

2023 Planning Cylce - Task 8 Recommendations

| Recommendation Type | ID     | Recommendation Statement                                                                                                                                                            | Reason for Recommendation                                                                                                                                                                                                                                                                                                                                              | Changes since Initial Recommendations                                                               |
|---------------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Legislative         | 8.1.1  | Direct State funding to counties to maintain drainage and stormwater infrastructure in unincorporated areas                                                                         | Counties have floodplain and drainage-related responsibilities without a consistent way to fund projects.                                                                                                                                                                                                                                                              |                                                                                                     |
| Legislative         | 8.1.2  | Develop state strategies to aid in acquiring federal funds                                                                                                                          | Projects for entities in Texas do not compete well with some federal funding programs. For example, Federal Emergency Management Agency (FEMA)'s Building Resilient Infrastructure and Communities (BRIC) grant requires statewide building codes to improve the application score.                                                                                    |                                                                                                     |
| Legislative         | 8.1.3  | Develop state funding to assist dam owners with the costs associated with repairing, maintaining, and upgrading dam structures                                                      | Urban areas now surround dams that were originally constructed in rural areas. The potential impact of flood damages resulting from dam failure has increased significantly with age and development. Often, private and/or local entities do not have the funding to maintain or repair these dams.                                                                   |                                                                                                     |
| Legislative         | 8.1.4  | Provide funding and/or technical assistance to develop regulatory floodplain maps                                                                                                   | Several entities with outdated maps or no mapping are not able to fund the projects necessary to update or create accurate depictions of flood risk.                                                                                                                                                                                                                   |                                                                                                     |
| Legislative         | 8.1.5  | Provide funding and/or technical assistance to update drainage criteria and development standards                                                                                   | Up-to-date drainage criteria and development standards at the county level improve resiliency and prevent additional flood risk. However, many entities do not have the funding to update criteria and standards.                                                                                                                                                      |                                                                                                     |
| Legislative         | 8.1.6  | Provide funding and/or technical assistance to perform or update flood planning and/or master drainage planning studies                                                             | Many communities and entities do not have up-to-date studies or plans that reflect growth or updated rainfall data. Up-to-date master drainage plans can help communities identify drainage needs and develop conceptual solutions to reduce flood risk. These studies can update future regional flood planning cycles and respond to disaster funding opportunities. | TWDB allotted money through Tasks 4C and 5B to assist underserved communities in drainage planning. |
| Legislative         | 8.1.7  | Provide alternative funding sources; Expand eligibility and use of funding for stormwater and flood mitigation solutions (Local, State, Federal, Public/Private Partnerships, etc.) | Flood mitigation studies/projects do not generate revenue, making them more challenging to fund locally. Funding sources could utilize different financial/economic benefit metrics for projects that do not generate revenue.                                                                                                                                         |                                                                                                     |
| Legislative         | 8.1.8  | Provide additional funding to enable the continued function of RFPGs during the interim timeframe between the planning cycle                                                        | In the interim of the planning cycles, not only could RFPGs continue adding Flood Management Evaluations (FMEs), Flood Management Strategies (FMSs), and Flood Mitigation Projects (FMPs) to the Regional Flood Plan, but they could also implement RFPG-sponsored flood management activities, outreach, and stay informed on regional flood-related occurrences.     |                                                                                                     |
| Legislative         | 8.1.9  | Extend Local Government Code, Title 13, Subtitle A, Chapter 552 to allow counties the opportunity to establish and collect drainage utilities/fees in the unincorporated areas      | Counties have floodplain and drainage-related responsibilities in the State of Texas. Currently, counties cannot establish and collect stormwater utility fees, thus limiting their ability to fund stormwater or drainage projects, despite having the responsibility.                                                                                                |                                                                                                     |
| Legislative         | 8.1.10 | Grant counties additional authority to regulate land use, especially in unincorporated flood-prone areas downstream of dams                                                         | Regulation of development in flood-prone unincorporated areas by counties will aid in the prevention of additional flood risk.                                                                                                                                                                                                                                         |                                                                                                     |
| Legislative         | 8.1.11 | Establish a levee safety program similar to the dam safety program                                                                                                                  | Levees are often constructed to protect a specific commodity; however, they do not have a safety program like dams, despite being an equal flood risk.                                                                                                                                                                                                                 |                                                                                                     |

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| Regulatory & Administrative | 8.2.1 | Simplify all funding application processes and criteria as well as the management and reporting process required once funding is awarded                                           | Current funding applications require significant time and resources to prepare a project for consideration, as well as complete the application itself, especially for jurisdictions with limited resources. Thus, jurisdictions that may need the funding the most typically do not apply for current opportunities, despite having need. Once funding is awarded, the management process can be time-consuming, and some communities may choose not to pursue funding due to the management and reporting requirements. |                                                                                                                                                             |
| Regulatory & Administrative | 8.2.2 | Review and revise, as necessary, all state infrastructure entities’ (i.e., TxDOT) standards and practices for legislative and regulatory compliance with stormwater best practices | State entities should be aware of the drainage and stormwater standards in the areas where they are active. State entities shall consider local regulations when local regulations are higher than State minimum criteria.                                                                                                                                                                                                                                                                                                |                                                                                                                                                             |
| Regulatory & Administrative | 8.2.3 | Develop resources for and educate local and regional officials regarding the respective entities’ ability/authorization to establish and enforce higher development standards      | Local and regional officials are often unaware of their authority to establish and enforce stormwater regulations (Texas Local Government Code Title 7, Subtitle B.; Texas Water Code Chapter 16, Section 16.315). Flooding and drainage components of local and regional officials’ training are often inadequate for their level of responsibility.                                                                                                                                                                     |                                                                                                                                                             |
| Regulatory & Administrative | 8.2.4 | Provide measures to allow and encourage jurisdictions to work together toward regional flood mitigation solutions                                                                  | Flooding does not recognize jurisdictional boundaries. Allowing and encouraging entities to work together towards common flood mitigation goals would benefit all involved, including state agencies.                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                             |
| Regulatory & Administrative | 8.2.5 | Develop a publicly available statewide database and tracking system to document flood-related fatalities and injuries                                                              | High flood-risk areas should be tracked and reported to address the health, safety, and welfare of the public. Doing so would increase awareness of the area so that the public could be aware of the risks, and elected officials and decision-makers could institute solutions to reduce the risk.                                                                                                                                                                                                                      |                                                                                                                                                             |
| Regulatory & Administrative | 8.2.6 | Provide financial or technical assistance to smaller/rural jurisdictions                                                                                                           | The former Office of Rural Affairs/Texas Department of Rural Affairs was intended to assist and work with rural entities; however, the department was disbanded. Actions such as maintaining a department specifically for smaller/rural entities, incentivizing consultants to pursue work for smaller or rural entities, or adjusting BCAs to rank small/rural entities equally are all ideas towards this goal.                                                                                                        | TWDB allotted money through Task 5B to support small and rural communities. Rural communities also receive slight boost in ranking of their sponsored FMXs. |
| Regulatory & Administrative | 8.2.7 | Revise the scoring criteria for funding associated with stormwater and flood-related projects that benefit agricultural and other activities                                       | The traditional benefit-cost analysis tools prevent agricultural projects from competing with municipal benefit-cost ratios.                                                                                                                                                                                                                                                                                                                                                                                              | TWDB released additional guidance and toolkit to support the determination of benefits associated with damage to agriculutural lands.                       |
| Regulatory & Administrative | 8.2.8 | Revise inspection criteria for high-hazard at-risk dams                                                                                                                            | Recommend a statewide criticality assessment for high hazard dams to identify dams with a high likelihood of failure and high population at-risk and inspect these dams with greater frequency. This would inform Texas Commission on Environmental Quality on dam safety on which dams to inspect more often than the standard five years.                                                                                                                                                                               |                                                                                                                                                             |

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| Regulatory & Administrative | 8.2.9 | Address the concern of “takings” regarding floodplain development regulations, comprehensive plans, land use regulations, and zoning ordinances                                                       | Jurisdictions should be allowed to regulate development responsibly, reducing future flood risk exposure without fearing legal action by property owners.                                                                                                                                                                                                    |                                                                                                                                                            |
| Flood Planning              | 8.3.1 | Update the scope of work, guidance documents, rules, checklists, etc., based on the adjustments and lessons learned made to these planning documents during the first cycle of planning               | During the first cycle of the State Flood Plan, multiple amendments and additions to the TWDB documents and the TWDB’s interpretation of its documents occurred. Moving forward, the TWDB documents provided at the onset of each new planning cycle should reflect what is ultimately required of the RFPGs.                                                |                                                                                                                                                            |
| Flood Planning              | 8.3.2 | Develop a fact sheet and/or other publicity measures to encourage entities to participate in the regional flood planning effort                                                                       | Many entities were unaware of the regional and state flood plan efforts despite the RFPG outreach efforts.                                                                                                                                                                                                                                                   |                                                                                                                                                            |
| Flood Planning              | 8.3.3 | Host “lessons learned” discussions with RFPG members, sponsors, and technical consultants following the submittal of the final regional plans                                                         | Opening dialogue among these participants to discuss proposed improvements to the regional planning process will streamline and improve future regional flood planning cycles. Some entities are still requesting information regarding the flood planning process and do not understand the benefits of participating.                                      | Lessons learned calls were hosted with both the technical consultant teams and regional flood planning chairs at the beginning of the 2028 planning cycle. |
| Flood Planning              | 8.3.4 | Develop an amendment process to efficiently amend approved regional flood plans to incorporate additional recommended FMEs, FMSs, and FMPs and allow the RFPG to advance the recommended FMEs to FMPs | Amending the Regional Flood Plan may be an extensive process. Amendments to move FMEs to FMPs and incorporate new flood management solutions should have a quicker turn-around time to include them in the Regional Flood Plan efficiently. Recommend utilizing the Regional Water Planning amendment process as a go-by.                                    | An amendment process was outlined by TWDB and performed by RFPGs. However, it was a singular instance not a revolving process for performing amendments.   |
| Flood Planning              | 8.3.5 | Reduce the amount of information required to escalate potentially feasible FMEs to FMPs; Align required information to be similar to what is required for design/construction funding                 | Some of the data currently requested for FMPs is more detailed than traditional planning level data. Therefore, certain FMPs had to be submitted as FMEs or FMSs despite having sufficient data to produce a project. The RFPs should focus on meeting the minimum requirement to produce funding rather than spending time and money on the project design. | BCAs are no longer required for FMPs which does reduce the threshold of information required.                                                              |
| Flood Planning              | 8.3.6 | Revise the criteria for the “No Adverse Impact” Certification required for FMPs                                                                                                                       | The current criteria give thresholds for increases in flow, water surface elevation, and inundation extents. Though helpful, the current criteria do not consider projects that exceed these thresholds but account for the impact through design or downstream accommodations.                                                                              |                                                                                                                                                            |

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| Flood Planning      | 8.3.7  | Streamline the data collection requirements, specifically those identified in Task 1. Focus on collecting the most useful data for the regional flood plan development                                                                 | This first round of planning proved that very few entities have the data requested as part of the flood planning process readily available in a geographic information system (GIS) format. Of those entities who did have GIS data, most were unable to share that information. As a result, some of this data was not used or was used minimally to develop potentially feasible and recommended FMEs, FMPs, and FMSs.                       |                                                                                                                                                                   |
| Flood Planning      | 8.3.8  | Provide statewide data and a methodology to determine infrastructure functionality and deficiencies in the next cycle of the Flood Planning Process; Consider the lack of readily available local data when developing the methodology | Most entities do not have information regarding the functionality and deficiency of their infrastructure. Some fields required by the TWDB-required tables in the Regional Flood Plans are based on data unavailable to entities without extensive fieldwork. A statewide database with this information would be useful to all entities.                                                                                                      | An infrastructure assessment tool was developed and provided by the TWDB. The tool is intended to be used by communities to assess their drainage infrastructure. |
| Flood Planning      | 8.3.9  | Review and revise the geodatabase submittal attributes and elements                                                                                                                                                                    | Normalizing the geodatabase with relationships would allow for cross-referencing data elements and attributes. More domains for attributes need to be developed.                                                                                                                                                                                                                                                                               |                                                                                                                                                                   |
| Flood Planning      | 8.3.10 | Use FEMA’s Social Vulnerability Index (SVI) when available instead of the Centers for Disease Control and Prevention (CDC)’s SVI in future planning cycles                                                                             | FEMA’s SVI is more relevant to flood resiliency and risk than the CDC’s SVI. SVI should not be the primary component considered when allocating funding.                                                                                                                                                                                                                                                                                       | TWDB developed a "TX-SVI" to be used in conjunction with FEMA's SVI metrics.                                                                                      |
| Flood Planning      | 8.3.11 | Use consistent Hydraulic Unit Code (HUC) reporting requirements throughout the TWDB-required tables                                                                                                                                    | The RFPG guidance requires HUC-8 in some tables, HUC-10 in other tables, and HUC-12 in other tables. Some tables require multiple HUCs to be provided. The RFPG recommends that the TWDB require HUC-8 in all TWDB-required tables for consistency and to correspond to FEMA’s base level watershed planning granularity.                                                                                                                      |                                                                                                                                                                   |
| Flood Planning      | 8.3.12 | Develop a statewide bridge inventory with bridge deck elevations                                                                                                                                                                       | The availability of statewide Light Detection and Ranging (LiDAR) provides the opportunity to more accurately describe the risk at riverine crossings (i.e., overtopping elevation). Creating a statewide database outside of flood planning would further simplify this data.                                                                                                                                                                 |                                                                                                                                                                   |
| Flood Planning      | 8.3.13 | Improve flood risk identification and exposure process regarding building footprints and population at risk by including first-floor elevations of structures                                                                          | While the building footprints are helpful, it is difficult to determine the extent of flood risk per structure without first-floor elevations. If the structure is sufficiently elevated above the base flood elevations (BFE), for example, the footprint still shows the structure in the floodplain, and the corresponding population is considered “at-risk” though the structure meets National Flood Insurance Program (NFIP) standards. |                                                                                                                                                                   |
| Flood Planning      | 8.3.14 | Update state rainfall every 10 years in cycle with the State Flood Plan                                                                                                                                                                | Use similar statistical process and same data as NOAA, but on a more predictable and frequent schedule. Regular updates should help avoid large swings in data.                                                                                                                                                                                                                                                                                | NOAA is working on releasing updated rainfall and continuing to update on a regular cycle.                                                                        |