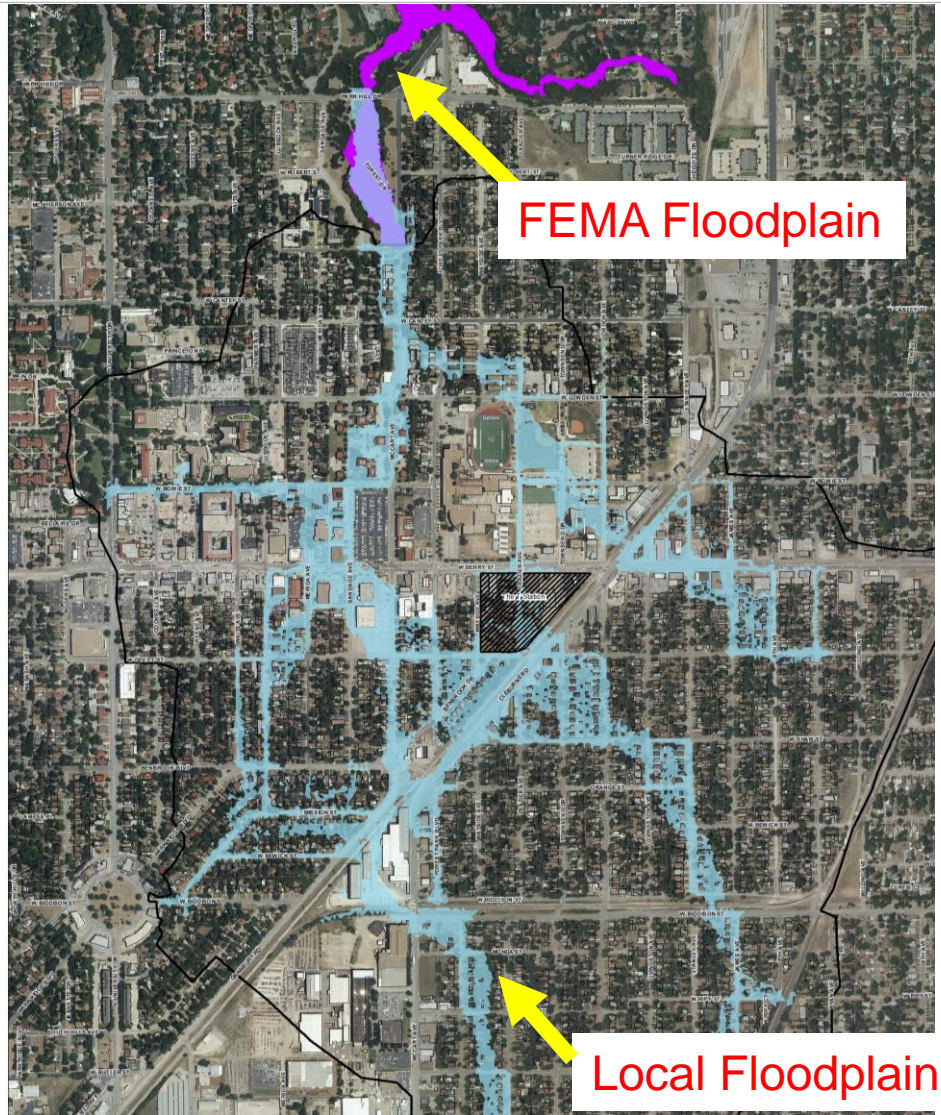


LFMA CONFERENCE – SPRING 2019

UNMAPPED RISKS ASSOCIATED WITH LOCAL FLOOD HAZARDS

APRIL 4, 2019

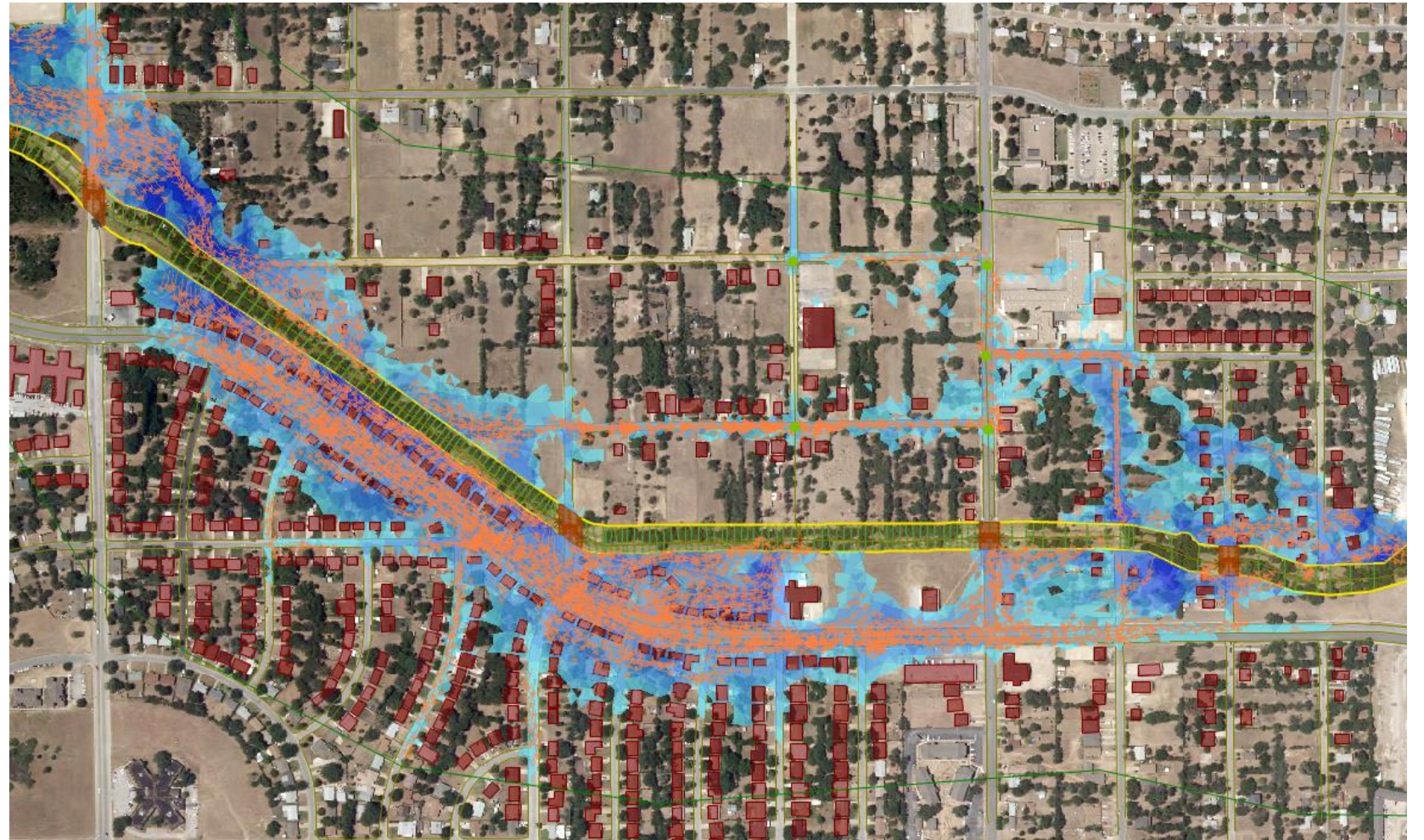


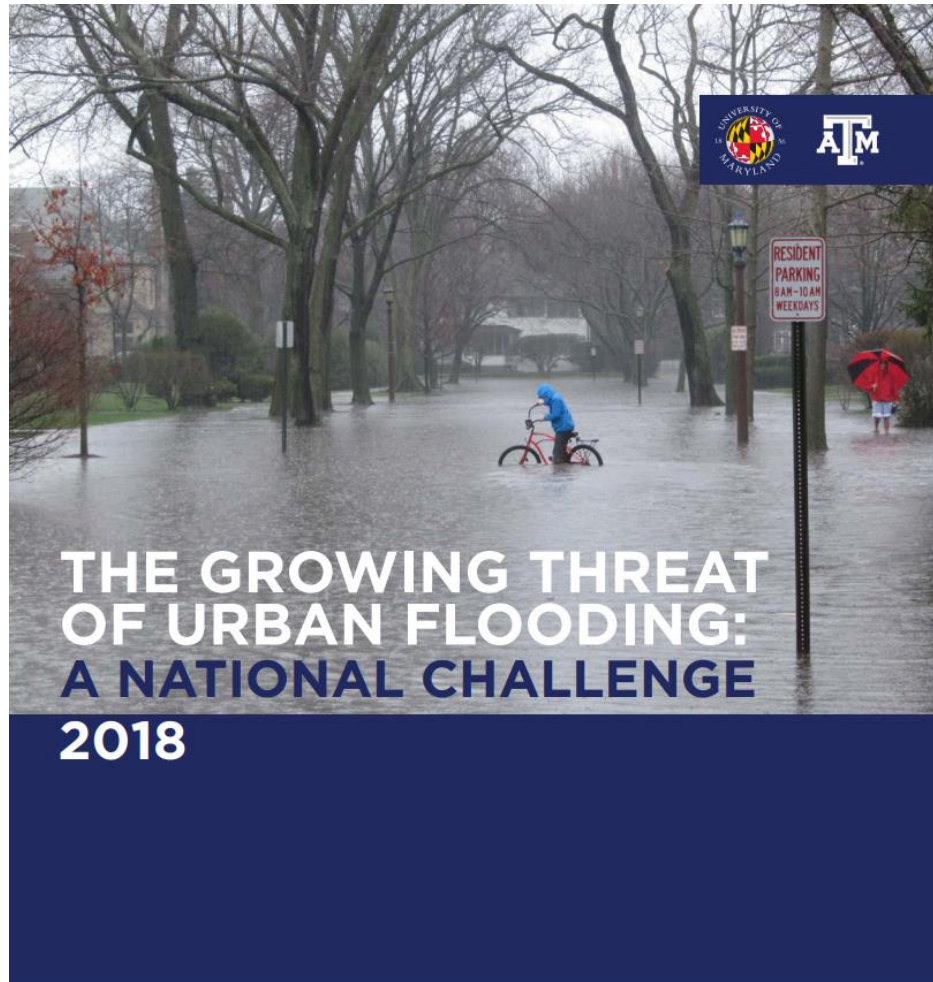
UNMAPPED FLOOD RISKS

1. Local Floodplains
2. Urban Floodplains
3. Residual Floodplains
4. Drainage

AGENDA

- Overview
- Mapping
- Modeling
- Mitigating
- Policies

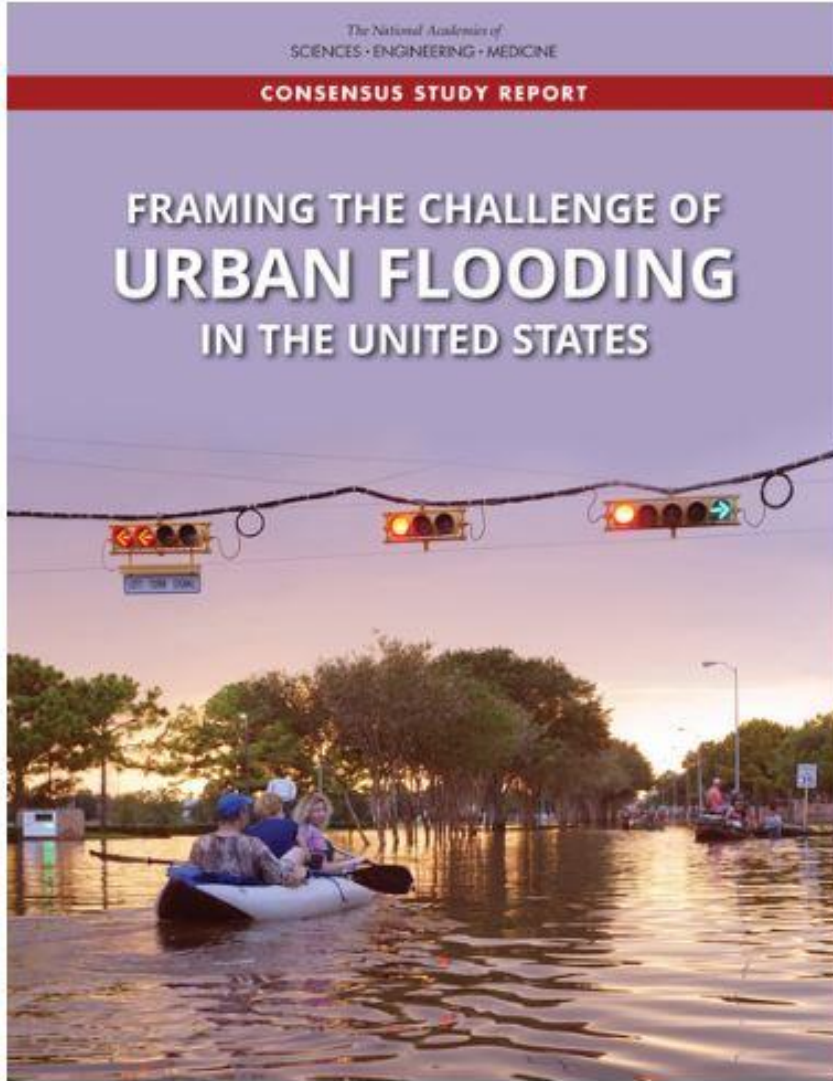




RECOGNIZED NATIONAL ISSUE

Significant flood losses and repetitive loss properties across the U.S. in unmapped areas.

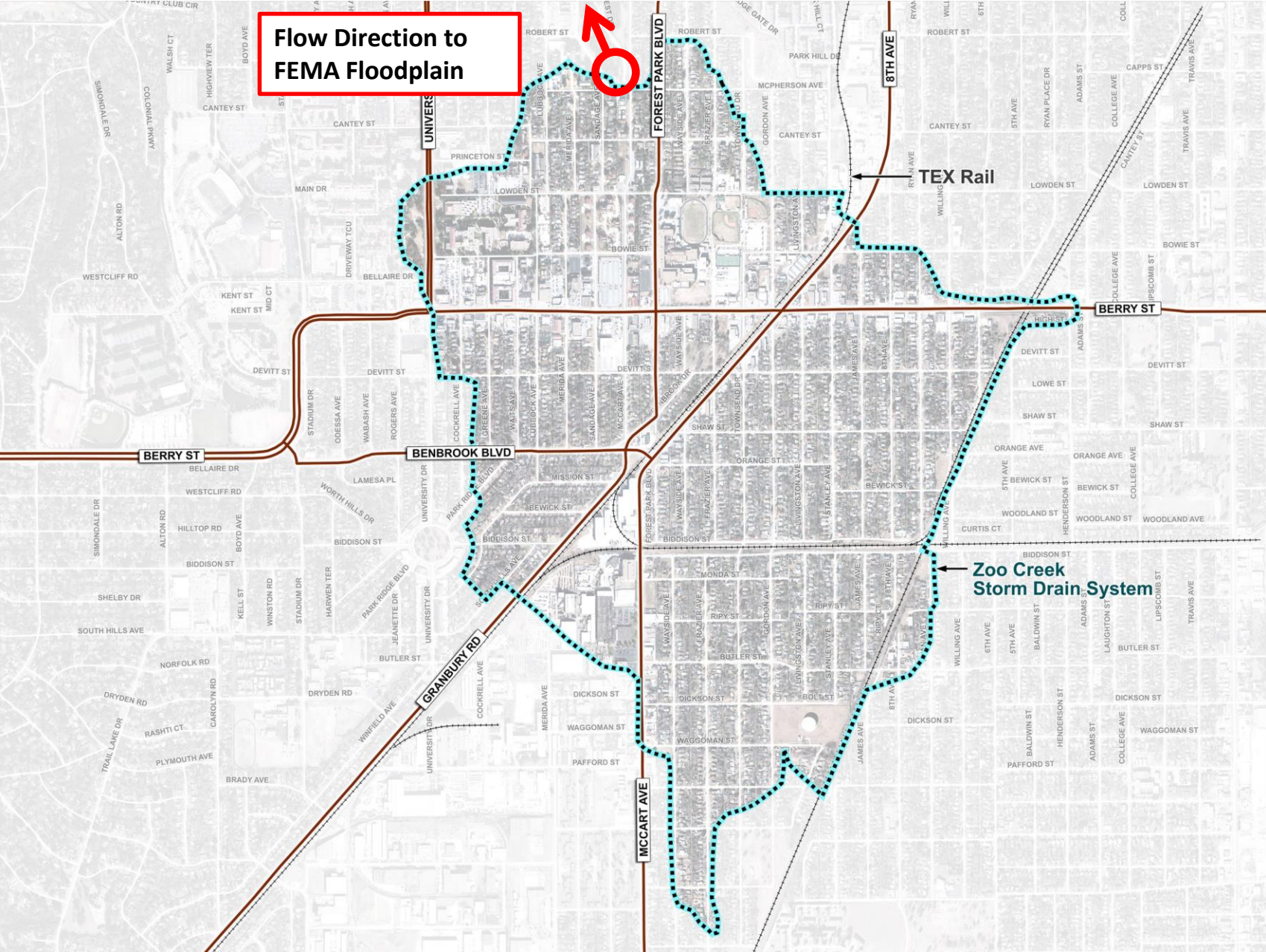
- *The Growing Threat of Urban Flooding: A National Challenge* - 2018
- ASFPM Stormwater Committee
- THE 6TH GILBERT F. WHITE NATIONAL FLOOD POLICY FORUM - Increasing Our Resiliency to Urban Flooding - March 2019

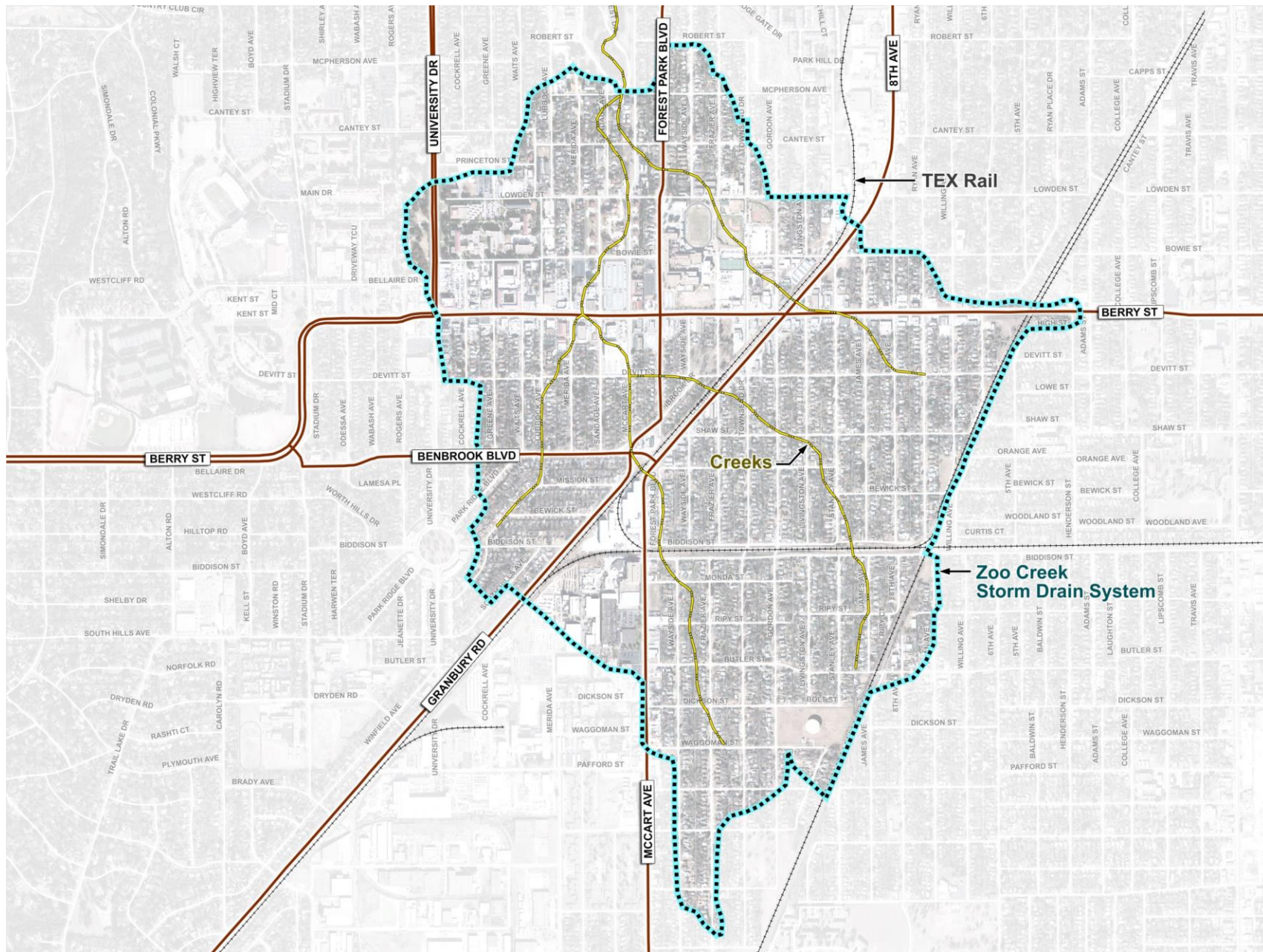


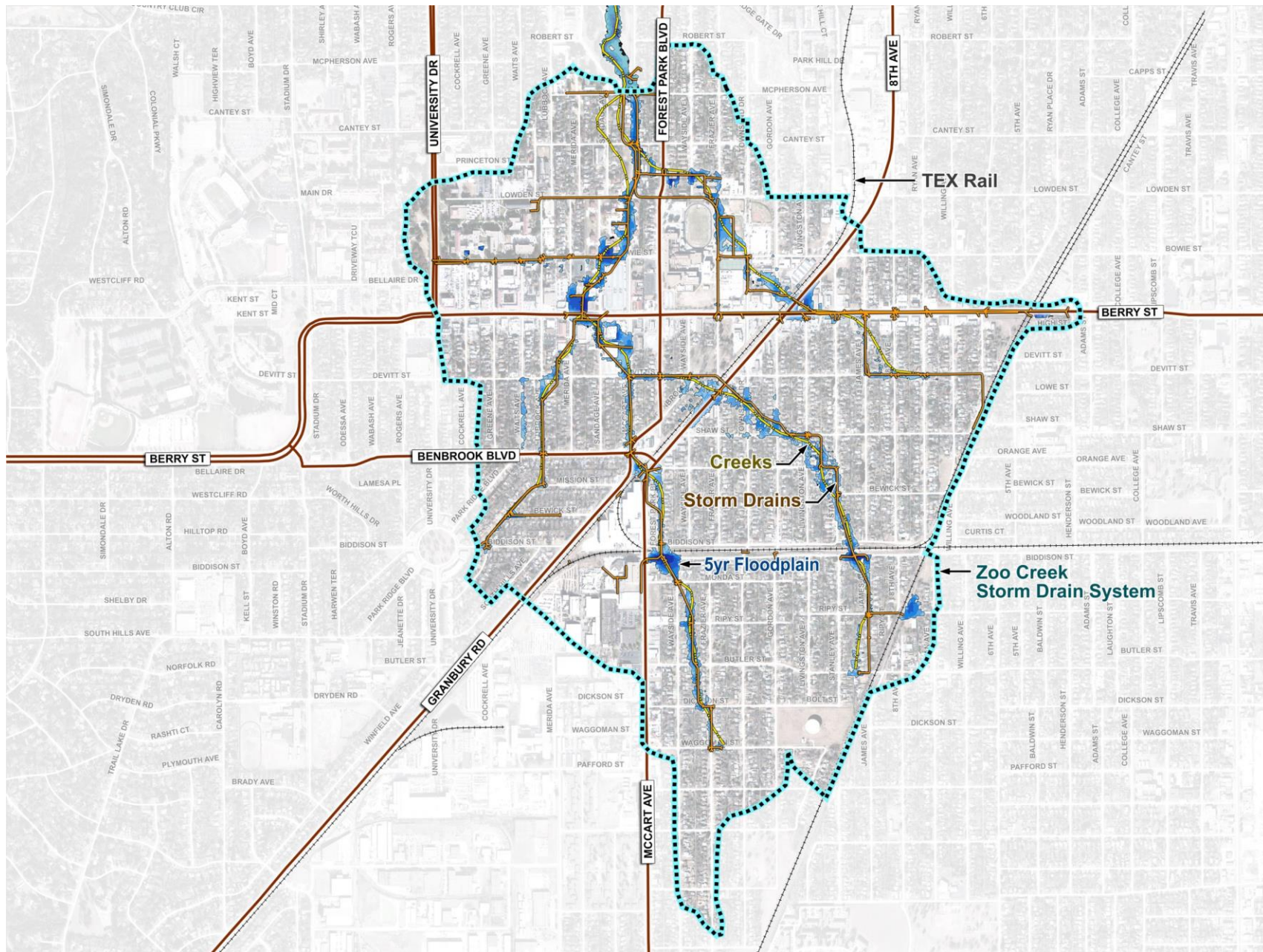
NATIONAL ACADEMY OF SCIENCE
FRAMING THE CHALLENGE OF
URBAN FLOODING IN THE UNITED
STATES – MARCH 2019

OVERVIEW | WHAT ARE LOCAL FLOOD HAZARDS?

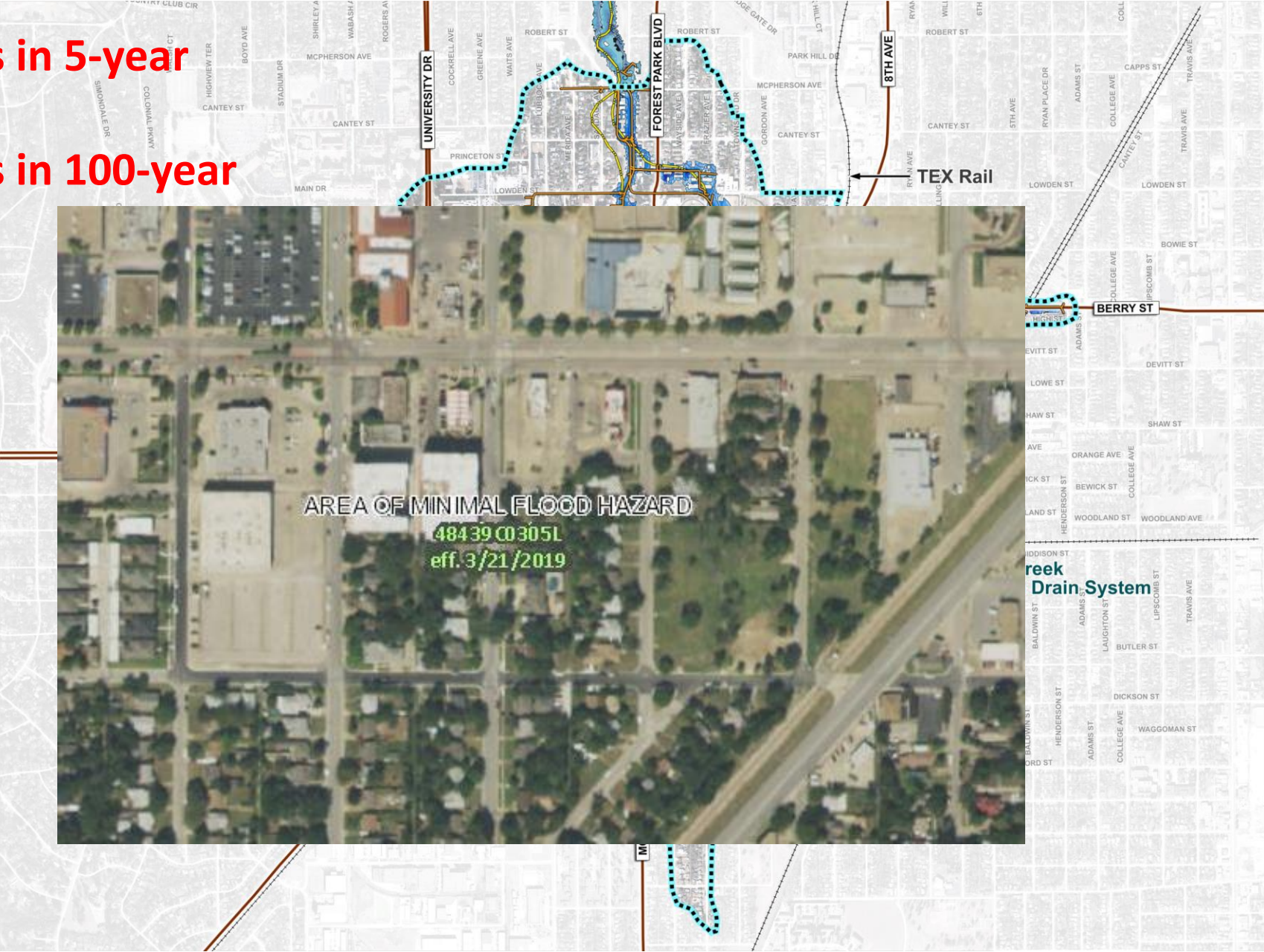




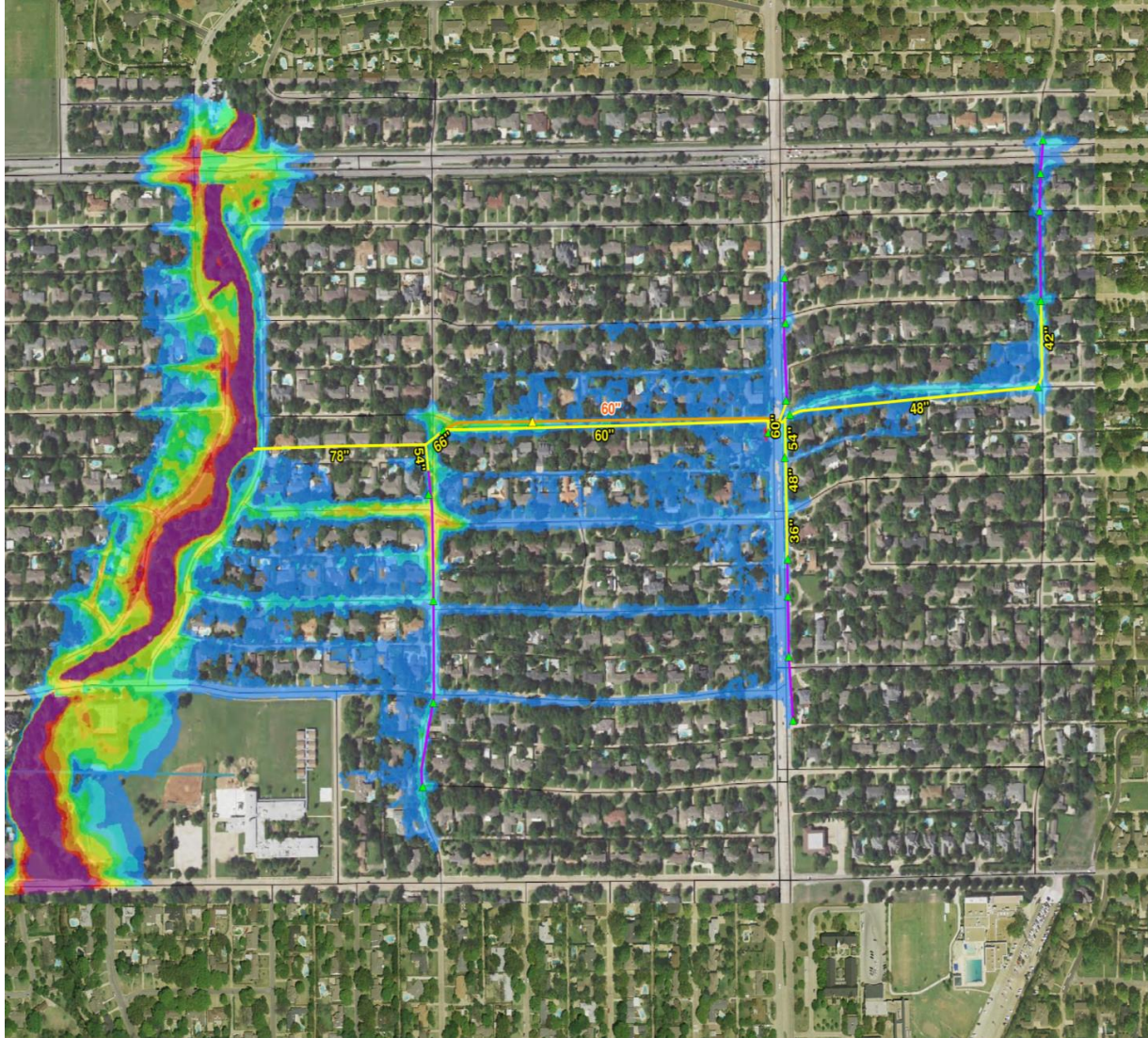




150 Properties in 5-year
300 Properties in 100-year



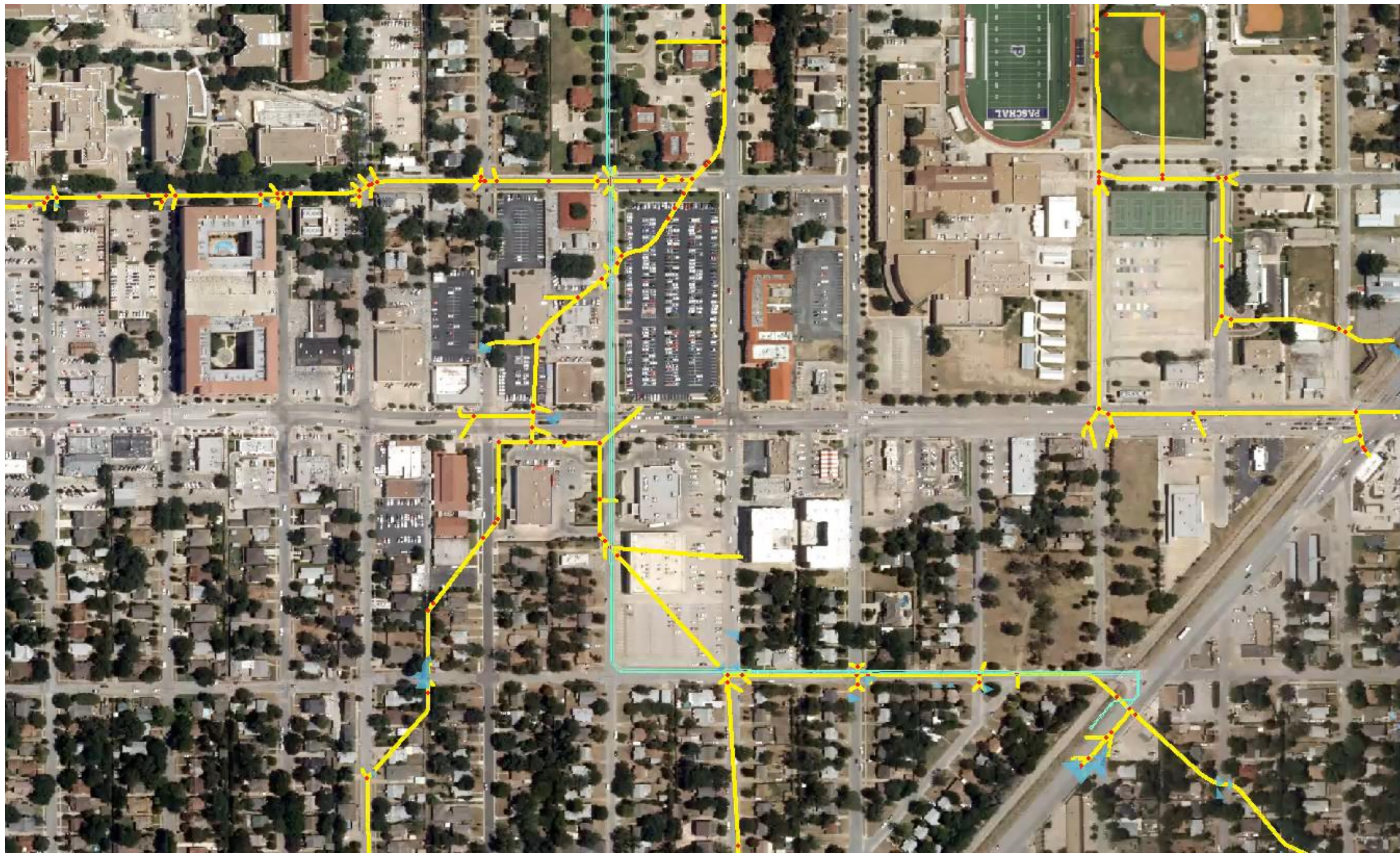
LOCAL FLOOD HAZARDS | MODELING



MODELING

Often 2D modeling is required

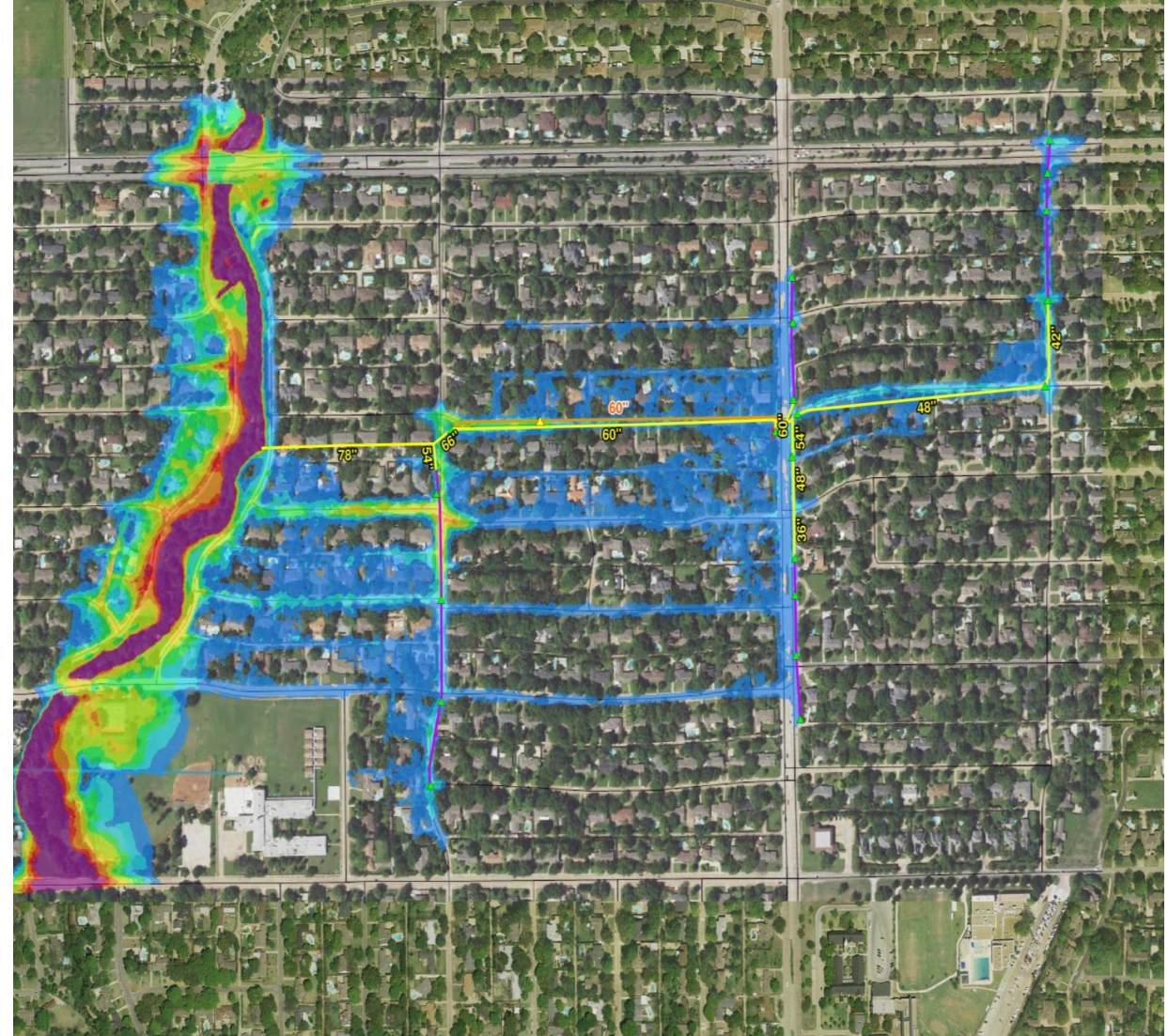
1. Made possible by LiDAR data
2. Complex overflows
3. Surface / Subsurface interactions
4. Effort intensive
5. Cumbersome to keep current
6. Visualization helps with buy-in



MAPPING

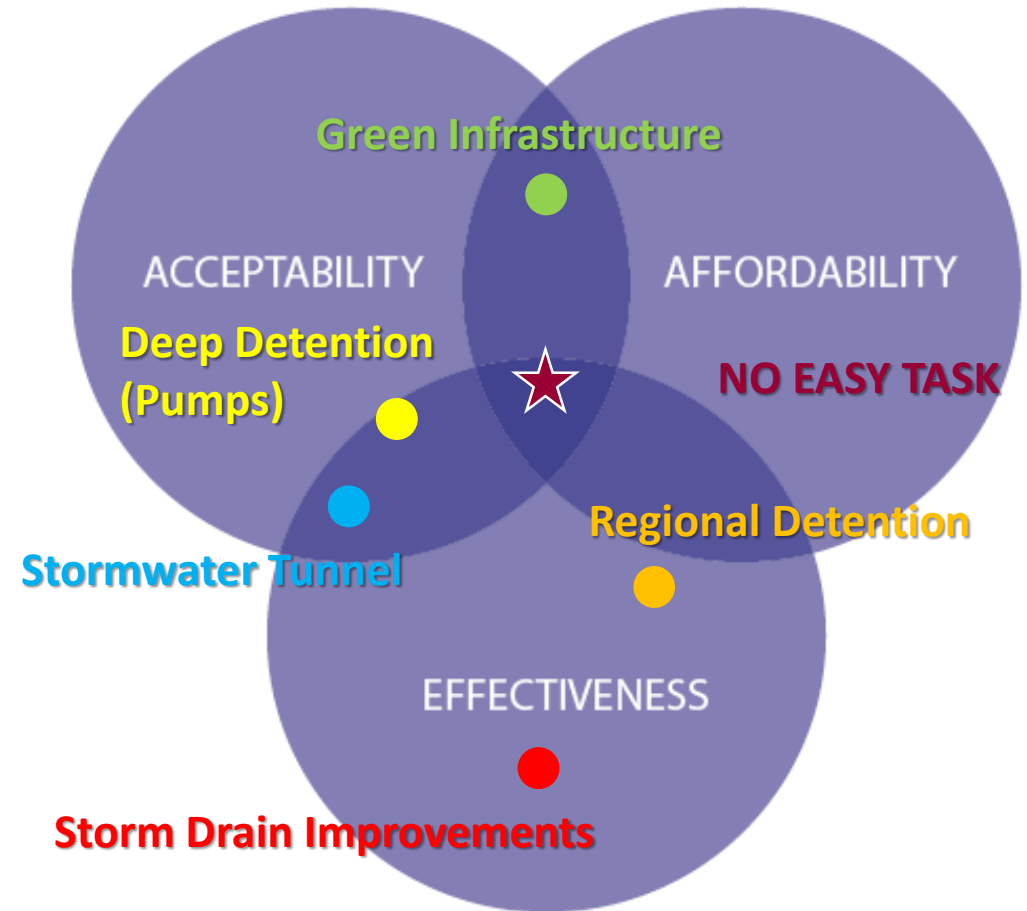
- Challenging to calibrate/validate
- Prone to variability
- Land use changes and development impacts
- Resistance to new floodplain mapping

Impacts property transactions and renters



MITIGATING

- ID “Feasible” Solutions
- Effective Flood Risk Reduction
- Affordable & Within Budget
- Acceptable to Residents



LOCAL FLOOD HAZARD | MITIGATING

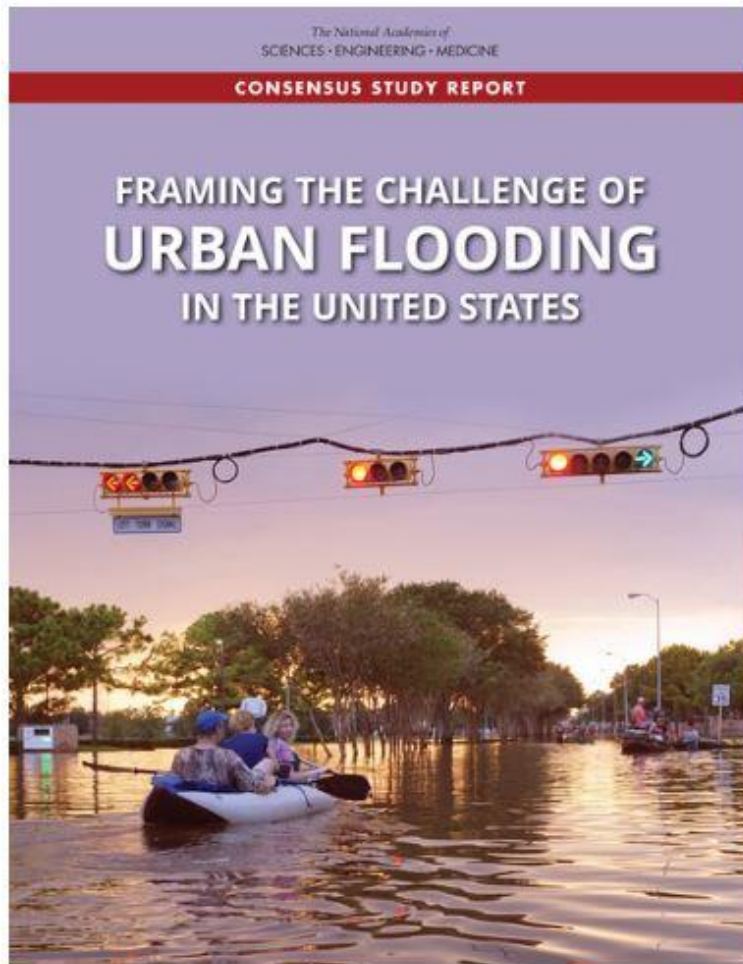




POLICIES

Impacts a number of different stakeholders

1. How do we communicate these flood hazards?
2. How can we help people to make informed decisions?
3. How can we help protect people and property?



NATIONAL ACADEMY OF SCIENCE – MARCH 2019

A Way Forward on Urban Flooding

- Established Method for Analyzing Urban Flood Hazards
- Limit Social Impacts of Urban Flooding
- Need new generation of flood maps and improved methods of updating
- Stronger coordination across agencies



QUESTIONS?

Contact:

Benjamin Pylant | 318 458-1125

bpylant@halff.com

What is the greatest challenge involving local/urban floodplains?

Mapping – Actually showing these areas on a map

Modeling – Understanding where the flood risk is occurring

Mitigating – Addressing the flooding issues

Policies – Communicating and Regulating these areas

All of the above

How significant is the flood risk in unmapped (non-FEMA) flood zones in your community

Very
Significant

Somewhat
significant

Not very
significant

I don't know

How well are local/urban floodplains mapped in your community?

City-wide
mapping

Isolated
areas only

Minimal
mapping

Insignificant
amount

I don't know

How well are local/urban floodplain (non-FEMA) risks being communicated to residents in your community?

Very well

Moderately
well

Not very
well

I don't
know

Should we be doing more to address issues of flood risk in local/urban (non-FEMA) floodplains?

Yes, strongly agree

Yes, agree

No, disagree

I don't know