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Task 8: Administrative, Regulatory, and Legislative Recommendations (361.43)

As guided by the TWDB rules for regional flood planning, the Regional Flood Planning Groups may adopt recommendations on policy issues related to floodplain management and flood mitigation planning and implementation. Specifically, the RFPGs may adopt:

1. Legislative recommendations considered necessary to facilitate floodplain management and flood mitigation planning and implementation.
2. Other regulatory or administrative recommendations considered necessary to facilitate floodplain management and flood mitigation planning and implementation.
3. Any other recommendations that the RFPG believes are needed and desirable to achieve its regional flood mitigation and floodplain management goals.
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.

These recommendations may address items that benefit and/or can be implemented at the local, regional, or state levels and may include suggested changes to the flood planning process for the TWDB to consider in the next regional and state flood planning cycle.

Legislative, regulatory and administrative recommendations adopted by Guadalupe Regional Flood Planning Group follow. The associated TWDB guidance principles found in TWDB Exhibit C, Part 3.1, are linked with the recommendations to underscore alliance with the over-arching flood planning goals.

8.1 Legislative Recommendations

Table 8.1 below presents recommendations related to flood planning, flood risk mitigation, and funding adopted by the Guadalupe RFPG that will require legislative action.

Table 8.1: Legislative Recommendations

ID Number	Recommendation	Rationale	Associated TWDB Guiding Principles
8.1.1	Continue recurring biennial appropriations to Flood Infrastructure Fund (FIF) for Study, Strategy and Project implementation.	The FIF allocations provide local governments with funding to implement flood management projects. Continuing this effort will further enhance public safety and help achieve the Regional Flood Plan and State	3, 13, 14, 16

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ID Number	Recommendation	Rationale	Associated TWDB Guiding Principles
		Flood Plan goals of reducing the risk and impact to life and property.	
8.1.2	Allow counties the opportunity to establish drainage utilities and to collect drainage utility fees in unincorporated areas.	Municipalities in Texas have the statutory authority to establish drainage utilities to fund planning, design, and project implementation along with operations and maintenance of the stormwater system. Counties have floodplain management responsibilities but do not have the authority to establish drainage utilities which limits their ability to fund flood management and mitigation activities. Counties could use this authority to enhance their role in floodplain management as much of the ongoing development in Texas takes place outside of city limits.	20, 32
8.1.3	Remove barriers that limit jurisdictions from working together to provide regional flood mitigation solutions and consistent development management rules.	Flooding occurs within watersheds that may span multiple jurisdictions and require cooperation and coordination with other local governments, regional entities, and state agencies to enhance flood mitigation and floodplain management (preventing the creation of additional flood risk in the future). The TWDB should incentivize and encourage watershed management planning and project implementation to enhance flood safety and manage costs. One way to do this is to add points to the TWDB, GLO, and other agency project evaluation processes. Another is the creation of regional drainage districts.	29, 33
8.1.4	Develop and allocate State funding to assist privately-owned dam owners with the costs associated with repair and maintenance of dams	There are thousands of dams in Texas, many are not regulated by the dam safety program. With Atlas 14 signaling larger rainfall events since dam completion, developing a prioritization system and providing funding for dam repairs is important in protecting downstream life and property.	14, 16, 22
8.1.5	Develop and allocate a program to fund flood early warning systems on	Flood early warning systems can play an important role in notifying residents and business owners of impending flooding and	14, 16, 22

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ID Number	Recommendation	Rationale	Associated TWDB Guiding Principles
	a regional basis (especially in rural areas)	the need for evacuation and/or implementing floodproofing measures. Providing funding for flood early warning systems serves an important public safety function and can be coordinated across a watershed with multiple local governments to support recommendation 8.1.3 above.	
8.1.6	Provide funding for “buy out” programs to convert flood prone neighborhoods into green space and parkland as an alternative to large-scale construction projects.	Repetitive loss neighborhoods are often located in low lying areas that are difficult to remove from the floodplain (high water areas). Providing funding to buy-out neighborhoods can eliminate the flood risk to residents and result in the creation of green space and parkland for the larger community to enjoy. By avoiding project implementation within the waterway, habitat and ecological systems can be preserved. At the same time, there is not the need for long-term project operations and maintenance requirements	14, 16, 17, 23, 39
8.1.7	Limit breakaway structures being built or placed within the floodplain by providing counties the authority to prevent these activities	The implementation of docks, piers, and other in waterway obstruction poses a risk to adjacent and downstream residents as they can impede flows, retain debris, and increase flood elevations. When they are washed away, pose safety and floodplain issues to these residents.	14, 16, 27
8.1.8	Provide funding to improve safety at low water crossings through structural improvements and/or flood warning systems	There are an estimated 815 low-water roadway crossings (LWC) within Region 11. Low water crossings are defined as experiencing swift water flow conditions, not standing water from poorly functioning storm drain systems. Many of the LWCs experience frequent flooding but may have minor flood risk, in terms of public safety due to low traffic levels. The funding should prioritize low water crossing improvements based on traffic counts, type of roadway, existing level of risk (storm event) and the potential to use signage, reverse 911 notifications, and/or gates to minimize structural improvements to stretch financial resources. This program could be implemented by TXDOT, TXDEM,	14, 16, 22

ID Number	Recommendation	Rationale	Associated TWDB Guiding Principles
		<p>and/or TWDB singly or in collaboration with one another.</p> <p>This recommendation aligns with goals recommendation in Chapter 3.</p>	
8.1.9	Provide counties with the authority to require commercial outfitters to safely store recreational equipment outside of the floodplain	Recreational vehicles, equipment, tents, trailers, concession stands in the floodplain can impede flows and increase floodplain elevations. During flooding, these items can be swept downstream and pose safety and floodplain issues to residents.	14, 16, 28
8.1.10	Provide funding to increase the number of conservation easements for riparian areas and land in the 100-year floodplains.	Acquiring known flood prone areas can preserve natural storage to maintain existing floodplain conditions and can prevent development from being construction in the floodplain.	7, 10, 24, 27, 36, 39

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8.2 Administrative Recommendations

Other flood-related policy issues will not require legislative action but could be addressed through administrative actions existing authority and implemented with existing and/or increased state agency resources. Table 8.2 presents administrative recommendations adopted by the Guadalupe RFPG.

Table 8.2: Administrative Recommendations

ID Number	Recommendation	Rationale	Associated TWDB Guiding Principles
8.2.1	Develop model ordinances for general law cities (e.g., building codes, Low Impact Design/Development, Green Infrastructure, other...)	TWDB, FEMA, state agencies, and other organizations (TMFA) support professional education, training, and technical assistance programs. Programs can be crafted to include model ordinances that illustrate the value of enhanced standards, criteria, and regulations (stormwater detention, buffer zones, etc.) to minimize development in the floodplain and protect existing downstream property owners from unmanaged development.	6, 7, 8, 20

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ID Number	Recommendation	Rationale	Associated TWDB Guiding Principles
8.2.2	Provide funds/support for ongoing education/training regarding floodplain management	<p>TWDB, FEMA, TFMA, and other organizations provide professional education, training, and technical assistance programs.</p> <p>The audience for these programs is typically local officials, elected and professional, that may not be experienced in floodplain managed practices. This training and support can assist local governments in implementing higher standards for existing and new development. Education and outreach information can also be shared with the community to underscore the importance of avoiding/not driving through low water crossings during flood events.</p>	6, 7, 10, 17, 27, 36, 39
8.2.3	Modify the selection process for flood projects that benefit agricultural activities so that project selection is not scored or awarded based on a traditional benefit-cost ratio	Applied benefit-cost analysis methods incentivize the protection of high-value public and private assets usually found in urbanized areas. The project funding/scoring systems should be modified to include agricultural assets and benefits in the selection formula to be able to better compete with urban projects.	16, 17, 24, 27
8.2.4	Provide funding and/or technical assistance to develop updated floodplain maps	There are many local governments in Region 11 that lack floodplain maps or are using outdated maps. Accurate floodplain models and maps are necessary to manage existing and new development to minimize flood risk. The State should continue the BLE program and provide funding/support to local governments to allow them to update their maps to FEMA standards. At the same time, the State should encourage the delineation of anticipated future development floodplain maps.	4, 7
8.2.5	Develop a statewide database and tracking system to document flood-related fatalities that is publicly available	The development of a database will identify dangerous areas and low water crossings that can be prioritized for future projects. This can be incorporated into project scoring systems in pursuit of FIF and other funds.	1, 13

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ID Number	Recommendation	Rationale	Associated TWDB Guiding Principles
8.2.6	Increase stream monitoring at high-risk flood prone areas.	Flood early warning systems are effective tools to warn residents of approaching high water using social media, radio, and reverse 911 notifications. The TWDB could implement programs in at-risk regions and/or enhance/expand current systems to provide a broader range of coverage.	14, 16, 22
8.2.7	Provide incentives to local governments to participate in the FEMA Community Rating System (CRS) program.	The CRS can be an effective program to implement flood management and mitigation measures in a community while reducing flood insurance premiums. However, there is a cost to local government to implement and operate a CRS system, often, requiring staff. The State could provide funding or other incentives (higher priority FIF project ranking, etc.) to help local governments establish programs.	6, 7, 17, 23, 24
8.2.8	TWDB should provide Green Infrastructure training to agencies, local governments, engineers, planners	The TWDB can host workshops to inform local governments, engineers, and elected officials of the potential value of flood mitigation through green infrastructure including social, economic, and environmental benefits. There could be different training levels to move from informational to design and operations and maintenance guidance for engineers. By implementing green infrastructure, ecological and habitat benefits are accrued while avoiding increasing flooding on downstream landowners that can occur from typical conventional projects (culverts, concrete channels, storm drain systems, etc.)	17, 18, 24, 36, 37, 39
8.2.9	TWDB Flood Infrastructure Fund (FIF) project selection process should include a green infrastructure scoring component to prioritize these types of projects. TWDB should continue to consider social vulnerability (SVI) and other measures of social,	In the first round of funding from the Flood Infrastructure Fund, TWDB requested information about social vulnerability and the socioeconomic attributes of the populations of areas for which funding is being sought. There is an opportunity to include social, environmental, and sustainability factors in the project selection process. The TWDB should develop project scoring formulas that incentivize green infrastructure solutions so that communities can receive multiple	12, 17, 27, 28

ID Number	Recommendation	Rationale	Associated TWDB Guiding Principles
	environmental resilience and sustainability. This should include modifying the benefit-cost methodology rather than relying solely on traditional measures of benefit (e.g., avoidance of flood losses to property, value of infrastructure to be constructed, etc.).	benefits from a project, not just a one-dimensional flood mitigation improvement.	
8.2.10	TWDB and Tx Parks and Wildlife collaborate to restrict mechanical management activities within the floodway	Mechanical removal of vegetation and trees can create a riparian zone susceptible to erosion. Native vegetation can slow floodwaters and increase floodplain storage thus helping to manage downstream flood levels.	15, 16, 20

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8.3 Regulatory Recommendations

Other flood-related policy issues may need to be addressed through regulatory actions adopted by the State. Table 8.3 presents regulatory recommendations adopted by the Guadalupe RFPG.

Table 8.3: Regulatory Recommendations

ID Number	Recommendation	Rationale	Associated TWDB Guiding Principles
8.3.1	Expand municipal and county authority to regulate land use and development in floodplains and address legal concerns regarding potential takings	Jurisdictions should be allowed to regulate development in a responsible manner that reduces future flood risk exposure without the fear of unreasonable or punitive legal action by property owners.	6, 7, 20
8.3.2	Expand city and county authority to ensure that new development does not increase downstream flooding	Jurisdictions should be allowed to regulate development in a responsible manner that reduces future flood risk exposure including the requirement of new development to manage their stormwater runoff to pre-development levels so that downstream	6, 7, 20

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		residents are not adversely affected by higher flood elevations and accelerated riparian zone property loss. .	
8.3.3	State adoption of higher flood standards, for example, establish a minimum floor elevation two feet above the base flood elevation to account for potential changes in future rainfall depths and flood elevations. Enact legislation updating the state building code to a more recent edition (e.g., the 2018 edition of the International Building Code and International Residential Code).	Establishing higher standards such as freeboard, development outside the floodplain, etc. helps prevent an increase in flood problems and provides public safety benefits. Without a current mandatory state building code, local entities in Texas do not qualify for some federal funding programs such as FEMA’s Building Resilient Infrastructure and Communities (BRIC) Grant. Statewide standards will lead to consistent development standards so that new development/commercial/industrial projects cannot seek communities with fewer restrictions to implement their projects.	2, 5, 8, 13, 14
8.3.4	TxDOT design criteria should require that all roadways to be above the 100-year flood level	TXDOT should take a leadership role in flood management to strive to meet this standard for public safety and risk reduction. It is recognized it may not be feasible in all cases, however, TXDOT can initiate a policy with this goal that could trickle down to counties and local governments to encourage them to do the same.	10, 14, 16, 26
8.3.5	TxDOT design criteria should include stormwater detention requirements to not increase downstream flooding from new highway projects	TXDOT should take a leadership role in flood management/stormwater detention to strive to meet this standard for public safety and risk reduction. It is recognized it may not be feasible in all cases, however, TXDOT can initiate a policy with this goal that could trickle down to counties and local governments to encourage them to do the same	10, 14, 16, 26
8.3.6	Statewide detention and/or verification of no downstream impact from new development	Prevent downstream landowners from experiencing more frequent and severe flooding from upstream development to protect their property from excessive	10, 16, 20, 28, 29, 39

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ID Number	Recommendation	Rationale	Associated TWDB Guiding Principles
	for design storms ranging from the 2-year to the 100-year storm	erosion and property loss. This also protects downstream infrastructure from being adversely impacted (washed away utilities, bridge/culvert failures, increased low water crossing risk). This recommendation directly complies with the Regional Flooding goal of eliminating the increase of additional flooding.	
8.3.7	State should provide guidance and/or authority to local governments to manage proposed RV parks in the floodplain	RV parks are a unique development practice that can avoid most local government regulations. By providing standards, local governments will have the authority to prevent the practice of placing structures and other features in the floodplain that can be swept away in flooding events, posing flood and safety risks to adjacent and downstream residents.	14, 16, 28