SAME Resiliency Workshop

HARRIS COUNTY FLOOD CONTROL DISTRICT

SAFER Section 203 Feasibility Study

April 14, 2025

Flooding is Harris County's

#1 Natural Disaster

HARRIS COUNTY
FLOOD CONTROL
DISTRICT

Our Guiding Principles

Mission

Plan, implement, and maintain flood risk reduction projects guided by community and natural values.

Vision

Enhance quality of life through effective flood risk reduction.

Values

Good Stewards | One Team | Service Driven | Adaptable

HARRIS COUNTY FLOOD CONTROL DISTRICT

Our Strategic Priorities

Our People

Service Delivery

Partnerships & Collaboration

Performance & Risk Management

Public Engagement

Our Work

SAFER Study

Identify large-scale, transformational flood risk reduction projects that could be cost-shared with the Federal government

Solutions for

Advancing

Flood Mitigation,

Equity, and

Resilience

Flooding in Harris County

Why is Harris County flood prone?

- Extreme rainfall
- Flat, slow-draining terrain
- Clay soils with low infiltration

How does the Flood Control District typically address flooding?

- Regional stormwater detention
- Channel conveyance improvements
- Voluntary buyouts

Flooding Events in Harris County

Storm Event	Est. Structure Flooding
Tropical Storm Allison (June 2001)	73,000
Memorial Day (May 2015)	6,335
Halloween (October 2015)	394
Tax Day (April 2016)	9,840
Memorial Day (May 2016)	465
Hurricane Harvey (August 2017)	154,170
Tropical Storm Imelda (September 2019)	3,990

Hurricane Harvey – Flooded Houses

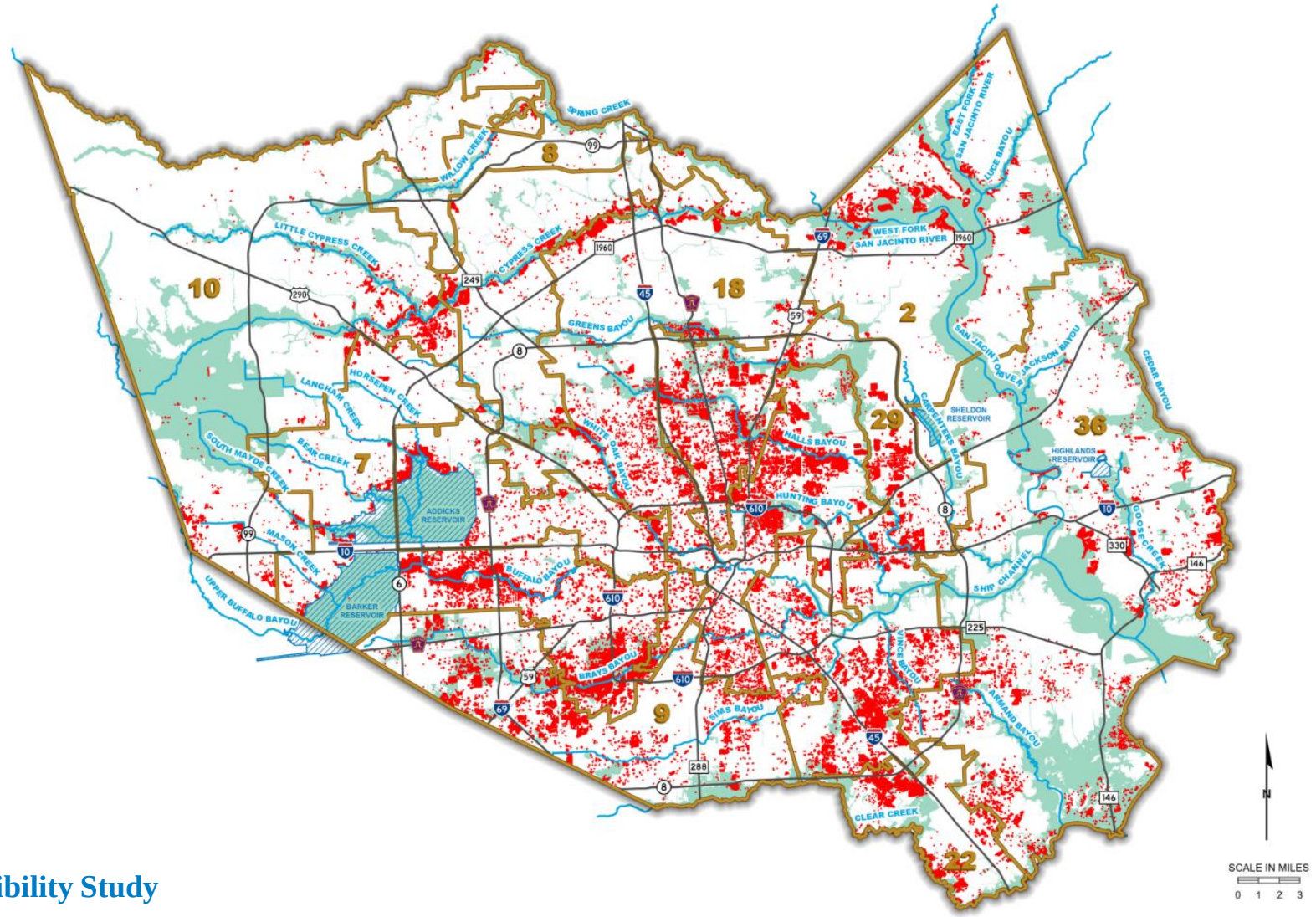
By Watershed

Addicks Reservoir	6,009
Armand Bayou	3,784
Barker Reservoir	1,908
Brays Bayou	23,811
Buffalo Bayou	17,084
Carpenters Bayou	234
Cedar Bayou	2,200
Clear Creek	5,479
Cypress Creek	8,746
Greens Bayou	12,904
Halls Bayou	11,831
Hunting Bayou	7,419
Little Cypress Creek	697
San Jacinto River	9,418
San Jacinto & Galveston Bay	492
Sims Bayou	11,756
Spring Creek	511
Spring Gully & Goose Creek	2,077
Vince Bayou	2,718
White Oak Bayou	12,373
Willow Creek	309

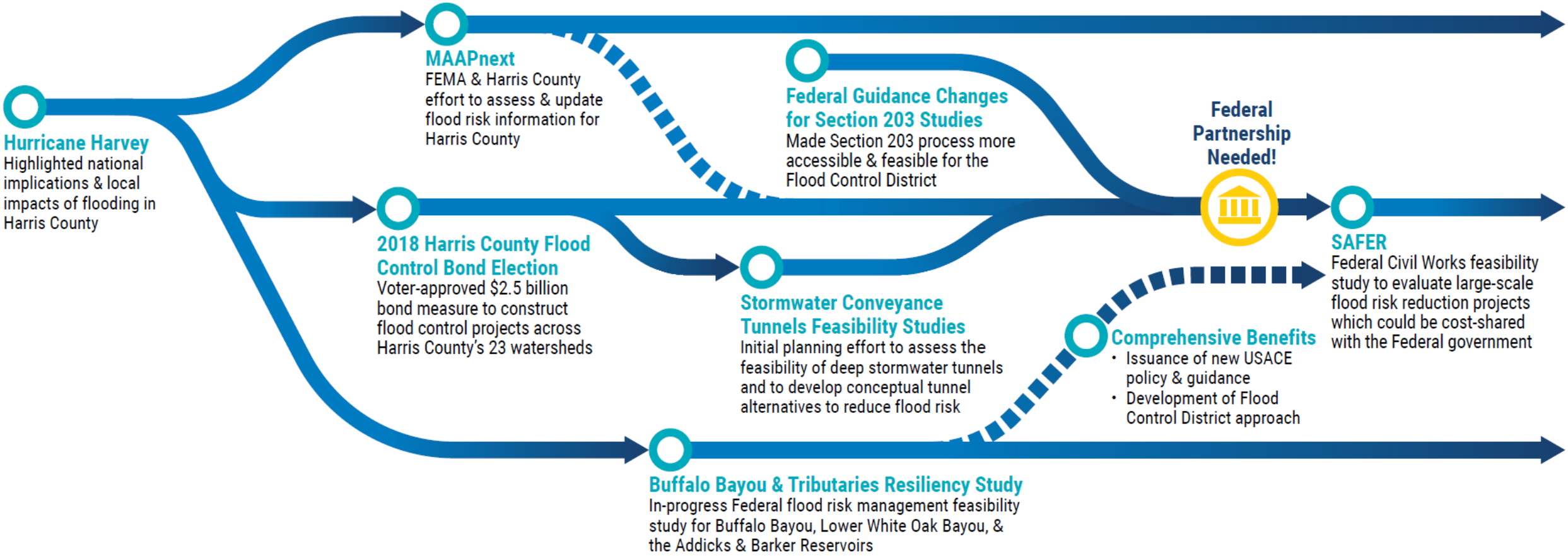
Other watersheds had less than 200 each

LEGEND

- EFFECTIVE FEMA FLOODPLAIN LIMITS
- MAJOR CHANNEL
- CONGRESSIONAL DISTRICT
- FLOODED RESIDENCES



Efforts Leading up to the SAFER Study



A History of Successful Partnerships with the U.S. Army Corps of Engineers

- Special purpose district created by State of Texas
- Created to be the non-federal sponsor for Addicks and Barker Reservoirs
- Served successfully as the nonfederal sponsor with the USACE in partnerships involving Greens Bayou, Sims Bayou, Brays Bayou, White Oak Bayou, Hunting Bayou, and Clear Creek

Project Brays Ribbon Cutting

What is Section 203?

Federal permission established to allow non-federal sponsors to conduct, on their own, feasibility studies that would, when completed and transmitted by the Secretary to Congress, serve as the basis for authorization of new Federal water resources projects.

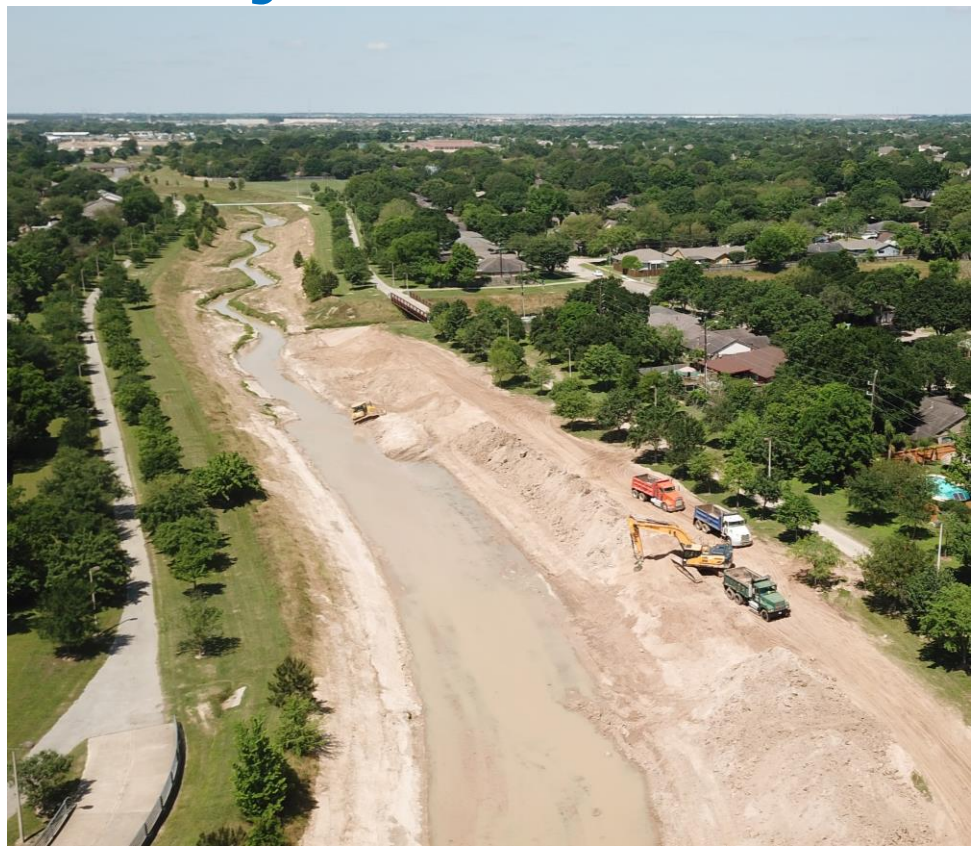
Section 203 of the Water Resources Development Act of 1986, as amended by Section 161 of the Water Resources Development Act of 2020 (33 U.S.C. § 2231).

US Army Corps of Engineers®

HARRIS COUNTY FLOOD CONTROL DISTRICT

Why Perform a Section 203 Study?

- Conducting a new feasibility study following federal guidelines and policy required for a Section 203 study **will provide the opportunity for the Flood Control District to pursue large-dollar federal investment in drainage infrastructure.**
- The potential Federal funding (65%/35% cost-share) allows the Flood Control District **to leverage available local resources to pursue larger-scale projects which could accelerate the delivery of flood risk reduction benefits for Harris County.**



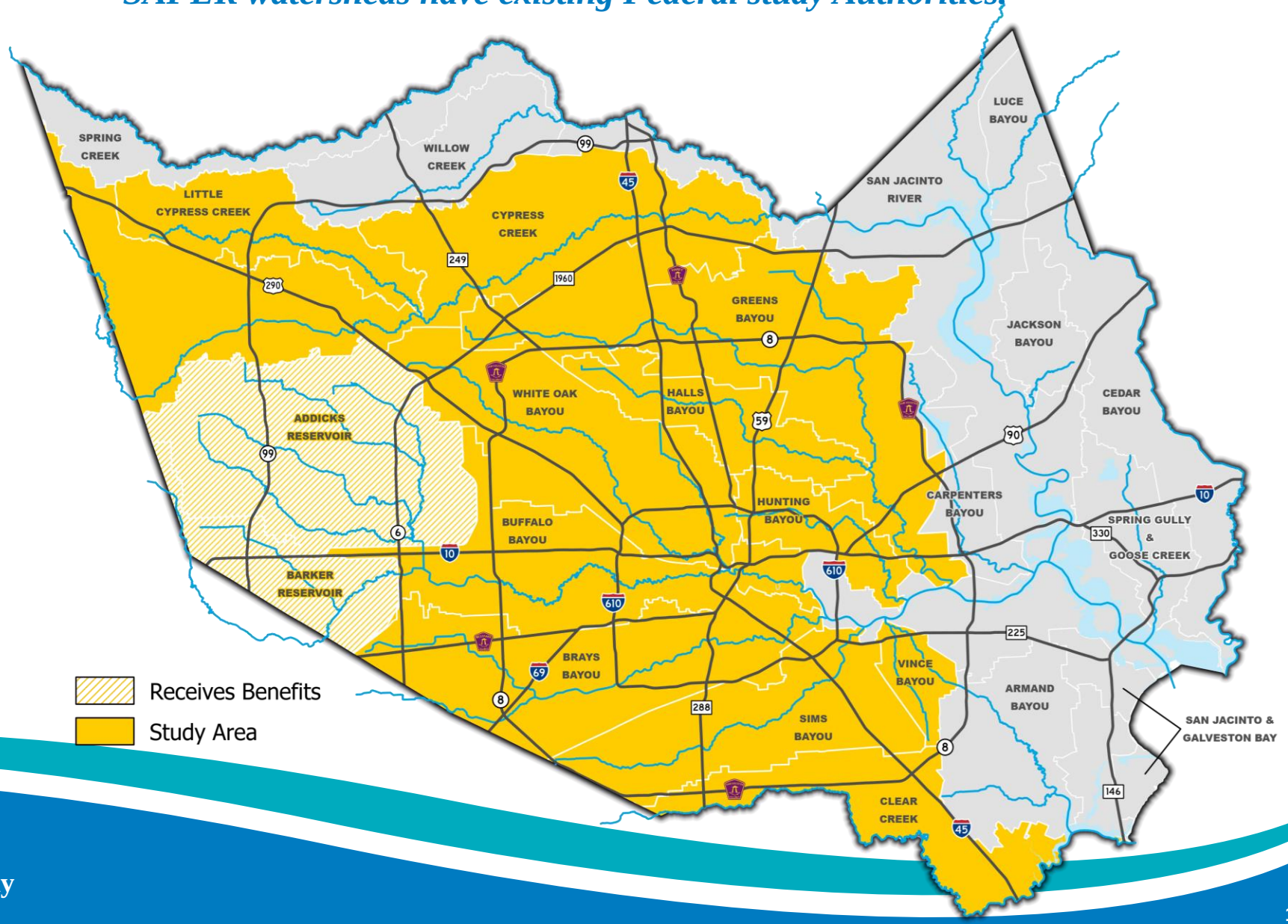
Key Aspects of Section 203 (as amended)

- Non-Federal sponsor prepares feasibility study and environmental document, with USACE performing inherently governmental activities
- Non-Federal sponsor submits Feasibility Study directly to the ASA (CW)
- ASA (CW) issues recommendation directly to Congress
- New guidance clarifies the role of USACE in providing inherently governmental activities and in performing technical and policy reviews
- If authorized, the non-Federal sponsor is eligible to receive credit for a portion of the feasibility study effort towards their cost-share requirements for design and construction

SAFER Study Watersheds

- Brays Bayou
- Buffalo Bayou
- Clear Creek
- Cypress Creek
- Greens Bayou
- Halls Bayou
- Hunting Bayou
- Little Cypress Creek
- Sims Bayou
- White Oak Bayou
- Vince Bayou

SAFER watersheds have existing Federal study Authorities.



Solutions for

Advancing

Flood Mitigation,

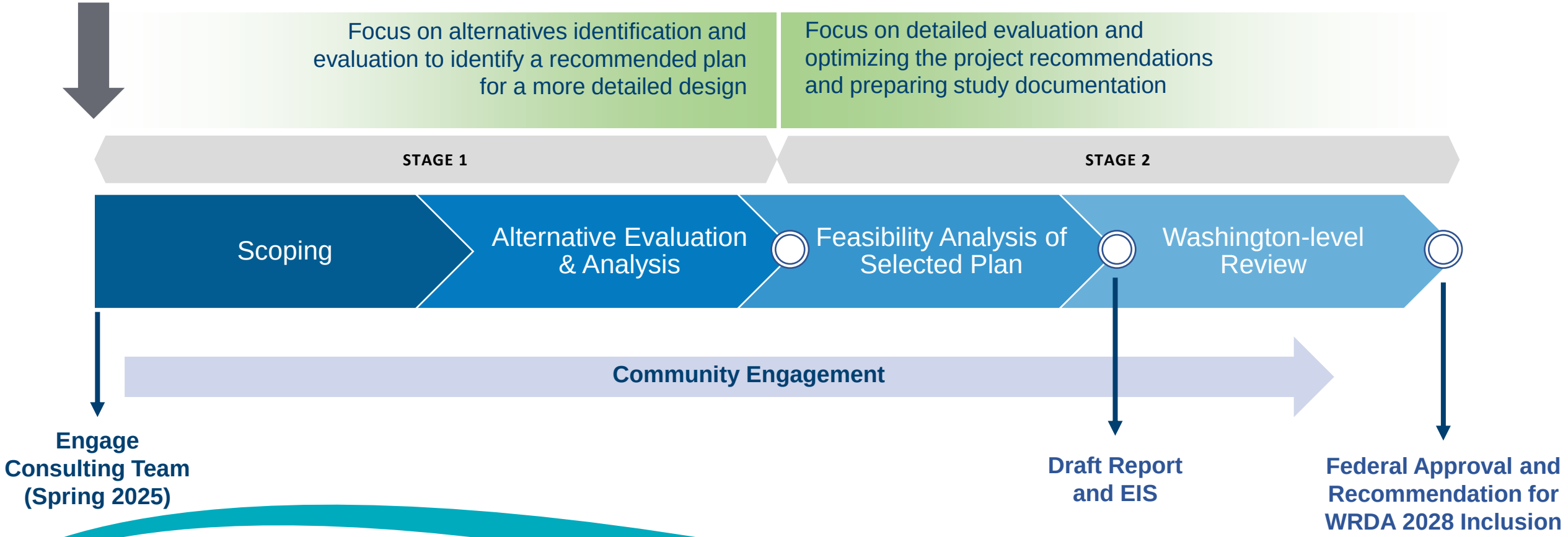
Equity, and

Resilience

Study Priorities:

- Deliver policy compliant Section 203 Feasibility Study and EIS
- Cultivate support through robust outreach and engagement
- Present multi-faceted Implementation Plan to accelerate successful implementation of study recommendations

SAFER Study Process



Alternatives Under Consideration*

Conveyance improvements

Detention basins

Bridge / culvert improvements

Large-diameter deep tunnels

Levees / floodwalls

Dams / reservoirs

Non-structural measures

Natural and nature-based features

List is not all-inclusive

Comprehensive Benefits

Economic Development

Environmental Quality

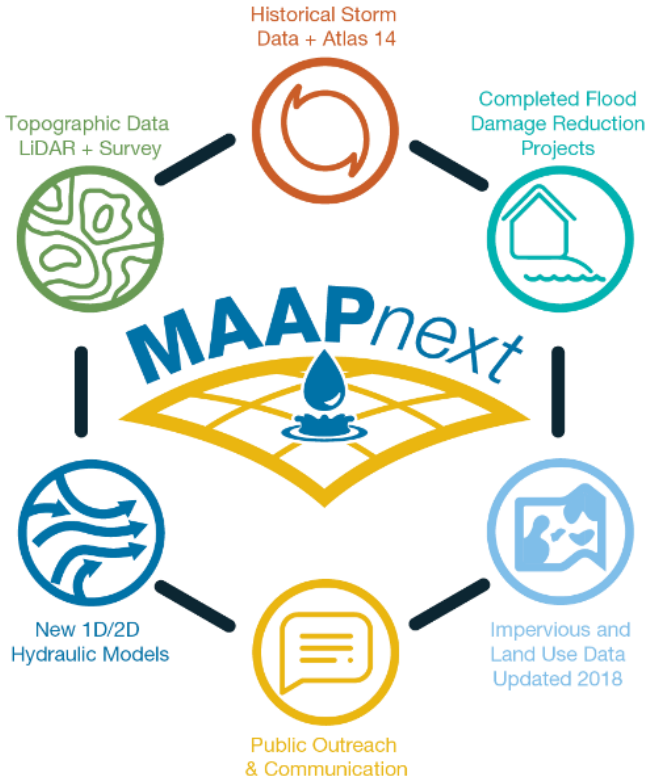
Societal Effects

ER 1105-2-103: Planning Policies and Procedures
PR&G Agency Specific Procedures

Hydrology & Hydraulics

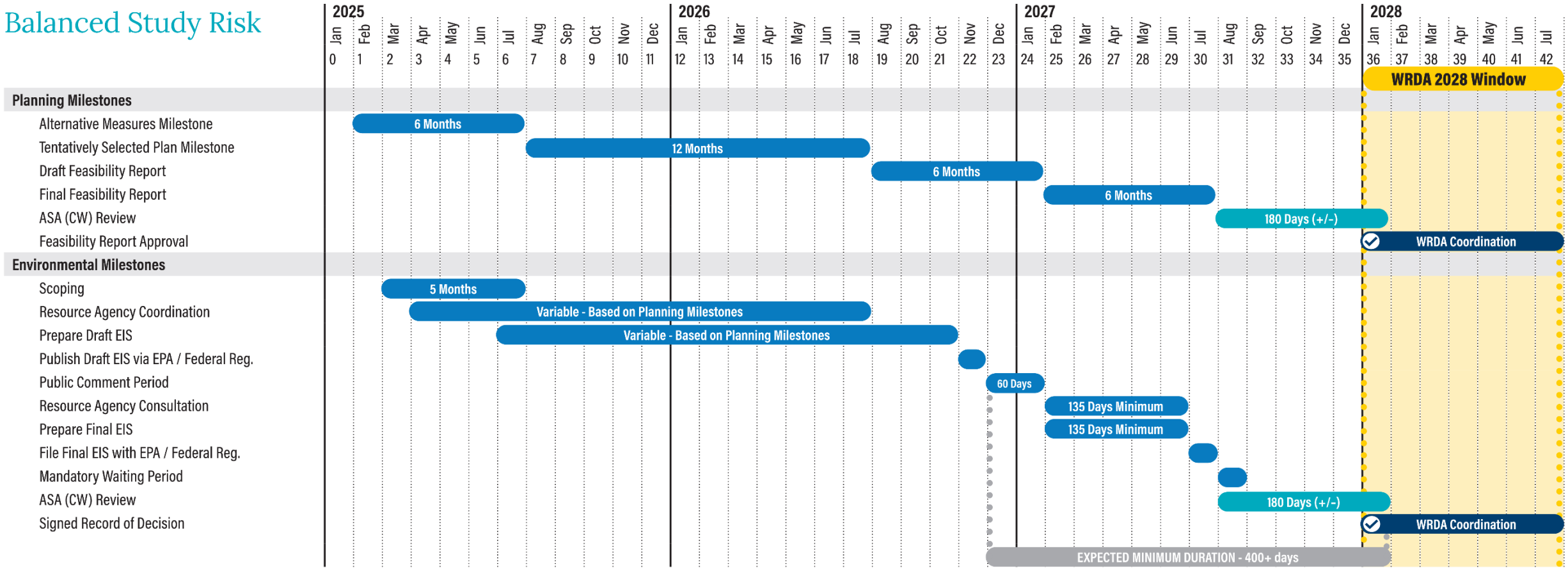
Sea Level Rise

Changes to Inland Hydrology & NOAA Atlas 15



Proposed Schedule – Targeting WRDA 2028

Balanced Study Risk



Questions & Answers

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