

Memorandum

TO: Lower Colorado-Lavaca Regional
Flood Planning Group

DATE: May 31, 2022

THROUGH: Lauren Graber
Lower Colorado River Authority
P.O. Box 220
Austin, TX 78767

PROJECT: LCRA Contract No. 5809
Halff AVO 43796.001

FROM: Mike Personett
Project Manager
Halff Associates, Inc.

SUBJECT: **V2 Draft Chapter 8 – Administrative, Regulatory and Legislative Recommendations**

Attached for your review is a revised draft of Chapter 8 (Task 8) addressing policy issues and potential RFPG recommendations. This second draft incorporates suggestions and feedback received from the RFPG at its meeting on May 2nd. We've also added one legislative recommendation (8.1.8) pertaining to property tax incentives for protection of sensitive stream corridors.

As noted previously, the proposed "policy" recommendations in the preliminary draft of Chapter 8 were derived from several sources – the LC-LV RFPG, recommendations under consideration in other flood planning regions, and ideas from the Technical Consultant team. We've also kept an eye on the RFPG's adopted goals to consider potential recommendations that might support or advance progress towards achievement of goals.

At your meeting on June 9, 2022 we will not do another walk-through of the entire document as we did on May 2nd. Rather, we will encourage further discussion and feedback on specific topics and recommendations of interest. Once again, there are two questions we would like you to consider as you review the current draft:

- Are there potential topics and recommendations that should be added, removed, or otherwise modified?
- Which topics/recommendations do you see as having the highest priority?

We will continue to accept comments from individual RFPG members on the draft until Friday, June 17th, after which we will incorporate revisions and provide a final draft for discussion and action at your July 7, 2022 RFPG meeting. As with other recommendations to be included in your Regional Flood Plan, we will ask for your approval of policy recommendations at that time. Note however, that all will remain in draft form and subject to continuing review and refinement, particularly as we begin the public review process on the draft Regional Flood Plan.

Thanks!

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Chapter 8 - Administrative, Regulatory, and Legislative Recommendations

As set forth in TWDB rules and guidelines for regional flood planning, the Regional Flood Planning Groups may adopt recommendations, if desired, 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.

Legislative, regulatory, and administrative recommendations adopted by the Lower Colorado-Lavaca Regional Flood Planning Group follow.

Section 8.1 – Legislative Recommendations

Some flood-related policy issues require approaches and solutions that will require action by the Texas Legislature, either establishing new authorities or programs by statute, or through new or increased appropriations through the state budget process. Table 1 below presents legislative recommendations adopted by the LC-LV RFPG related to flood planning, flood risk mitigation, and funding.

Table 1. Legislative Recommendations

ID	Recommendation	Rationale for Recommendation
8.1.1	Extend Local Government Code, Title 13, Subtitle A, Chapter 552 to allow counties the opportunity to establish drainage utilities and to collect drainage utility fees in un-incorporated areas.	Municipalities in Texas have the statutory authority to establish public utilities to provide various services to their residents, including drainage. Municipal public utilities can assess and collect user fees to fund operations and maintenance, for land acquisition, and to implement projects. By comparison, counties in Texas have floodplain, drainage, and flood mitigation responsibilities but do not currently have the authority to establish drainage utilities. This limits the ability of counties to self-finance flood mitigation and drainage projects and provide adequate ongoing maintenance of drainage and flood

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		mitigation infrastructure.
8.1.2	Investigate legal impediments and potential legislative or other remedies to the use of local government funds for the elevation and/or floodproofing of private properties (structures) at-risk of severe flooding.	Elevation and/or floodproofing of existing at-risk structures may be preferable to buyouts or other flood risk reduction measures in some situations (e.g., less cost, avoids displacement, no ongoing O&M). Local entities in Texas cannot use local funds for improvements to private properties. However, local entities can use local resources to assist with the implementation of FEMA-funded projects to elevate/floodproof, but they cannot contribute local funding directly to such improvements. By comparison, municipalities in Texas do have legal authority to expend local funds to purchase and remove structures that are at risk of flooding, the primary difference being that the local entity ends up owning the property and therefore retains the public benefits in perpetuity.
8.1.3	Establish and provide state budget appropriations and/or assess fees to fund implementation of a levee safety program similar to the TCEQ dam safety program.	Levees are typically designed and constructed to meet specific standards in order to obtain FEMA certification under the NFIP. However, unlike dams, there is not a state levee safety program even though levee failures may pose a significant flood risk to the populations and assets they are intended to protect.
8.1.4	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).	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 program.
8.1.5	Provide ongoing state appropriations to TWDB for additional grant funding for Regional Flood Planning Groups to continue to function during the interim between planning cycles.	It is important that momentum gained in the first regional flood planning cycle be maintained in the interim between planning cycles. Additional ongoing funding will enable the RFPGs to continue to meet and function; conduct ongoing public and stakeholder outreach and engagement within their respective regions; consider additional FMEs, FMPs, and/or FMSs that may be identified; amend the Regional Flood Plan as needed; and allow RFPGs to implement RFPG-sponsored regional flood

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		<p>management strategies, for example targeted outreach and technical assistance to local entities for enhanced floodplain management and floodplain and land use regulation).</p>
<p>8.1.6</p>	<p>Increase State funding and technical assistance for the development and maintenance of accurate watershed models and floodplain maps.</p>	<p>Accurate floodplain models and maps are essential to effective floodplain management and are a prerequisite for thorough evaluations of flood risk and the evaluation of flood risk reduction measures. Many local entities that participate in the NFIP, or are eligible to participate, lack FEMA Flood Insurance Rate Maps (FIRM) or are using outdated maps. Grant funding and technical assistance is available through the FEMA Cooperating Technical Partners (CTP) Program, administered by TWDB. Watershed modeling and mapping studies are also being funded by TWDB through the Flood Infrastructure Fund (FIF). Substantial additional funding is needed for these types of recommended Flood Management Evaluations, of which xx are included in the LC-LV Regional Flood Plan</p>
<p>8.1.7</p>	<p>Establish and fund a state program specifically to assist counties and cities with the assessment and prioritization of low water crossings for flood risk mitigation. Funding should also be provided on a cost-sharing basis for implementation of structural and/or non-structural flood risk reduction measures at high-risk low water crossings.</p>	<p>There are an estimated 1,352 low-water roadway crossings (LWC) within the Lower Colorado-Lavaca Flood Planning Region. Many of these crossings experience frequent flooding but may have relatively minor flood risk, in terms of public safety and/or the integrity of the roadway. Others, however, are at high-risk and experience flood depths and velocities that do pose a significant risk. While there are some historical records of fatalities at some LWCs, much of the available information is anecdotal and the risk has not been fully assessed. Furthermore, the cost to mitigate flood risk at high-risk LWC with structural solutions (e.g., bridges) is typically very high, often prohibitive. It is therefore important that the flood risk at LWCs be systematically and fully evaluated in order to prioritize those LWCs in need of mitigation, either through structural measures or non-structural (e.g., closures, reverse 911 notifications) measures.</p>

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		<p>This program could be implemented by TXDOT, TXDEM, and/or TWDB singly or as an inter-agency collaboration.</p> <p>Note that this recommendation is a companion to a Flood Management Strategy included in the LC-LV Regional Flood Plan. Note also that there are xx FMEs and yy FMPs that are included in the RFP that are focused on high-risk LWCs.</p>
<p>8.1.8</p>	<p>Consider establishment of property tax incentives for protection of sensitive stream corridors by private landowners.</p>	<p>The LC-LV RFPG has recommended a regional Flood Management Strategy (FMS) to encourage collaboration among governmental and non-governmental organizations and private property owners to undertake voluntary actions to protect and restore sensitive stream corridors particularly in rural areas. This strategy is seen as a complement to another regional FMS focused on encouraging adoption of higher or enhanced floodplain and land development standards and regulations, which could include protection of stream corridors within urban areas.</p> <p>This recommendation is to establish a new category of special tax assessment (aka property tax exemption) for protection of stream corridors on qualified agricultural land. This is envisioned to be similar to current state law that allows agricultural appraisal of land used to manage wildlife.</p>

Section 8.2 – Regulatory and Administrative Recommendations

Other flood-related policy issues will not require legislative action but rather could be addressed through state agency regulations or administrative actions promulgated or taken under existing statutory authority and implemented with existing and/or increased state agency resources. Table 2 presents recommendations adopted by the LC-LV RFPG that involve administrative and/or regulatory action by one or more state agency.

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Table 2. Regulatory or Administrative Recommendations

ID	Recommendation	Rationale for Recommendation
8.2.1	<p>TWDB should actively promote establishment of local drainage utilities, where appropriate, to provide a stable and predictable source of funding, though the assessment of drainage fees, to support ongoing operations and maintenance (O&M) of existing flood mitigation and other drainage infrastructure. This should include the provision of technical with the creation of local drainage utilities.</p>	<p>State law (Local Government Code, Title 13, Subtitle A, Chapter 552) provides municipalities with the authority to establish local drainage utilities, including the assessment of fees to support its operations, including administration of floodplain management and implementation and enforcement of floodplain and drainage regulation and to self-finance investments in flood risk reduction infrastructure, structural and non-structural. Having a stable and predictable source of funding is conducive to both long-range planning and the timely development and implementation of flood risk reduction projects. Absent creation of a drainage utility, local governments typically fund floodplain management and regulatory programs, O&M of drainage and flood risk reduction infrastructure with general tax revenues and/or municipal bonds secured and serviced with local tax revenues. At present, there are only 3 municipalities in Region 10 that have established a drainage utility. It is recognized, however, that not all municipalities have a need for or are well-suited to establish drainage utilities as there is overhead associated with administration of such utilities. Municipalities best suited to having drainage utilities are typically larger communities, communities with extensive networks of aging drainage infrastructure, and communities that are experiencing high levels of growth and development.</p>

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Table 2. Regulatory or Administrative Recommendations

ID	Recommendation	Rationale for Recommendation
8.2.2	TXDOT should employ roadway design criteria to require all new and reconstructed state roadways to be designed and constructed, to the extent practicable, at elevations at or above the 1.0% annual chance water surface elevation. TXDOT should also consider future conditions, such as urbanization and climate variability, in its roadway design criteria for drainage and flood risk reduction.	TXDOT is not a participant in the NFIP and does not in all cases design roadways in a manner consistent with minimum NFIP requirements. It is recognized that, by the linear nature of roadways, it is often not feasible or practicable to design and construct facilities to provide a level of flood protection equivalent to or greater than the 1% annual chance storm event. However, as a matter of policy and practice, TXDOT should strive to meet this standard.
8.2.3	Revise the scoring criteria for funding associated with stormwater and flood-related projects that benefit agricultural activities.	Commonly used benefit-cost analysis methods and tools skew towards protection of high-value public and private assets, those typical of urbanized areas. In terms of benefit versus cost, projects to reduce flood risk to agricultural assets therefore do not compare/compete well with projects benefiting urban areas.
8.2.4	TWDB should continue to include and refine its criteria for evaluating and ranking applications for financial assistance for flood risk mitigation studies and projects, considerations of social vulnerability (SVI scores) and other measures of social, economic, and environmental resilience and sustainability. This should include modifying the benefit-cost methodology to account for such factors rather than relying solely on traditional measures of benefit (e.g., avoidance of flood losses to property, value of infrastructure to be constructed, etc.).	In its first round of funding from the Flood Infrastructure Fund, TWDB requested information about and consider social vulnerability and the socioeconomic attributes of the populations of areas for which funding is being sought. Other TWDB programs also consider such factors (e.g., the Economically Distressed Areas Program, commonly known as the colonias program). This is important as many local entities have a limited ability to self-finance flood risk reduction measures, serve low income populations, and populations that have relatively low resilience in terms of the ability to recover from flood damages.
8.2.5	Provide direct technical assistance to economically distressed communities and/or those with high social vulnerability with the preparation of funding applications for federal and/or state financial assistance for flood planning and implementation of flood risk reduction measures.	Currently available federal and state financial assistance programs for flood planning and for the development and implementation of flood risk reduction measures often require significant effort as well as specialized technical capabilities to prepare applications for financial assistance. Smaller entities, those considered economically distressed, and those with high

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Table 2. Regulatory or Administrative Recommendations

ID	Recommendation	Rationale for Recommendation
		social vulnerability typically lack the staff resources and expertise, or funds to hire consultants, to develop and compile information required for funding applications.
8.2.6	Reduce or eliminate barriers to and provide incentives for the planning, funding, and implementation of inter-jurisdictional flood risk reduction measures, either structural and/or non-structural.	Flooding occurs within watersheds and does not recognize jurisdictional or political boundaries. Local entities, through interlocal agreements and other mechanisms, can collaborate and share costs of implementing flood management activities and flood risk reduction projects. This should be encouraged and perhaps incentivized by the state. TWDB and other state agencies should evaluate and take action, as appropriate, to reduce or eliminate barriers to and/or implement measures to encourage and incentivize greater inter-jurisdictional collaboration (e.g., added points in TWDB's project ranking system).
8.2.7	In collaboration with FEMA, other state agencies, and professional organizations (e.g., ASCE, TMFA), TWDB should expand its flood-related professional education, training and technical assistance programs and activities. This should include targeted outreach and technical assistance to entities that are not currently participating in the NFIP as well as to participating NFIP communities with a need or interest in adopting enhanced floodplain management and floodplain, drainage, and land use regulations. In delivering such services, consideration should also be given to partnering with and providing funding support to RFPGs to assist in the delivery of professional education, training, and technical assistance.	TWDB, FEMA, other state agencies, and other organizations (TMFA) each support professional education, training, and technical assistance programs. The target audience for these programs are typically local officials, elected and professional, particularly those that lack the knowledge, expertise, and resources required to put in place effective floodplain management practices and other preventative measures. Communities that are not NFIP participants may not fully understand the benefits of joining the NFIP and cities and counties may not fully understand their current authority to establish and enforce higher floodplain management and land development standards over and above NFIP minimums.
8.2.8	Address legal concerns regarding potential "takings" associated with	Jurisdictions should be allowed to regulate development in a responsible manner that

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ID	Recommendation	Rationale for Recommendation
	floodplain development regulations, land use regulations, and local comprehensive plans.	reduces future flood risk exposure without the fear of unreasonable or punitive legal action by property owners.
8.2.9	Other?	

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Section 8.3 – Flood Planning Recommendations

The first regional flood planning process has been a learning experience for all involved – TWDB, the RFPGs, sponsors, and technical consultants. It is important that lessons learned be captured and, as appropriate, incorporated into TWDB rules and guidance to improve the regional flood planning process going forward into the second planning cycle. Table 3 below presents the LC-LV RFPG recommendations pertaining to potential improvements in the regional flood planning process. Additionally, the LC-LV recommends that TWDB convene a series of lessons learned workshops, at or near the conclusion of the first regional flood planning cycle, in various areas of the state to obtain feedback from RFPGs, sponsors, and technical consultants.

Table 3. State Flood Planning Recommendations

ID	Specific Recommendation Statements	Reason for Recommendation
8.3.1	Use consistent HUC reporting requirements throughout the TWDB-required tables.	The RFPG Guidance requires HUC-8 in some tables, HUC-10 in other tables, HUC-12 in yet 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 spatial granularity.
8.3.2	Use FEMA’s Social Vulnerability Index (SVI) instead of the CDC SVI in future planning cycles. SVI should not be the primary component considered when allocating funding.	FEMA’s SVI is reasoned to be more directly relevant to flood resiliency and flood risk reduction than the CDC’s SVI.
8.3.3	Clarify the phrase “flood-related authorities or entities”, what local and regional governmental entities are included, and which are not.	The phrase is used in the TWDB planning documents multiple times and is a central part of Tasks 1 and 10. TWDB originally provided the RFPG with a list of entities that were thought to have flood-related responsibilities. During the outreach efforts, some these entities indicated that they did not have flood responsibilities and did not believe they should be included in the regional flood planning effort.
8.3.4	Clarify the distinction between flood management, mitigation, and infrastructure and what is more commonly considered drainage management and infrastructure.	Many local entities, for example, Municipal Utility Districts and Water Control and Improvement Districts, have drainage responsibilities, particularly with respect to development of land within their jurisdictions and the maintenance of drainage infrastructure, such as storm drain systems. These entities may or may not also develop what might be considered flood risk reduction infrastructure. Also, most local

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Table 3. State Flood Planning Recommendations

ID	Specific Recommendation Statements	Reason for Recommendation
		<p>drainage problems and deficiencies in local drainage infrastructure are very localized and can best be characterized as causing “nuisance” flooding, rather than posing a significant risk and exposure to people and property. It would be helpful in future planning cycles to delineate as well as possible this distinction. For example, TWDB guidance re: flood exposure and vulnerability could be refined to better emphasize identification and mitigation of significant risks to public safety, property, and public infrastructure.</p>
8.3.5	<p>Streamline the data collection requirements, specifically those identified in Task 1. Focus on collecting the data that was most useful to the regional flood plan development.</p>	<p>This first round of planning proved that very few local entities collect and maintain data and information prescribed by TWDB for use in the regional flood planning process. This is particularly the case with data to be provided in a digital geospatial format. Also, some required data (e.g., drainage infrastructure) was not available and it is of questionable value in the process and was generally not available. As noted in the previous recommendation, most drainage problems do not present significant flood risk and are best characterized as nuisance flooding.</p>
8.3.6	<p>Update the scope of work, guidance documents, rules, checklists, etc. based on the clarifications, interpretations, and adjustments made during the first regional flood planning cycle.</p>	<p>During the first cycle of the State Flood Plan, multiple amendments, additions, interpretations, clarifications, and adjustments were made to TWDB requirements and guidance. These adjustments should be incorporated, as appropriate, into TWDB requirements and guidance documents for the second regional flood planning cycle.</p>

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Table 3. State Flood Planning Recommendations

ID	Specific Recommendation Statements	Reason for Recommendation
8.3.7	Reassess and relax, as appropriate, requirements for potentially feasible Flood Mitigation Projects (FMP) that present impediments to inclusion of FMPs in regional flood plans.	A large number of potentially feasible FMPs were required to be developed and included in the regional flood plans as Flood Management Evaluations (FMEs) due mostly to a lack of some required data and information, such as cost estimates or a benefit-cost analysis. Otherwise, many local entities that have requested or support inclusion of their projects in the regional flood plan have identified a “preferred” solution to a flooding problem and intend to proceed with its implementation at some point in the future when funding becomes available. In addition to resulting in the “downgrade” of some potential FMPs to FME, such situations, may result in lower scores when evaluated for TWDB financial assistance. Overall, the information required for FMPs is more detailed than one might expect for a flood planning at a regional scale.
8.3.8	Develop a regional and state flood plan amendment process similar to that for the TWDB Regional Water Planning process. RFPGs need be able to efficiently amend their approved regional flood plans to incorporate additional recommended FMEs, FMPs and FMSs as they are identified and/or brought forward by local entities. Also, it would be appropriate to allow RFPGs to advance a recommended FMEs to FMPs based on the results at the completion of an FME.	Amending the Regional Flood Plan, as seen with the Technical Memorandum Addendum, can be an extensive process. Amendments to move FMEs to FMPs and incorporate new flood management solutions should have a quicker turn-around time to allow timely inclusion in an approved Regional Flood Plan. Note – TWDB has recently clarified and communicated the process to be followed by RFPGs in amending their regional flood plans.
8.3.9	Provide applicable data sources and a methodology to determine infrastructure functionality and deficiencies for use in the next regional flood planning cycle. 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 flood and drainage infrastructure. Some fields in the tables required by TWDB require data that is generally not readily available without extensive field work (e.g., mapping, conditions assessments, risk/consequence of failure, etc.).
8.3.10	Include the reimbursement of costs all	Many RFPGs have had to rent or purchase

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	<p>pertinent and justified needs associated with the conduct of RFPG meetings and other meetings (e.g., RFPG committees, public meetings). A specific example are costs for audio and visual equipment purchases or rentals that is required for hybrid and/or virtual meetings.</p>	<p>A/V equipment in order to conduct virtual/hybrid meetings in a manner that conforms with requirements of the Texas Open Meetings Act. Given the large geographic areas spanned by the flood planning regions and the availability of technology for virtual/hybrid meetings, many RFPG members have come to prefer to not have to travel to attend meetings. Virtual/hybrid meetings also increase opportunities for public and stakeholder participation in the regional flood planning process. Expenses incurred to conduct virtual/hybrid meetings in a manner compliant with the Open Meetings Act should not have to be absorbed by RFPG sponsors.</p>
8.3.11	Other?	