Neighborhood Drainage Meeting

Holiday Meadow, Clearview, Gentry Place, Timberwood and Sarah Dee Park

Monique Boulet, Mayor-President

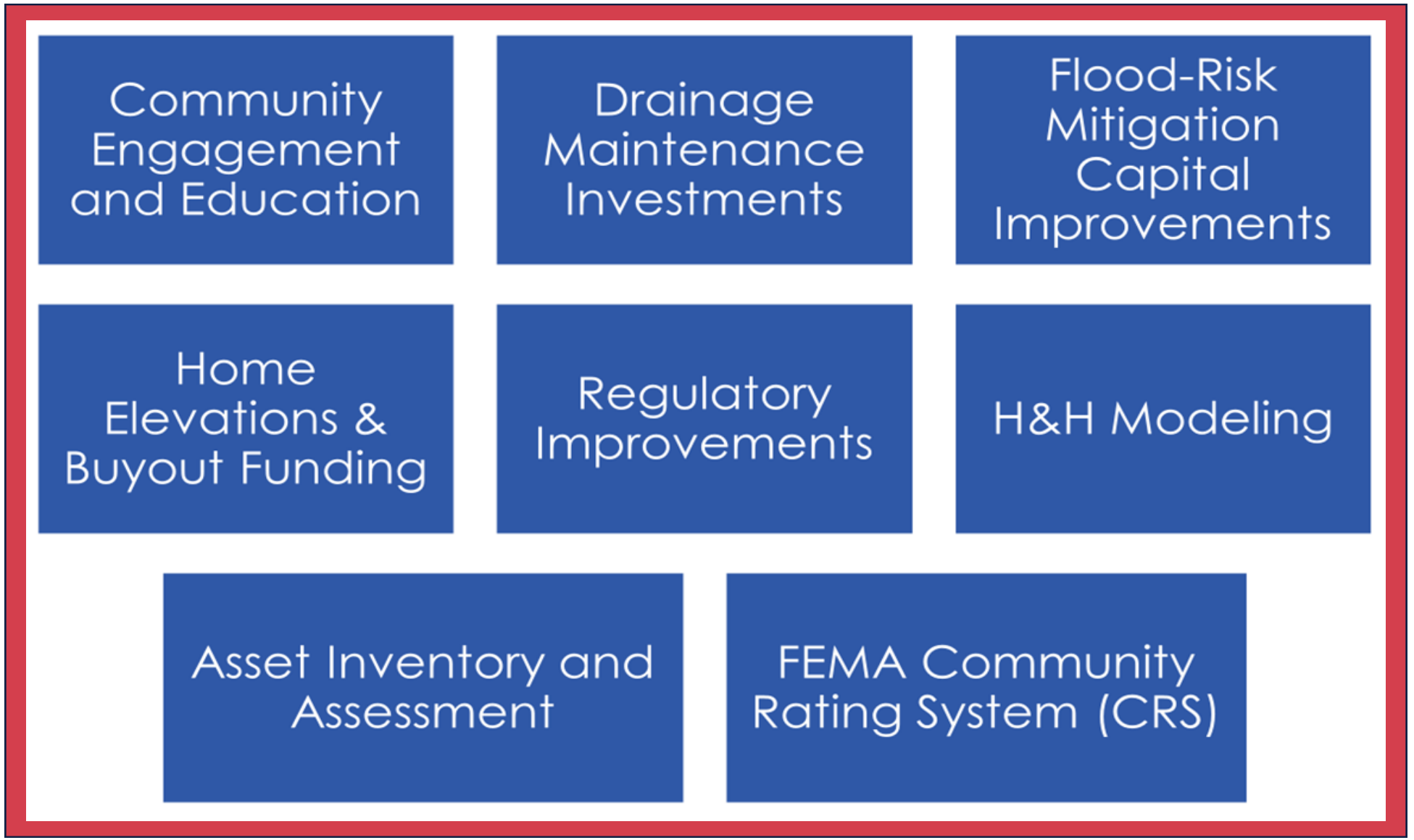
Rachel Godeaux, CAO

Freese and Nichols

Monday, November 9, 2026

STORMWATER MANAGEMENT FRAMEWORK

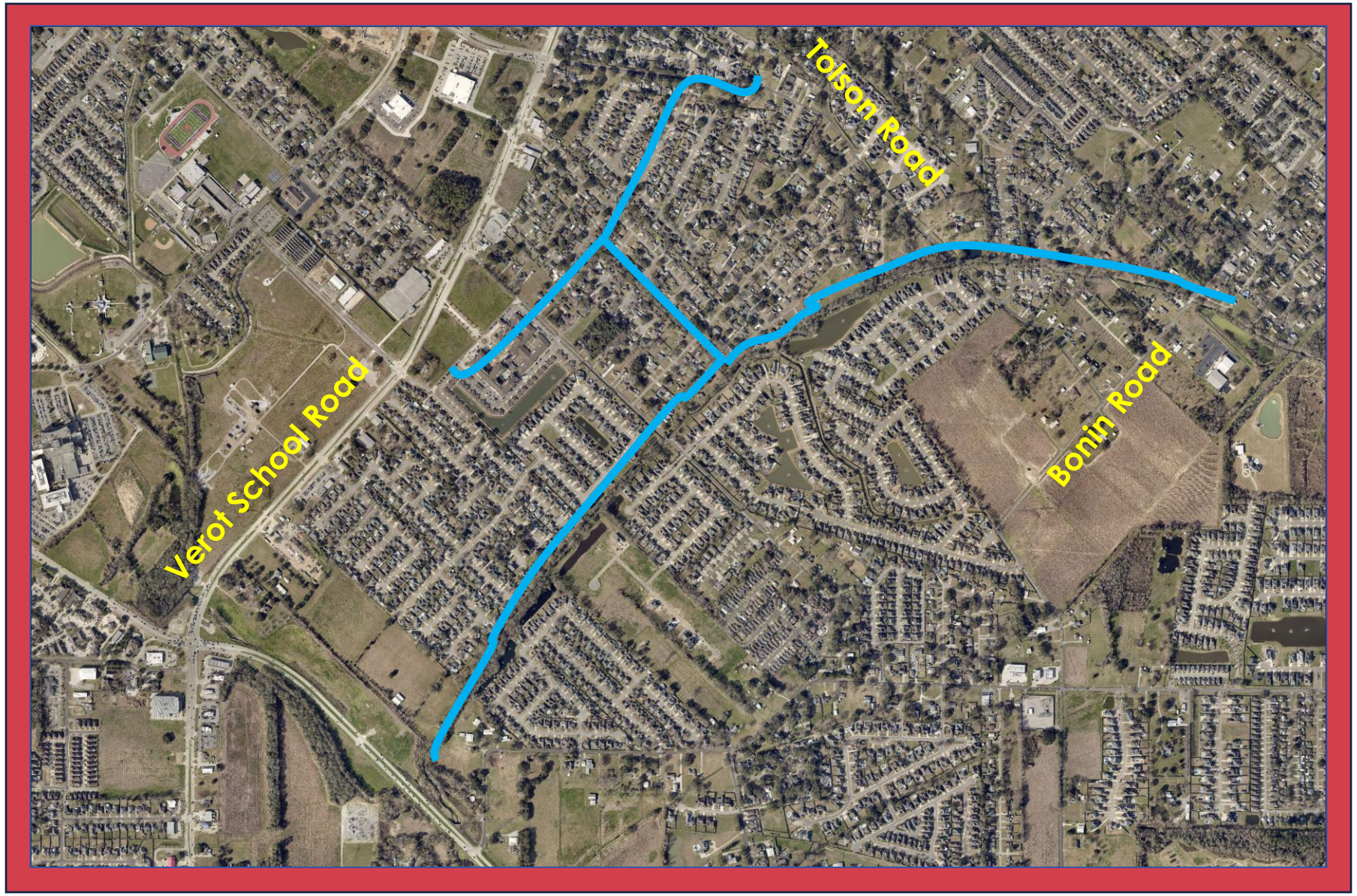
Lafayette
CONSOLIDATED GOVERNMENT



Basin Level – 1958 Aerial Map



Basin Level – 2026 Aerial Map



Regional Level – FEMA Map

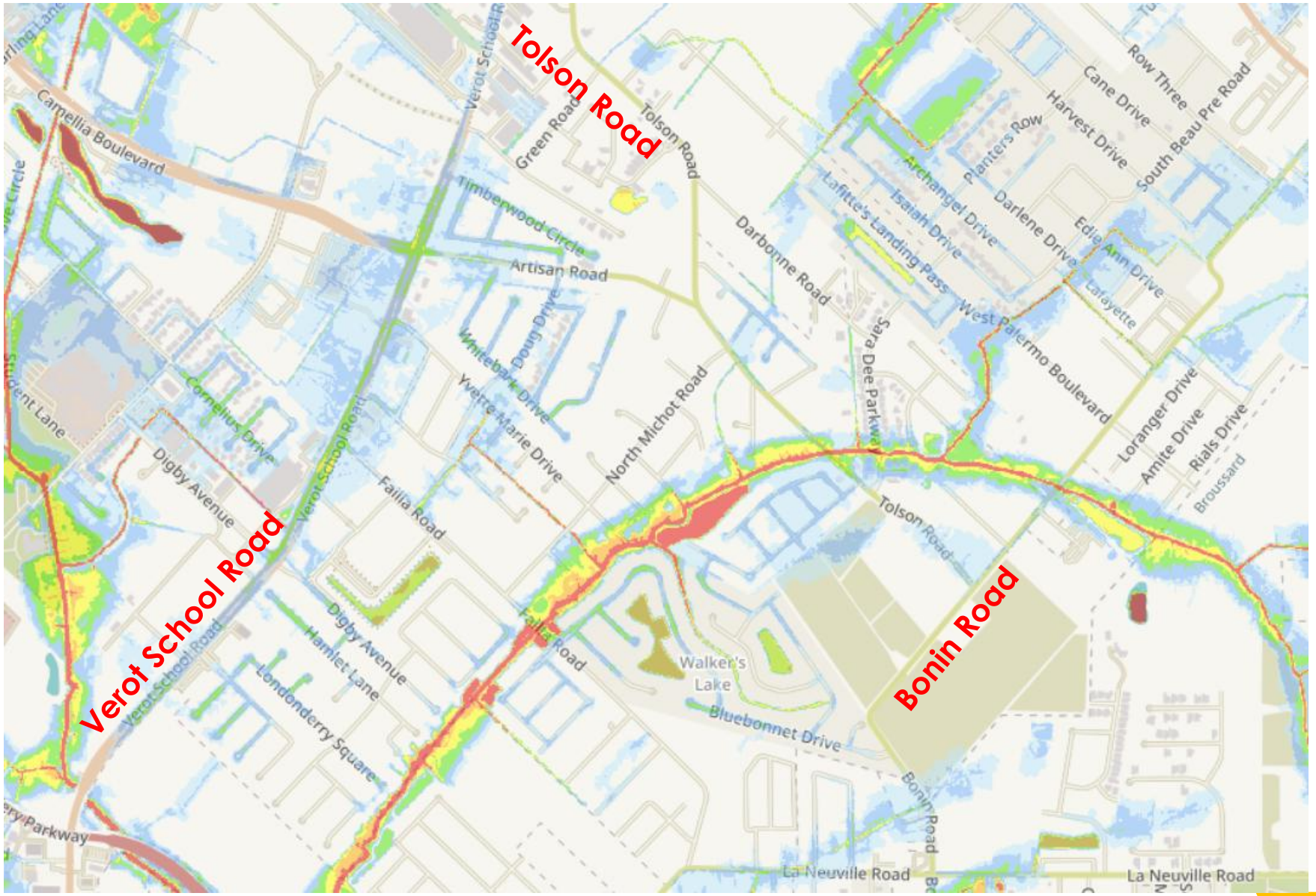


Effective FEMA Flood Zones

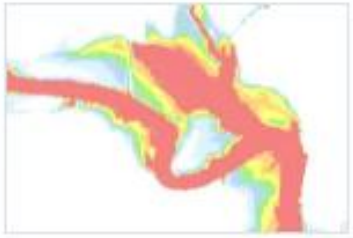
FloodZone

- A,
- AE,
- AE, FLOODWAY
- AH,
- X, 0.2 PCT ANNUAL CHANCE FLOOD HAZARD
- X, AREA OF MINIMAL FLOOD HAZARD

Regional Level – BLE Map



Flood Depth (1%)

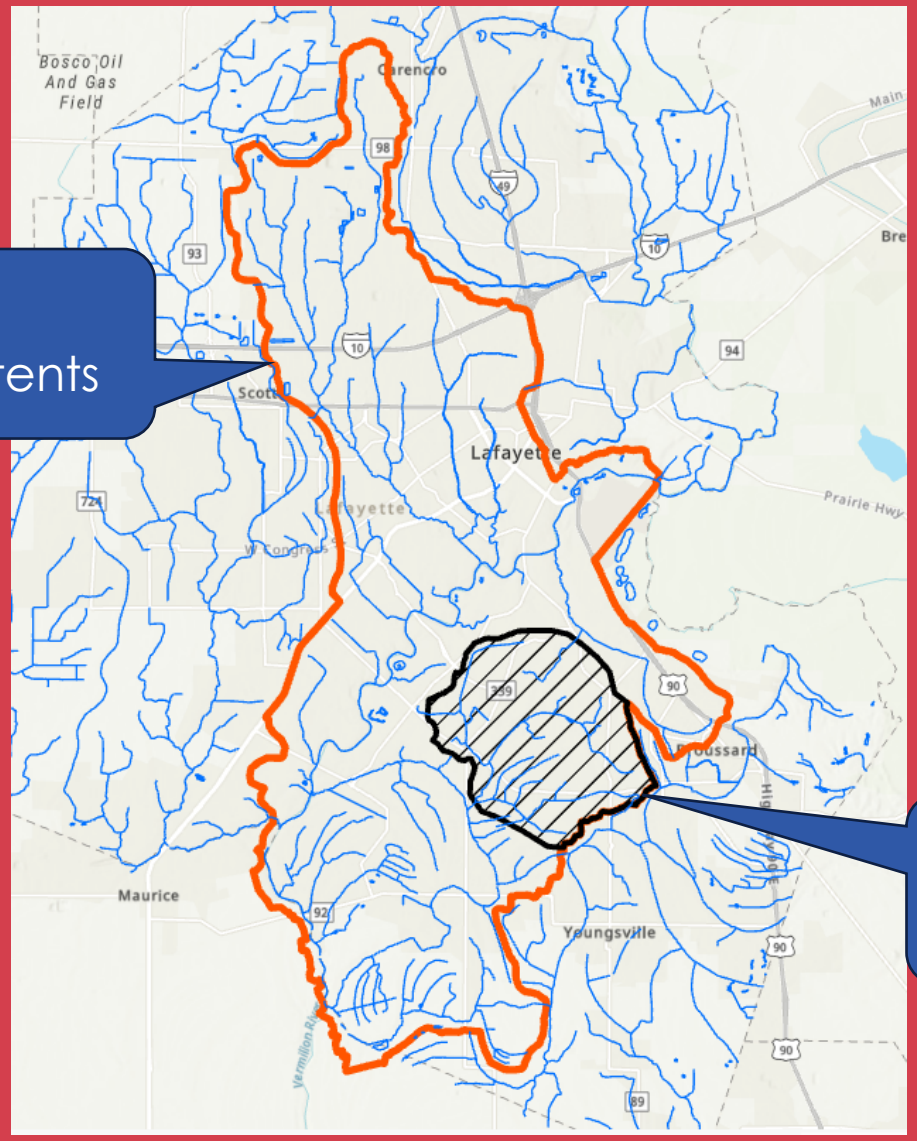


- ≤ 1 foot
- > 1 to 2 feet
- > 2 to 3 feet
- > 3 to 4 feet
- > 4 to 5 feet
- > 5 feet

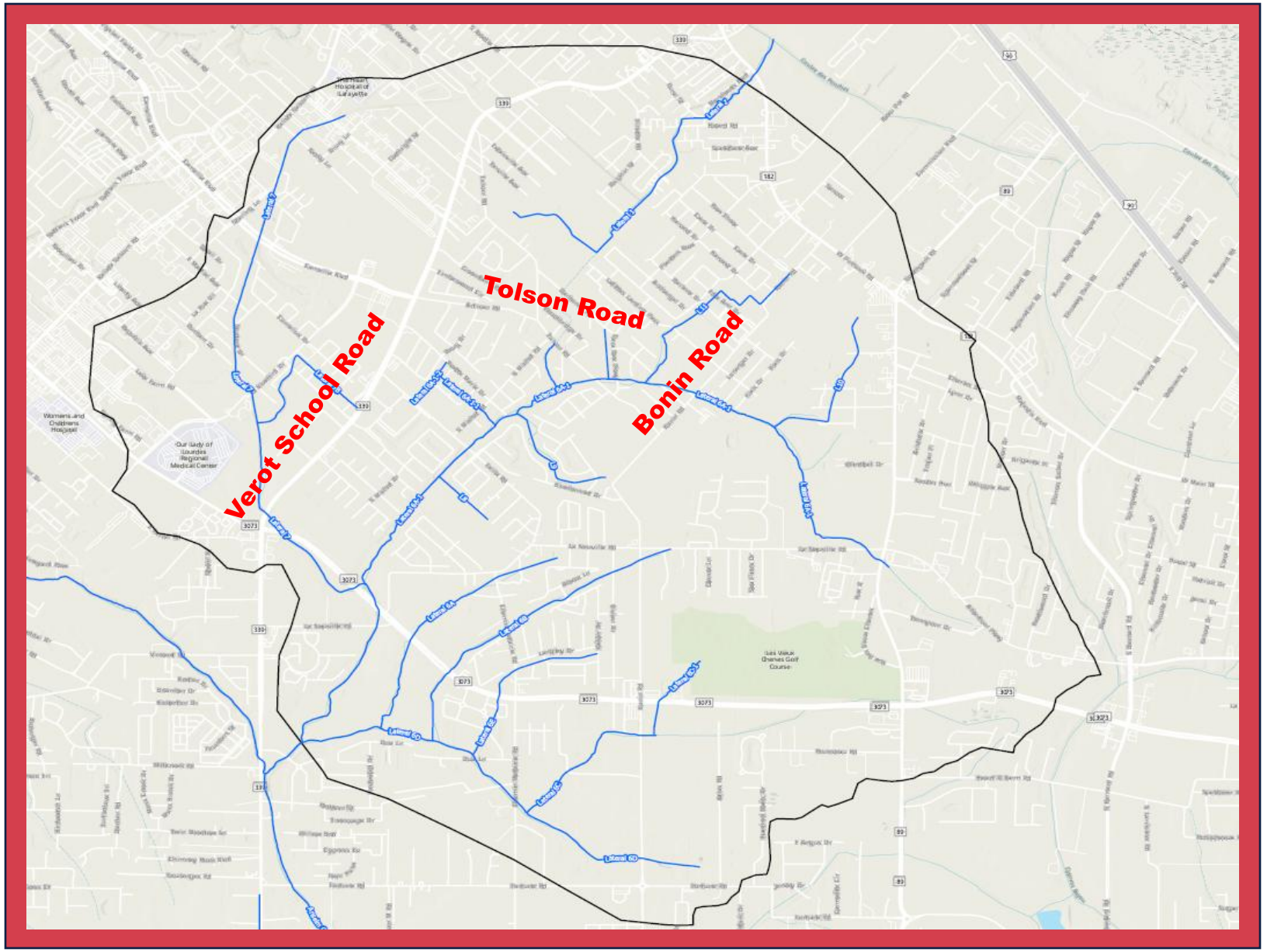
Freese and Nichols, Inc.

Mat Leclair, PE, CFM
Whitney Broussard, PhD

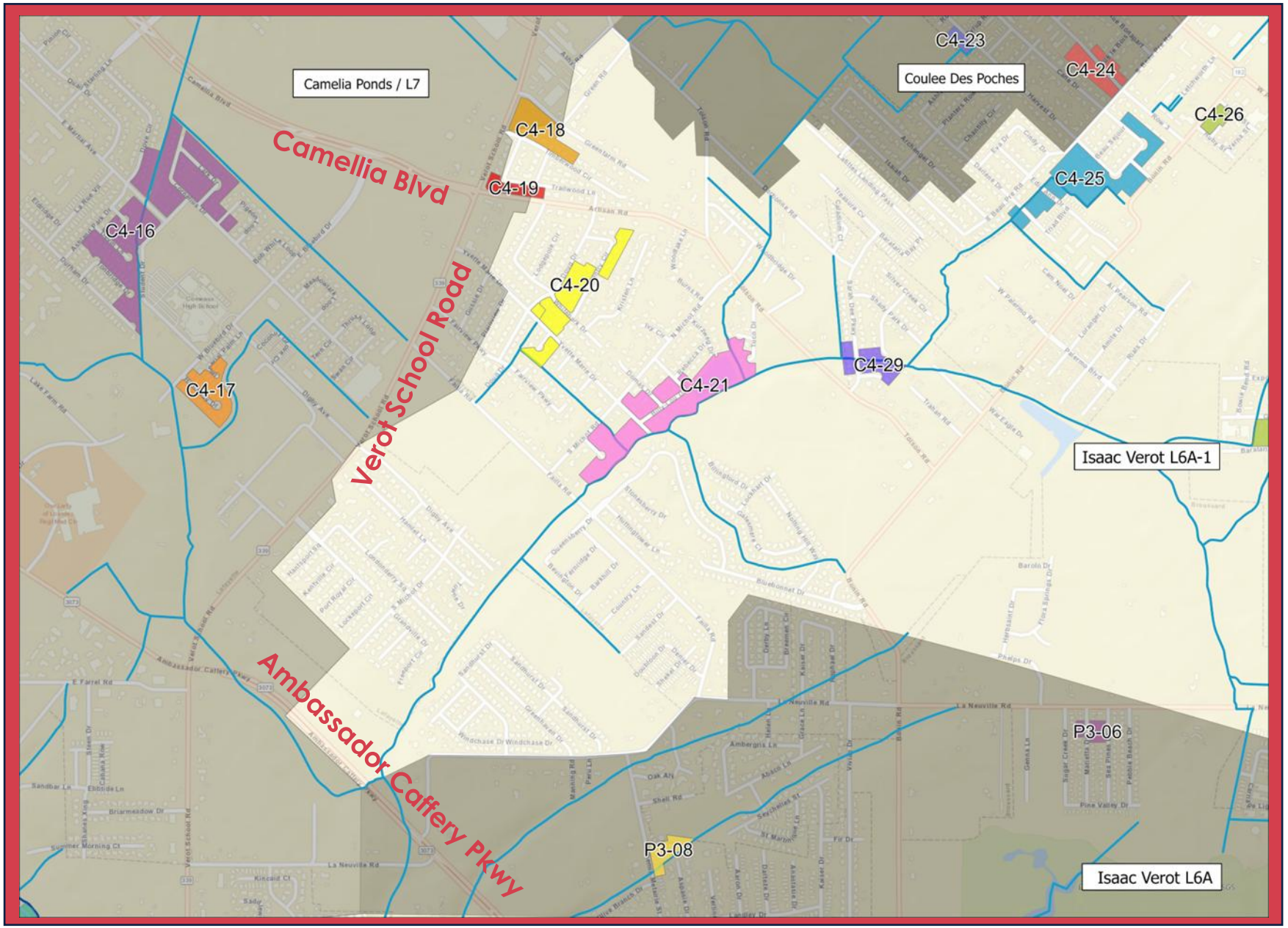
Regional Level



Basin Level – Model Extents



Basin Level – Basin Boundaries with RLAs



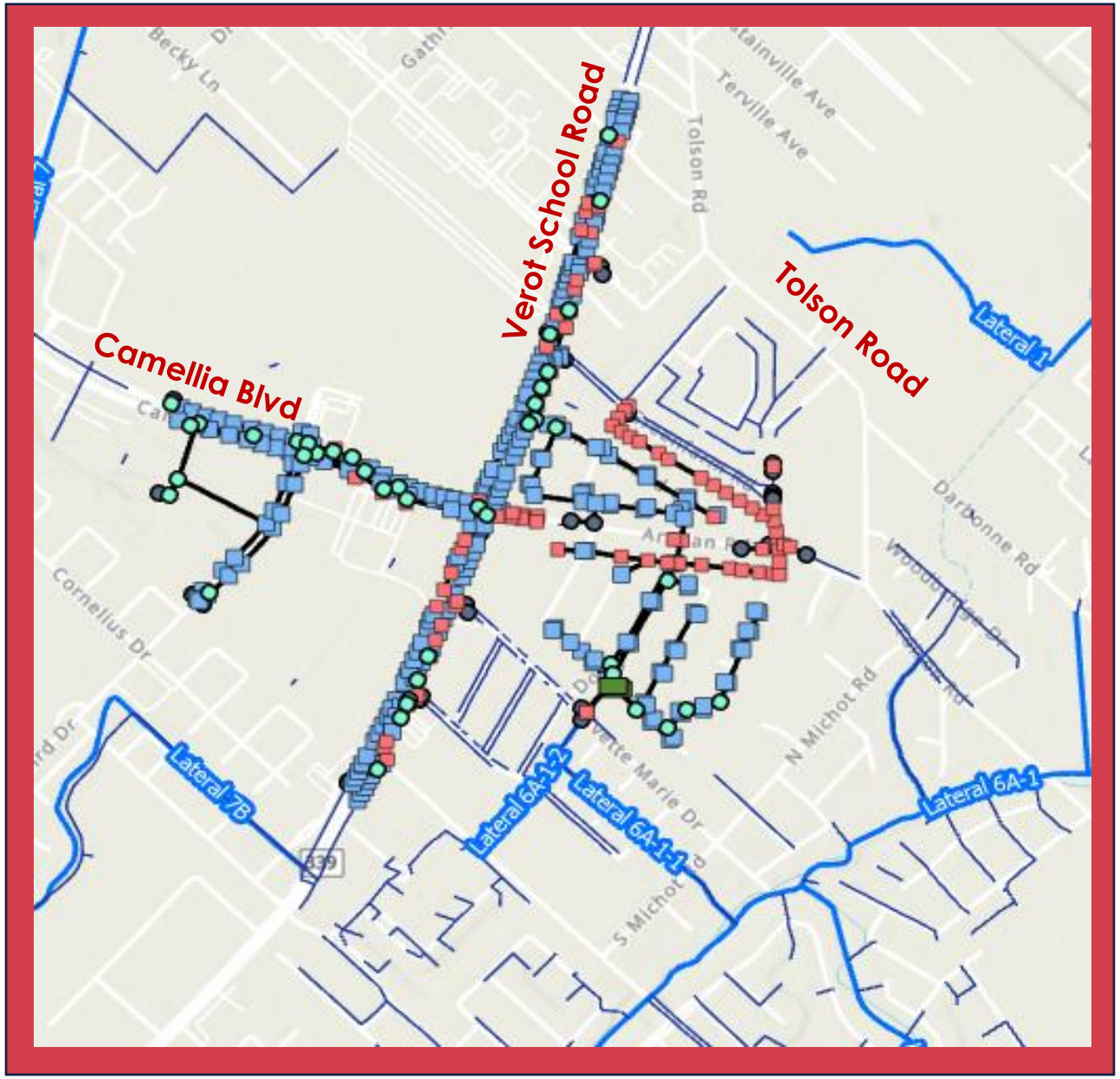
RLA – Repetitive Loss Area – an area that has homes with 2 or more documented flooding events within a 10 year period

Lafayette
CONSOLIDATED GOVERNMENT

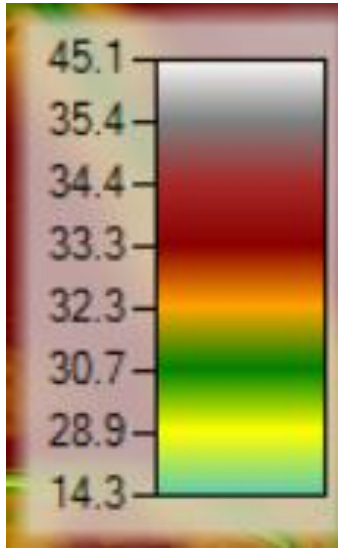
Pipe Network Modeled

Detailed
- Nodes & Links

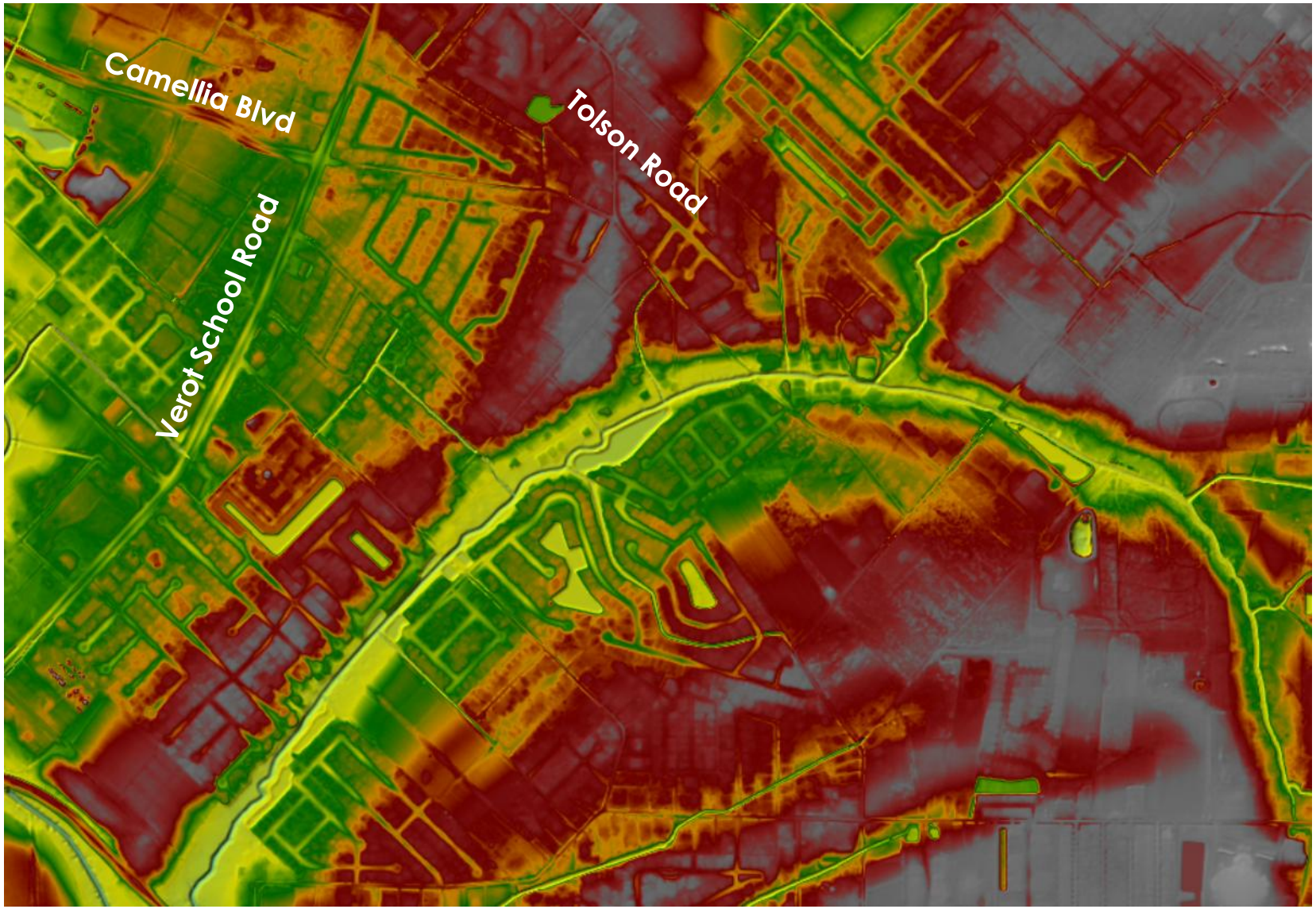
Approximated
- Simulated links using adjusted terrain



Basin Level – Topographic Map



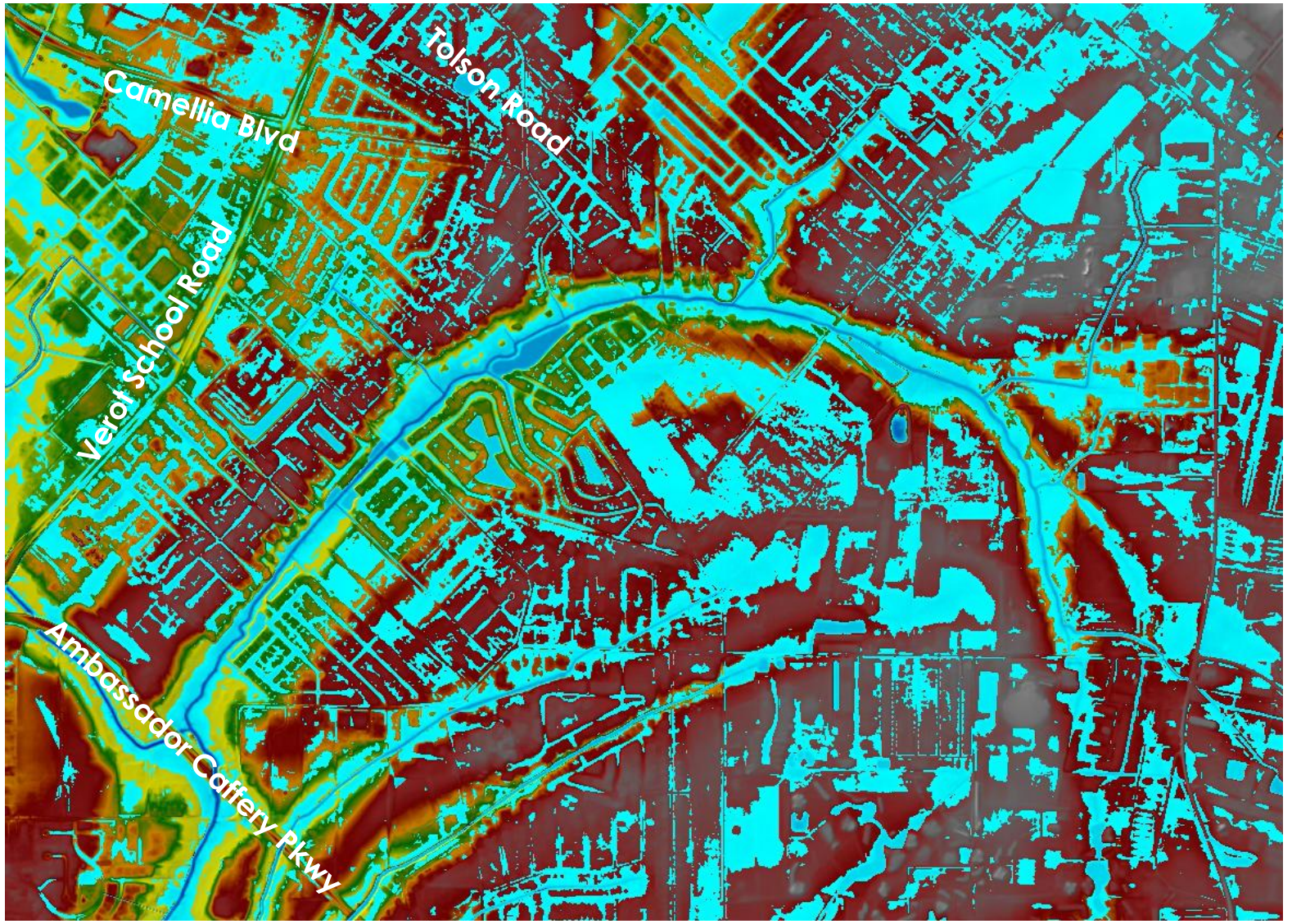
Ambassador Caffery Pkwy



Basin Level – Inundation Map

20% chance Storm Event (5-yr)

Rainfall ~ 6.5 inches in 24 hours

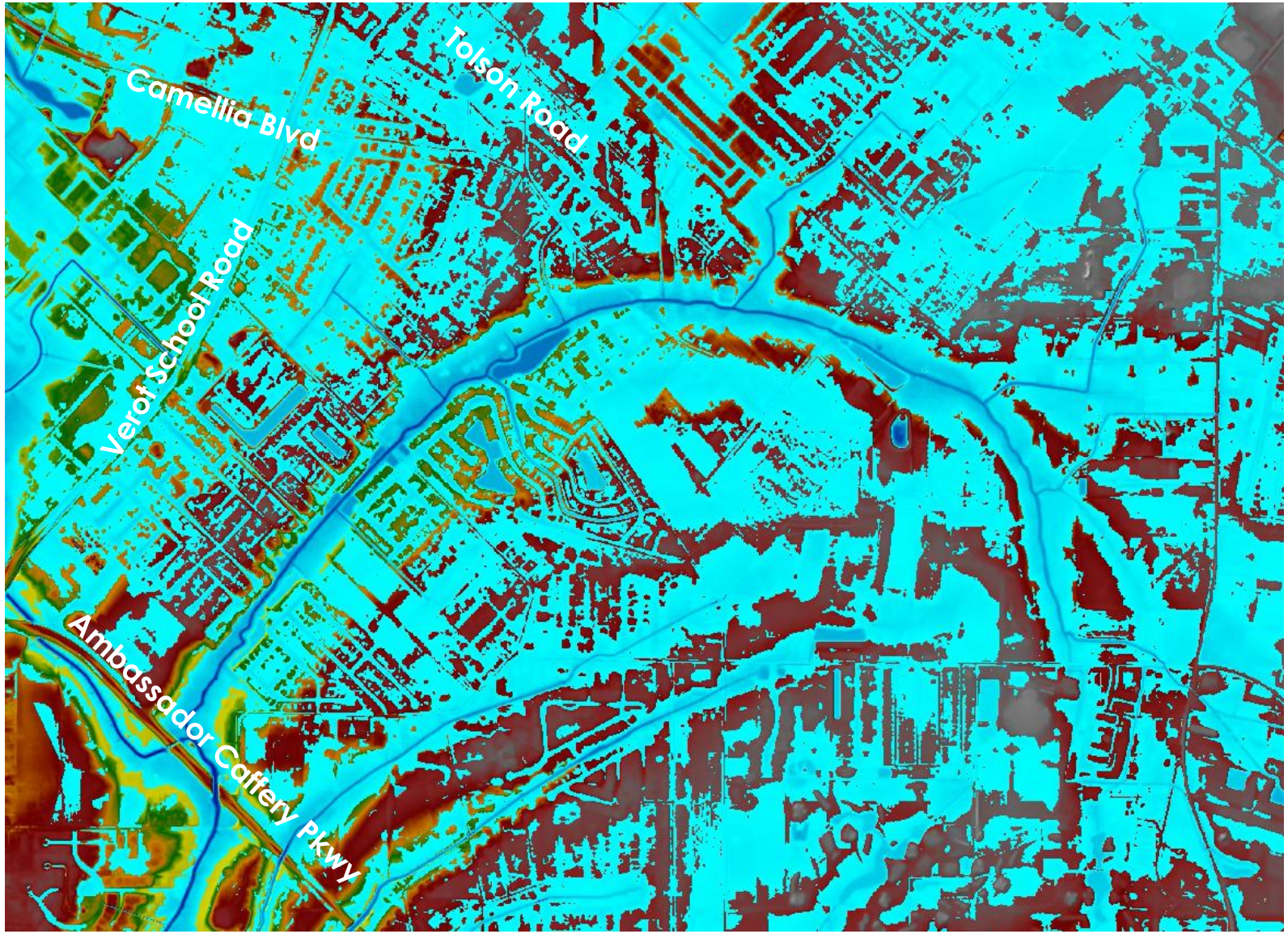




Basin Level – Inundation Map

1% chance Storm Event (100-yr)

Rainfall
~ 13.5 inches in 24 hours
~ April 2025 event was approximately 6 inches in 2 hours, 0.2% chance (500-yr)





Basin Level - Alternatives Tested

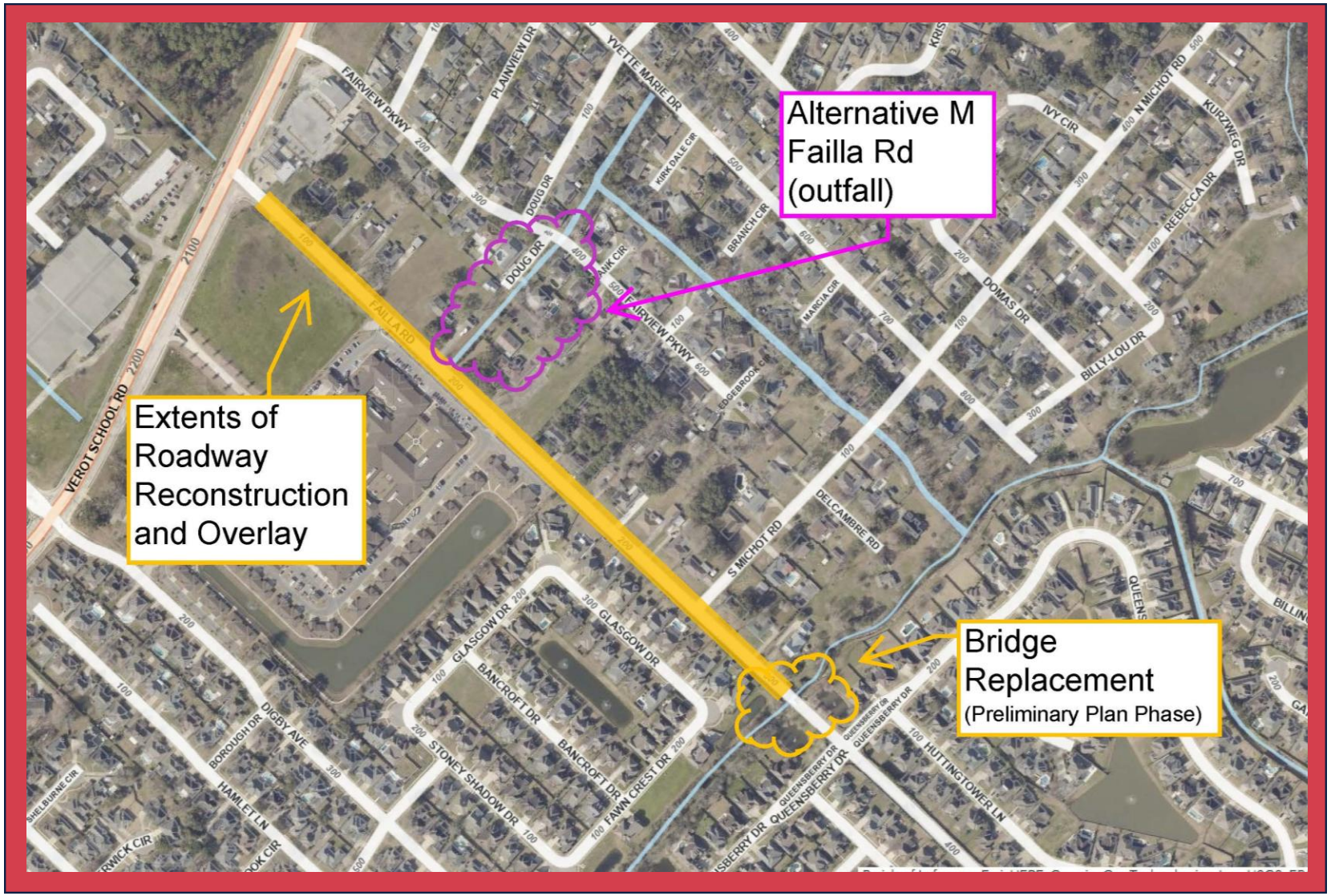
Alt.	Description	Detail	Move Forward?
A	Lat. 6A-1-1 Channel Cleaning	Minimal flood reduction	
B	Lat. 6A-1-1 Channel Improvements	Large benefits to neighborhood	✓
C	Lat. 6A-1 Channel Cleaning	Minimal flood reduction	
D	Bonin/Tolson Diversion & Detention	Marginal benefits, terrain challenges	
E	Tolson Road Detention	Minimal flood reduction	
F	Whitebark/Domas Storm Sewer Diversion	Better benefits with Alt. L	
G	Lat. 6A-1 Concrete-lined Channel Improvements	Large Benefits to channel	✓
H	Lat. 6A-1 Grass-lined Channel Improvements	Large Benefits to channel	✓
I	Downstream Detention	Provides mitigation storage	✓
J	Artisan Rd Storm Sewer Diversion	Minimal benefits, terrain challenges	
K	Lat. 6A-1 Channel Benching - Tolson to Failla	Good benefits to channel	✓
L	Yvette Marie Storm Sewer Diversion	Good benefits to neighborhood	✓
M	Lat. 6A-1-2 and Failla Road Storm Sewer	Evaluation in progress	

Basin Level – Alternative M

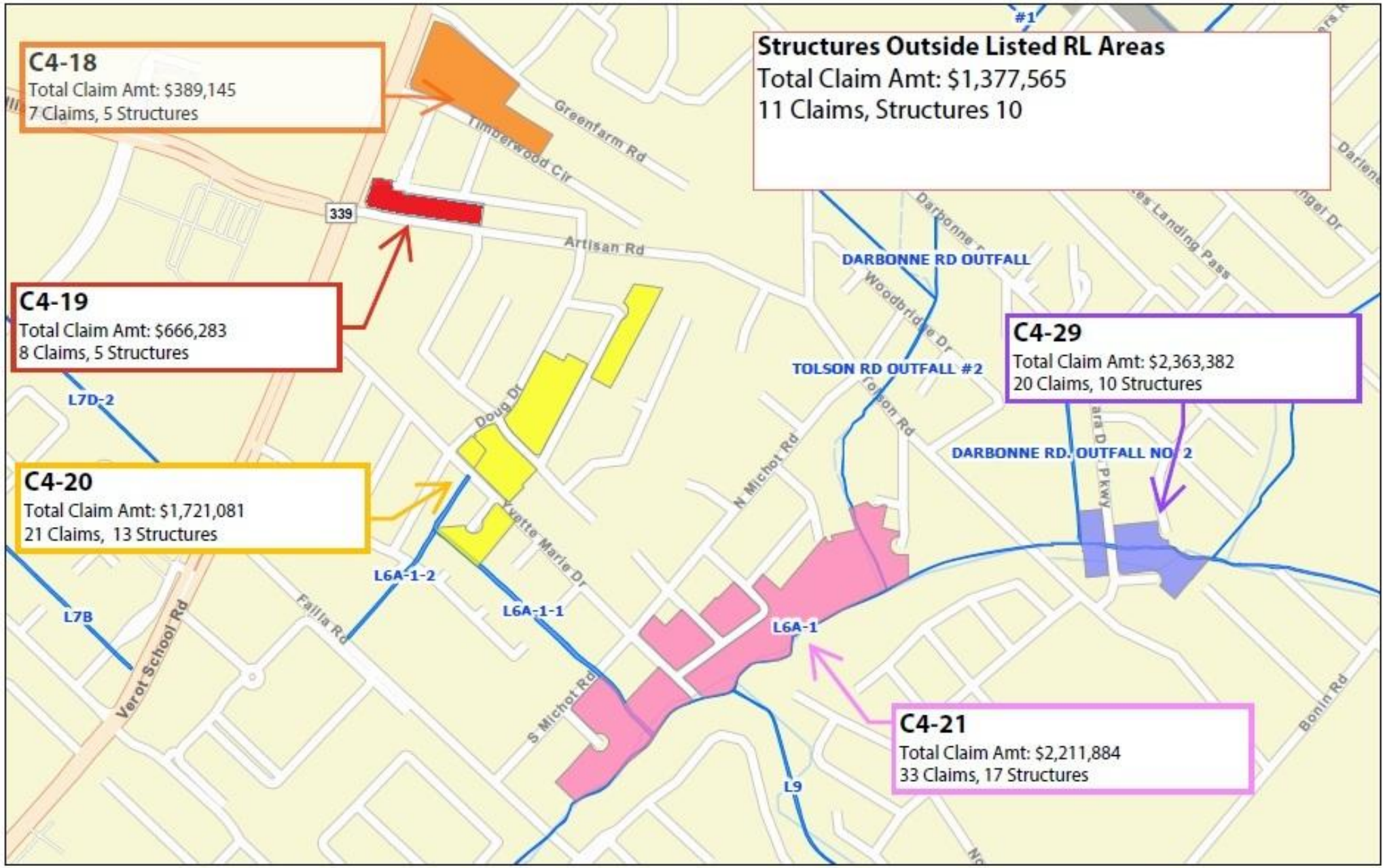
Alternative M:

Redirect outfall to Failla Rd

- **A roadway improvement on Failla Rd from Verot to Lateral 6A-1 is proposed in 2027.**
- **Failla Bridge Replacement is proposed in 2027.**
- **If viable, include Alternative M in the Failla roadway improvement project.**



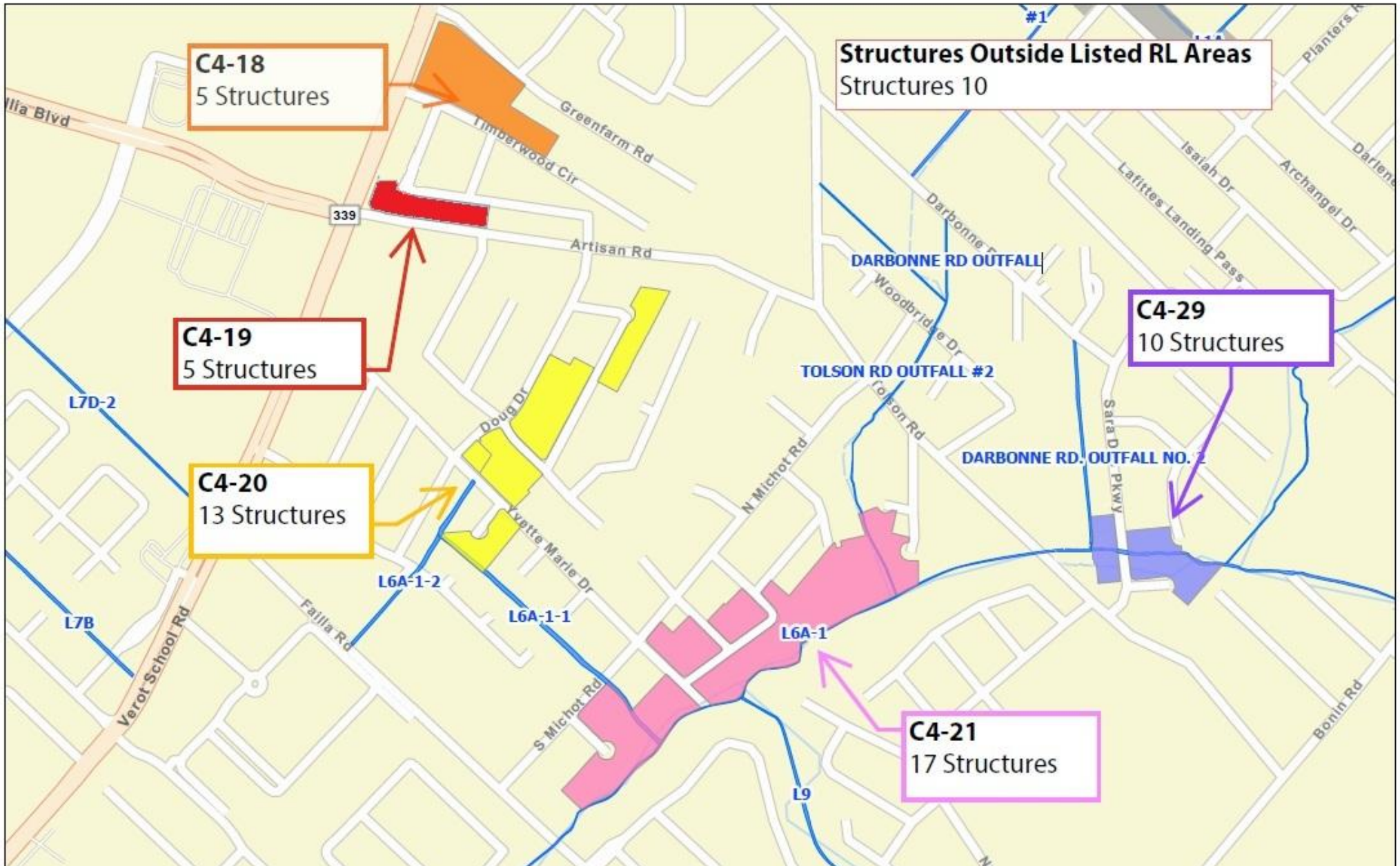
Home Level - Damages



Totals for entire area shown

- **100 Claims**
- **60 Homes**
- **$8,729,340**

Home Level – Elevation Costs



$15M (est.) to elevate all 60 homes with claims

Home Level – LCG Elevation Program





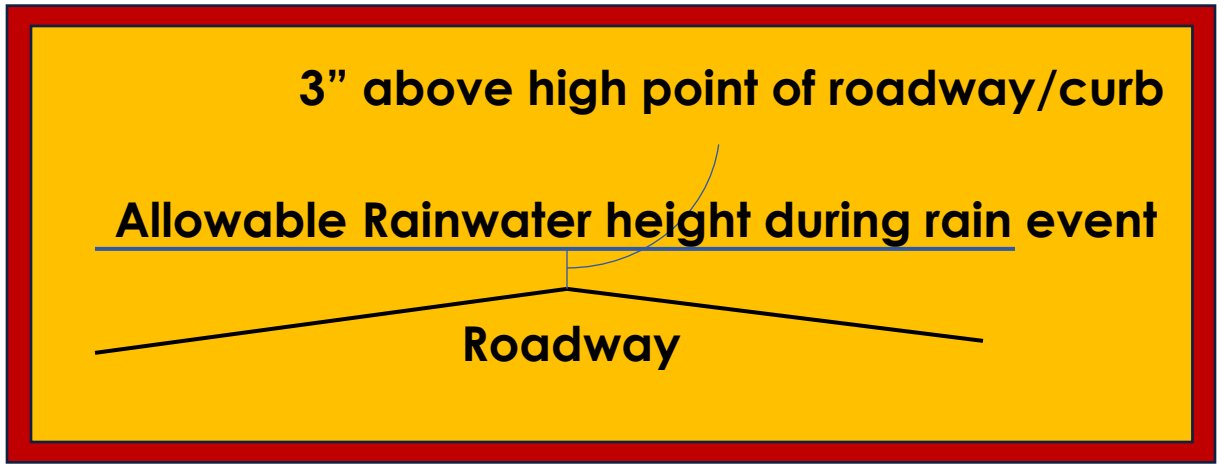
System Level

2019 - Debris removal in Lateral 6-A-1
2022 – Doug/Whitebark system improvement
2024 – Timberwood diversion
2025 – Lateral 6-A-1 cleaning from Woodlands of Acadiana to upstream of Bonin $232k





Development standards when this area developed



- 50% chance design storm 4.8" in a day (24-hours) (2-yr)
- No retention/detention or reduction of flow, increased flow went directly to receiving system
- There were no flood zones designated in the area
- No minimum elevation for homes

Questions or Comments