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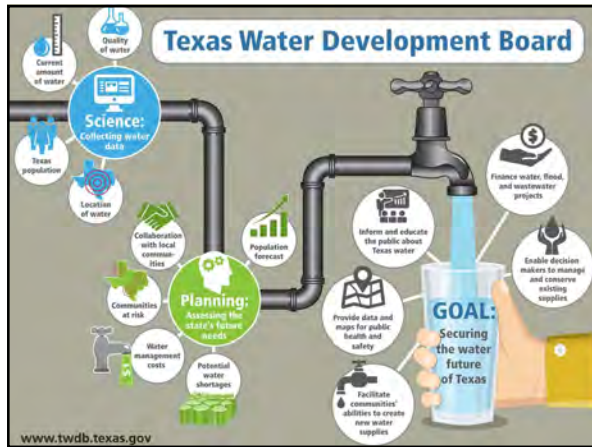
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**STATE FLOOD ASSESSMENT**

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

STATE FLOOD ASSESSMENT

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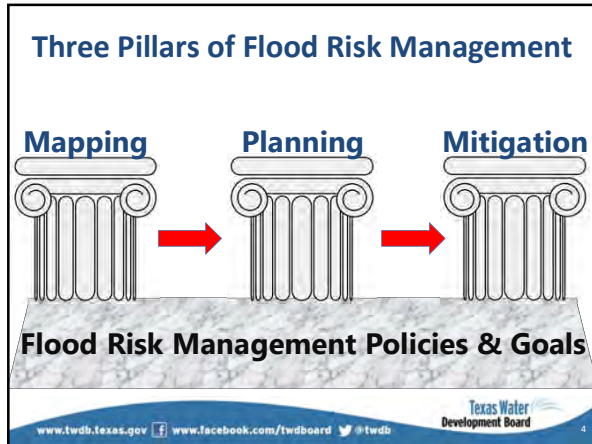
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**Governor’s Commission to Rebuild Texas: Eye of the Storm Report**

“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.”

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**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

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### 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 periods

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

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

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### Road Show Highlights



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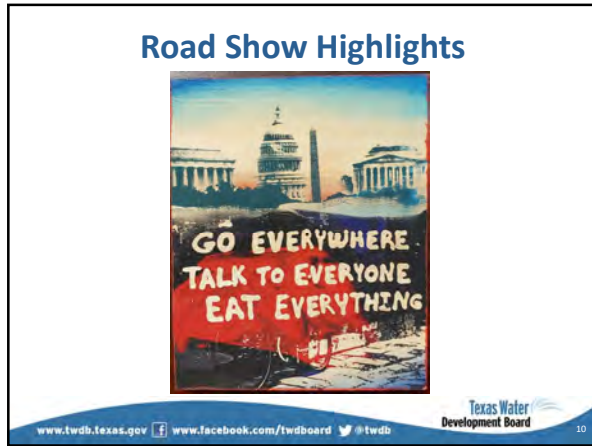
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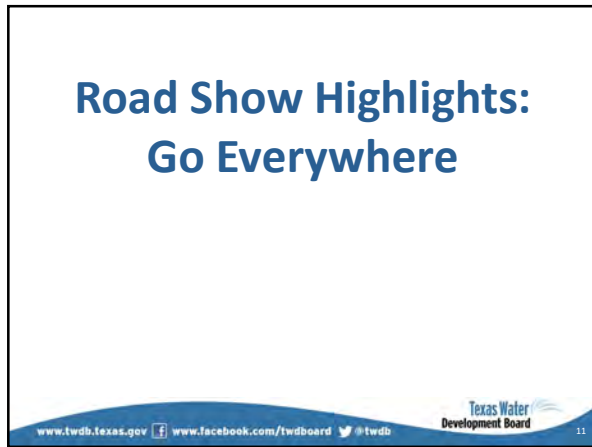
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## Road Show Highlights: Talk to Everyone

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## Workshop Attendance: 1,000+

- Bastrop: 127
- Morning webinar: 115 (Poll Everywhere)
- Arlington: 112
- McAllen: 97
- Tomball: 85
- Houston: 79
- Orange: 76
- Kerrville: 76
- Lake Jackson: 66
- El Paso: 48
- Tyler: 47
- Rockport: 43
- San Angelo: 38
- Lubbock: 35
- Evening webinar: 27 (Poll Everywhere)
- Abilene: 25

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### Poll Everywhere




- A few limitations:
  - Not everyone participated
  - Some double counting
  - Simplified questions
  - Answers are missing the “why”
  - Time limit to answer
  - Crowd influence?
  - Still processing responses and accepting written responses

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### Poll Everywhere




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### Interests Represented (top 2 choices)

- City or county: **261**
- Concerned citizen/flood survivor: **44**
- Floodplain manager/ flood professional: **235**
- Federal government: **28**
- Engineering/consulting: **187**
- Education/academics: **28**
- Water-related district or political subdivision: **119**
- Professional association: **28**
- Environmental/natural resources: **101**
- Council of government: **26**
- State government: **93**
- Business: **18**
- Legislative/policy: **59**
- Other: **17**
- Real estate/development: **8**
- Insurance: **4**

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## SB 7: Flood Financing

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## 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

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## Flood Mitigation Activities

Structural			Non-structural		
Local drainage	Bridges, culverts, pipes		NFIP	Development ordinances	
Local detention / retention	Regional detention / retention	Channel conveyance		Training & education	Buyouts or relocations
Infrastructure			Elevation, flood-proofing	Warning system	

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### 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

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

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

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

1. Give out more grants than loans to meet immediate needs for those that qualify? **17%**
2. Give out more low-interest loans to maximize overall funds available over time? **16%**
3. **Balance loans and grants based on program demands and interest? 67%**

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

1. *Very important*
2. *About the same importance as needs for new infrastructure/mitigation activities*
3. *Less important than the needs for new infrastructure/mitigation activities*

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

1. *Very important: 39%*
2. *About the same importance as needs for new infrastructure/mitigation activities: 50%*
3. *Less important than the needs for new infrastructure/mitigation activities: 11%*

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**What is the best use of state funds?**

1. *Local match for federal programs?*
2. *Complement to federal buyout programs?*
3. *Assistance to implement local projects that lack funding?*

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**What is the best use of state funds?**

1. Local match for federal programs?  
**14 %**
2. Complement to federal buyout programs? **4%**
3. Assistance to implement local projects that lack funding? **81%**

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

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

- Buyouts
- Coastal protection
- Conveyance
- Detention
- Drainage
- Early warning systems
- Education
- Elevations
- Floodplain preservation
- Green and nature-based infrastructure
- Mapping
- Regional detention
- Structural
- Zoning and regulations

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**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?

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

1. Yes
2. No
3. Only in conjunction with federal programs

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

1. Yes: **67%**
2. No: **11%**
3. Only in conjunction with federal programs: **22%**

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### Property Buyouts

- *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?*

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### 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?*

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### SB 8: Regional and State Flood Planning

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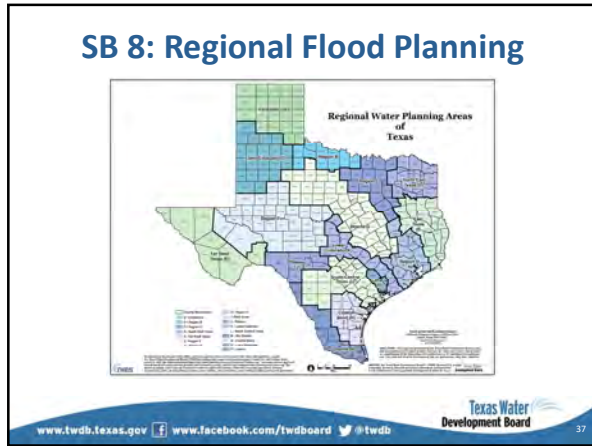
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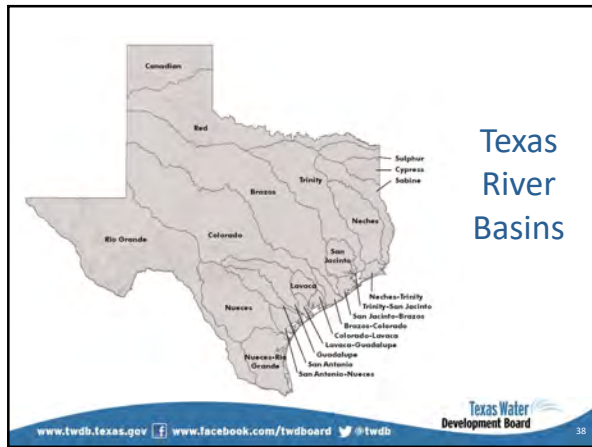
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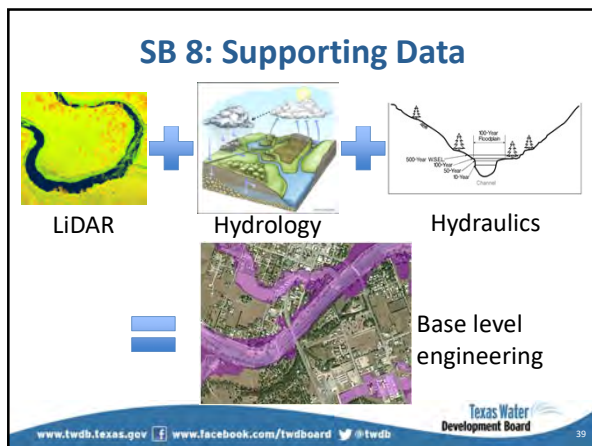
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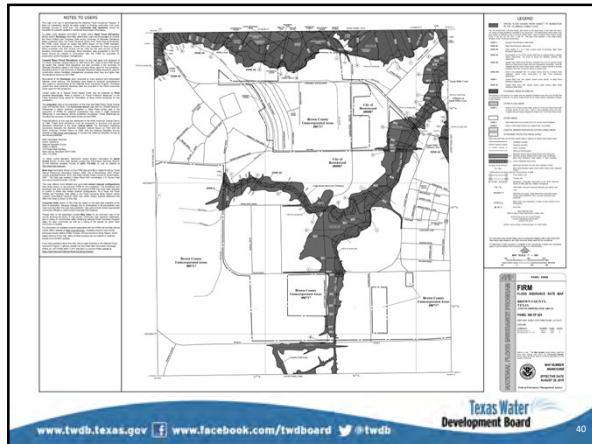
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### SB 8: Planning Group Membership

<p>Required interests:</p> <ul style="list-style-type: none"> <li>• Public</li> <li>• Counties</li> <li>• Municipalities</li> <li>• Industries</li> <li>• Agricultural interests</li> <li>• Environmental interests</li> <li>• Small businesses</li> <li>• Electric generating utilities</li> <li>• River authorities</li> <li>• Water districts</li> <li>• Water utilities</li> </ul>	<p>Ex officio members:</p> <ul style="list-style-type: none"> <li>• TWDB</li> <li>• Texas Commission on Environmental Quality</li> <li>• General Land Office</li> <li>• Texas Parks and Wildlife Department</li> <li>• Texas Department of Agriculture</li> <li>• Texas State Soil and Water Conservation Board</li> <li>• Texas Division of Emergency Management</li> </ul>
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### What other interests should be represented on the flood planning groups?

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

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

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

1. Regional plans should focus only on flooding that results in the loss of life or property. **6%**
2. All regional plans should include a lower limit for project scale, such as contributing drainage area of greater than 1.0 square mile. **12%**
3. Regional flood groups should have some flexibility on consideration of project scale. **82%**

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**What timeframe should the planning process cover?**

1. 10 years?
2. 20 years?
3. 30 years?
4. 40 years?
5. 50 years?

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### What timeframe should the planning process cover?

1. 10 years? **18%**
2. **20 years? 31%**
3. 30 years? **21%**
4. 40 years? **3%**
5. 50 years? **27%**

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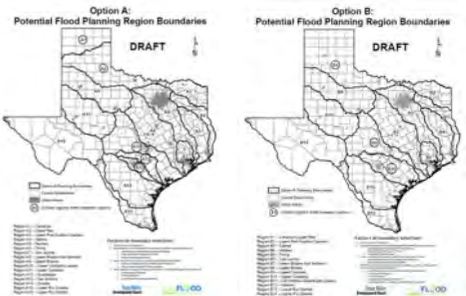
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### SB 8: Planning Area Boundaries



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### SB 8: Planning Area Boundaries

- 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?

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### SB 8: Other Issues

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

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### Road Trip Highlights: Eat Everything



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### Next Steps

- Written comments due by August 30
- Formal rulemaking begins this fall
- Financial assistance available program and regional flood planning process starting in 2020



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**TXDB Staff Information (notifications for public comments and public meetings)**

**TXDB Texas Natural Resources Information System (TWDB electronic newsletter, news, projects, information system information, website updates)**

**TXDB Water for Texas Conference**

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

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- Send written comments to [rulescomments@twdb.texas.gov](mailto:rulescomments@twdb.texas.gov)

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