TWDB Seeking Preliminary Feedback on Potential Policy Recommendations for the DRAFT 2024 State Flood Plan

The TWDB is holding a public Board Work Session in Austin, TX on Thursday, April 4, to seek preliminary public feedback on the *potential* policy recommendations that the Board is considering for inclusion in Texas' first draft state flood plan. To be considered by the TWDB, comments must be provided through an online form on the TWDB website no later than April 11, 2024.

Note that the input received during the April 4 work session will be taken into consideration as the TWDB finalizes the Draft 2024 State Flood Plan. The public will also have another opportunity to comment on the policy recommendations that are included in the full Draft 2024 State Flood Plan.

Following TWDB consideration of public comments on the draft plan, the final 2024 State Flood Plan must be adopted by September 1, 2024.

Summary of potential policy recommendations for the Draft 2024 State Flood Plan

April 04, 2024

Reem J Zoun, PE, CFM
Director, Flood Planning Division, TWDB

State Flood Plan Statute

86th legislature (2019) **Senate Bill 8** directs TWDB to develop a state flood plan, which must:

1) provide for orderly preparation for and response to flood conditions to protect against the loss of life and property;
2) **be a guide to state and local flood control policy**; and
3) contribute to water development where possible.

The state flood plan must include:

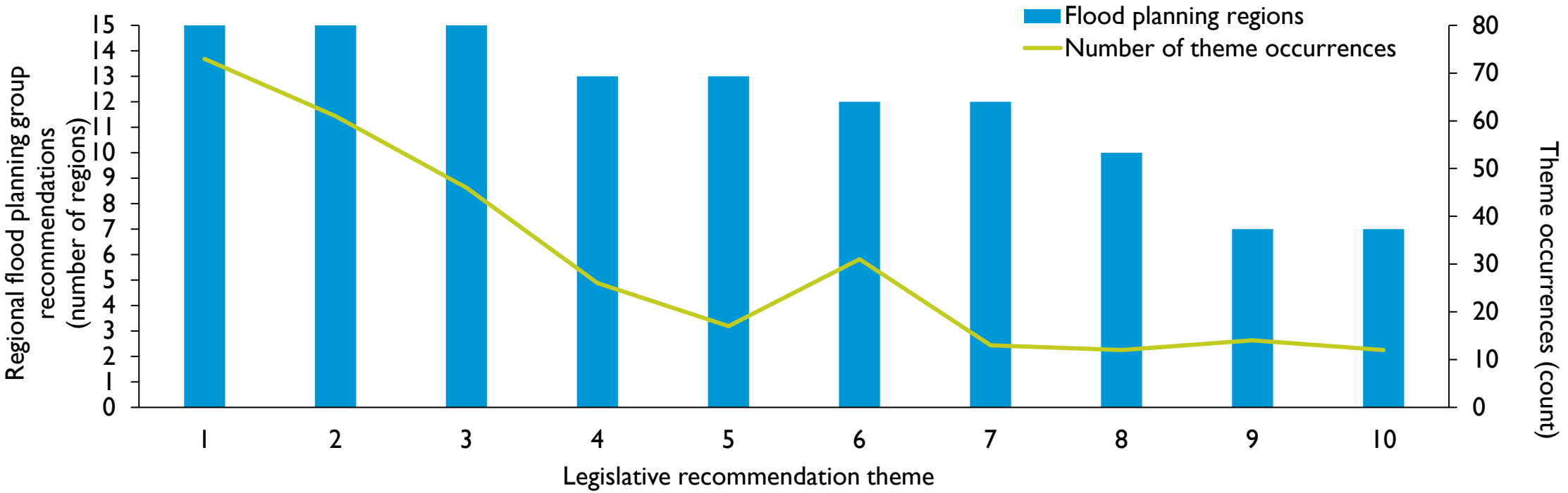
> **"legislative recommendations the board considers necessary to facilitate flood control planning and project construction."**

Regional Flood Plan Rules

As per 31 Texas Administrative Code § 361.43 Regional Flood Planning Groups shall develop and include in their plans:

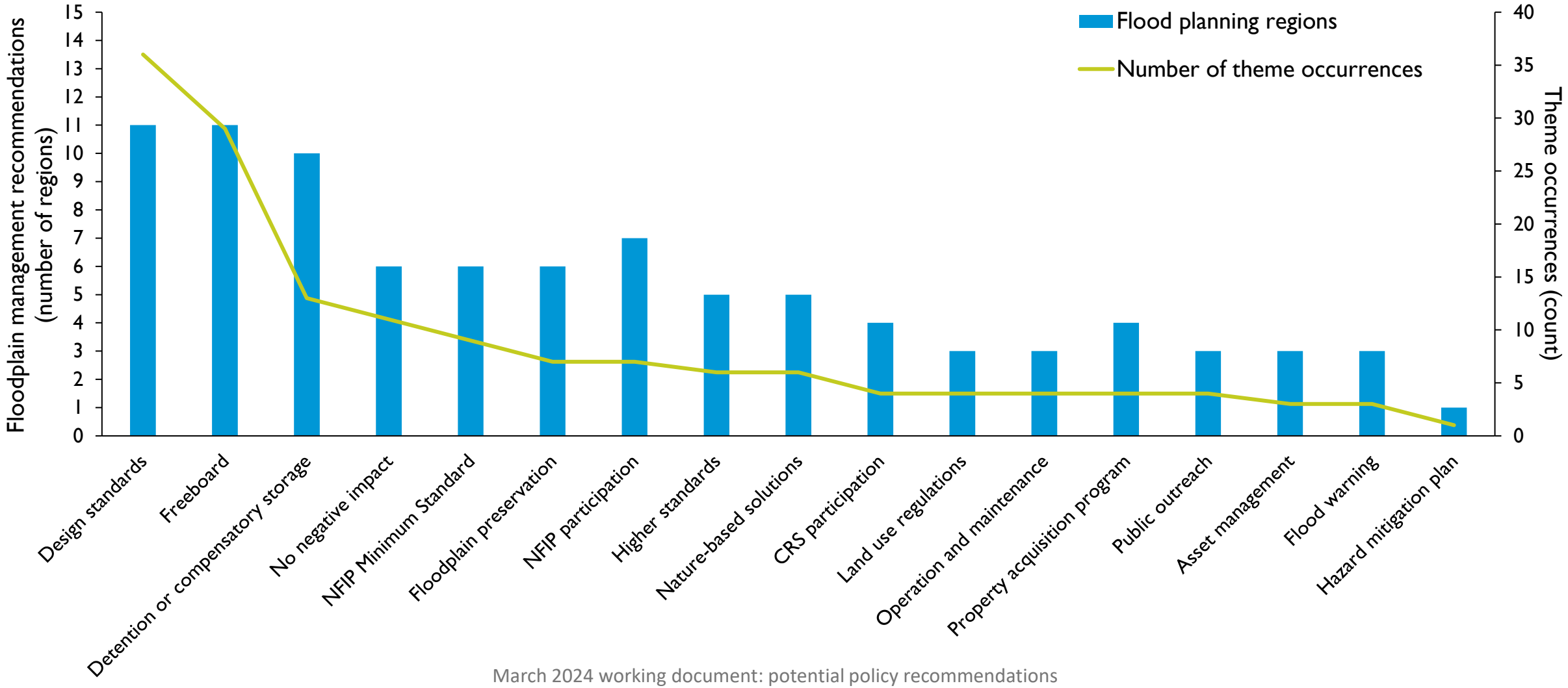
1) legislative recommendations that they consider necessary to facilitate floodplain management and flood mitigation planning and implementation;
2) other regulatory or administrative recommendations that they consider necessary to facilitate floodplain management and flood mitigation planning and implementation;
3) any other recommendations that the regional flood planning group believes are needed and desirable to achieve its regional flood mitigation and floodplain management goals; and
4) recommendations regarding potential, new revenue-raising opportunities, including potential new municipal drainage utilities or regional flood authorities, that could fund the development, operation, and maintenance of floodplain management or flood mitigation activities in the region.

Summary of Administrative, Legislative, and Regulatory Recommendations made by Regional Flood Planning Groups



1. Infrastructure/Stormwater/Project Design Standards and Infrastructure Programs (Dams, Levees, Roadways, Channels, Low Water Crossings)
2. Funding and Financial Mechanisms
3. Public Education, Outreach, Interjurisdictional Collaboration and Admin Training
4. Data, Mapping, and Modeling Updates
5. Small/Rural Jurisdiction Assistance
6. Floodplain Ordinances and Regulatory Authority
7. Drainage Utility Fee Authority
8. Improving Benefit Cost Analyses
9. Nature Based Solutions, Green Infrastructure, Conservations Easements, Open Space Preservation
10. Federal Program Participation and Collaboration

Summary of Floodplain Management Recommendations made by Regional Flood Planning Groups



Potential Board recommendations to the Texas Legislature (TWC 16.061(5))

Potential Legislative Recommendation 1:
Flood funding and financial mechanisms

The legislature should allocate dedicated funding for ongoing flood mitigation efforts through the Texas Water Development Board, including flood risk reduction solutions through the Flood Infrastructure Fund, continued funding for regional and state flood planning program, flood risk modeling, and mapping.

[Supported by Regions 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15]

Potential Legislative Recommendation 2:
Community financial and technical assistance

The legislature should consider establishing and funding a targeted technical assistance program specifically aimed at small, remote, rural, or otherwise socioeconomically disadvantaged communities to develop and/or perform floodplain management activities to protect Texas' most vulnerable communities against loss of life and property.

[Supported by Regions 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15]

- Targeted assistance for historically disadvantaged communities
- Technical assistance for small, remote, and rural communities

Potential Legislative Recommendation 3:
Low water crossing safety

The legislature should consider expanding funding to enhance safety at low water crossings, prioritizing improvements based on traffic counts, roadway type, and existing risk levels through structural enhancements and flood warning systems.

[Supported by Regions 9, 10, 11, 12]

Potential Legislative Recommendation 4:
Flood early warning systems

The legislature should consider prioritizing and expanding funding for the implementation of flood early warning systems on a regional scale, with emphasis on rural areas, to enhance public safety and reduce flood risk to communities.

[Supported by Regions 11, 12]

Potential Legislative Recommendation 5:
Enhanced dam and new levee safety programs

The legislature should consider developing a Levee Safety Program and enhancing the existing Dam Safety Program to further identify and assess risks to dams and levees and potentially assist private dam owners and agencies owning dams built by National Natural Resources Conservation Service (NRCS) in high hazard areas with the costs associated with evaluation, repair, and maintenance.

[Supported by Regions 1, 2, 3, 6, 7, 8, 10, 11]

- Creation of a levee safety program [Supported by Regions 1, 2, 3, 6, 8, 10]
- Financial assistance to private dam owners [Supported by Regions 1, 2, 3, 7, 8, 11]
- Resources for high and significant hazard dams Emergency Action Plan

Potential Floodplain Management Recommendations

Per Texas Water Code (TWC) 16.061(a)(2), the state flood plan shall be a guide to state, regional, and local flood risk management policy. As such, the TWDB has included several recommendations for floodplain management that may be considered for incorporation into rules or regulations of state, regional, and local agencies.

Potential floodplain management recommendation A:

Minimum design guidelines examples

Consider minimum design guidelines for infrastructure and buildings, as applicable, to address flood risk from a range of flood event frequencies from 50 percent (2-year) to at least the 1 percent (100-year) event, for example:

- developing and considering drainage criteria to set a baseline of criteria ensuring **safe development in flood-prone areas**. For example:
  - Limiting construction within certain high flood hazard areas, such as 10-percent annual chance floodplain,
  - Requiring the use of flood-resistant construction materials.
- considering a consistent standard requiring **a minimum freeboard, for example, of 1 foot and up to 2 feet,** above the Base Flood Elevation (BFE) or the one percent annual chance water surface elevation (100-year) for all new development and substantial improvements within the 1 percent annual chance floodplain, as applicable.
- considering floodwater **detention requirements** for new developments, as applicable, and waterway infill restrictions in high flood hazard areas.
- developing and considering statewide '**no negative impact**' requirements for neighboring (especially downstream) areas for new developments, similar to as is required by statute for all proposed projects recommended by the RFPGs.

Potential floodplain management recommendation B: **Floodplain Management**

- Encourage National Flood Insurance Program (NFIP) Participation and adoption of minimum floodplain management practices for all Texas communities including ensuring development is in line with current flood risk assessments

- Enhance coordination among state agencies for floodplain management. Improve education for state agencies that perform a variety of permitting functions such as:
    - Texas Parks and Wildlife Department for park properties
    - Texas Department of Licensing and Regulation for mobile home installations, and
    - the Railroad Commission for propane tank installations [Supported by Regions 13, 14].

Potential floodplain management recommendation C: **Nature-based Solutions**

Seek ways to provide funding and incentives for incorporating nature-based solutions, such as open space and floodplain preservation or reduced use of impervious cover approaches for development or drainage projects.

[Supported by Regions 1, 4, 5, 6, 10, 11, 13]

- Water needs space to flow. Leaving adequate space for water to flow today can prevent creation for additional flood risk to life and property in the future.

Potential floodplain management recommendation D: **Asset Management**

- Generate and maintain a statewide inventory and assessment of major flood infrastructure. This is a large effort that will require dedicated resources and funding at local level.
- Provide statewide guidance on how to best manage drainage and floodplain assets.

Potential floodplain management recommendation E: **Education and Outreach**

- Seek to improve awareness and ways to mitigate risk at low water crossings. Examples include improved mapping of locations, improved flood warning, and increased or prioritized grant funding.
- Improve public flood education and outreach. Improve coordinated messaging between all agencies (federal, state, regional, local). Increase targeted marketing campaigns through avenues like social media, print media, TV media, and billboard media.
- Increase regional and statewide activities related to flood warning. Support National Weather Service release of new Flood Inundation Mapping products in late 2023. Improve guidance and outreach related to developing flood warning systems and flood sensors.

Potential floodplain management recommendation F: **State Flood Planning**

- Maintain coordination between Texas Department of Emergency Management's State Hazard Mitigation Planning and TWDB's State Flood Planning processes.
- Seek to incorporate state flood planning into other statewide planning processes such as Texas Department of Transportation planning, Texas Parks and Wildlife Department planning, and Texas Facilities Commission planning.

Potential RFPG Recommendations to the Texas Legislature

Potential RFPG Legislative Recommendation I:
Authority of counties, including regarding drainage fees

Consider providing counties with legislative authority to establish and collect drainage fees, at their own discretion, in unincorporated areas.

[Supported by regions 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 13, 15]

Clarify regulatory authority of counties regarding land use and floodplain management.

[Supported by Regions 1, 3, 7, 8, 9, 11, 13]

Potential RFPG Legislative Recommendation II: **Statewide design standards for infrastructure and buildings for flood risk reduction**

The legislature should consider developing and adopting statewide, minimum design standards for infrastructure and building to reduce loss of life and property from flooding. All statewide design standard must be simple and flexible enough to accommodate the broad range of development needs and flood risk conditions across Texas.

[Supported by Regions 1, 6, 7, 11]

Potential RFPG Legislative Recommendation III: **Statewide building codes**

The legislature should consider adopting consistent statewide building codes with regard to flood risk.

[Supported by Regions 1, 6, 7, 10, 11, 13]

Potential RFPG Legislative Recommendation IV: **Transportation Infrastructure Considerations**

The legislature should consider the following:

- Local regulation integration for TxDOT *[Supported by Regions 2, 3, 4, 8, 9, 12]*
- Critical infrastructure (roadway and bridges) protection *[Supported by Regions 2, 3, 5, 6, 7, 8, 9, 12, 13]*
- Minimum elevation standards for roadways and buildings *[Supported by Regions 6, 10, 12]*