Chapter 9: Flood Infrastructure Financing Analysis

The Texas Water Development Board (TWDB) requires that each Regional Flood Planning Group (RFPG) assess and report on how sponsors propose to finance recommended Flood Management Evaluations (FMEs), Flood Management Strategies (FMSs), and Flood Mitigation Projects (FMPs). This chapter will focus on understanding the funding needs of the Trinity RFPG's sponsors and recommend what role the state should have in financing the recommended FMEs, FMSs, and FMPs.

This chapter presents an overview of common sources of funding for flood mitigation planning, projects, and other flood management efforts. It then describes the methodology and results of the financing survey.

Sources of Potential Funding for Flood Management Activities

Communities, counties, and entities with flood-related authority or responsibility across the state utilize a variety of funding sources for their flood management efforts, including local, state, and federal sources. This section discusses some of the most common avenues of generating local funding, as well as various state and federal financial assistance programs available to communities. ***Table 9.1*** summarizes the local, state, and federal funding sources presented in this chapter, and characterizes each by the following three key parameters:

- Which state and federal agencies are involved with the funding, if applicable
- Whether the funding offers grants, loans, or both
- Whether the funding is classified as a regularly occurring opportunity or is only available after a disaster

Local Funding

Through the Trinity RFPG's initial stakeholder outreach efforts, the Trinity Region sought to understand the landscape of local funding for flood efforts in the region. Many communities, particularly smaller and more rural communities, reported that they did not have any local funding sources for flood management activities. Those communities who reported having local funding indicated the following primary sources:

- General fund
- Dedicated fees, such as stormwater or drainage utility fees
- Bonds

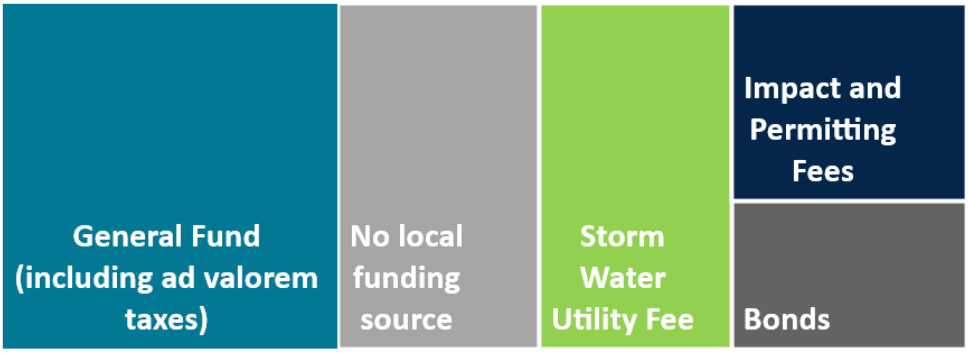
Table 9.1: Common Sources of Flood Funding in Texas

Source	Federal Agency	State Agency	Program Name	Grant (G)	Loan (L)	Post-Disaster (D)
Local			General fund			
			Bonds			
			Stormwater or drainage utility fee			
			Special purpose district taxes and fees			
State		TWDB	Flood Infrastructure Fund (FIF)	G	L	
		TWDB	Texas Water Development Fund (Dfund)		L	
		TSSWCB	Operation and Maintenance (O&M) Grant Program	G		
		TSSWCB	Flood Control Dam Infrastructure Projects - Supplemental Funding	G		
		TSSWCB	Structural Dam Repair Grant Program	G		
Federal	FEMA	TWDB	Flood Mitigation Assistance (FMA)	G		
	FEMA	TDEM	Building Resilient Infrastructure and Communities (BRIC)	G		
	FEMA	TCEQ	Rehabilitation of High Hazard Potential Dam Grant Program (HHDP)	G		
	FEMA	TBD[3]	Safeguarding Tomorrow through Ongoing Risk Mitigation (STORM)		L	
	FEMA	TDEM	Hazard Mitigation Grant Program (HMGP)	G		D
	FEMA	TDEM	Public Assistance (PA)	G		D
	FEMA		Cooperating Technical Partners (CTP)	G		
	HUD	GLO	Community Development Block Grant – Mitigation (CDBG-MIT)	G		D
	HUD	GLO	Community Development Block Grant Disaster Recovery Funds (CDBG-DR)	G		D
	HUD	TDA	Community Development Block Grant (TxCDBG) Program for Rural Texas	G		
	USACE		Partnerships with USACE, funded through Continuing Authorities Program (CAP), Water Resources Development Acts (WRDA), or other legislative vehicles[1]			
	EPA	TWDB	Clean Water State Revolving Fund (CWSRF)	G[2]	L	

[1]Opportunities to partner with USACE are not considered grant or loan opportunities, but shared participation projects where USACE performs planning work and shares in the cost of construction.
[2]The CWSRF program offers principal forgiveness, which is similar to grant funding.
[3]To be determined

Figure 9.1 presents these results visually, indicating how stakeholders responded when asked about their local funding sources for flood management activities. The relative size of the box represents the relative response rate for each local source, with the larger boxes indicating greater utilization of the source. It is important to note that these results are self-reported and do not include a response from every community in the region.

Figure 9.1: Local Funding Sources Utilized by Communities in the Trinity Region



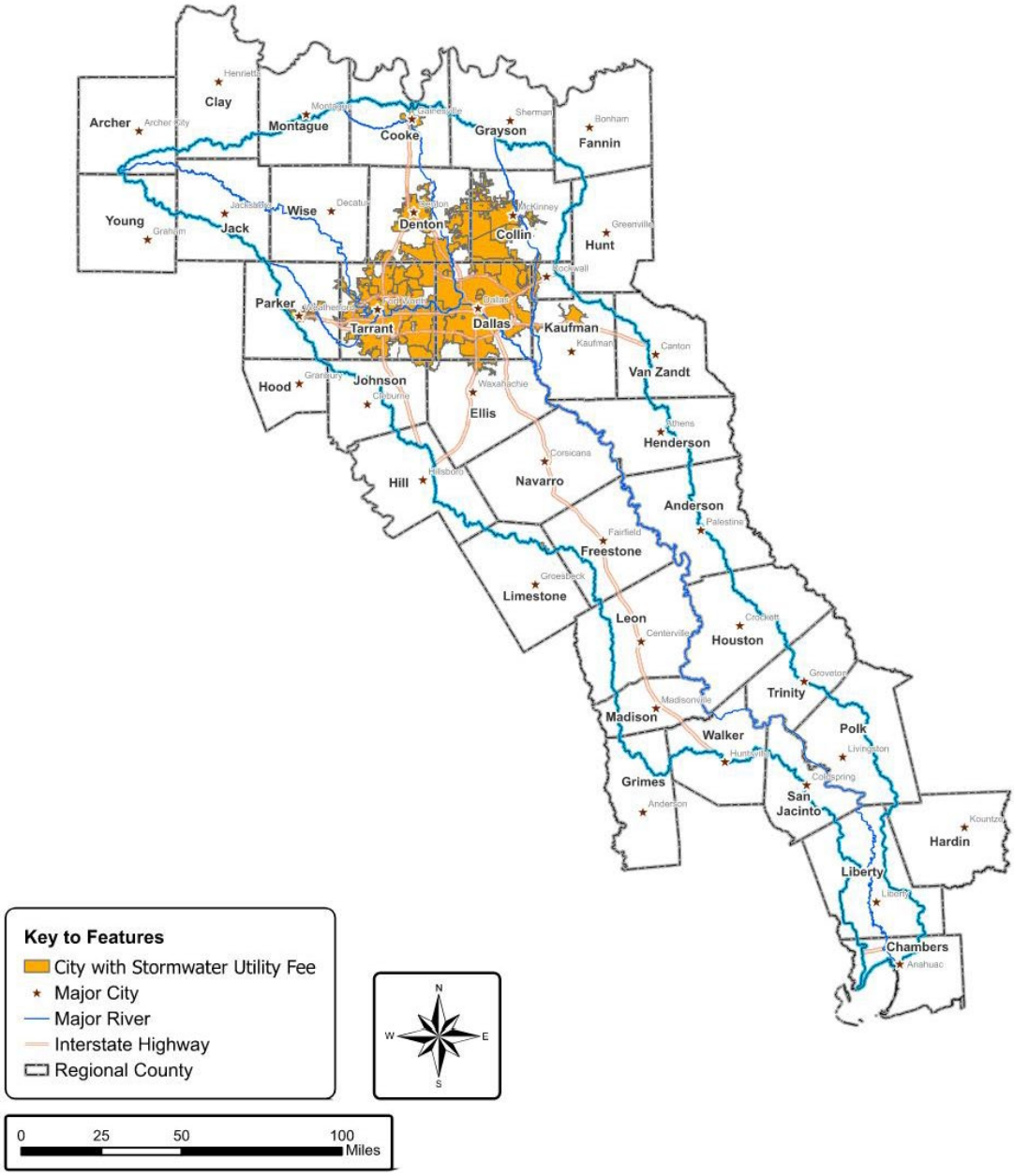
This section primarily focuses on the funding mechanisms available to municipalities and counties, as a large majority of the FME, FMS, and FMP sponsors are these types of entities. Special purpose districts are briefly discussed as there may be opportunities to create more of these types of districts in the region. River authorities typically generate their own revenue from fees charged to users for selling water, electricity, wastewater treatment, and other services.

A community's general (for cities or counties) revenue fund stems from sales, property, and other taxes and is typically the primary fund used by a local governmental entity to support most departments and services such as police, fire, parks, trash collection, and local government administration. Due to the high demands on this fund for many local needs, the general fund often is not often a viable option to provide a significant amount of funding for flood projects. State agencies including TWDB, Texas State Soil and Water Conservation Board (TSSWCB), Texas Department of Emergency Management (TDEM), Texas Commission on Environmental Quality (TCEQ), Texas General Land Office (GLO), and Texas Department of Agricultural (TDA), as well as federal agencies such as the Federal Emergency Management Agency (FEMA), United States Department of Housing and Urban Development (HUD), United States Army Corps of Engineers (USACE), and Environmental Protection Agency (EPA), offer many common sources of flood funding.

Dedicated stormwater or drainage fees are an increasingly popular tool for local flood-related funding. Municipalities can establish a Stormwater Utility (SWU), sometimes called a drainage utility, which is a legal mechanism used to generate revenue to finance a city's cost to provide and manage stormwater services. According to the 2020 Western Kentucky University

Stormwater Utility Survey, 62 entities within the Trinity Region have a SWU fee, while 266 entities do not have a SWU (Campbell, 2020). Entities that have SWU fees are shown in orange in ***Figure 9.2.*** To provide these services, municipalities assess fees to users of the stormwater utility system. Impact fees, which are collected from development to cover a portion of the expense to expand municipal storm water systems necessitated by the new development, can also be used as a source of local funding for flood-related efforts.

Figure 9.2: Entities within the Trinity Region that have a Stormwater Utility



Another source for local funding to support flood management efforts includes special districts. A special district is a political subdivision established to provide a single public service (such as water supply, drainage, or sanitation) within a specific geographic area. Examples of these special districts include Water Control and Improvement Districts (WCID), Municipal Utility Districts (MUD), Drainage Districts (DD), and Flood Control Districts (FCD). Each of these different types of districts are governed by different state laws, which specify the authorities and process for creating a district. Districts can be created by various entities, including the Texas Legislature, the TCEQ, county commissioners' courts, or city councils. Some types of districts may have the ability to raise revenue through taxes, fees, or bonds to fund flood and drainage-related improvements within their jurisdiction.

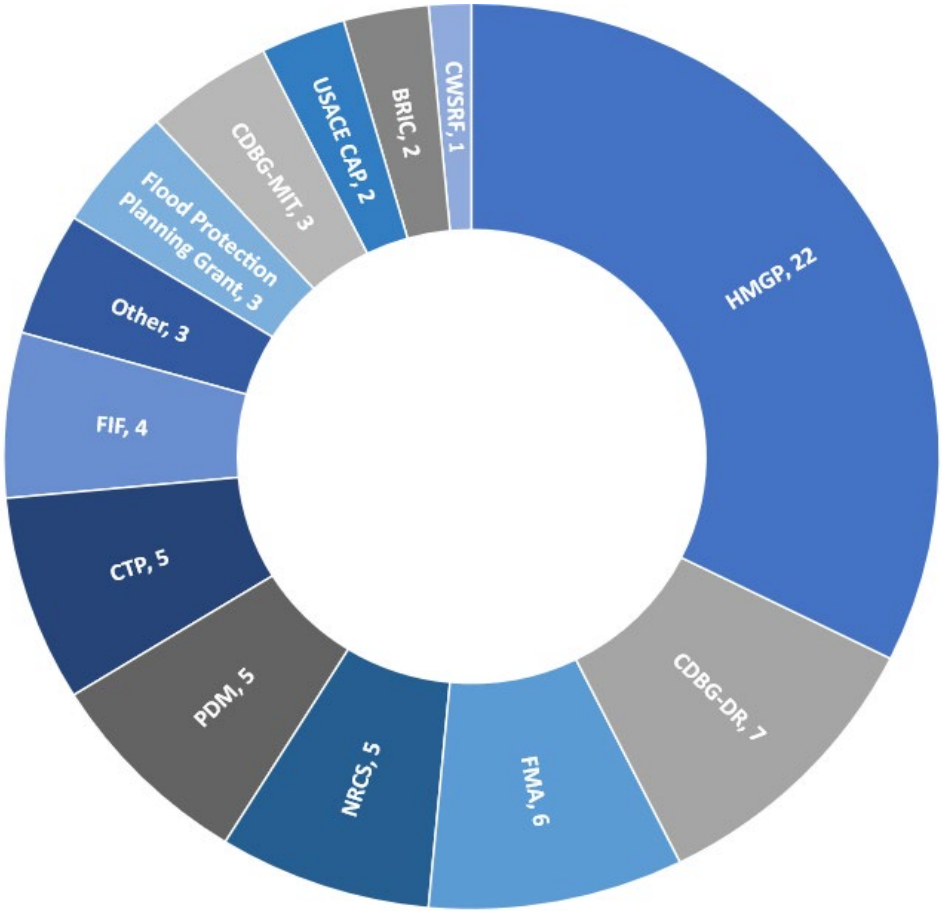
Lastly, municipalities and counties have the option to issue debt through general obligation bonds, revenue bonds, or certificates of obligation, which are typically paid back using any of the previously mentioned local revenue mechanisms.

Overall, local governments have various options for raising revenue to support local flood-related efforts; however, each avenue presents its own unique challenges and considerations. It is important to note that municipalities have more authority to establish various revenue raising options in comparison to counties. Of the communities that have access to local funding, the amount available is generally much lower than the total need, leading local communities to seek out state and federal financial assistance programs.

State Funding

Today, communities have a broader range of state and federal funding sources and programs available thanks to new grant and loan programs that did not exist even five years ago. Currently, two primary state agencies are involved in providing state funding for FMPs: the TWDB and the TSSWCB. ***Figure 9.3*** depicts how many local communities responded when asked what state and federal funding sources they have obtained to implement flood management activities. It is important to note that state and federal financial assistance programs discussed herein are not directly available to homeowners and the general public. Local governments may apply on behalf of their communities to receive and implement funding for FMPs within their jurisdiction.

Figure 9.3: State and Federal Funding Sources Utilized by Local Communities in the Trinity Region



The TWDB's FIF is a new funding program passed by the Texas Legislature and approved by Texas voters through a constitutional amendment in 2019. The program provides financial assistance in the form of low or no interest loans and grants (cost match varies) to eligible political subdivisions for flood control, flood mitigation, and drainage projects. FIF rules allow for a wide range of FMPs, including structural and nonstructural projects, planning studies, and preparedness efforts such as flood early warning systems. After the first State Flood Plan is adopted, only projects included in the most recently adopted state plan will be eligible for funding from the FIF. FMEs, FMSs, and FMPs recommended in this regional flood plan will be included in the overall State Flood Plan, and the sponsor for a particular recommended action will be eligible to apply for this funding source. The Flood Protection Planning Grant referenced in ***Table 9.1*** has been replaced by the FIF Category 1 planning grants.

The TWDB also manages the Dfund program, which is a state-funded, streamlined loan program that provides financing for several types of infrastructure projects to eligible political subdivisions. This program enables the TWDB to fund projects with multiple eligible

components (water supply, wastewater, or flood control) in one loan at a low interest rate. Financial assistance for flood control may include structural and nonstructural projects, planning efforts, and flood warning systems.

The TSSWCB has three state-funded programs specifically for flood control dams:

- O&M grant program
- Flood Control Dam Infrastructure Projects - supplemental funding program
- Structural Repair Grant program

The O&M grant program provides grants for local soil and water conservation districts (SWCDs) and certain co-sponsors of flood control dams. This program reimburses SWCDs 90 percent of the cost of an eligible O&M activity as defined by the program rules; the remaining 10 percent must be paid with non-state funding. The Flood Control Dam Infrastructure Projects - Supplemental Funding program was created and funded in 2019 by the Texas Legislature. Grants are provided to local sponsors of flood control dams, including SWCDs, to fund the repair and rehabilitation of the flood control structures, to verify dams meet safety criteria to adequately protect lives downstream. The Structural Repair Grant program provides state grant funds that cover up to 95 percent of the cost of allowable repair activities on dams constructed by the United States Department of Agriculture - Natural Resources Conservation Service (USDA-NRCS), including match funding for federal projects through the Dam Rehabilitation program and the Emergency Watershed Protection (EWP) program of the Texas NRCS.

Federal Funding

Federal funding currently accounts for a large share of total available funding for flood projects throughout the state and region, with federal funding programs having greater access and availability to large funding amounts appropriated by Congress. Commonly utilized funding programs administered by seven different federal agencies are discussed in this section. The funding for these programs originates from the federal government. For many of the programs, a state agency partner plays a key role in the management of the program. Each funding program has its own unique eligible applicants, project types, requirements, and application and award timelines. More information regarding each program and these details can be found at the links below.

Federal Emergency Management Agency

Common FEMA-administered flood-related funding programs include:

- FMA
- BRIC
- HHPD grant program
- STORM
- HMGP
- PA program
- CTP program

FMA is a nationally competitive grant program that provides funding to states, local communities, federally recognized tribes, and territories. FMA is administered in Texas by the TWDB. Funds can be used for projects that reduce or eliminate the risk of repetitive flood damage to buildings insured by the National Flood Insurance Program (NFIP). Funding typically includes a 75 percent federal grant with a 25 percent local match. Projects mitigating repetitive loss and Severe Repetitive Loss (SRL) properties may be funded through a 90 percent federal grant and 100 percent federal grant, respectively. FEMA's FMA program now includes a disaster initiative called Swift Current. The program was released as a pilot initiative in 2022 and explored ways to make flood mitigation assistance more readily available during disaster recovery. Similar to a traditional FMA, the Swift Current program mitigates repetitive losses and substantially damaged buildings insured under the NFIP.

BRIC is a new nationally competitive grant program implemented in 2020. The program supports states, local communities, tribes, and territories as they undertake Hazard Mitigation Projects (HMPs), reducing the risks they face from disasters and natural hazards. BRIC is administered in Texas by the TDEM. Funding is typically a 75 percent federal grant with a 25 percent local match. Small, impoverished communities and United States island territories may seek funds through a 90 percent federal grant and 100 percent federal grant, respectively.

STORM is a new revolving loan program enacted through federal legislation in 2021 to provide needed and sustainable funding for HMPs. The program is designed to provide capitalization grants to states to establish revolving loan funds for projects to reduce risks from disaster, natural hazards, and other related environmental harm. At the time of the publication of this plan, the program does not yet appear to be operational and has not yet been implemented in Texas.

FEMA’s HHPD grant program, administered in Texas by the TCEQ, provides technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible high hazard potential dams. The cost share requirement is typically no less than 35 percent for either the state or local agency.

Under the HMGP, FEMA provides funding to state, local, tribal, and territorial governments so they can rebuild from a recent disaster in a way that reduces, or mitigates, future disaster losses in their communities. The program is administered in Texas by TDEM. Funding is typically a 75 percent federal grant with a 25 percent local match. While the program is associated with Presidential Disaster Declarations, the HMGP is not a disaster relief program for individual disaster victims or a recovery program that funds repairs to public property damaged during a disaster. The key purpose of HMGP is to make certain that the opportunity to take critical mitigation measures to reduce the risk of loss of life and property from future disasters is not lost during the reconstruction process following a disaster.

FEMA's PA program provides supplemental grants to state, tribal, territorial, and local governments, as well as certain types of private non-profits following a declared disaster so communities can quickly respond to and recover from major disasters or emergencies through actions such as debris removal, life-saving emergency protective measures, and restoring public infrastructure to its pre-disaster condition. Funding cost share levels are determined for each disaster and are typically not less than 75 percent federal grant (25 percent local match) and typically not more than 90 percent federal grant (10 percent local match). In Texas, FEMA PA is administered by TDEM. In some situations, FEMA may fund mitigation measures as part of the repair of damaged infrastructure. Generally, mitigation measures are eligible if they directly reduce future hazard impacts on damaged infrastructure and are cost-effective. Funding is limited to eligible damaged facilities located within PA-declared counties.

The CTP program is an effort launched by FEMA in 1999 to increase local involvement in developing and updating FIRMs, Flood Insurance Study reports, and associated geospatial data in support of FEMA's Risk Mapping, Assessment, and Planning (Risk MAP) program. To participate in the program, interested NFIP-participating communities, (state or regional agencies, universities, territories, tribes, or nonprofits), must complete training and execute a partnership agreement. Working with the FEMA regions, a program participant can develop business plans and apply for grants to perform eligible activities.

United States Department of Housing and Urban Development

HUD administers the following three federal funding programs:

- CDBG-DR
- CDBG-MIT
- TxCDBG for rural Texas

Following a major disaster, Congress may appropriate funds to the HUD under the CDBG-DR program when there are significant unmet needs for long-term recovery. Appropriations for CDBG-DR are frequently very large, and the program provides 100 percent grants in most cases. The CDBG-DR is administered in Texas by the Texas GLO. The special appropriation provides funds to the most impacted and distressed areas for disaster relief, long term-recovery, restoration of infrastructure, housing, and economic revitalization.

CDBG-MIT is administered in Texas by the GLO. Eligible grantees can use CDBG-MIT assistance in areas impacted by recent disasters to carry out strategic and high-impact activities to mitigate disaster risks. The primary feature differentiating CDBG-MIT from CDBG-DR is that, unlike CDBG-DR which funds recovery from a recent disaster to restore damaged services, systems, and infrastructure, CDBG-MIT funds are intended to support mitigation efforts to rebuild in a way which will lessen the impact of future disasters.

The CDBG program provides annual grants on a formula basis to small, rural cities and counties to develop viable communities by providing decent housing and suitable living environments. It also expands economic opportunities principally for persons of low- to moderate-income. Funds can be used for public facilities such as water and wastewater infrastructure, street and drainage improvements, and housing. In Texas, the CDBG program is administered by the TDA.

United States Army Corps of Engineers

The USACE works with non-federal partners (states, tribes, counties, or local governments) throughout the country to investigate water resources and related land problems and opportunities. If warranted, they develop civil works projects that would otherwise be beyond the sole capability of the non-federal partner(s). Partnerships are typically initiated or requested by the local community to their local USACE district office. Before any project or study can begin, USACE determines whether there is an existing authority under which the project could be considered, such as the USACE CAP, or whether Congress must establish study or project authority and appropriate specific funding for the activity. New study or project authorizations are typically provided through periodic WRDA or via another legislative vehicle. Congress will not provide project authority until a completed study results in a recommendation to Congress of a water resources project, conveyed via a Report of the Chief of Engineers (Chief's Report) or a Report of the Director of Civil Works (Director's Report). Opportunities to partner with USACE are not considered grant or loan opportunities, but shared participation projects where USACE performs planning work and shares in the cost of construction. USACE also has technical assistance opportunities, including Floodplain Management Services, Silver Jackets team, and the Planning Assistance to States program, available to local communities.

Environmental Protection Agency

The CWSRF provides financial assistance in the form of loans with subsidized interest rates and opportunities for partial principal forgiveness for planning, acquisition, design, and construction of wastewater, reuse, and stormwater mitigation infrastructure projects. Projects can be structural or non-structural. Low Impact Development (LID) projects are also eligible. The CWSRF is administered in Texas by the TWDB.

United States Department of Agriculture

The USDA's NRCS provides technical and financial assistance to local government agencies through the following programs: EWP program, Watershed Protection and Flood Prevention program, watershed surveys and planning, and watershed rehabilitation. The EWP program, a federal emergency recovery program, helps local communities recover after a natural disaster by offering technical and financial assistance to relieve imminent threats to life and property caused by floods and other natural disasters that impair a watershed. The Watershed

Protection and Flood Prevention program helps units of federal, state, local, and tribal government protect and restore watersheds to prevent erosion, floodwater, and sediment damage; to further the conservation development, use, and disposal of water; and to further the conservation and proper use of land in authorized watersheds. The focus of Watershed Surveys and Planning program is funding the development of watershed plans, river basin surveys and studies, flood hazard analyses, and floodplain management assistance aimed at identifying solutions that use land treatment and nonstructural measures to solve resource problems. Lastly, the Watershed Rehabilitation program helps project sponsors rehabilitate aging dams that are reaching the end of their design lives. This rehabilitation addresses critical public health and safety concerns. The USDA also offers various water and environmental grant and loan funding programs, which can be used for water and waste facilities, including stormwater facilities, in rural communities.

Special Appropriations

On occasion, and when the need is large enough, Congress may appropriate funds for special circumstances, such as natural disasters or pandemics (COVID-19). A few examples of recent special appropriations from the federal government that can be used to fund flood-related activities include:

- American Rescue Plan Act (ARPA)
- Infrastructure Investment and Jobs Act (IIJA)/Bipartisan Infrastructure Law (BIL)

In 2021, the ARPA provided for a substantial infusion of resources to eligible state, local, territorial, and tribal governments to support their response to and recovery from the COVID-19 pandemic. Coronavirus State and Local Fiscal Recovery Funds (SLFRF), a part of ARPA, delivers $350 billion directly to state, local, and tribal governments across the country (Coronavirus State and Local Fiscal Recovery Funds, 2022). Communities have significant flexibility to meet local needs within the eligible use categories, one of which includes improving stormwater facilities and infrastructure as an authorized use. Eligible entities may request their allocation of Coronavirus SLFRP directly from the United States Department of Treasury.

Although not a direct appropriation to local governments like ARPA, the 2021 IIJA, also called the BIL, authorized over $1 trillion for infrastructure spending across the United States and provides for a significant infusion of resources over the next several years into existing federal financial assistance programs, including several of the flood funding programs discussed herein, as well as creating new programs.

Barriers to Funding

Local communities in the Trinity Region identified several barriers to accessing or seeking funding sources for flood management activities, including lack of knowledge of funding sources, lack of expertise to apply for funding, lack of resources to prepare funding applications, lack of expertise to manage funding awards when received, and lack of funds available for local match requirements. Unlike other types of infrastructure projects, flood projects do not typically generate revenue and many communities do not have steady revenue streams to fund flood projects. Consequently, communities struggle to generate funds for local match requirements or loan repayment. Complex or burdensome application or program requirements, as well as prolonged timelines also act as barriers to accessing state and local financial assistance programs. Of those communities that can overcome these barriers, apply for funding, and generate local resources for match requirements, the high demand for state and federal funding, particularly for grant opportunities, means that the need exceeds available funds, leaving many local communities without the resources they need to address flood risks.

Flood Infrastructure Financing Survey

Flood Infrastructure Financing Survey Methodology

The Trinity RFPG performed a survey of the sponsors for the recommended FMEs, FMPs, and FMSs. The Trinity RFPG primarily used email to send the surveys to the sponsors. When email addresses were unavailable, additional outreach such as phone calls were used to obtain emails. As a last resort, the Trinity RFPG mailed surveys or used other means of collecting the required information. The primary aim of this survey effort was to understand the funding needs of local sponsors and obtain feedback regarding the role the state should have in financing the recommended FMEs, FMSs, and FMPs.

The Trinity RFPG collected information from sponsors by creating a survey through mail merge and sending it through email. Mail merge allowed the Trinity RFPG to automate a batch of emails that were personalized for each sponsor by linking a main template to a data source. The main template contained the text that was the same for each survey, while the data source was a file containing all the information to be merged into the survey and the sponsor's email address. An example of the survey emailed out to sponsors is shown in ***Figure 9.4***.

Figure 9.4: Flood Infrastructure Financing Survey Example

Hello Sponsor,

We are reaching out to you because there are one or more actions for your community that will be listed in the Trinity regional flood plan, and we need your help to identify how much state or federal funding you may need to implement these projects.

Please reply to this email and fill out the drop-down menu in the table below for each of your entities' Flood Mitigation Actions by June 28, 2022. Please note the percent funding financed by sponsor and other funding needed must equal 100%. For more information regarding your Flood Mitigation Actions, visit the following link: RFP Region 3 - FMX Summaries by Sponsor . If we do not receive a response, we will assume that 90% of the cost for that action will need other funding (including state, federal and/or other funding).

The Texas Water Development Board (TWDB) designated 15 regional flood planning areas each of which began with a designated regional flood planning group that will develop a regional flood plan for their region by January 2023. TWDB will bring the regional flood plans together to produce the first State Flood Plan by September 1, 2024. Entities must have their project listed in the State Flood Plan to receive state funding for a proposed flood project. As part of the regional flood planning process, RFPGs must indicate how sponsors will propose to finance recommended Flood Mitigation Actions included in the Flood Plan[1]. Flood Mitigation Actions include Flood Management Evaluation (FME), Flood Mitigation Strategy (FMS), and Flood Mitigation Project (FMP)[2].

There is no commitment associated with being a sponsor for an action in the plan, this is just a planning level study.

Flood Mitigation Action ID	Flood Mitigation Action Type[2]	Flood Mitigation Action Name	Flood Mitigation Action Description	Flood Mitigation Action Total Estimated Cost*	Sponsor Funding		Other Funding Needed** (including state, federal and/or other funding)
					Anticipated Source of Sponsor Funding	Percent Funding to be Financed by Sponsor**	
032000095	FMS	Floodplain Regulatory Awareness Public Information Campaign	Rewrite, improve, and implement new local floodplain regulations, to include a public information campaign on regulatory awareness	$50,000	General Revenue	90%	10%
032000058	FMS	Acquisition of Repetitive Loss Properties	Acquire repetitive flood loss properties and properties prone to flooding in the Deep River Plantation Subdivision	$5,000,000	Choose an item.	Choose an item.	Choose an item.
032000070	FMS	Voluntary Buyout Program	The county and partnering jurisdictions will begin a voluntary buyout program for insured severe repetitive loss properties that are in the floodplain	$5,000,000	Choose an item.	Choose an item.	Choose an item.
031000033	FME	FEMA Mapping	Create FEMA mapping in previously unmapped areas and update existing FEMA maps as needed.	$1,276,000	Choose an item.	Choose an item.	Choose an item.

**Costs are based on high level engineering estimates and assumptions.*

***Percent funding financed by sponsor and other funding needed MUST equal 100%.*

During the mail merge process, a personalized table of recommended FMEs, FMSs, and FMPs was generated for each sponsor. The table included the identification number, type, name, description, and total estimated cost for each FME, FMS, and FMP listed. Additionally, a link was provided where sponsors could navigate to their one-page report summaries for more information about their FMEs, FMSs, and FMPs (***Appendices E, F and G***). After receiving the email, sponsors were asked to reply to the survey by selecting from the drop-down menu of possible answers under the financing columns. Sponsors could select a percentage between zero percent to 100 percent (in five percent increments) under the 'Percent Funding to be Financed by Sponsor' and 'Other Funding Needed' columns for each FME, FMS, and/or FMP.

Drop-down menu options for 'Anticipated Source of Sponsor Funding' included:

- Taxes
- General revenue
- Dedicated revenue inclusion fees
- Entity budget/funds
- Donations
- Bonds/other financing
- Other
- To be determined

The Trinity RFPG scheduled phone call survey meetings with sponsors to address any questions or concerns, resulting from the funding survey. Additionally, the Trinity RFPG followed up with sponsors who did not initially respond to the funding survey to improve the response rate.

Following the Draft Plan submittal in the Fall of 2022, the Trinity RFPG performed two additional rounds of phone calls to sponsors. These phone calls aimed to confirm the correct e-mail addresses in which to send the Financing Survey. These phone calls also allowed the Trinity RFPG to answer any sponsor questions and encourage them to respond to the survey.

Flood Infrastructure Financing Survey Results

The flood infrastructure funding survey was sent to 158 sponsors of recommended FMEs, FMSs, and FMPs, with capital costs identified for each. The primary goal of this survey effort was to understand the funding needs of local sponsors and then propose what role the state should have in financing the recommended FMEs, FMSs, and FMPs. Of the 158 entities surveyed, 29 responded. This represents a response rate of 18 percent. ***Appendix A*** presents the results of the survey for each FME, FMS, and FMP in the ***TWDB-Required Table 19***. The response rate for the survey does not represent a significant percentage of respondents and, therefore, does not accurately represent the total need for state and federal funding in the Trinity Region. With additional time provided in the second cycle of regional flood planning, the Trinity RFPG

anticipates that a greater response rate may be obtained through additional outreach efforts such as follow-up emails, phone calls, and meetings.

The Trinity RFPG assumed that those sponsors who did not respond to the survey would need 90 percent of the total project costs to be funded by state and/or federal sources. This represents an average of 10 percent projected local investment in projects. A high percentage of outside need is supported by the initial outreach efforts discussed in earlier in this chapter, which confirmed that many communities, particularly smaller and more rural communities, do not have any local funding available for flood management activities. Those communities that reported having local funding indicated relatively little local funding available in relation to the overall need.

Overall, there is a total cost of $1,076,686,000 needed to implement the recommended FMEs, FMSs, and FMPs in this regional flood plan. From the total cost, it is projected that $966,309,000 of state and federal funding is needed. This number does not represent the amount of funding needed to mitigate all risks in the region and solve flooding problems in their entirety. This number simply represents the funding needs for the specific, identified studies, strategies, and projects in this cycle of regional flood planning. Future cycles of regional flood planning will continue to identify more projects and studies needed to further flood mitigation efforts in the Trinity Region.

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