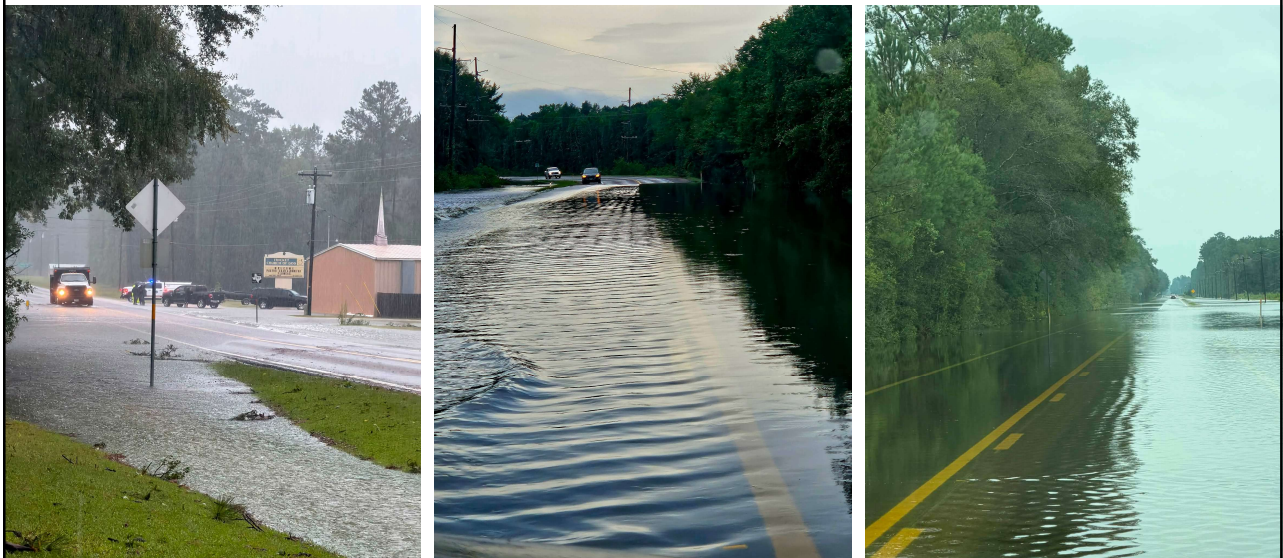
500YR Existing Conditions



9

Thicket

5

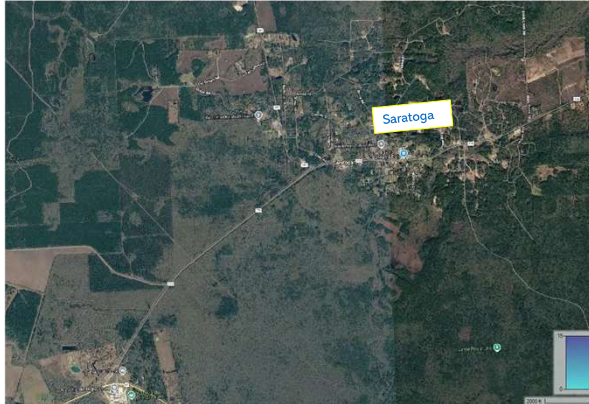


10

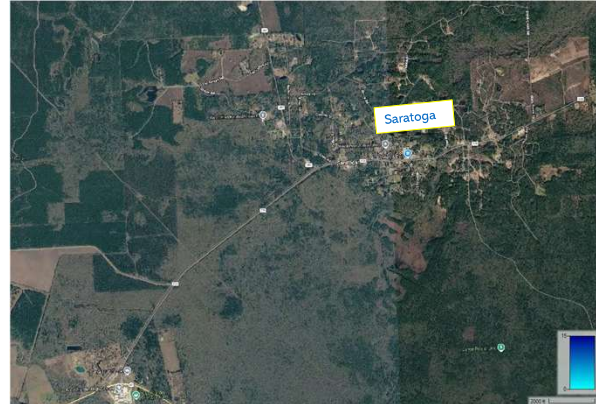
Saratoga (DD6 Model)

5

100YR Existing Conditions



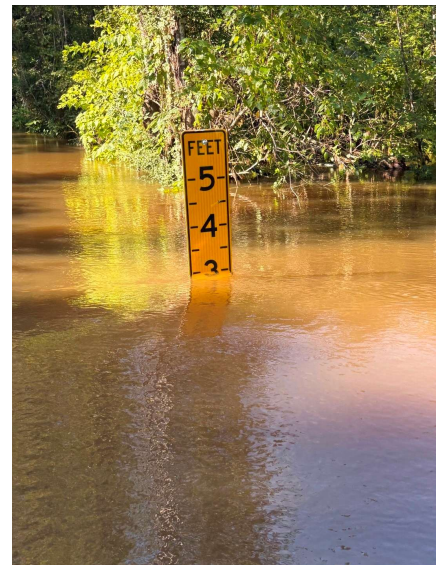
500YR Existing Conditions



13

Village Mills/Wildwood

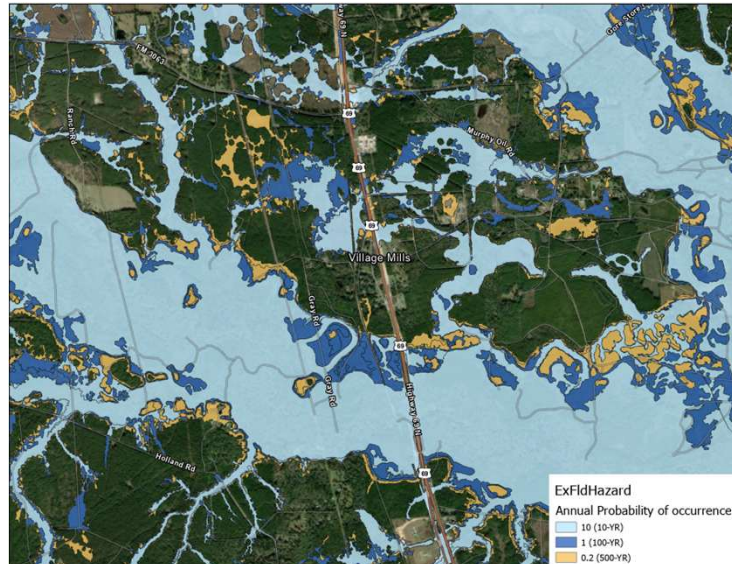
5



14

Village Mills/Wildwood (ExFldHazard)

5

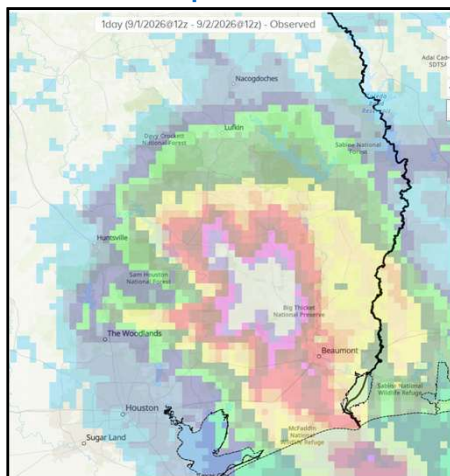


15

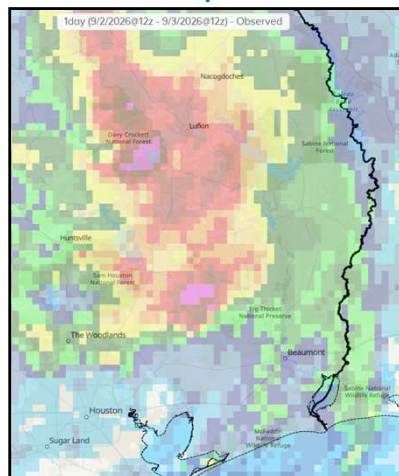
Tropical Storm Edouard

5

Tue Sept 1st



Wed Sept 2nd

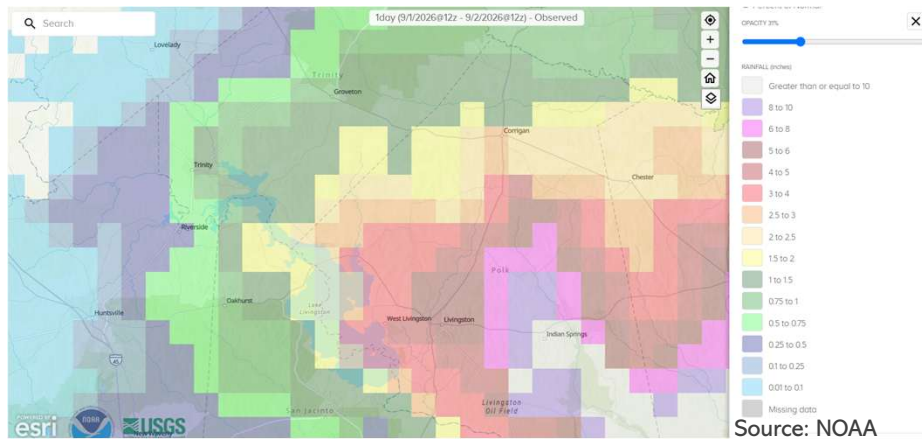


16

Tropical Storm Edouard

5

- September 1st – 3rd, 2026
 - Corrigan received approximately 7.5"
 - Indian Springs received approximately 13.0"

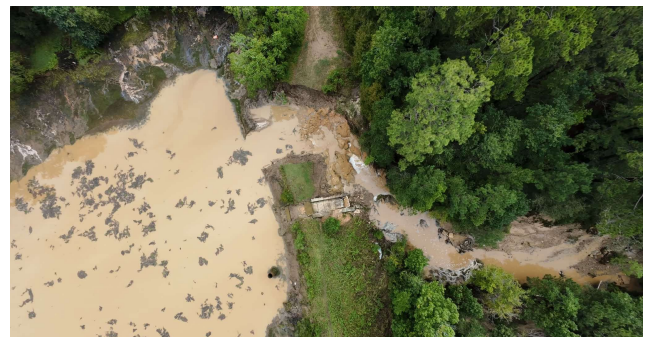


17

Tropical Storm Edouard

5

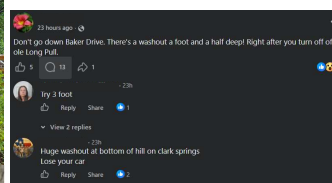
- Indian Springs reported damage
 - Lake Donna Dam breached
 - Residents lost power overnight
 - Numerous road washouts
 - [KPRC2 News Article](#)



Source: Neal Jay, Top Dog FPV Drones, We <3 Indian Springs Facebook page



Source: We <3 Indian Springs Facebook page



Source: We <3 Indian Springs Facebook page

18

5

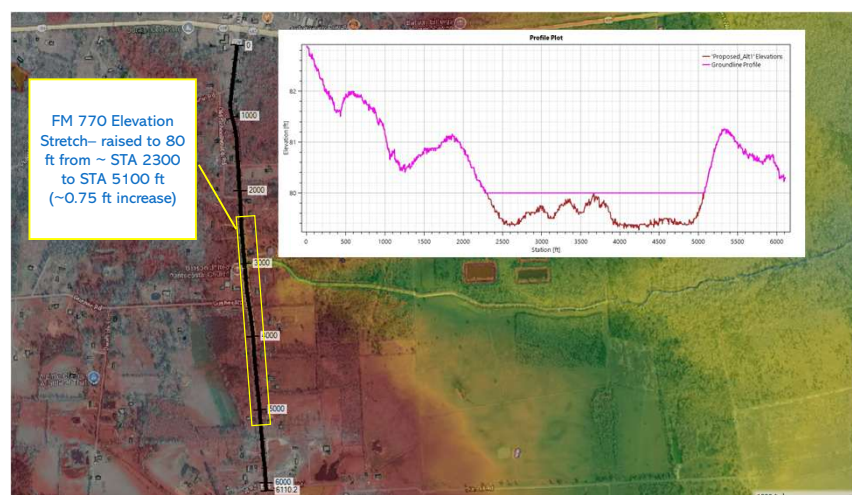
Task 4C – Performance of Flood Management Evaluations

19

1st Alternative: Road Elevation along FM 770 – Updates

5

- Properties along FM 770 mostly above 100YR WSEL – Opted to elevate roadway to preserve emergency access
- 30 ft bottom width channel with 3:1 side slopes to aid in mitigating impacts

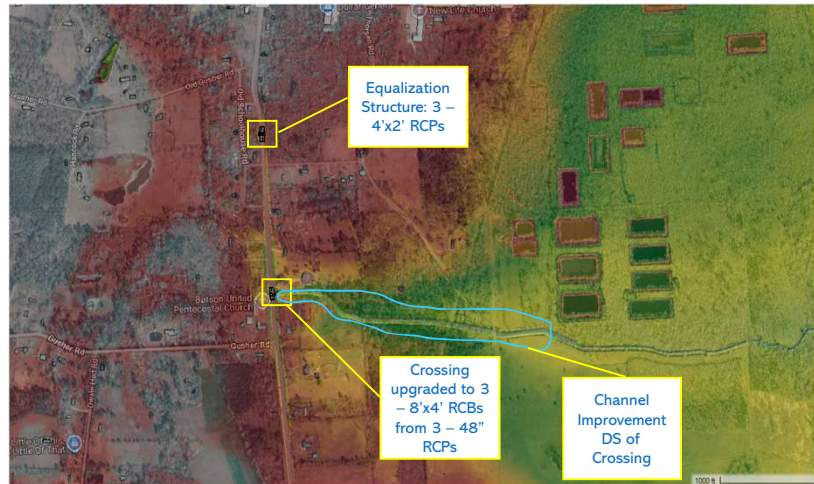


20

1st Alternative: Road Elevation along FM 770 – Updates

5

- Equalization structure to mitigate ponding to the west
- Channel improvement downstream of upgraded crossing

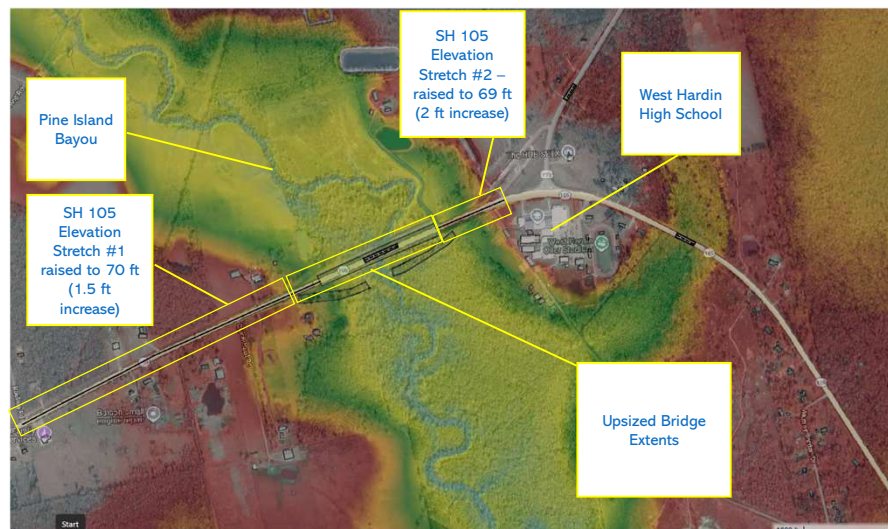


21

2nd Alternative: Road Elevation along SH 105 + Bridge Crossing Upgrade – Updates

5

- Road elevation along SH 105 to provide emergency access to West Hardin High School
- Bridge crossing at Pine Island Bayou to be upsized

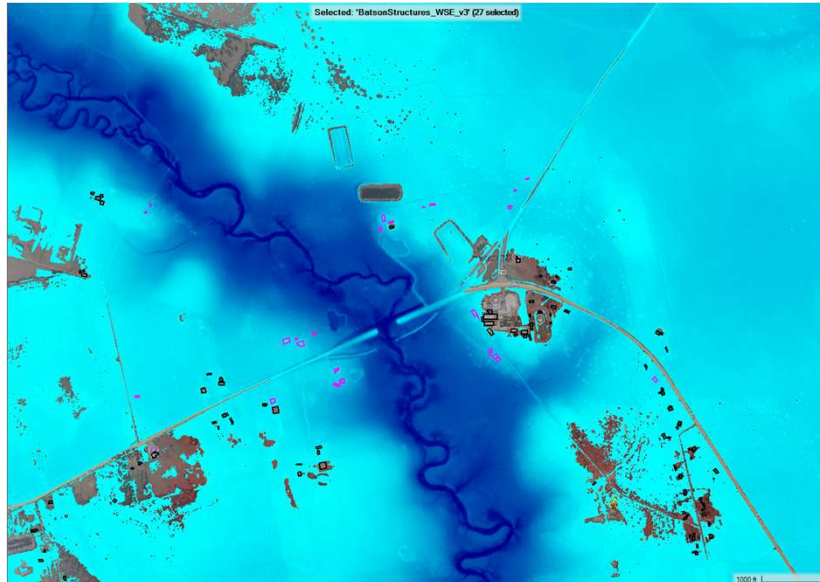


22

3rd Alternative: Structure Elevation of Properties in Batson

5

- 27 properties at 100YR flood risk along SH 105 and FM 770
- Structure elevation considered due to proximity to Pine Island Bayou

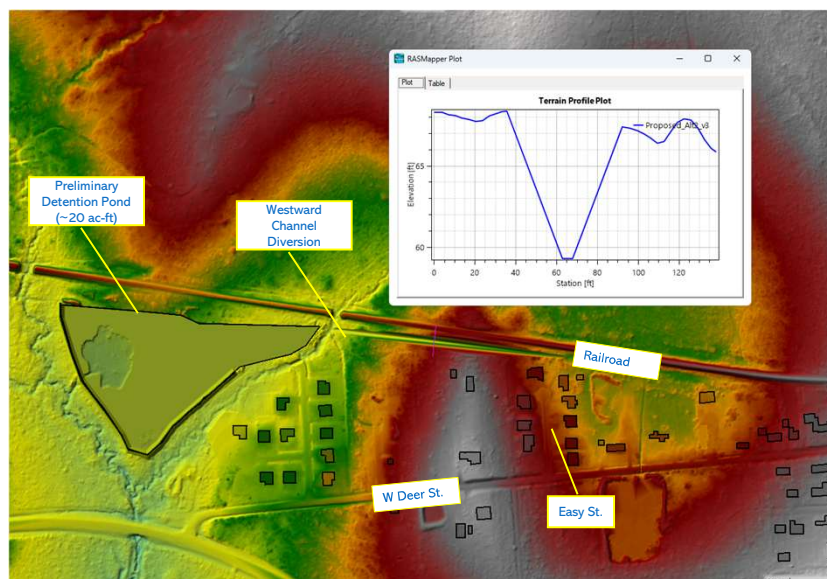


23

Alternative #1: Channel Diversion for Easy St. Neighborhood

5

- Existing culvert crossing across RR to north causing ponding of neighborhood to south
- Channel diversion to westward stream proposed to alleviate flooding for neighborhood
- Channel currently 5 ft bottom width with 3:1 side slopes

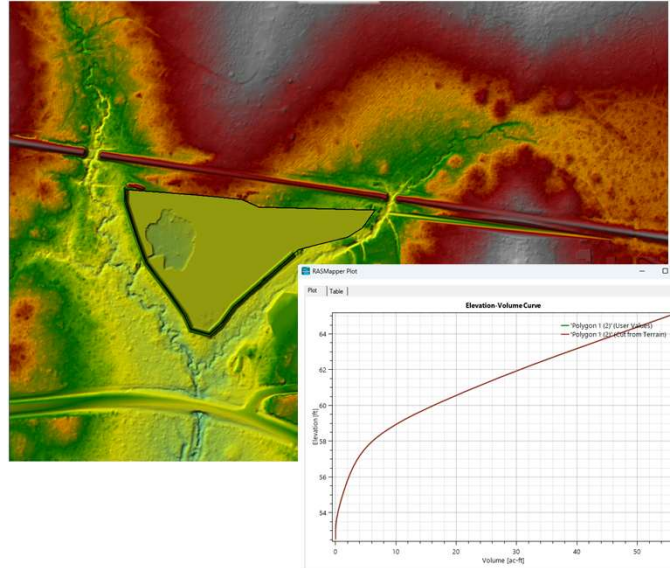


24

Alternative #1: Channel Diversion for Easy St. Neighborhood

5

- ~20 acre-ft of detention is required to fully offset any impact in the 100-YR event
- Site of detention will need to be refined in further studies, but proof of concept of capacity was made in the terrain

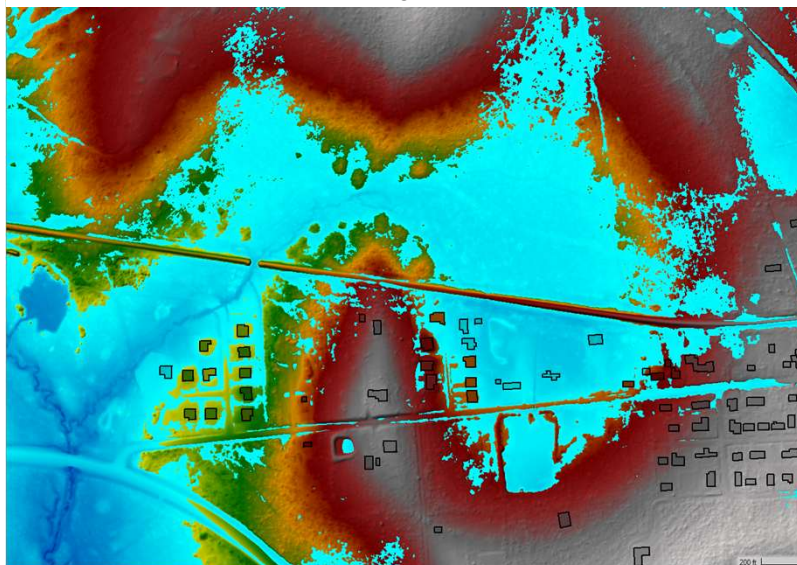


25

Alternative #1: Channel Diversion for Easy St. Neighborhood

5

Existing 100YR

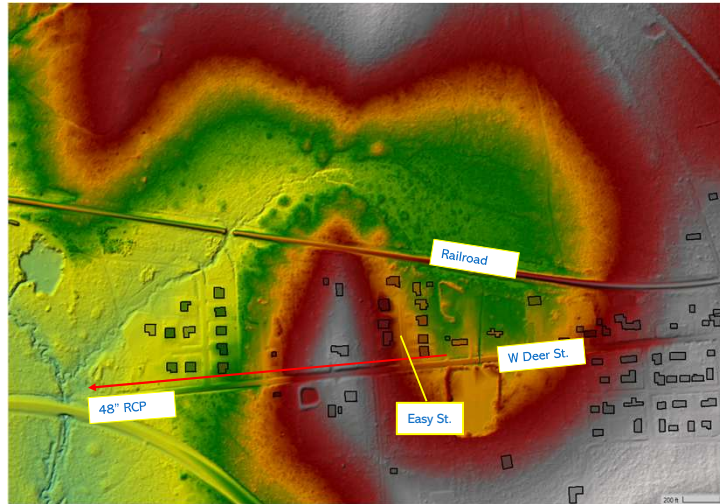


26

Alternative #1: Channel Diversion for Easy St. Neighborhood

5

- Alternate course of action: install RCP to south to accomplish same objective
- Benefit: avoid proximity to RR to north and utilize public Right-of-way to south

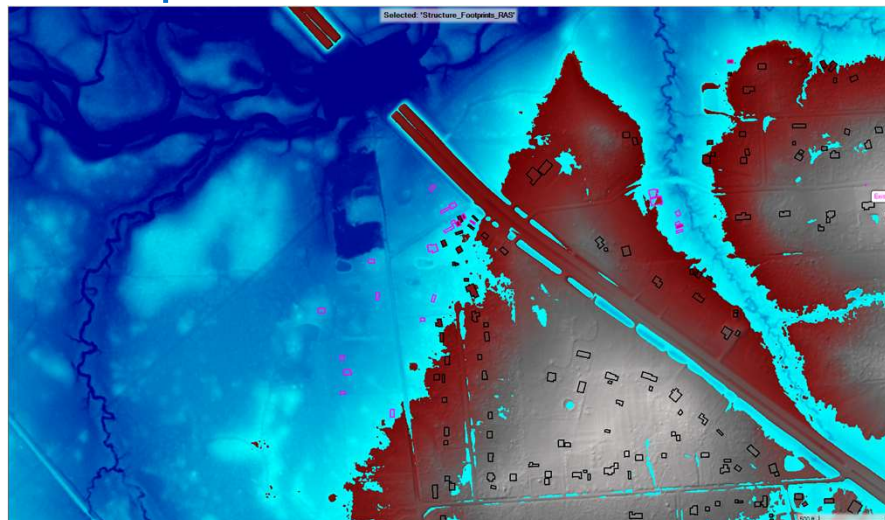


27

Alternative #2: Structure Elevation along HWY 287 & Overstreet Loop

5

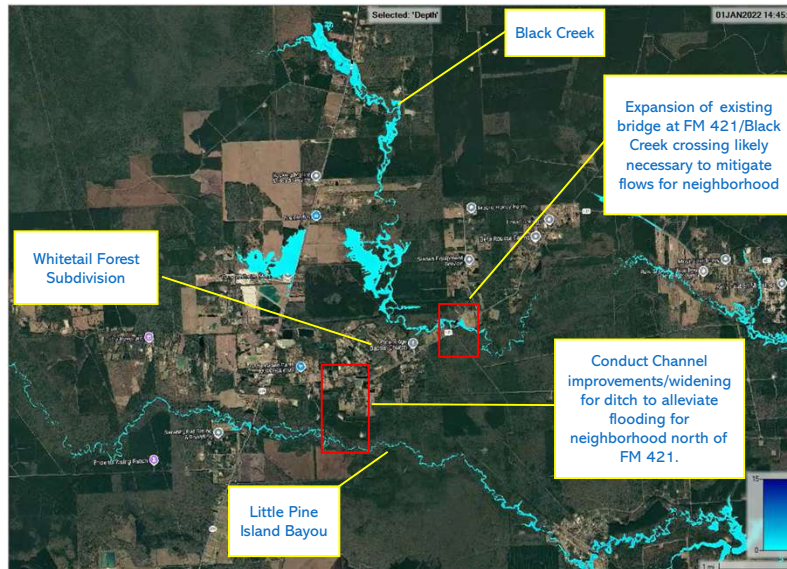
- 24 residential properties at 100YR flood risk along Overstreet Loop.
- Structure elevation considered due to property locations.



28

Black Creek Improvements for Pine Ridge

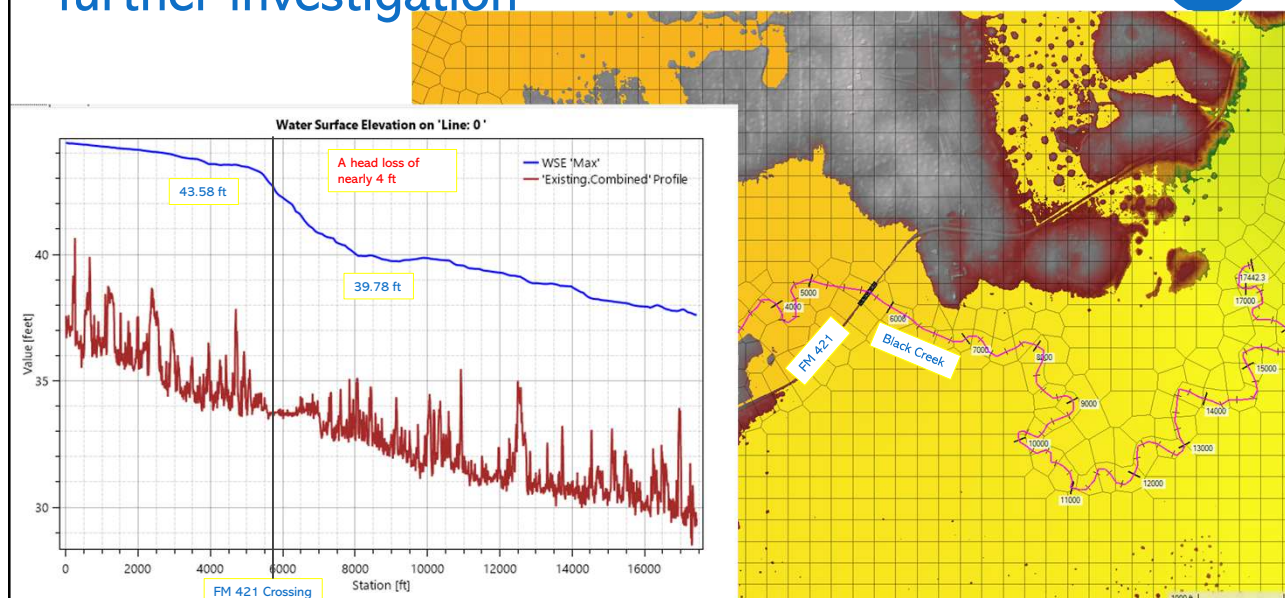
5



29

Black Creek Improvements for Pine Ridge – further investigation

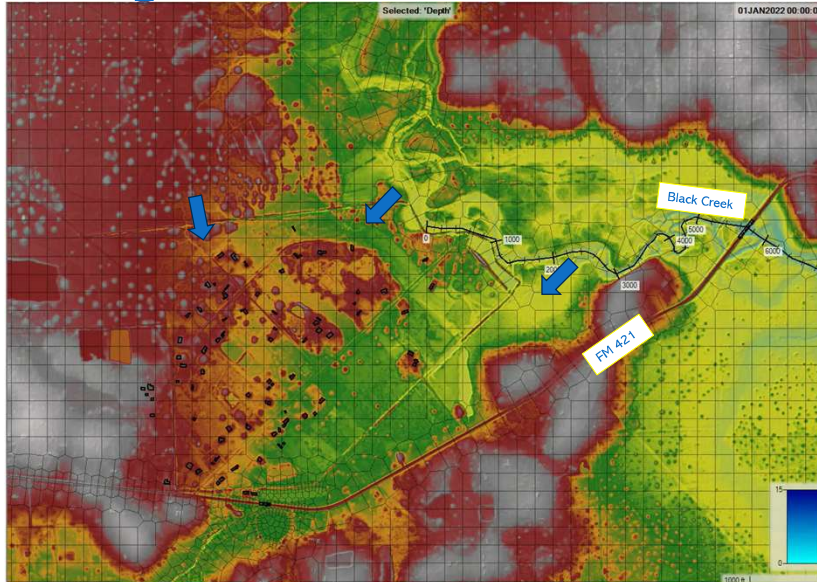
5



30

Black Creek Improvements for Pine Ridge – further investigation

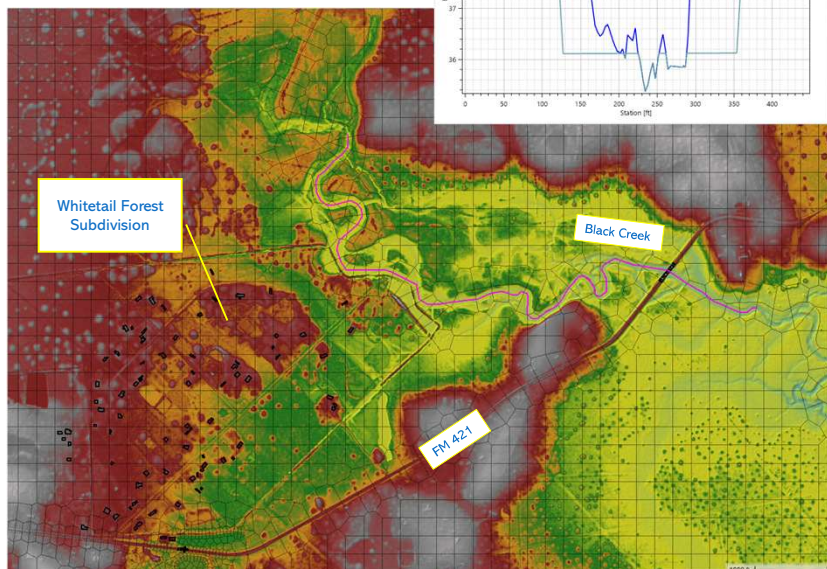
5



31

Black Creek Improvements for Pine Ridge – further investigation

- Head Loss Counter:
Channel widening
along Black Creek
 - 225 ft Width
 - 4:1 Side Slopes
 - ~0.3 ft of benefit for
Whitetail Forest
properties in 100YR
- Project will need to
account for impacts via
placement of detention

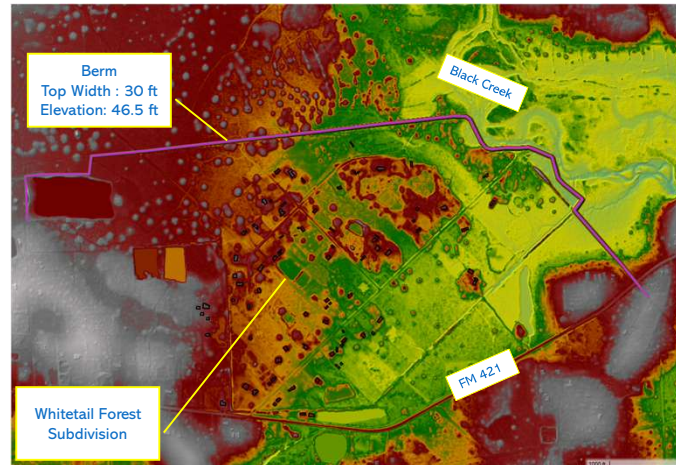


32

Black Creek Improvements for Pine Ridge – further investigation

5

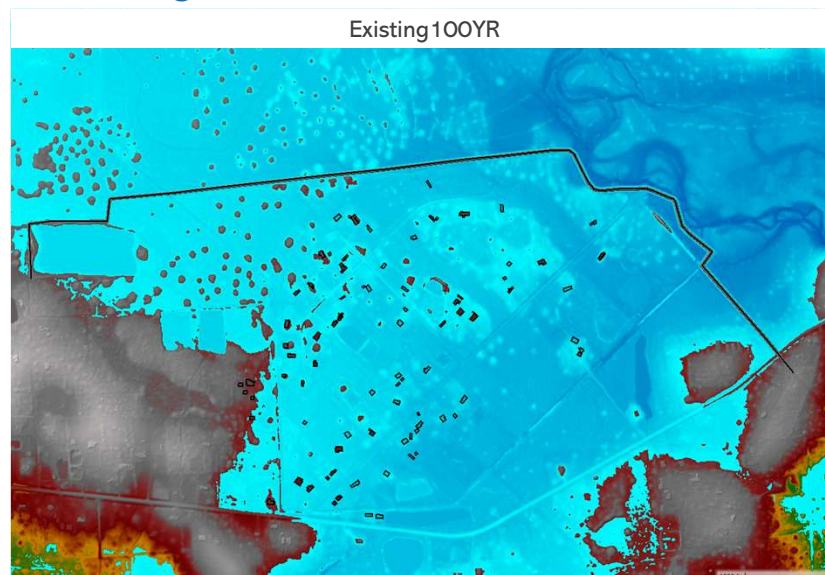
- Overflow Counter: Placement of berm to restrict flow from entering Whitetail Forest neighborhood
 - Berm has 3:1 side slopes and an elevation of 46.5 ft to keep 100-YR flows from overtopping.



33

Black Creek Improvements for Pine Ridge – further investigation

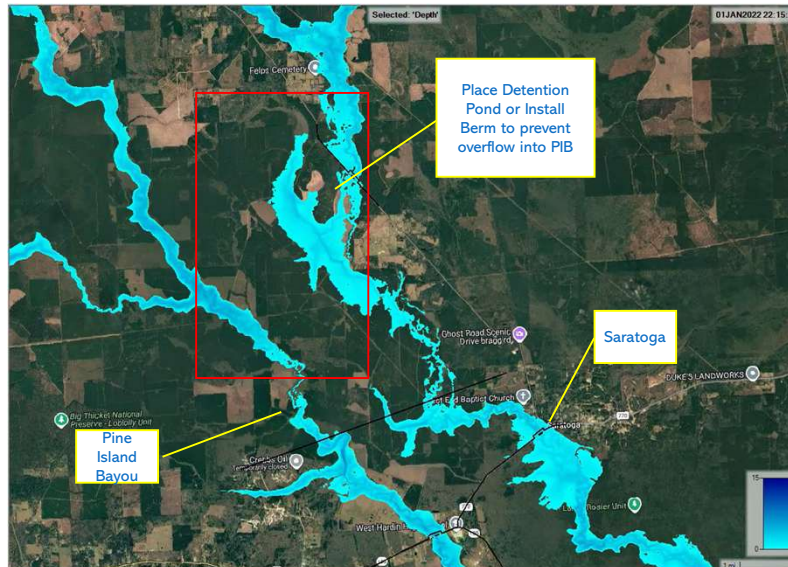
5



34

Further Alternatives – Saratoga Detention/Berm

5



35

Further Alternatives – Saratoga Detention/Berm

5

- Previous analysis of Proposed Pond done in 2021
 - Preliminary Pond Design was estimated to be 774 ac-ft
 - 0.96 in benefit for Pinewood Estates residents
 - 0.48 in benefit for Saratoga residents
 - Pond projected to have to increase to capacity of 7,774 ac-ft to provide 1 ft benefit along stream

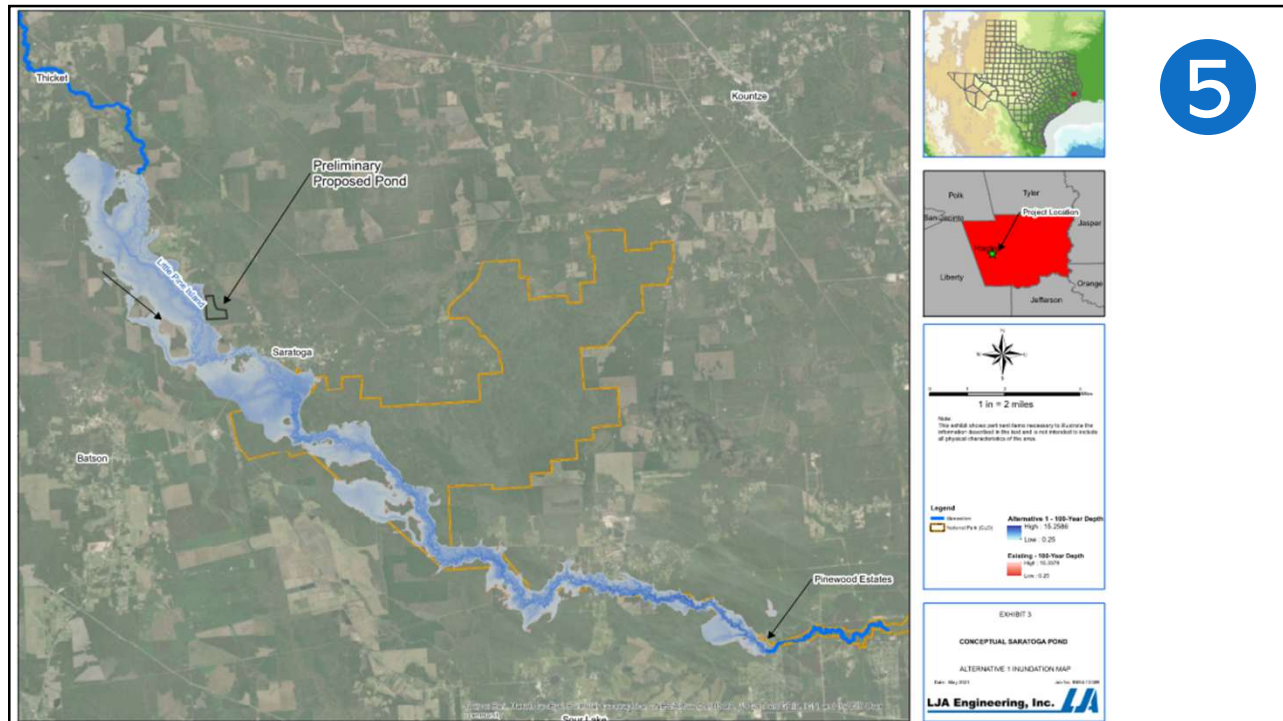
Table 3 – Alternative 1 (Proposed) Summary Results

Location	HEC-RAS Station	100-Year Peak Flows (cfs)			100-Year Water Surface Elevation (ft)		
		Existing	Alt. 1: Proposed	Delta	Existing	Alt. 1: Proposed	Delta
Proposed Pond	188644	11123	11090	-33	77.94	77.93	-0.01
Saratoga	166706	10927	10762	-165	69.94	69.9	-0.04
Pinewood Estates	28657	13986	13665	-321	25.89	25.8	-0.09

Table 4 – Alternative 2 (Hypothetical) Summary Results

Location	HEC-RAS Station	100-Year Peak Flows (cfs)			100-Year Water Surface Elevation (ft)		
		Existing	Alt. 2: Hypothetical	Delta	Existing	Alt. 2: Hypothetical	Delta
Proposed Pond	188644	11123	8498	-2625	77.94	77.5	-0.44
Saratoga	166706	10927	8231	-2696	69.94	69.33	-0.61
Pinewood Estates	28657	13986	10307	-3679	25.89	24.75	-1.14

36



37

Polk County – Corrigan

5

Project Alternatives:

- 1 Raising Union Springs and improve crossing at US59 on Bear Creek
- 2 Elevate FM 352 bridge at Dry Creek Tributary
- 3 Corrigan channel improvements to address flooding along west side of town (W 5th Street, Voss Street, W 3rd Street, W 1st Street, W Front Street)
- 4 Corrigan-Camden School: homes south of campus are in low lying area, channel improvements



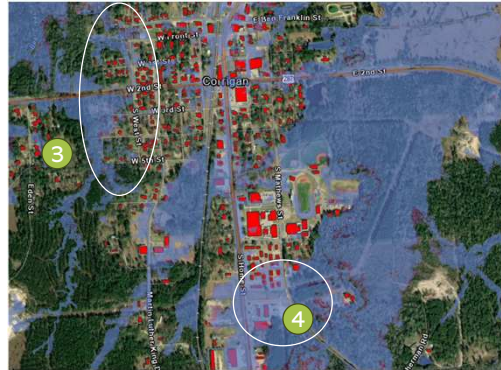
38

Polk County – Corrigan

5

Project Alternatives:

- 1 Raising Union Springs and improve crossing at US59 on Bear Creek
- 2 Elevate FM 352 bridge at Dry Creek Tributary
- 3 Corrigan channel improvements to address flooding along west side of town (W 5th Street, Voss Street, W 3rd Street, W 1st Street, W Front Street)
- 4 Corrigan-Camden School: homes south of campus are in low lying area, channel improvements



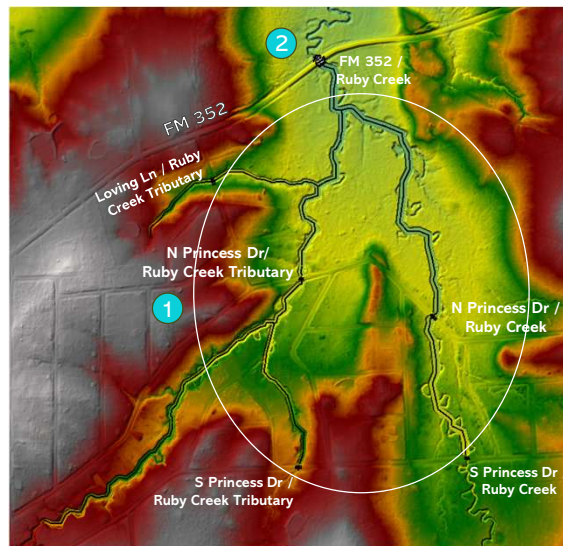
39

Polk County – Reily Village

5

Project Alternatives:

- 1 Channel Improvements and Road Improvements at N and S Princess Dr
- 2 Elevate FM 352 bridge at Ruby Creek



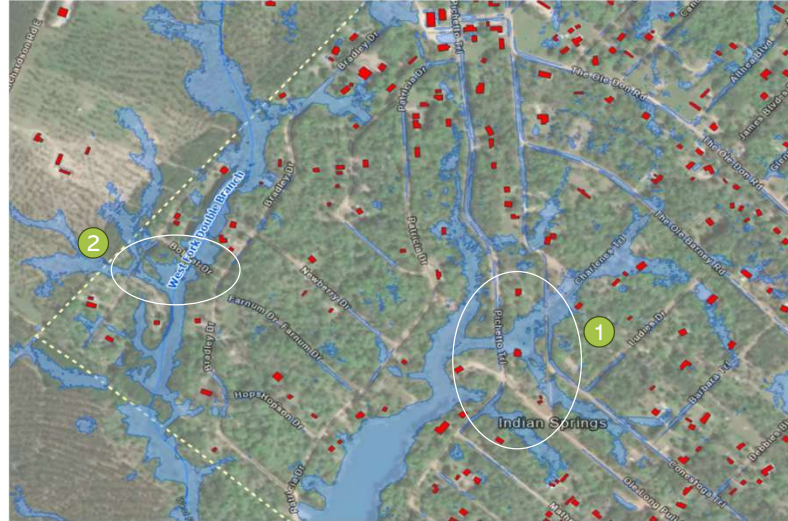
40

Polk County – Community of Indian Springs

5

Project Alternatives:

- 1 Low water crossing improvements on Pichetto Trail, Ole Long Pull Road, and Conestoga Trail
- 2 Low water crossing improvements / culvert upsizing on Bobcat Trl. and Bobcat Dr.



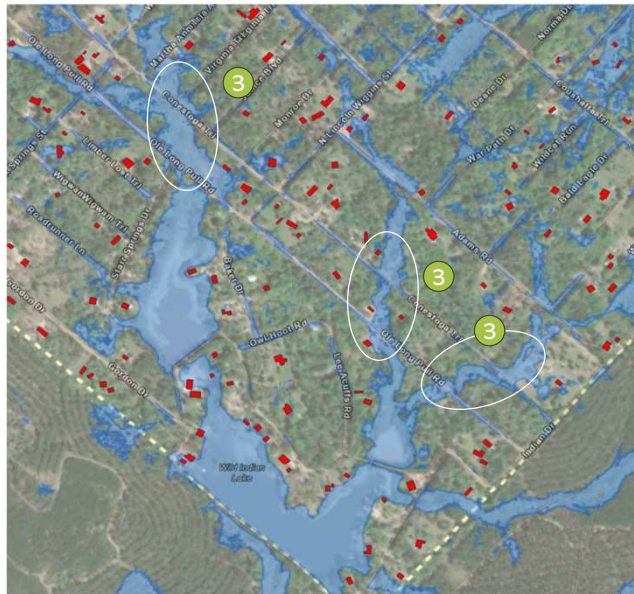
41

Polk County – Community of Indian Springs

5

Project Alternatives:

- 3 Low water crossing improvements on Ole Long Pull Road and Conestoga Trail



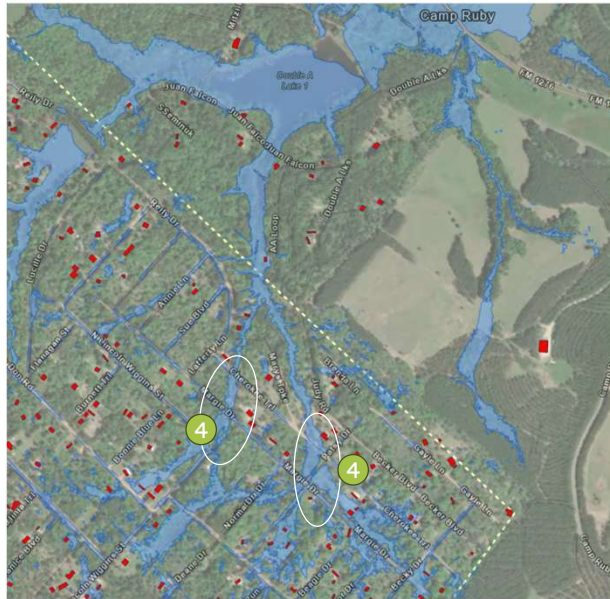
42

Polk County – Community of Indian Springs

5

Project Alternatives:

- 4 Low water crossing improvements on Margie Drive and Cherokee Trail



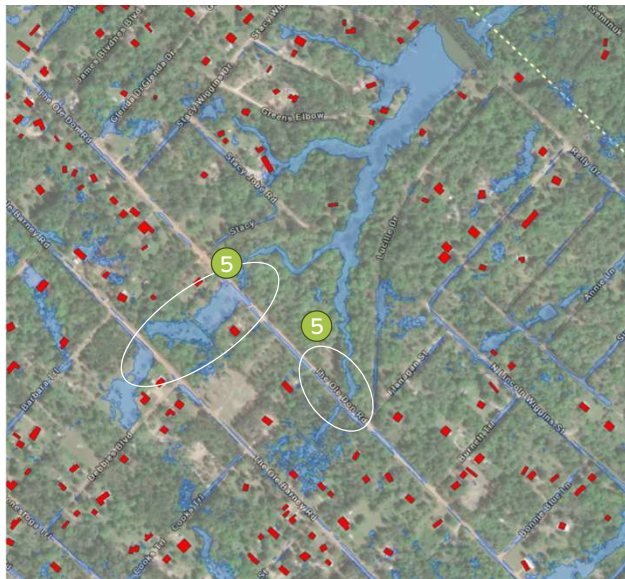
43

Polk County – Community of Indian Springs

5

Project Alternatives:

- 5 Low water crossing improvements and culvert upsizing on The Ole Don Road and The Ole Barney Road



44

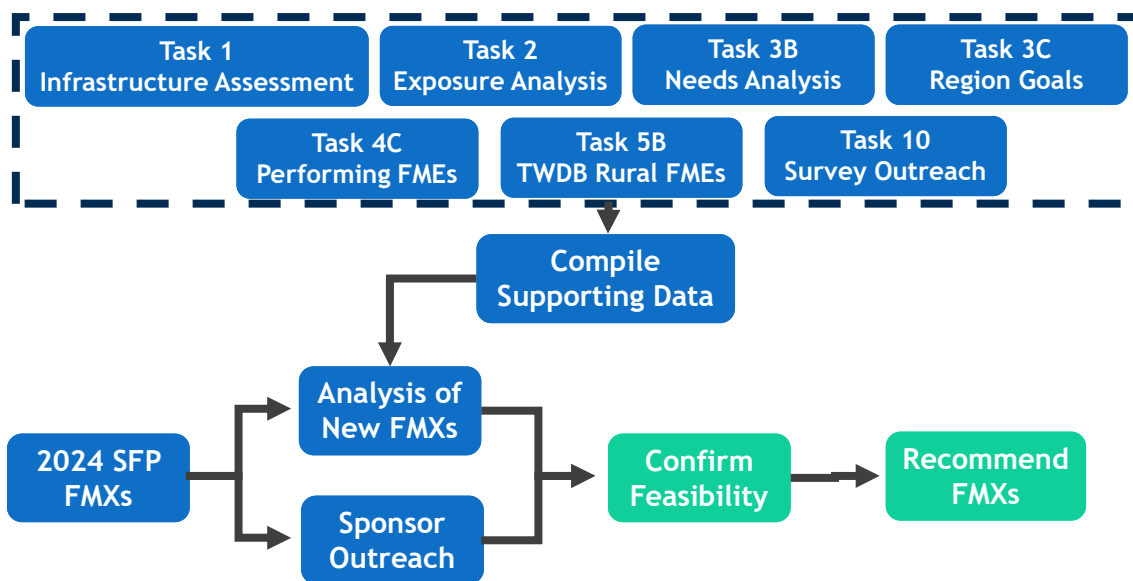
5

Task 5A – Recommendation of FMEs, FMSs, and FMPs

45

FMX Recommendation Process the 2028 RFP

5



46

Task 5 - Recommendation of FMEs, FMSs, and FMPs (Cycle 1 Updates)

5

*FME and FMS Costs updated to 2025 costs due to most being sourced from 2021/2022.

Flood Mitigation Action	Number of Cycle 1 Recommended Actions	Total Flood Mitigation Action Cost	Number of Cycle 1 Recommended Actions (Adjusted)	Total Flood Mitigation Action Cost (Adjusted)
FME	168	\$94,813,824	149	\$102,355,960*
FMS	157	\$194,596,318	157	\$231,354,028*
FMP	53	\$6,631,098,780	52	\$6,648,665,568

47

Summary of Cycle 1 FMX Updates

5

- FMEs
 - 19 Cycle 1 FMEs now marked as “Not Recommended”
 - Examined under another study like FIF
 - Modeling received to promote to FMP
 - FME completed and construction underway
- FMPs
 - 1 Cycle 1 FMP now marked as “Not Recommended”
 - Orange County Coastal Storm Risk Management Project to be represented in the Sabine RFP
 - 5 Cycle 1 FMPs now with adjusted costs
 - Hillebrandt Bayou FMPs from DD6 Regional Watershed Study
 - Bessie Heights Drainage Ditch Extension Project

48

Task 5 – Recommendation of FMEs, FMSs, and FMPs (Cycle 2 Updates)

5

- New FMEs and FMSs identified from Stakeholder Outreach
- New FMPs sourced from Texas General Land Office River Basin Flood Study (Eastern Region)
 - Additional FMPs to be included as Task 4C nears completion

Flood Mitigation Action	Number of Cycle 1 Recommended Actions (Adjusted)	New Actions Identified To Date	Total Count To Date
FME	150	126	276
FMS	157	45	202
FMP	52	11	63

49

Summary of FMPs from GLO East

5

FMP Name	FMP Description	FMP Cost
Hillebrandt Bayou Structure Elevation	Project elevates buildings for flooding prevention purposes within Hillebrandt Bayou.	\$101,500,000
Hillebrandt Bayou Detention Improvements	Construct detention basins within conveyance improvements within Hillebrandt Bayou.	\$34,400,000
Spindletop Bayou Channel Widening	The proposed project includes the channel widening of approximately 4.4 miles of Spindletop bayou. The project benefits approximately 30 sq miles of the surrounding area.	\$205,000,000
Upper Coon/Trotti Creek Detention near Jasper TX	Dam detention project on upper Coon/Trotti Creek to provide upstream flood storage and reduce downstream flood risk within the City of Jasper and lower Sandy Creek watershed.	\$4,261,210
Levee and local conveyance improvements near SF Taylor Bayou and IH-10	Levee with local conveyance improvements within Mitigation Area 29 of the GLO RBFS - East Region, located in the community north of the IH-10 and SF Taylor Bayou crossing.	\$2,857,020

50

Summary of FMPs from GLO East

5

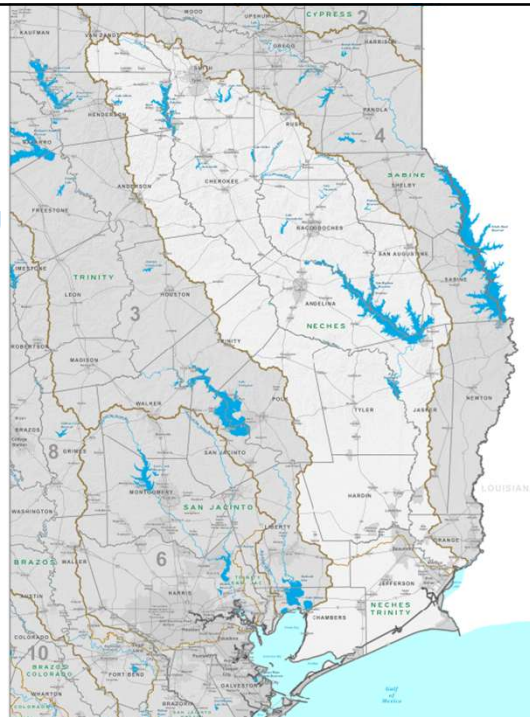
FMP Name	FMP Description	FMP Cost
Ayish Bayou & Tributaries Channel Improvement (Desnagging and Clearing) - San Augustine, TX	Approximately 2-miles of Ayish Bayou mainstem and tributaries channel improvement (channel and adjacent floodplain desnagging and clearing) within the City of San Augustine, Texas.	\$1,186,800
Tenmile Creek Tributary Detention Basin in Vidor, TX	The proposed 71.26-acre detention basin provides approximately 285 acre-feet of storage at a bottom elevation of 18 feet. It includes a 24-foot-wide berm with 3H:1V side slopes, a 23-foot top elevation, and 22-foot overflow spillways.	\$23,046,700
Village Creek Conveyance Improvements – Cypress Creek	Conduct improvements to the main stem of Village Creek in the vicinity of the city of Kountze.	\$101,500,000
Rose Hill Acres Levee – Boggy Creek	Detailed modeling, design and construction of levee to benefit the community of Rose Hill Acres	\$34,400,000
Home Buyouts in Tyler County/Woodville	Home Buyouts for six residential structures inundated during the 2-year storm event.	\$205,000,000
S Beech St Detention Basin & Channel Diversion	Detailed modeling, design and construction of detention basin and diversion channel in Tyler County/Woodville between S Beech St and S Pecan St.	\$4,261,210

51

Cross Regional Coordination

5

- Cross Regional Coordination
 - Technical Consultant coordinating with Trinity (R3) and Sabine (R4) to identify duplicate FMXs
 - Jurisdiction-wide efforts to be combined to show a complete picture of flood risk exposure, regardless of region boundary



52

Cross-Regional Coordination

5

FMX Area	Alteration?	Reason?
Orange Countywide	Defer to Sabine RFPG	Orange County and OCDD remain very active stakeholders within the Sabine RFPG, City of Orange located in Sabine side
Jasper Countywide	Keep	City of Jasper located in Neches region in addition to majority of county
Sabine Countywide	Defer to Sabine RFPG	Majority of county located within Sabine region
Newton Countywide	Defer to Sabine RFPG	Majority of county located within Sabine region
Shelby Countywide	Defer to Sabine RFPG	Majority of county located within Sabine region
San Augustine Countywide	Keep	City of San Augustine located in Neches region in addition to majority of county
Rusk Countywide	Keep	City of Henderson located in Neches region in addition to majority of county
Smith Countywide	Keep	City of Tyler located in Neches region in addition to majority of county

53

Cross-Regional Coordination

5

FMX Area	Alteration?	Reason?
City of Vidor	Keep	City of Vidor mostly within Neches region
City of Bridge City	Keep	City of Bridge City mostly within Neches region
Polk Countywide	Defer to Trinity RFPG	Livingston located in Trinity region
Houston Countywide	Defer to Trinity RFPG	Crockett located in Trinity region in addition to majority of county
Henderson Countywide	Defer to Trinity RFPG	Trinity RFPG has contact from stakeholders within the County, majority of Athens located in Trinity side
Liberty Countywide	Defer to Trinity RFPG	Liberty located in Trinity region in addition to majority of county
Trinity Countywide	Defer to Trinity RFPG	Trinity RFPG has contact from stakeholders within the County
Anderson Countywide	Split between Neches and Trinity – any countywide FMXs to have names altered to reflect what region they belong to.	Palestine located directly on region border and both Neches and Trinity have recommended studies be done for the county

54

5

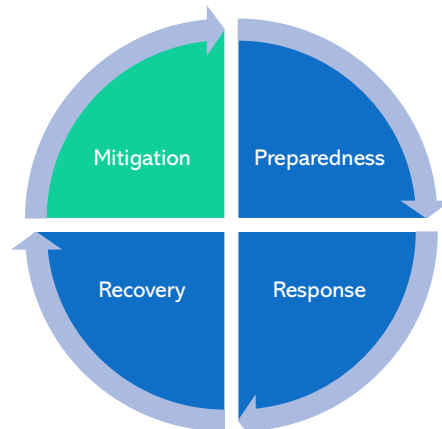
Task 7 – Flood Response Information and Activities

55

Task 7 – Flood Response Information and Activities

5

- Task Goals:
 - Summarize nature and types of flood response preparations
- Not an analysis related to planning for disaster response or activities



56

Task 7 – Relevant Entities in Region

5

Local

- Police Departments
- Fire Departments
- County Emergency Responders
- Drainage Districts

State

- DPS
- TWDB
- TDEM
- TxDOT
- Texas Army National Guard
- River Authorities

Federal

- FEMA
- NOAA
- USACE
- USFS
- NWS
- USGS

57

Task 7 – Mitigation

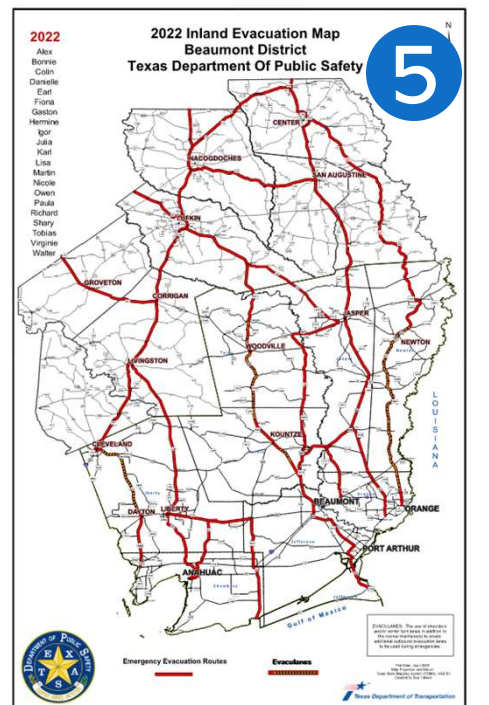
5

- Primary focus of the Regional Flood Planning Process
- Implementation of actions, including both structural and non-structural solutions, to reduce flood risk to protect against the loss of life and property
- Examples (Structural):
 - Regional Detention
 - Storm Drain Improvements
 - Low Water Crossing/Bridge Improvements
- Examples (Non-Structural):
 - Flood Early Warning Systems
 - Floodplain property acquisition
 - Elevation of Structures above BFE

58

Task 7 – Preparedness

- Actions, aside from mitigation, that are taken before flood events to prepare for flood response activities
- Examples:
 - Identification of Critical Infrastructure
 - Emergency Action Plans
 - Public Notification/Education
 - Identification of Evacuation Routes
 - Tabletop exercises
 - Staff training for response/recovery



59

Task 7 – Response

- Actions taken during and in the immediate aftermath of a flood event
- Examples:
 - Reverse 911 & other notifications
 - Social Media Posts/Alerts
 - Radio stations & Emergency Alert systems
 - Emergency Operation Centers
 - Forecast tools & centers
 - Closing roadways and traffic control
 - Providing high water rescues
 - Food & First Aid Distribution



Aerial photo of the Hillebrandt area of Jefferson County immediately after Hurricane Harvey, Beaumont Enterprise

60

Task 7 – Recovery

5

- Actions taken after a flood event involving repairs or other actions necessary to return to pre-event conditions
- Examples:
 - Providing information on flood insurance
 - Coordinating debris removal and cleanup
 - Providing traffic control
 - Assisting residents to find temporary housing
 - Regular communication with disaster victims
 - Coordinating with local businesses
 - Compiling and conducting damage assessments



61

Planning Schedule

5

October

- Technical Consultant to work on:
 - Task 4C – Performance of FMEs
 - Task 5A – Recommendation of FMEs, FMSs, and FMPs

November

- Technical Consultant to work on:
 - Task 4C – Performance of FMEs
 - Task 5A – Recommendation of FMEs, FMSs, and FMPs
 - Task 9 – Flood Infrastructure Financing Analysis
- RFPG to vote to recommend FMEs and FMSs

December

- Technical Consultant to work on:
 - Task 4C – Performance of FMEs
 - Task 5A – Recommendation of FMEs, FMSs, and FMPs
 - Task 6 – Impacts and contribution of the RFP
- RFPG to vote to recommend FMPs

62