

# Risk MAP Pilot Project Harris County, Texas



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In Partnership with:



**FEMA**

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Chief Engineer

# Study Purpose

## 1. Physical Map Revision of Addicks Reservoir Watershed – 9 channels, 71 total miles

- Update land use
- Channel & bridge updates
- Current terrain data (1' versus 2' contours)
- Updated modeling and mapping standards & tools
- Incorporate effective LOMRs



# Study Purpose

## 2. Incorporate new overflow values from Cypress Creek LOMR

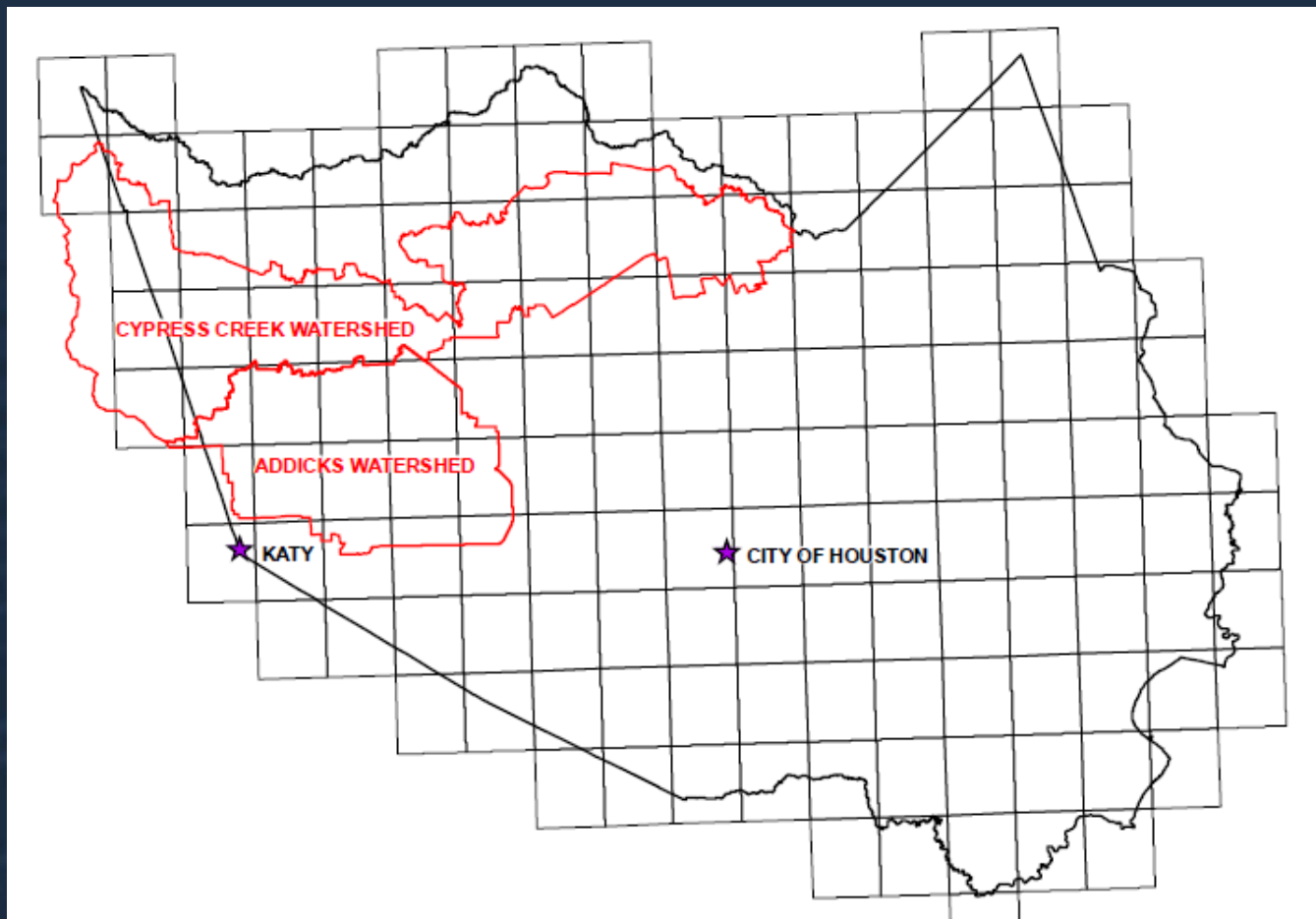
- Use detailed topo (1' contour) & 2D model to better estimate overflow limits & depths

## 3. Risk MAP Products

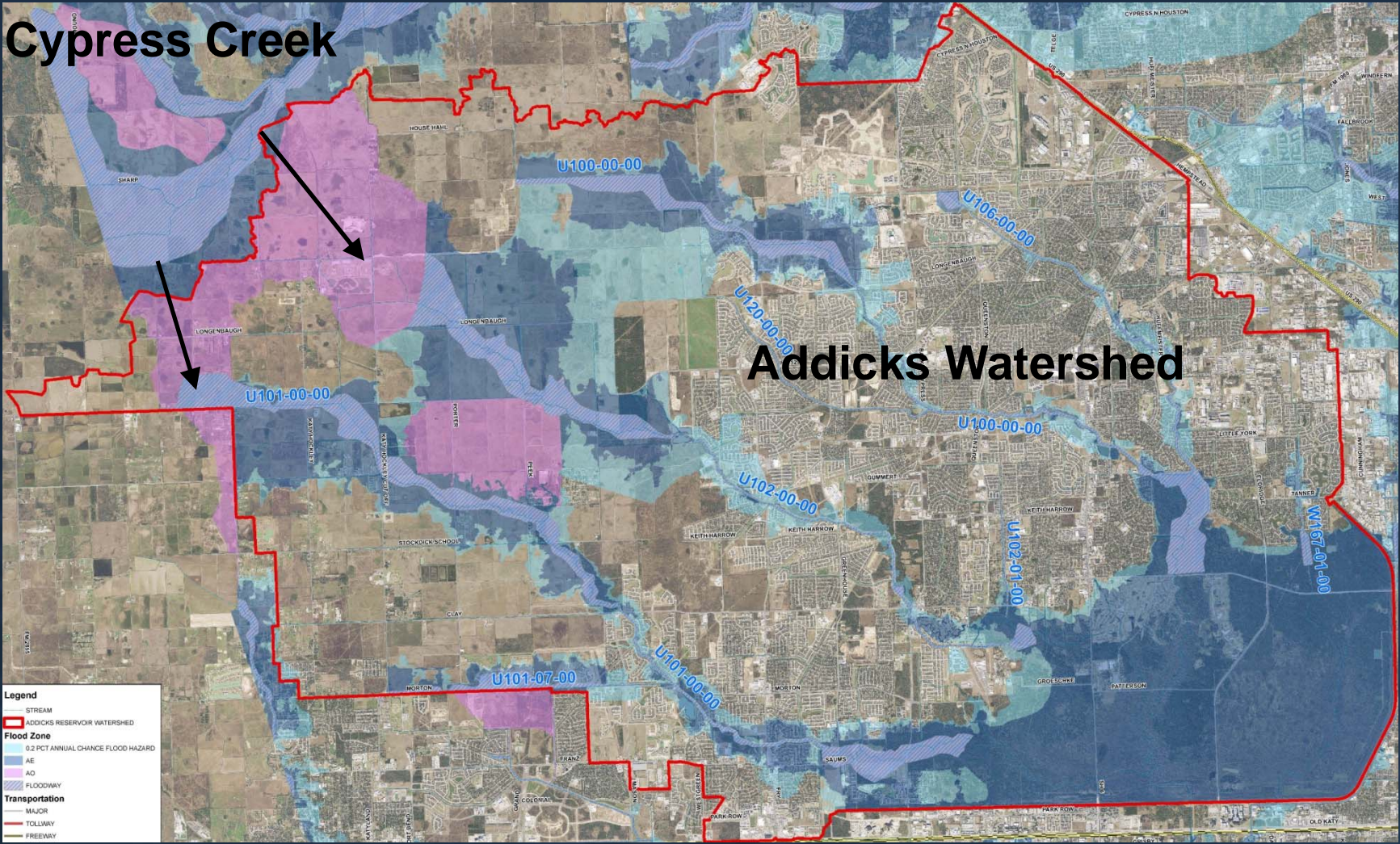
- Changes from effective map
- Multi-frequency flood depth map



# Vicinity Map



# Location



# Overflow



# Overflow



# Overflow



# Local, State, and Federal Agencies

- **Harris County Flood Control District**
- **Municipal Utility Districts**
- **Cities of Houston and Katy**
- **Unincorporated Harris County**
- **US Army Corps of Engineers**
- **Texas Department of Transportation**

## Public & Stakeholder Involvement



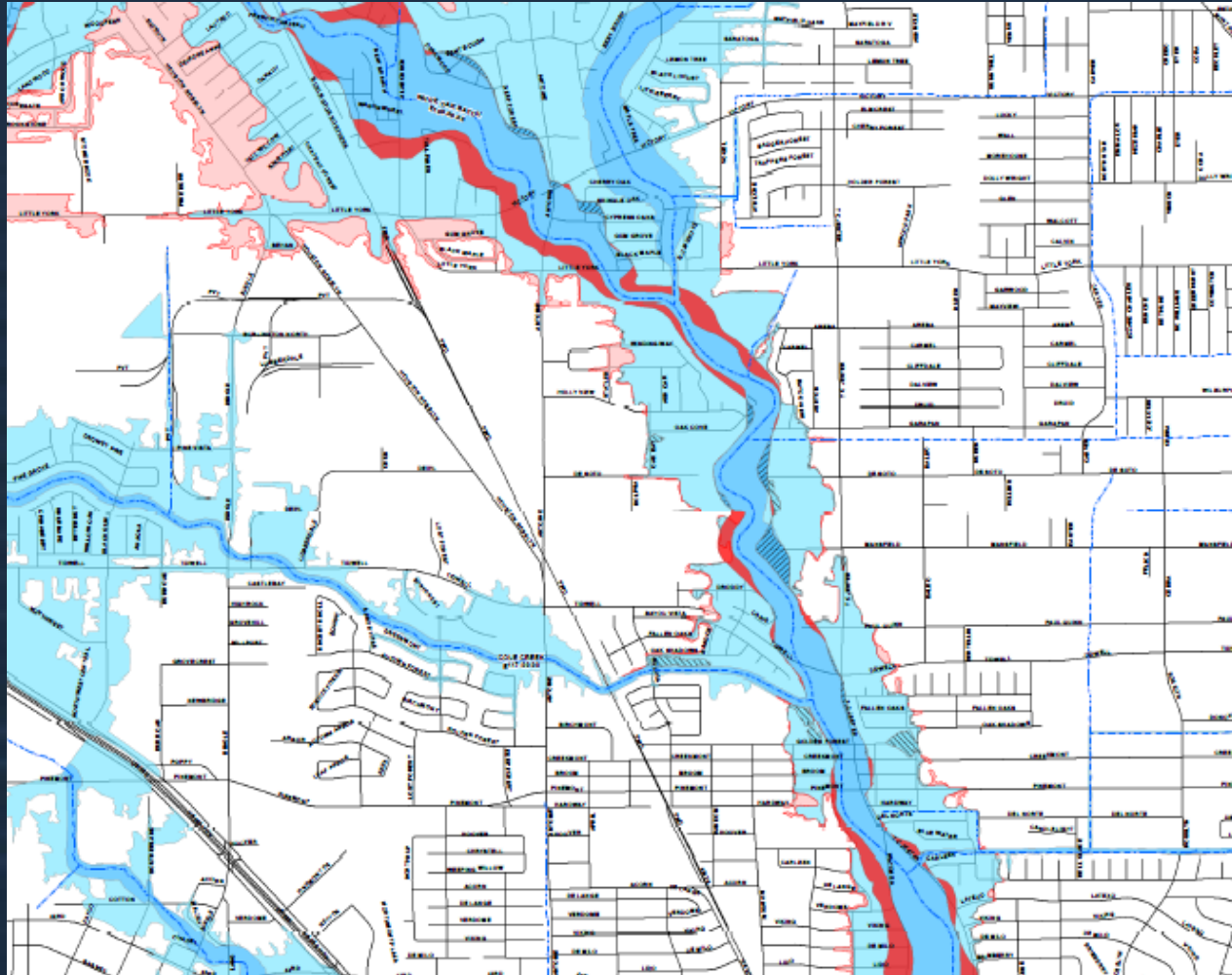
# Risk MAP

- **What is Risk MAP?**
  - **Mapping, Assessment, and Planning**
  
- **National Risk MAP Goals**
  - **Improve and maintain flood hazard data**
  - **Deliver quality products and services**
  - **Reduce loss of life and property from flooding**
  - **Increase local mitigation action to reduce flood risks**
  
- **Project Risk MAP Goals**
  - **Meet the National Goals**
  - **Innovate ways to communicate flood risks**



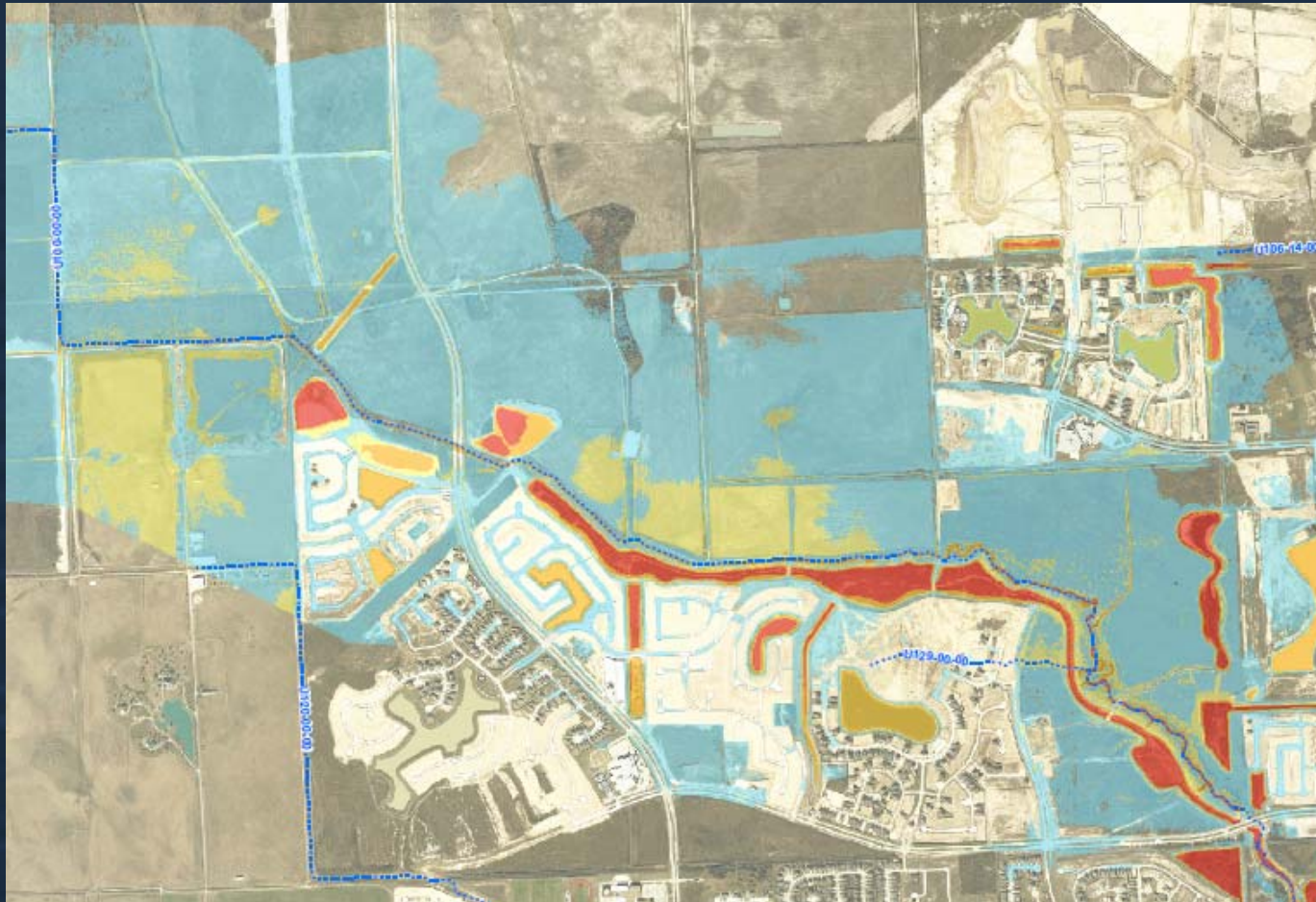
# Risk MAP

## Product – Map Changes Example



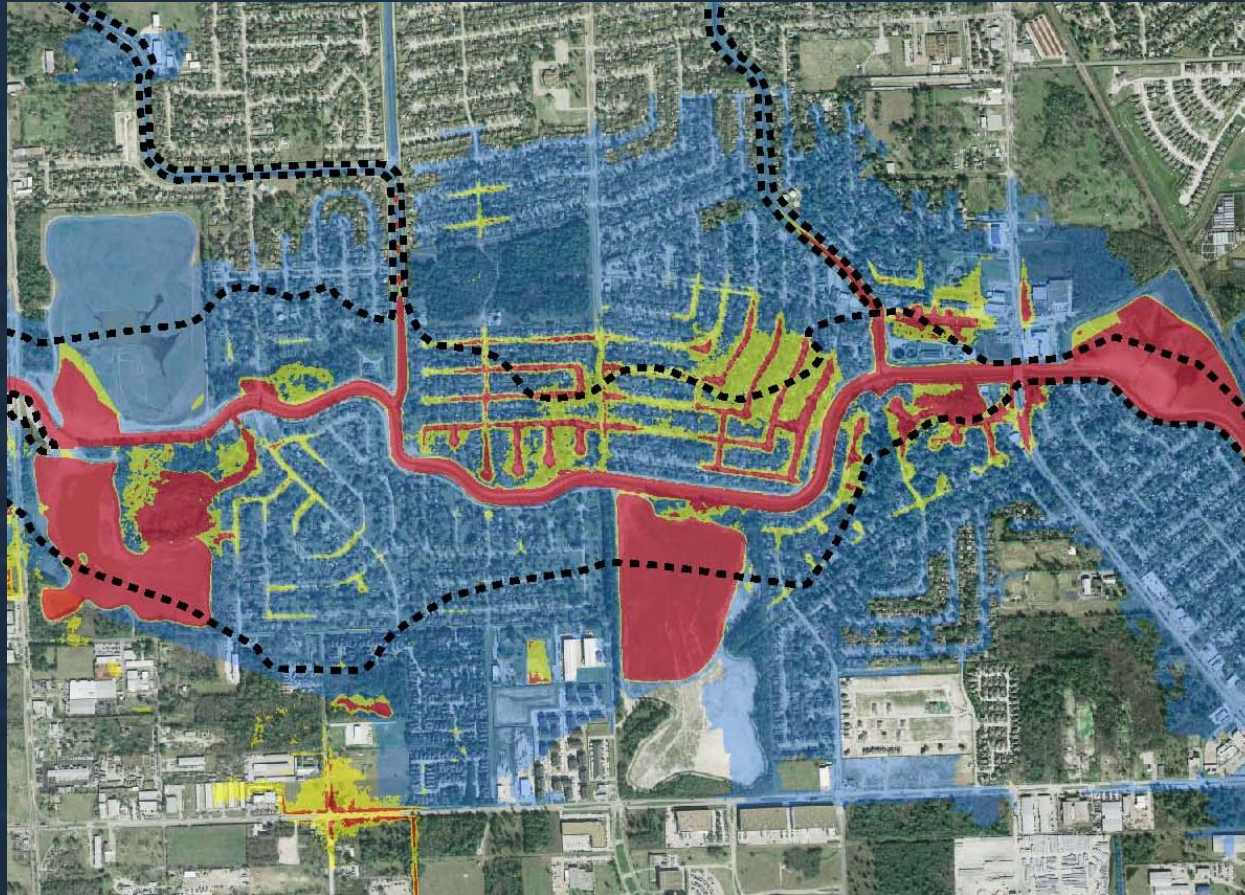
# Risk MAP

## Product – Inundation Depths Example



# Risk MAP

Product Idea – Velocity x Depths



# Risk MAP Mitigation Plans

## Putting Your Maps to Work

- **Reduction of Risk to Community**
  - Plans create a framework for risk-based decision making to reduce damages to lives, property, and the economy from future disasters
- **Assessing Your Risk**
  - Maps are an excellent tool to:
    - Identify the hazard area
    - Locate vulnerable structures and population
    - Determine need for structural or non-structural mitigation





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