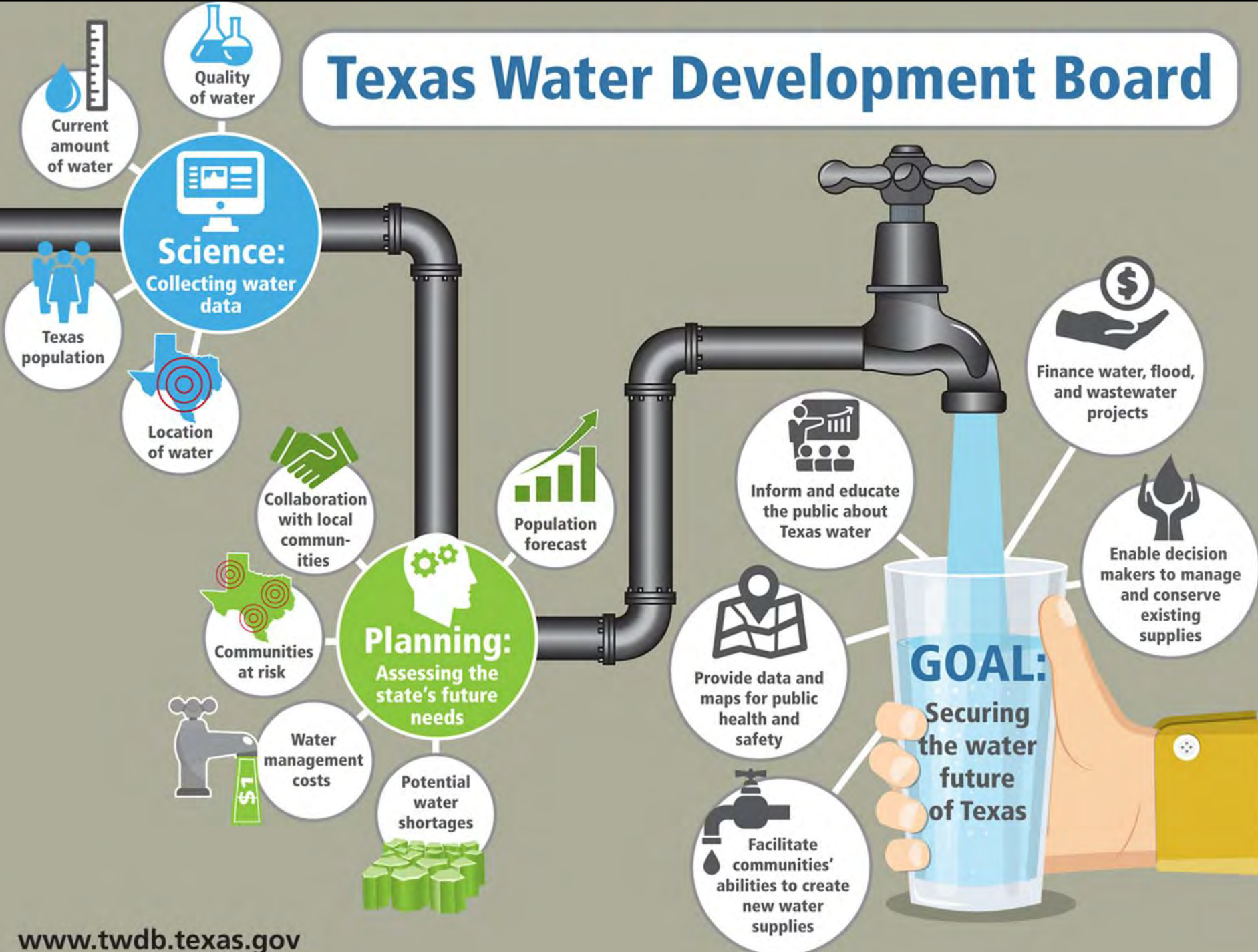


# Flood Implementation Stakeholder Workshop



**August 2019**

# Texas Water Development Board



# Agenda

- **Welcome and opening remarks**
- **TWDB Flood Activities: Past, Present, and Future**
- **Presentations of Senate Bill (SB) 7 and SB 8 stakeholder consideration issues**  
(interactive with real-time polling and audience participation)
- **Breakout session discussions (optional)**
  - Group 1: discussion on flood planning
  - Group 2: discussion on financial assistance
- **Adjourn**

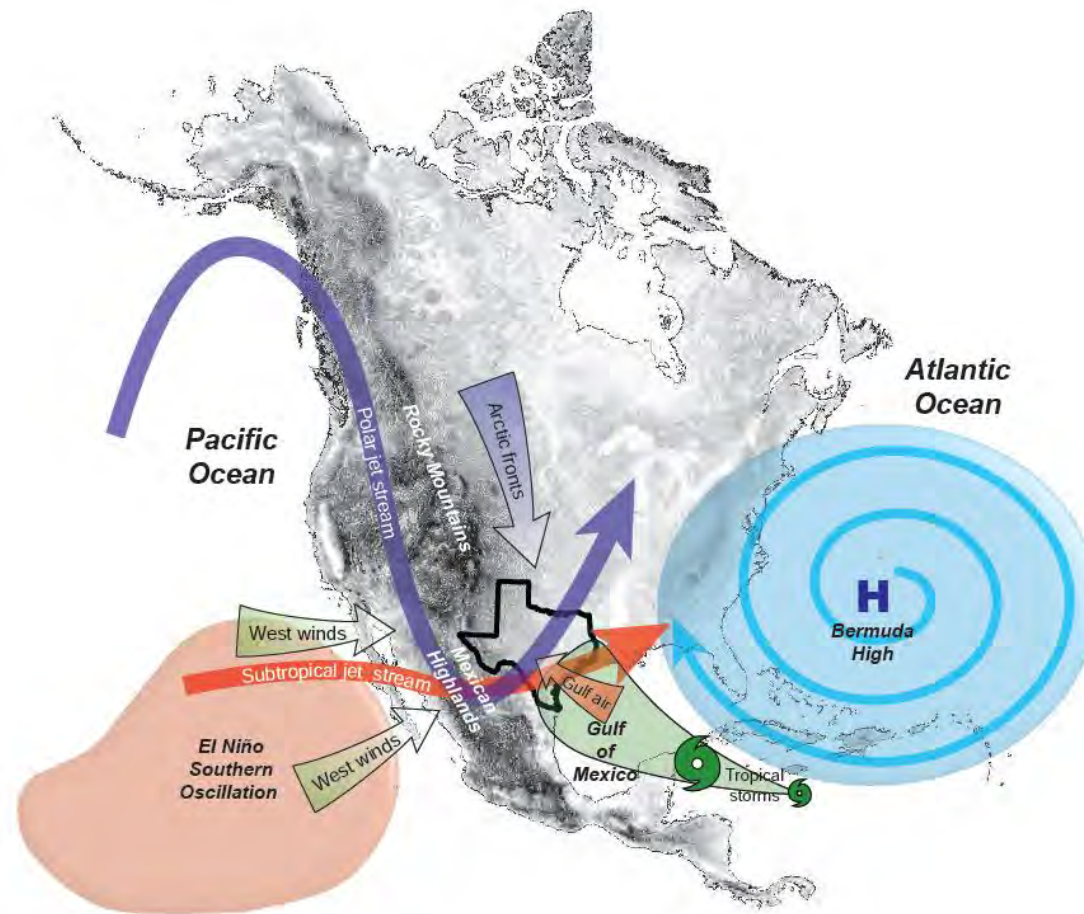
# Agenda

What won't be covered today:

- Flood Insurance Rate Maps (FIRMs) or insurance issues
- Local regulations, bond programs, or projects
- Federal projects or programs
- Disaster recovery efforts
- Public assistance to homeowners/businesses

# TWDB Flood Activities: Past, Present, and Future

# Texas Weather: Drought. Flood. Repeat.



# TWDB Flood Responsibilities

- Prior to 2015, TWDB:
  - Funded state grants for flood protection planning to conduct feasibility studies for an entire watershed to evaluate both structural and nonstructural solutions
  - Administered federal Flood Mitigation Assistance Grant (FMA) Program
  - Served as state coordinator for:
    - National Flood Insurance Program (NFIP)
    - Cooperating Technical Partner Program

# Expanded Flood Responsibilities in 2015

	DATA	SCIENCE	COMMUNICATION	FUNDING
NEW EFFORTS				
EXPANDED EFFORTS				

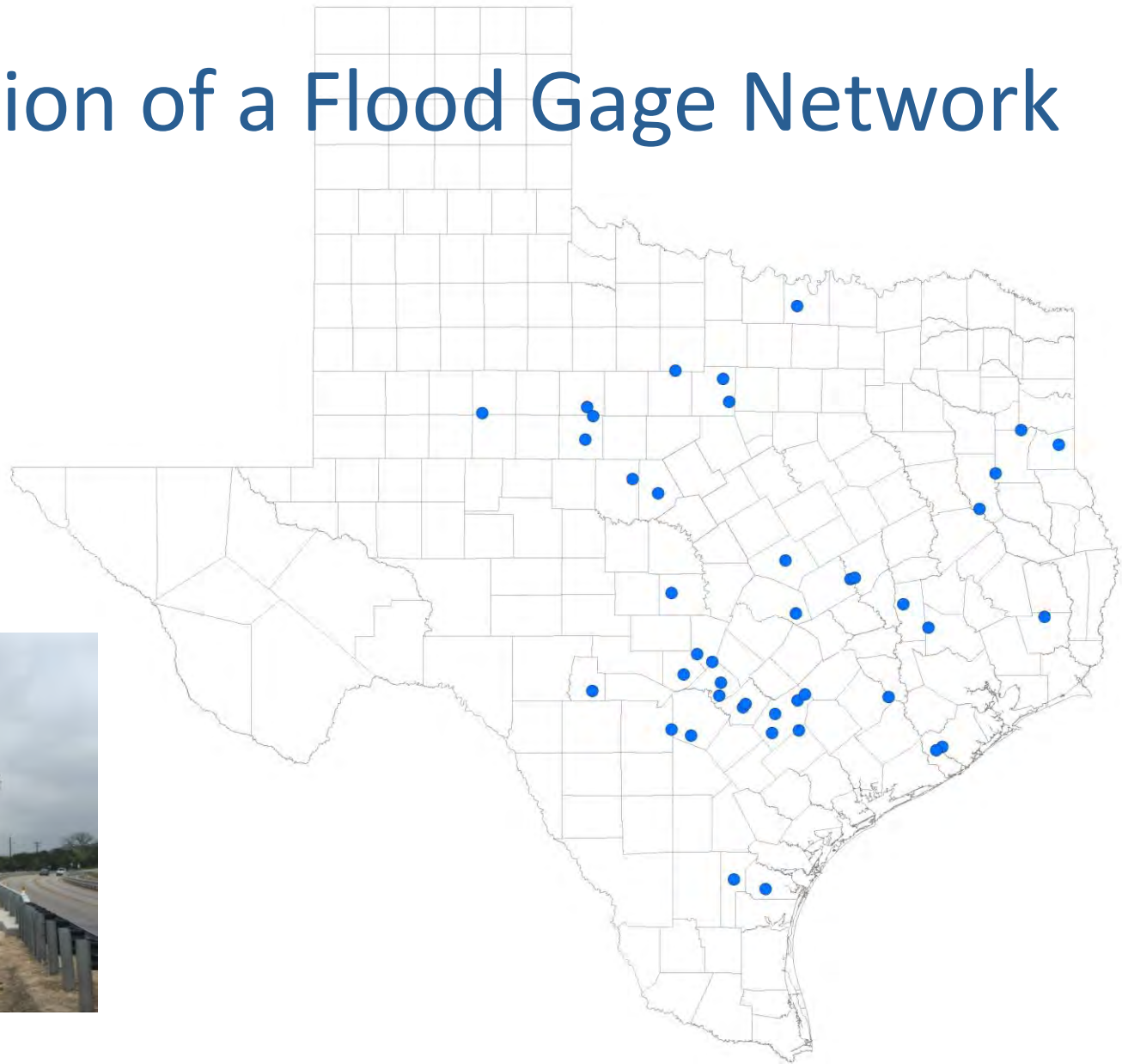
**2015 MOU \$ 6.8 million**  
**85<sup>th</sup> Legislature \$7.8 million**

# New and Expanded Data Collection

	DATA	SCIENCE	COMMUNICATION	FUNDING
NEW EFFORTS	Flood Gages	River Forecast Model Calibration	TexasFlood.org	
	TexMesonet		TexMesonet.org	
			State Flood Assessment	

EXPANDED EFFORTS	Lidar Data	Flood Mapping	Community Outreach	Flood Protection Grants
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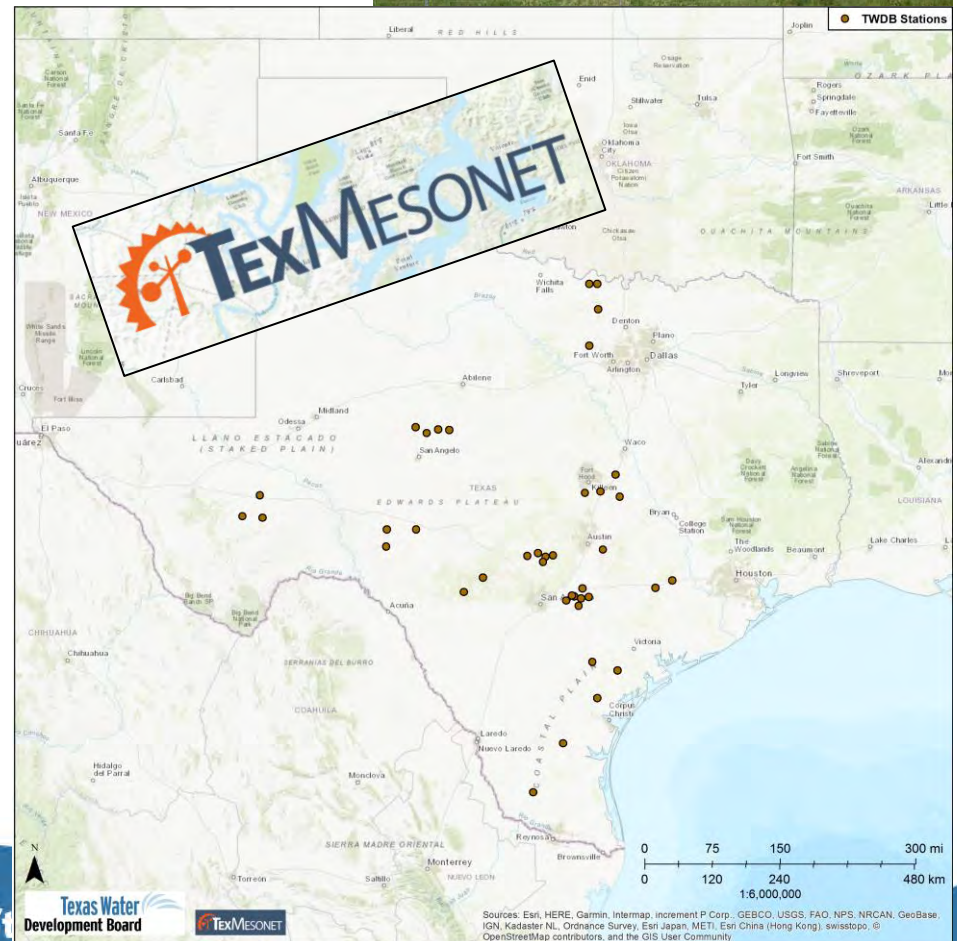
# Creation of a Flood Gage Network



# Creation of TexMesonet

statewide earth observation network

- Collects:  
precipitation, wind direction/speed, air temp., relative humidity, soil moisture/temp.
- Supports flood & drought monitoring and forecasting





# STATE FLOOD ASSESSMENT

1. Assess risk and roles
2. Estimate flood mitigation costs
3. Envision the future of flood planning in Texas

State Flood Assessment



REPORT TO THE  
LEGISLATURE

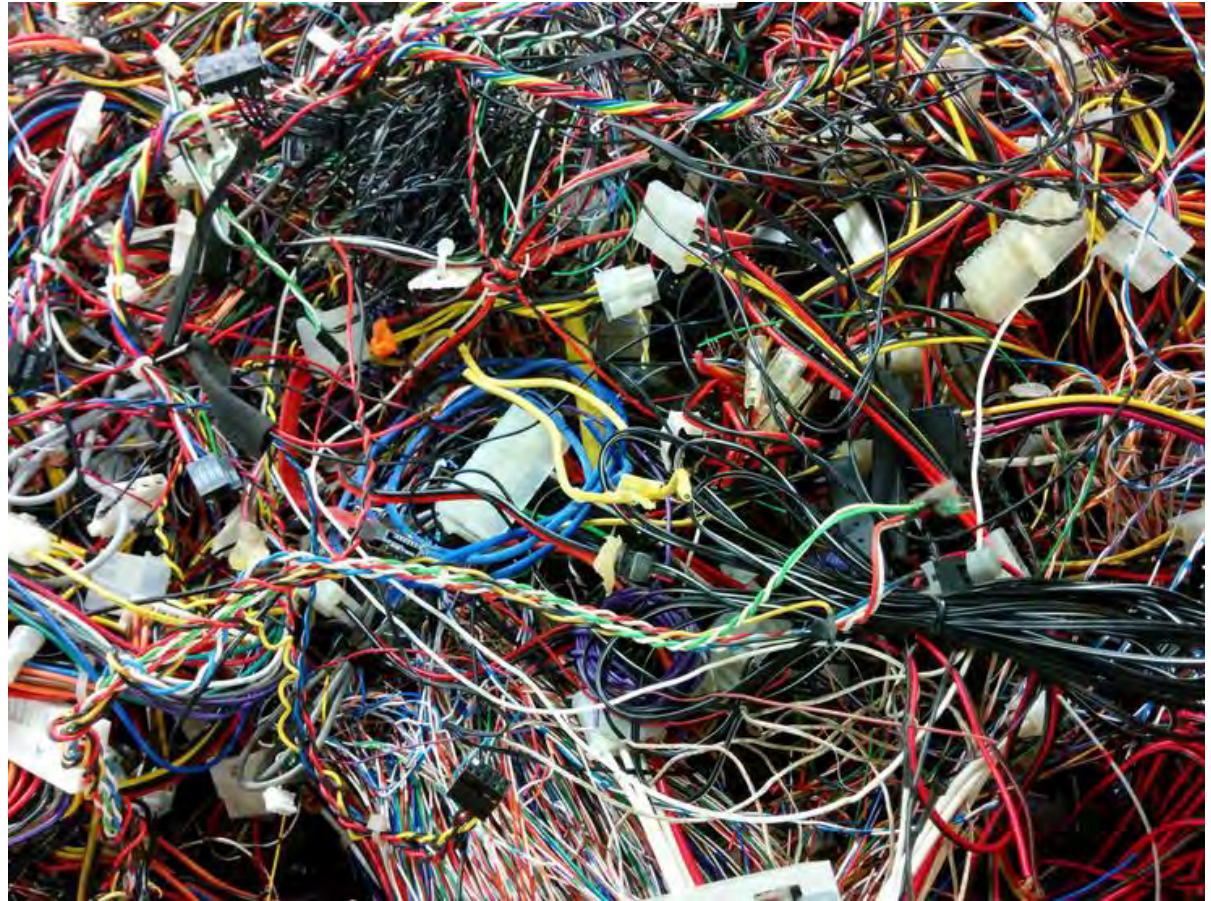
86TH LEGISLATIVE SESSION



STATE FLOOD  
ASSESSMENT

Texas Water  
Development Board

# Flood-related Roles and Responsibilities





We asked: *What would most benefit your community?*

awareness mapping  
drainage local regional  
development  
funding  
planning  
county  
mitigation

# Three Pillars of Flood Risk Management

**Mapping**

**Planning**

**Mitigation**



**Flood Risk Management Policies & Goals**

# Governor's Commission to Rebuild Texas: Eye of the Storm Report

“Texas needs to work toward making the Texas Gulf Coast—and indeed the entire state— more resilient in the face of future risks, whether the threat comes from hurricanes, tornadoes, wildfires, flooding or other disasters.”

# Outcomes of the 86<sup>th</sup> Texas Legislature

- SB 7 (Sen. Creighton): Creates the Flood Infrastructure Fund (FIF) and the Texas Infrastructure Resiliency Fund (TIRF)
- SB 8 (Sen. Perry): Creates a new state and regional flood planning process
- HJR 4 (Rep. Phelan): Flood Infrastructure Fund creation outside the treasury
- SB 500: Appropriates funding for bills, including:
  - Expansion of TexMesonet
  - Lidar acquisition
  - Development of a dashboard/datahub
  - Updates to reservoir flood pool measurements

# SB 7 and SB 8

## Implementation Process Timeline

**August 2019:** Informal, pre-rulemaking request for feedback, stakeholder workshops, and webinar

**Fall 2019/Early 2020:** Formal rulemaking activities, including public comment period

**Early 2020:** Flood funding applications are solicited

**Mid 2020:** Regional flood planning groups are formed

# Opportunities to Provide Input

- In following presentations on SB 7 and SB 8:
  - Respond to Poll Everywhere questions as member of audience
  - Pose questions and comments to the group
- Attend breakout session(s) or mingle
- Provide written comments by August 30
- Participate in formal rulemaking public comment options this fall
- Participate in regional flood planning process

# Poll Everywhere

Tell us a little bit about yourself.

What town or county do you call home?

# Poll Everywhere

Tell us a little bit about yourself.

What interests do you most identify with (top 2)?

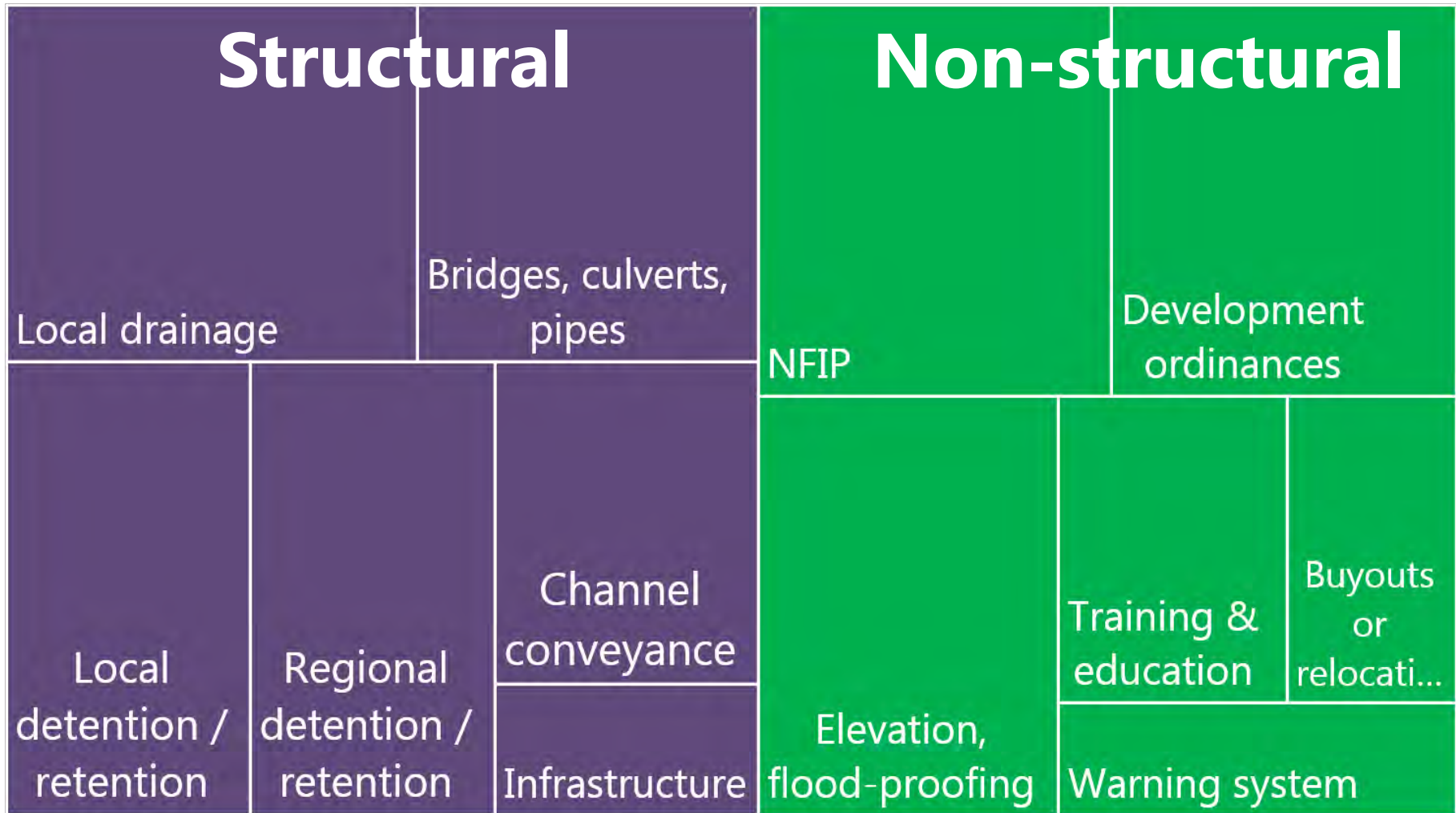
- Floodplain manager/  
flood professional
- City or county
- State government
- Federal government
- Water-related district or  
political subdivision
- Concerned citizen/ flood  
survivor
- Legislative/ policy
- Council of government
- Environmental/natural  
resources
- Engineering/consulting
- Real estate/  
development
- Education/academics
- Business
- Professional association
- Insurance
- Other

# SB 7: Flood Financing

# SB 7: Flood Financing

- Low interest loans
- Grants:
  - Lack of ability to repay a loan
  - Outside of metropolitan statistical area
- Can fund both structural and non-structural mitigation activities

# Flood Mitigation Activities



# SB 7: Flood Financing

*Prior to adoption of state flood plan in 2024, the Flood Infrastructure Fund can fund projects that have been developed through cooperative planning efforts:*

- Drainage
- Flood mitigation
- Flood control

*After adoption of state flood plan in 2024:*

- Can fund projects in state flood plan

# SB 7: Form of Financial Assistance (Issue 1)

Given that the amount of funding is limited and the needs for financial assistance are great, should the TWDB:

- A. *Give out more grants than loans to meet immediate needs for those that qualify?*
- B. *Give out more low-interest loans to maximize overall funds available over time?*
- C. *Balance loans and grants based on program demands and interest?*

# SB 7: Form of Financial Assistance (Issue 1)

How important are the needs for financial assistance for repair and rehab of existing infrastructure that manages floodwaters?

*A. Very important*

*B. About the same importance as needs for new infrastructure/mitigation activities*

*C. Less important than the needs for new infrastructure/mitigation activities*

# SB 7: Form of Financial Assistance (Issue 1)

What is the best use of state funds?

*A. Local match for federal programs?*

*B. Complement to federal buyout programs?*

*C. Assistance to implement local projects that lack funding?*

# SB 7: Prioritization of Projects (Issue 2)

*What types of projects do you consider to be the most impactful at addressing loss of life and property from flooding?*

# SB 7: Prioritization System (Issue 2)

*Which criteria should TWDB use in its point system?*

- Severity of risk?
- Risk to life vs. property?
- Benefit to cost ratio?
- Diverse urban/rural benefits?
- Repeated historical losses?
- Regional benefits?
- Socioeconomic considerations?
- Emergency need?
- Local contribution?
- Readiness to proceed?
- Water supply benefits?
- Multiple project benefits (including benefits to natural resources, recreation, etc.)?
- Expedites delivery of federally funded project?
- Others?

# SB 7: Property Buyouts (Issue 4)

*Should state financial assistance be available for political subdivisions to purchase private property to prevent future flood losses?*

*A. Yes*

*B. No*

*C. Only in conjunction  
with federal programs*

# SB 7: Property Buyouts (Issue 4)

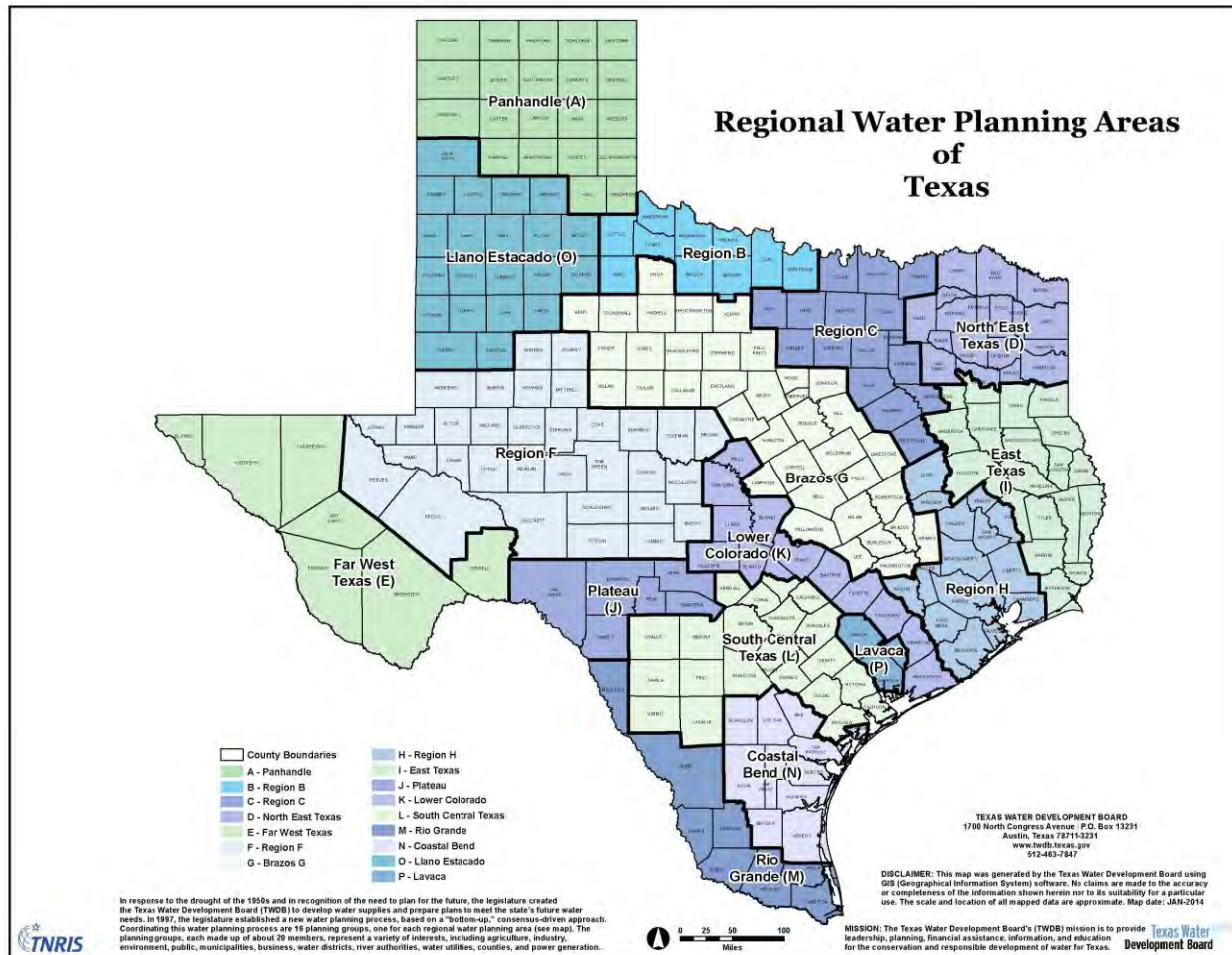
- *How could state funds be used to complement federal buyout programs?*
- *What requirements for future land use should be placed upon properties that are bought out?*

# SB 7: Other Issues

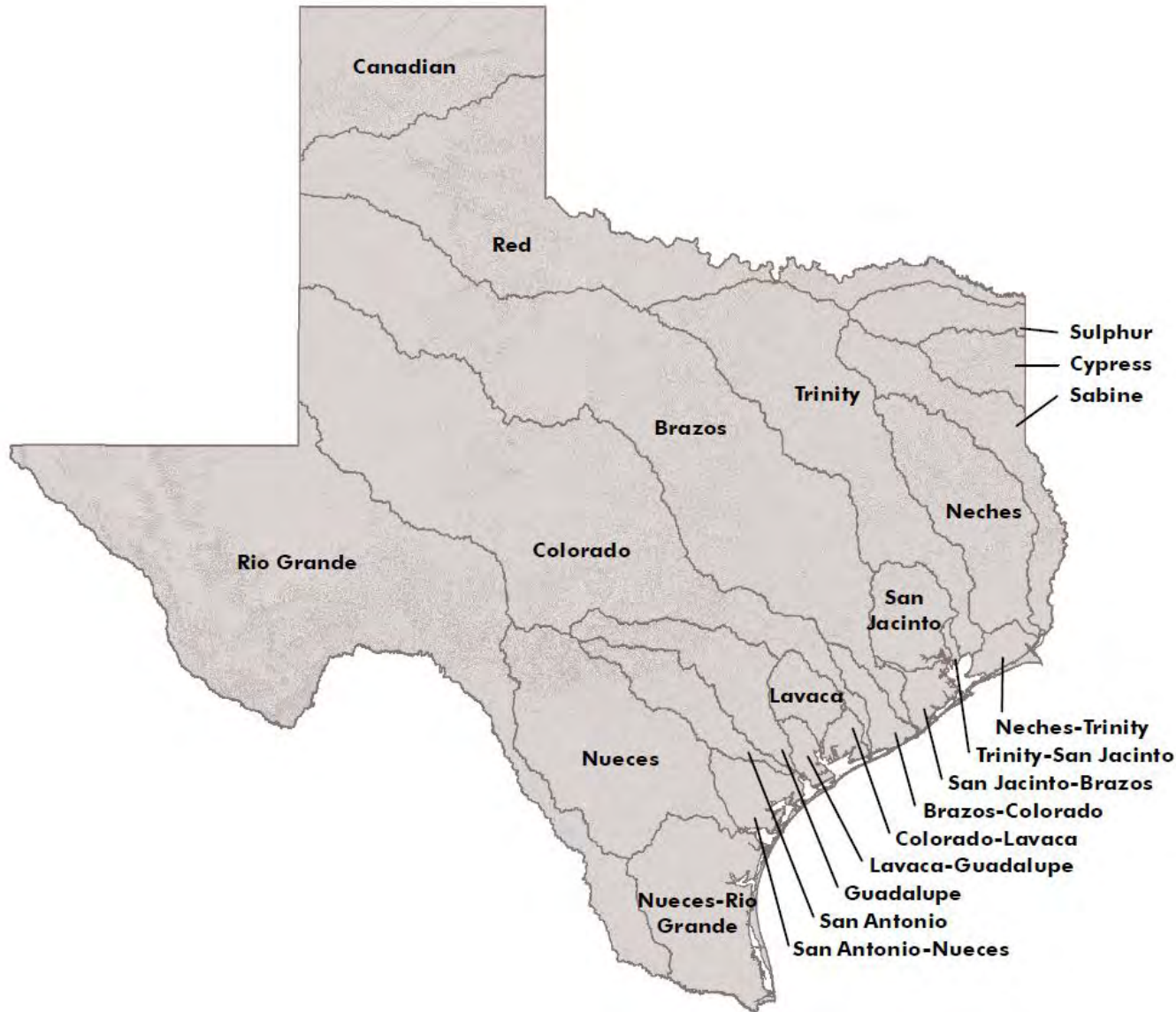
- *Should the entities that get the most value from flood mitigation (i.e. those in the floodplain) pay more? If so, how? If not, why not?*
- *What other issues do you see that the TWDB faces for this program?*
  - *What other issues do potential program participants face?*
- *How do you suggest that we address those issues?*

# SB 8: Regional and State Flood Planning

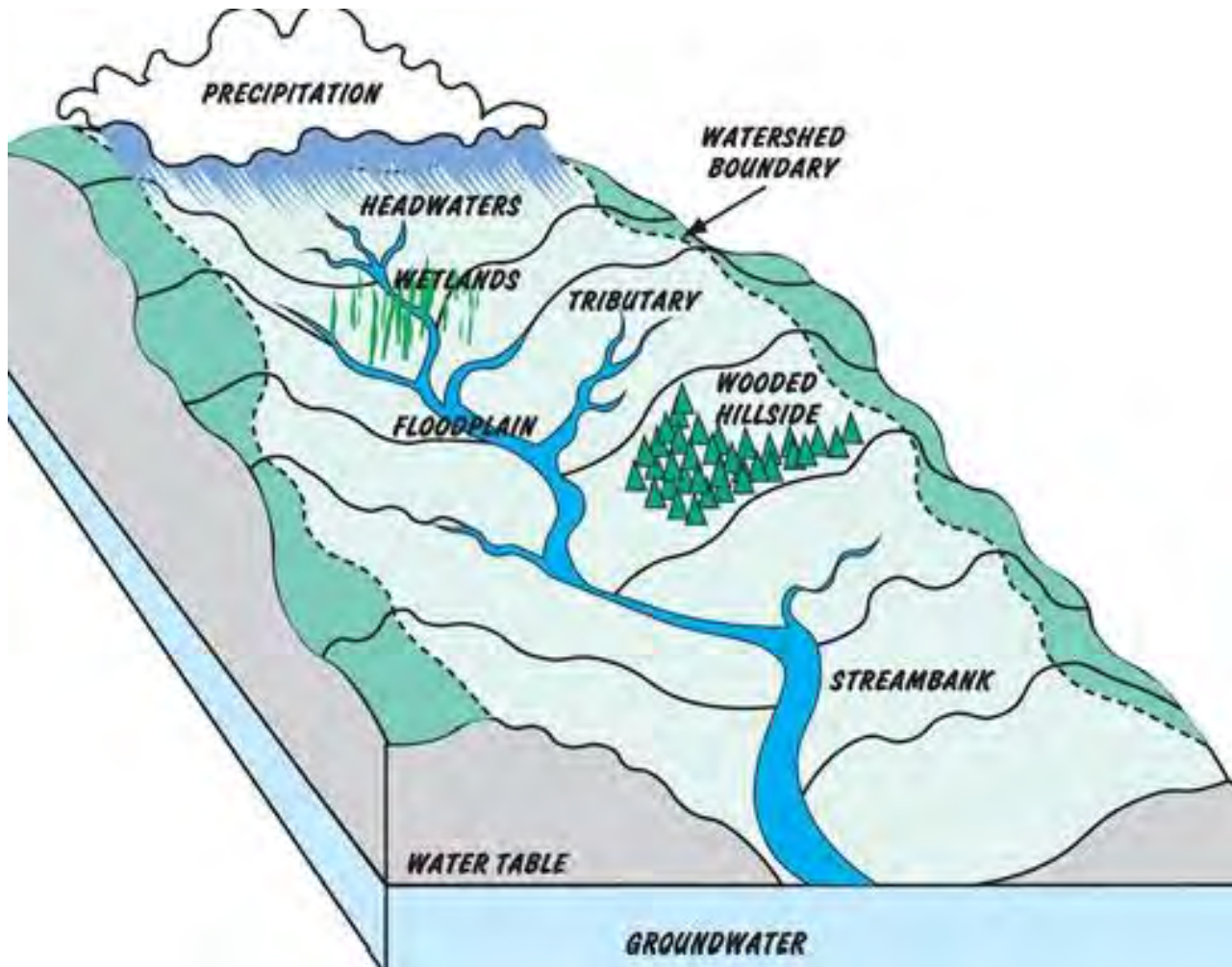
# SB 8: Regional Flood Planning



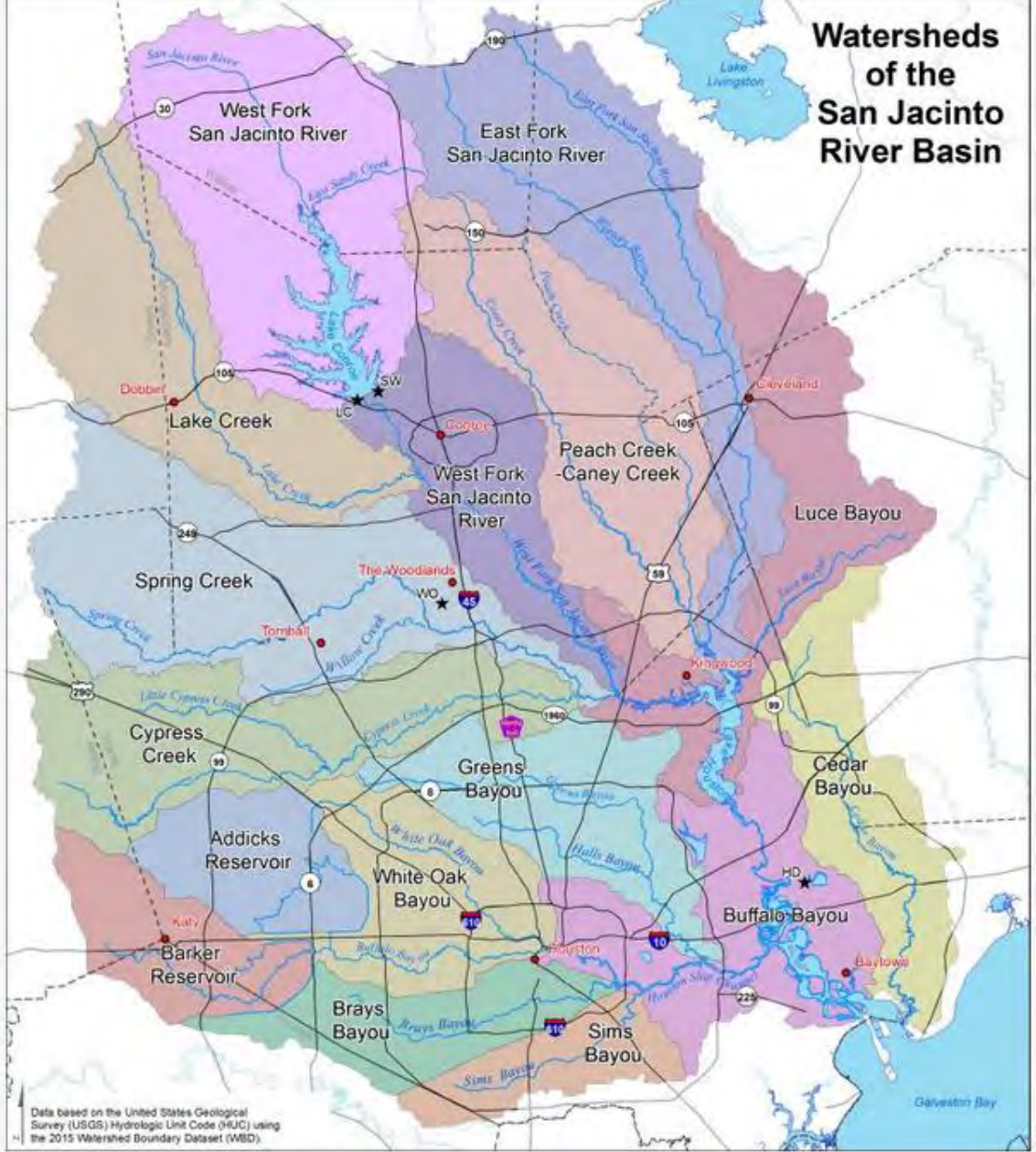
# Texas River Basins



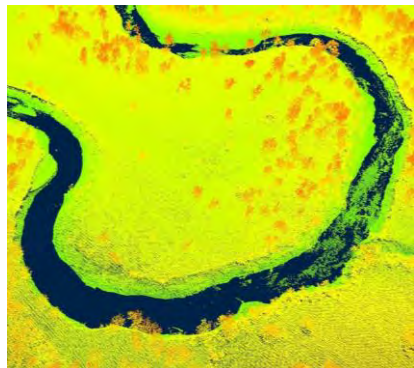
# SB 8: Planning by Watershed



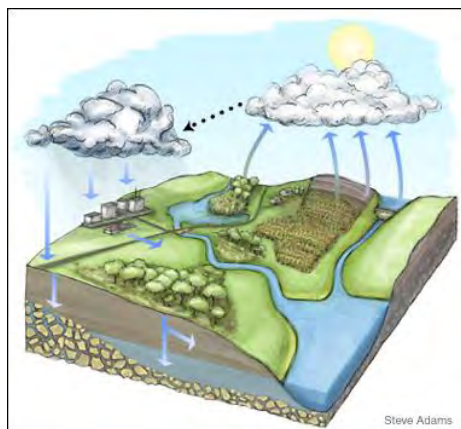
# Watersheds of the San Jacinto River Basin



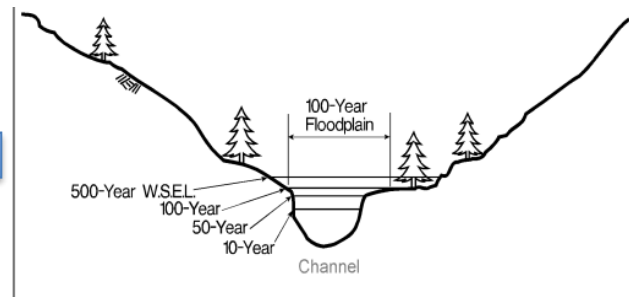
# SB 8: Supporting Data



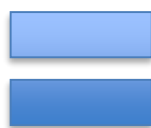
LiDAR



Hydrology



Hydraulics



Base level  
engineering



# SB 8: Planning Group Membership (Issue 1)

## Required interests:

- Public
- Counties
- Municipalities
- Industries
- Agricultural interests
- Environmental interests
- Small businesses
- Electric generating utilities
- River authorities
- Water districts
- Water utilities

## Ex officio members:

- TWDB
- Texas Commission on Environmental Quality
- General Land Office
- Texas Parks and Wildlife Department
- Texas Department of Agriculture
- Texas State Soil and Water Conservation Board
- Texas Division of Emergency Management

# SB 8: Planning Group Membership (Issue 1)

*What other interests  
should be represented on the  
regional flood planning groups?*

# SB 8: Planning Standards and Parameters (Issue 2)

To what extent should the regional flood plans consider local stormwater and drainage issues?

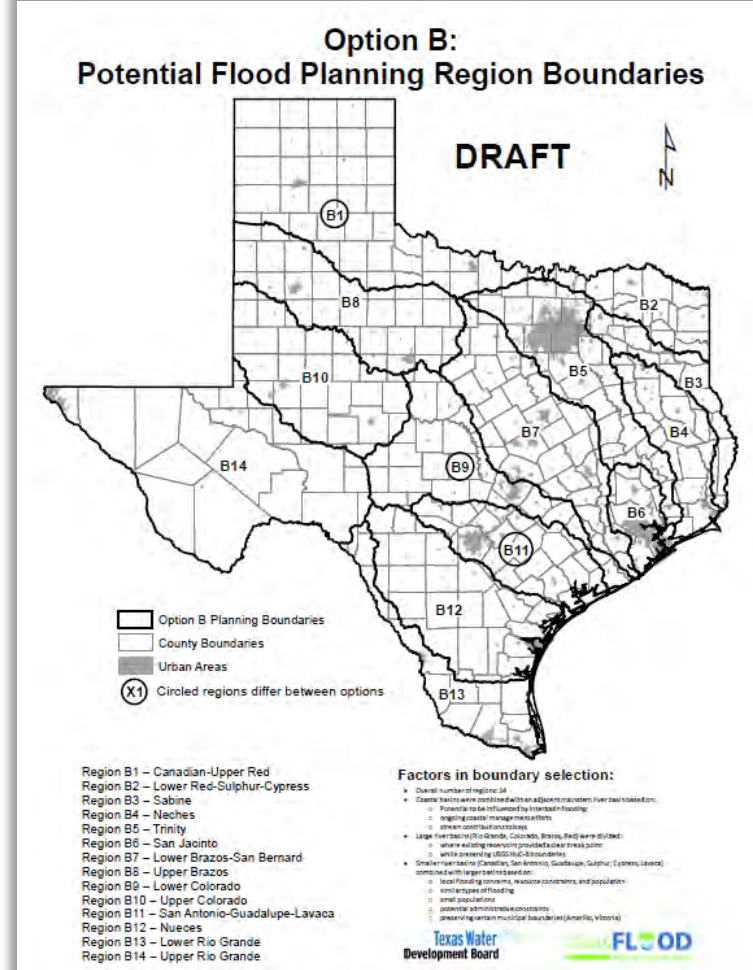
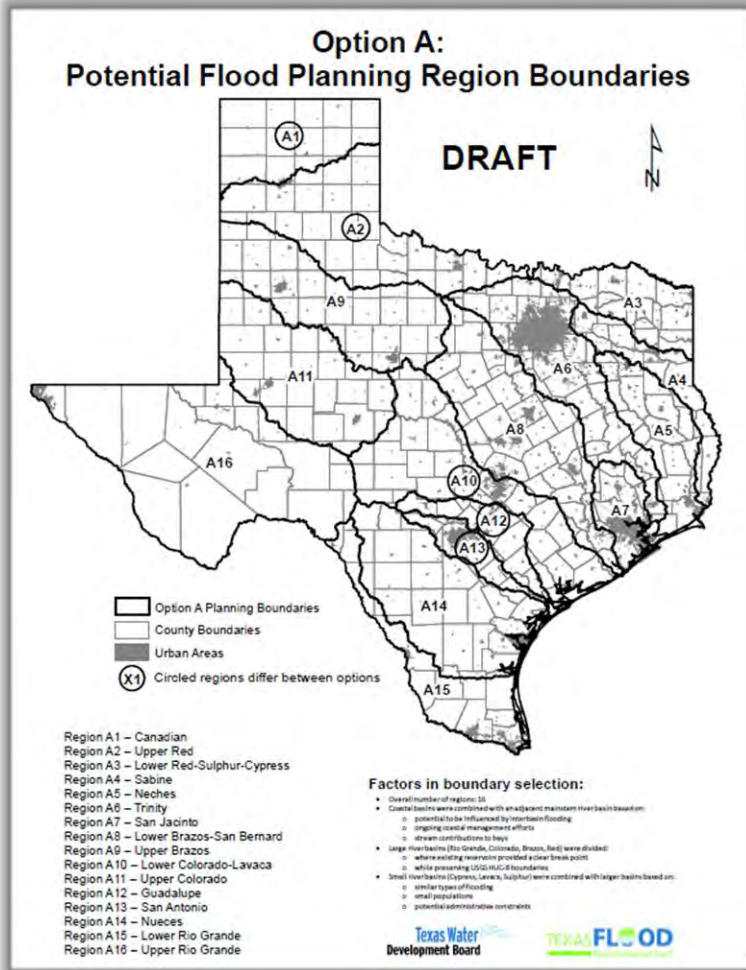
- A. *Regional plans should focus only on flooding that results in the loss of life or property.*
- B. *All regional plans should include a lower limit for project scale, such as contributing drainage area of greater than 1.0 square mile.*
- C. *Regional flood groups should have some flexibility on consideration of project scale.*

# SB 8: Planning Standards and Parameters (Issue 2)

*What timeframe should the planning process cover?*

- A. 10 years?*
- B. 20 years?*
- C. 30 years?*
- D. 40 years?*
- E. 50 years?*

# SB 8: Planning Area Boundaries (Issue 3)



# SB 8: Planning Area Boundaries (Issue 3)

- *How should the larger river basins be divided?*
  - *How should the smaller river basins be combined with other basins?*
- *How should the coastal basins be addressed?*

# SB 8: Issues 4 and 5

**Please review and provide comments on proposed guidance principles and rule outline.**

- *Have the guidance principles been crafted to adequately reflect the public interest of the entire state?*

# SB 8: Other Issues

- *What other issues do you see that the TWDB faces for this program?*
- *What other issues do the flood planning groups face?*
- *How do you suggest that we address those issues?*

# Opportunities to Provide Input

- Provide written comments by August 30
- Attend breakout session or mingle
- Participate in formal rulemaking public comment options this fall
- Participate in regional flood planning process starting in 2020

# Stay in Touch!



## Board Meetings



[Meet the board members](#)

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[Watch board meeting video](#)

[Board meeting schedule](#)

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## Agency Tweets

[Follow @TWDB](#) 6,010 followers

TX Water Dev Board Retweeted



Clear weekend for Texas with 0 gages in flood stage across the state! Good weekend to enjoy the water whether its the lakes, rivers, or the Gulf of Mexico. Enjoy! #txwx #txwater



## Hot Topics

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[Schedule for Flood Outreach Meetings](#)

[Flood Implementation Fund FAQ](#)

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## Registration

To join our mailing list, please complete the information below and click Sign Up.

\* Email Address

\* First Name

\* Last Name

Address

Select a state/province



Zip Code

Company

Email Lists

Flood Information (TWDB electronic newsletter, flood planning information, flood risk, flood funding, National Flood Insurance Program, events, website updates)

TWDB Conservation Information (TWDB electronic newsletter, educational information, events, website updates)

TWDB Financial Assistance Information (TWDB electronic newsletter, state revolving fund information, intended use plan information, application information, website updates)

TWDB General Information (TWDB electronic newsletter, Board meeting reminders, events, surveys, website updates)

TWDB Groundwater Information (TWDB electronic newsletter, desired future condition information, events, website updates)

TWDB SWIFT Information (Notifications for public comments and public meetings)

TWDB Texas Natural Resources Information System (TWDB electronic newsletter, events, geographic information system information, website updates)

TWDB Water for Texas conference

TWDB Water Resources Planning Information (TWDB electronic newsletter, regional water plan information, events, website updates)

# Stay in Touch!

- Contact [flood@twdb.Texas.gov](mailto:flood@twdb.Texas.gov) for general information
- Send written comments to [rulescomments@twdb.Texas.gov](mailto:rulescomments@twdb.Texas.gov)



# Optional Breakout Session Discussions

- Group 1: Flood planning
- Group 2: Financial assistance



Thank you for being here today!