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AGENDA ITEM MEMO

BOARD MEETING DATE: April 11, 2024

TO: Board Members

THROUGH: Bryan McMath, Interim Executive Administrator
Ashely Harden, General Counsel
Rebecca Trevino, Chief Financial Officer
John T. Dupnik, P.G., Deputy Executive Administrator, Water Science and Conservation

FROM: Saul Nuccitelli, PE., Director, Flood Science and Community Assistance
Kathy Hopkins, Manager, Grant Coordination

SUBJECT: Fiscal Year 2022 Flood Mitigation Assistance grant program

ACTION REQUESTED

Consider authorizing the Executive Administrator to execute contracts as approved and directed by the Federal Emergency Management Agency in a total amount not to exceed \$270 million for subgrants from the Fiscal Year 2022 Flood Mitigation Assistance grant program upon notification of award.

BACKGROUND

The Texas Water Development Board (TWDB) administers the Federal Emergency Management Agency's (FEMA) Flood Mitigation Assistance (FMA) grant program for the State of Texas and serves as the point of contact for the distribution of these federal grants for mitigation planning and project implementation. The TWDB administers, manages, and provides technical assistance to Texas communities during all phases of the grant cycle to ensure successful flood mitigation outcomes. The goal of the FMA grant program is to provide federal funding to political subdivisions to mitigate flood damages and prevent

Our Mission	:	Board Members
Leading the state's efforts in ensuring a secure water future for Texas	:	Brooke T. Paup, Chairwoman George B. Peyton V, Board Member L'Oreal Stepney, P.E., Board Member Bryan McMath, Interim Executive Administrator

future losses associated with Severe Repetitive Loss, Repetitive Loss, substantially damaged, or other types of structures insured under the National Flood Insurance Program (NFIP) through mitigation projects and long-term comprehensive mitigation planning.

Grant applications funded for FMA must meet several eligibility requirements and follow specific funding criteria:

- Sub-applicants must be participants in the NFIP, and properties included in project proposals must have and maintain NFIP flood insurance.
- FEMA may contribute up to 100 percent of the total eligible cost for mitigation of Severe Repetitive Loss¹ structures through acquisition, relocation, demolition, elevation, mitigation reconstruction, and flood-proofing of historical structures.
- FEMA may contribute up to 90 percent of the total eligible cost for mitigation of Repetitive Loss² structures or if the structure(s) being mitigated has a Centers for Disease Control and Prevention's (CDC) Social Vulnerability Index (SVI)³ of 0.5001 or higher through acquisition, relocation, demolition, elevation, mitigation reconstruction, flood-proofing of historical structures, project scoping, or community flood mitigation projects (e.g. localized flood risk reduction projects or stormwater management).
- FEMA may contribute up to 75 percent of the total eligible cost for mitigation of all other structures insured through the NFIP, project scoping, community flood mitigation projects, or for mitigation planning grants.
- Projects require a Benefit-Cost Ratio of 1.0 or higher as determined by FEMA's Benefit-Cost Analysis software or other FEMA-approved methodology.

The Fiscal Year (FY) 2022 FMA Notice of Funding Opportunity identified the availability of \$800 million nationally in funding. The funding increase from \$200 million to \$800 million is due to additional funds appropriated through the Infrastructure Investment and Jobs Act of 2021 (IIJA). Also, IIJA funding allows for an increase in federal cost share when the mitigation activity mitigates individual properties, or the benefit area has a Centers for Disease Control and Prevention Social Vulnerability Index score of not less than 0.5001.

¹A Severe Repetitive Loss property is a structure that has incurred either (i) four or more claim payments exceeding \$5,000 per claim, and with a cumulative amount exceeding \$20,000, or (ii) two separate building claim payments with a cumulative amount exceeding the market value of the insured structure.

²A Repetitive Loss property is a structure that has incurred flood-related damage on two occasions in which the cost of the repair, on average, equaled or exceeded 25 percent of the market value of the insured structure at the time of each flood event.

³The FMA program also aims to promote equity in delivery of funds in line with the Federal Administration's Justice40 Initiative. In implementing the Justice40 Initiative, the FMA program is prioritizing assistance that benefits disadvantaged communities as referenced in Executive Order 14008. Individual structures or a benefit area with a CDC's SVI at the census tract level with a threshold of 0.7501 can receive a higher federal cost share up to 90% of the total project cost.

Pursuant to federal regulations and current FEMA guidance, the TWDB is responsible for administering the FMA grant program on behalf of FEMA and Texas communities. The TWDB submits all eligible sub-applications to FEMA to compete nationwide for final approval and funding authorization. Contracting responsibilities and implementation oversight through agreement closeout are then performed by the TWDB once funding approval is received from FEMA.

KEY ISSUES

For the FY 2022 round of funding, the TWDB submitted 41 sub-applications to FEMA for a total federal funding request of \$226.40 million (Attachment 1). FEMA notified the TWDB that 37 of the 41 sub-applications (Attachment 2), totaling approximately \$197.66 million in federal funding with a community match requirement of \$50.04 million for a total project cost of \$247.69 million, were “Identified for Further Review.” FEMA defines “Identified for Further Review” as the sub-applications that have been selected for funding (award) once all pre-award activities are completed. Texas received over a fourth of the federal funding selected by FEMA this grant cycle.

It is projected that approximately 120,000 floodprone structures will benefit from the 37 community sub-applications selected for funding. The 37 community sub-applications are composed of the following mitigation types: development of Hazard Mitigation Plans, scoping projects, elevation projects, localized flood reduction projects (drainage or stormwater), or acquisition projects. Attachment 3 provides further sub-application details including mitigation activity description.

In addition to the 37 selected community sub-applications, FEMA also selected TWDB’s Management Cost sub-application of \$8,986,966 in federal funds. The required state general revenue match is estimated to be \$2,274,981, over the grant’s four-year period of performance. Management costs contribute to TWDB salaries, travel, and other administrative costs. FEMA has selected a total of 38 sub-applications with a total federal share of \$206.65 million, the highest federal share received nationwide (Table A). TWDB’s cost share requirement is determined by the overall federal percentage of the award community sub-applications. The final cost share percentage will be determined after all sub-applications have been awarded by FEMA.

FEMA may award increases in federal funds due to overruns caused by inflation or increased costs. This request is to execute contracts not to exceed \$270 million instead of the \$247.69 million to allow the Executive Administrator flexibility to execute contract amendments due to cost overruns as awarded by FEMA.

RECOMMENDATION

The Executive Administrator recommends approval to execute contracts as approved and directed by FEMA in a total amount not to exceed \$270 million for sub-grants from the FY 2022 FMA grant program upon notification of award.

Attachments:

1. Sub-application Rankings - FEMA's Priority Scoring Criteria
2. Flood Mitigation Assistance Fiscal Year 2022 Sub-application Status
3. Fiscal Year 2022 Flood Mitigation Assistance Sub-Application Descriptions

Attachment 1
Sub-application Rankings - FEMA's Priority Scoring Criteria

The Flood Mitigation Assistance Fiscal Year 2022 Notice of Funding Opportunity details the priority scoring criteria that each state uses to rank their sub-applications. FEMA's priority scoring criteria has four separate funding categories and each funding category has a priority scoring criteria matrix with points assigned ranging between 20-1090 total depending on the funding category.

Priority scoring uses the following factors when determining the point value: the number of National Flood Insurance Program insurance policies within the benefit area, number of severe repetitive loss and repetitive loss being affected, CDC Social Vulnerability Index, the extent climate change and other future conditions are being mitigated, incorporation of Nature-Based solutions into the mitigation project, private-partnership cost share, status of the community on NFIP's National Violation Tracker, Community Rating System participation, Cooperating Technical Assistance Partners Program Participation, whether the community has implementation measures incorporated into their project scope of work, and the number of substantial damaged structures being mitigated.

Each of the three funding categories uses a different make up of factors and have different point values that resulted in their scoring. Additionally, one category, individual property mitigation projects, had a first tier ranking system if more than 50% of their structures qualified as Severe Repetitive Loss or Repetitive Loss. Table A lists the ranking for the 41 sub-applications submitted to FEMA for consideration using the FEMA's priority scoring criteria.

Table A, FEMA's Priority Scoring Ranking.

Rank	Applicant	Short Title	Mitigation Type	Priority Scoring
1	Jefferson County Drainage District No. 7	JCDD7- Hazard Mitigation Plan Update	HMP	13
2	City of Bryan	City of Bryan Stormwater Master Plan	Project Scoping	18
3	Nassau Bay, City of	Nassau Bay Project Scoping FMA 2022	Project Scoping	17
4	Cameron County Drainage District No. 3	CCDD3/San Benito Drainage Master Plan - FMA - C&CB Project Scoping	Project Scoping	15
5	Jefferson County Drainage District No. 6	Hillebrandt Bayou	Project Scoping	13
6	Jefferson County Drainage District No. 6	Taylor Bayou	Project Scoping	13

Rank	Applicant	Short Title	Mitigation Type	Priority Scoring
7	Jefferson County Drainage District No. 6	Pine Island	Project Scoping	13
8	Friendswood, City of	Friendswood FMA 2022 Project Scoping for Flood Mitigation Projects	Project Scoping	12
9	Mission, City of	City of Mission Spike & Jupiter Drainage Engineering Design	Project Scoping	10
10	El Campo, City of	EL CAMPO Drainage Master Plan - FMA - C&CB Project Scoping	Project Scoping	10
11	Mineral Wells, City of	Mineral Wells FMA 2022 Project Scoping	Project Scoping	10
12	Jackson County	Cox's and Keller's Creek Drainage Master Plan FMA-C&CB Project Scoping	Project Scoping	10
13	Taylor Lake Village, City of	TLV FMA 2022 Project Scoping	Project Scoping	8
14	Medina County	C&CB Scoping for medina County- Climate resiliency & Floodplain Management	Project Scoping	7
15	Montgomery County	Project scoping Montgomery County Precinct 4 Flood Mitigation Projects	Project Scoping	5
16	Harris County Flood Control District	FY22 FMA - C-30 Tributary P118-27-00 Localized Flood Risk Reduction	Drainage	730
17	Jefferson County Drainage District No. 6	Jefferson County DD6 Bayou Din FMA 2022	Drainage	670
18	Harris County	A Harris County Precinct 4 FMA Application Sherwood Oaks Drainage Improvement Project	Drainage	620
19	Jersey Village, City of	Jersey Village Localized Flood Risk Reduction Flood Control	Drainage	590
20	Abilene, City of	City of Abilene Catclaw Creek Localized Flood Risk Reduction Flood Control	Drainage	483
21	Brazoria Drainage District No 4	BDD4 Hickory Slough Channel Improvement FMA 22	Drainage	478
22	Medina County	Medina County Localized Flood Risk Reduction & Climate Resiliency Project	Drainage	398
23	Silsbee, City of	Community Flood Mitigation Project for Timberlane Drainage	Drainage	386

Rank	Applicant	Short Title	Mitigation Type	Priority Scoring
24	Brazoria Drainage District No 4	BDD4 Cowart Creek Channel Modifications FMA 2022	Drainage	360
25	Orange County	Kinard Estates Drainage - Localized Flood Risk Reduction Project	Drainage	348
26	Silsbee, City of	Community Flood Mitigation Project for Hendricks Drainage	Drainage	320
27	Brazoria Drainage District No 4	BDD4 Cannon Ditch Channel Project FMA 2022	Drainage	284
28	West Brazoria County Drainage District No. 11	West Brazoria County Drainage District No. 11 Flood Mitigation Project	Drainage	1030
29	Conroe, City of	City of Conroe 3 Home Acquisition FMA 2022	Acquisition	NA
30	Jersey Village, City of	Jersey Village FY 22 FMA Home Elevation Grant #1	Elevation	NA
31	Bridge, City of	Elevation	Elevation	7
32	Conroe, City of	City of Conroe one Home Elevation FMA 2022	Elevation	NA
33	Houston, City of	COH FMA 22 (Pre-Calculated Benefits) Climate Resilient Elevation	Elevation	NA
34	Houston, City of	COH FMA 22 (BCA Tool) Climate Resilient Elevation of Flood Vulnerable Properties	Elevation	NA
35	Jersey Village, City of	Jersey Village FY 22 FMA Home Elevation Grant #2	Elevation	NA
36	Baytown, City of	Baytown FMA 2022 Home Elevation	Elevation	110
37	Orange County	Orange County Climate Resilient Elevations FY 2022	Elevation	NA
38	Jefferson County	Jefferson County FMA 2022 Elevation	Elevation	80
39	Longview, City of	Flood mitigation	Acquisition	9
40	Nassau Bay, City of	Nassau Bay Elevations FMA 2022	Elevation	20
41	Harris County Flood Control District	FMA 2022 HCFCD Buyout	Acquisition	80

ATTACHMENT 2

Flood Mitigation Assistance (FMA) Fiscal Year 2021 Sub-application Status

For Fiscal Year 2022, \$800 million was available nationwide for the FMA grant program. FEMA posted the Notice of Funding Opportunity on www.grants.gov for FMA grants with an application period from September 30, 2022, through January 27, 2023. The Federal Emergency Management Agency (FEMA) received 270 FMA sub-applications submitted by 28 states requesting over \$980.34 million in federal funding. FEMA completed their eligibility review in compliance with Hazard Mitigation Assistance Guidance and made selections based on the agency’s priorities and available funding. FEMA identified 230 FMA sub-applications for \$711 million in federal funding.

Table A, provides five sub-application types by the number of sub-applications and total funding amount selected nationwide and what TWDB received.

Uses of Flood Mitigation Assistance	Nationwide Number of Sub-applications Selected	TWDB Number of Sub-applications Selected	Nationwide Total Amount of Federal Cost Share	TWDB Total Amount of Federal Funding	TWDB Local Match Requirement
Localized Flood Risk Reduction Projects	22	10	\$378,754,296	\$151,346,266	\$46,578,486
Individual Property Mitigation Projects	127	12	\$263,703,514	\$38,952,504	\$2,487,482
Project Scoping	51	14	\$23,777,821	\$7,335,768	\$945,002
Technical Assistance/Flood Hazard Planning	7	1	\$477,375	\$25,000	\$25,000
Total Project Awards	207	37	\$666,713,007	\$197,659,538	\$50,035,969
State Management Costs	23	1	\$44,361,625	\$8,986,966	TBD
Totals	230	38	\$711,074,632	\$206,646,504	\$50,035,969

This summary from FEMA of the Fiscal Year 2022 FMA nationwide disposition announcement of selection (Table B) shows the status of the 41 Texas sub-applications along with the TWDB Management Cost sub-application for the Fiscal Year 2022 FMA application cycle. FEMA selected 37 community sub-applications along with the TWDB Management Cost sub-application for Texas as *Identified for Further Review* having a total federal share of \$206.65 million, the highest federal share received nationwide. Texas received over a fourth of the federal funding selected by FEMA this grant cycle.

Table B, Status of 41 TWDB-submitted sub-applications and the TWDB Management Cost sub-application (Data below was originally submitted in the application process and may change during pre-award)

Community Name	Sub-application Title	Federal Cost Share	FEMA's Sub-application Status
Jefferson County Drainage District No 7	Capability and Capacity Building Hazard Mitigation Plan Update - Jefferson County Drainage District 7	\$25,000.00	Identified for Further Review
Conroe, City of	City of Conroe Project Number One - Elevation	\$153,640.00	Identified for Further Review
Friendswood, City of	Friendswood Capability and Capacity Building Project Scoping for Flood Mitigation Projects	\$158,256.00	Identified for Further Review
Nassau Bay, City of	Nassau Bay Capability and Capacity Building Project Scoping	\$164,625.00	Identified for Further Review
Longview, City of	City of Longview - Acquisition	\$165,783.60	Identified for Further Review
Cameron County Drainage District No. 3	Cameron County Drainage District 3 / San Benito Drainage Master Plan - Project Scoping	\$367,254.00	Identified for Further Review
Taylor Lake Village, City of	Taylor Lake Village Capability and Capacity Building Project Scoping	\$420,000.00	Identified for Further Review
Mineral Wells, City of	Mineral Wells Capability and Capacity Building Project Scoping	\$472,500.00	Identified for Further Review
Medina County	Project Scoping for Medina County - Climate Resiliency & Floodplain Management	\$488,412.00	Identified for Further Review
El Campo, City of	El Campo Drainage Master Plan - Project Scoping Capability and Capacity Building	\$541,183.50	Identified for Further Review
Bryan, City of	City of Bryan Stormwater Master Plan Project Scoping	\$585,000.00	Identified for Further Review
Jackson, City of	Cox and Keller Creeks Drainage Master Plan - Capability and Capacity Building, Project Scoping	\$611,621.31	Identified for Further Review
Silsbee, City of	Localized Flood Risk Reduction Project for Timberlane Drainage - Flood Control	\$641,857.50	Identified for Further Review
Abilene, City of	City of Abilene Catclaw Creek Localized Flood Risk Reduction Flood Control	\$726,346.85	Identified for Further Review
Baytown, City of	City of Baytown - Elevation	\$749,700.00	Identified for Further Review

Community Name	Sub-application Title	Federal Cost Share	FEMA's Sub-application Status
Montgomery County	Project Scoping for the Montgomery County Precinct 4 Flood Mitigation Projects	\$789,075.00	Identified for Further Review
Jefferson County Drainage District No. 6	Project Scoping Jefferson County Drainage District 6 for Taylors Bayou	\$816,613.80	Identified for Further Review
Jefferson County Drainage District No. 6	Capability and Capacity Building - Project Scoping Jefferson County Drainage District 6 Pine Island	\$816,613.80	Identified for Further Review
Jefferson County Drainage District No. 6	Capability and Capacity Building Project Scoping Jefferson County Drainage District 6 For Hillebrandt Bayou	\$816,613.80	Identified for Further Review
Bridge City, City of	Bridge City - Elevation of Six Structures	\$943,745.09	Identified for Further Review
Orange County	Orange County - Elevation of Five Structures	\$1,014,750.51	Identified for Further Review
Conroe, City of	City of Conroe Project Number Two - Acquisition	\$1,521,076.00	Identified for Further Review
Houston, City of	City of Houston Project Number One - Elevation of Seven Flood Vulnerable Properties	\$1,837,487.29	Identified for Further Review
Silsbee, City of	Localized Flood Risk Reduction Project - City of Silsbee - Hendricks Drainage Flood Control	\$3,075,255.00	Identified for Further Review
Houston, City of	City of Houston Project Number Two - Elevation of 24 Flood Vulnerable Properties	\$3,696,320.97	Identified for Further Review
Jersey Village, City of	Jersey Village Application Number One - Elevation of 14 Homes	\$4,427,150.00	Identified for Further Review
Jersey Village, City of	Jersey Village Application Number Two - Elevation of 14 Homes	\$4,639,809.03	Identified for Further Review
Nassau Bay, City of	Nassau Bay - Elevation of 19 Residential Properties	\$4,952,476.02	Identified for Further Review
Jefferson County	Jefferson County Elevation of 37 Properties	\$6,520,662.75	Identified for Further Review
Harris County	Harris County Precinct Four, Sherwood Oaks Flood Control Project	\$8,598,833.00	Identified for Further Review
TWDB	Texas State Management Costs	\$8,986,966.41	Identified for Further Review

Community Name	Sub-application Title	Federal Cost Share	FEMA's Sub-application Status
Medina County	Medina County Localized Flood Risk Reduction and Climate Resiliency Flood Control Project	\$11,240,643.71	Identified for Further Review
Harris County Flood Control District	Harris County - Acquisition of 49 Residential Properties	\$14,850,565.47	Identified for Further Review
Brazoria Drainage District No. 4	Brazoria Drainage District 4 Cowart Creek Channel Modifications Localized Flood Risk Reductions Project Flood Control	\$19,678,460.25	Identified for Further Review
Brazoria Drainage District No. 4	Brazoria Draining District 4: Cannon Ditch Channel Localized Flood Risk Reductions Project Flood Control	\$21,602,443.50	Identified for Further Review
Brazoria Drainage District No. 4	Brazoria Drainage District Number Four Hickory Slough Channel Improvements Localized Flood Risk Reductions Project FMA 2022	\$29,261,763.00	Identified for Further Review
Jefferson County Drainage District No. 6	Jefferson County Drainage District 6 Bayou Din Localized Flood Risk Reduction Project	\$50,000,000.00	Identified for Further Review
Mission, City of	City of Mission Spike and Jupiter Drainage Engineering Design Capability and Capacity Building, Project Scoping	\$288,000.00	Identified for Further Review
Orange County	Kinard Estates Drainage - Localized Flood Risk Reduction Project Flood Control	Not Selected	Does Not Meet HMA Requirements
West Brazoria County Drainage District No. 11	West Brazoria County Drainage District No. 11 - Localized Flood Risk Reduction Project - Flood Control	Not Selected	Does Not Meet HMA Requirements
Jersey Village, City of	Jersey Village Localized Flood Risk Reduction Flood Control	Not Selected	Does Not Meet HMA Requirements
Harris County Flood Control District	Harris County Flood Control District Tributary Localized Flood Risk Reduction Flood Control Project	Not Selected	Does Not Meet HMA Requirements
Total Federal Funding		\$206,646,504.16	

Source: Flood Mitigation Assistance FY 2022 Sub-application Status, <https://www.fema.gov/grants/mitigation/flood-mitigation-assistance/after-you-apply/fy22-status#summary>

ATTACHMENT 3: Fiscal Year 2022 Flood Mitigation Assistance Sub-Application Descriptions

Community Name	Mitigation Type	Number of Structures	Total Project Cost (\$)	Federal Share (\$)	Local Share (\$)	Project Description
Abilene, City of	Drainage	322	807,052.06	726,346.85	80,705.21	The City of Abilene Catclaw Creek flood control project seeks to reduce flooding by increasing storage in Oscar Rose Park. The goal of this project is to reduce flooding by increasing storage and allowing more runoff to flow within the park rather than in the extensive overbank floodplain. Once implemented this project will affect approximately 322 residents.
Baytown, City of	Elevation	2	749,700.00	749,700.00	-	The City of Baytown seeks to mitigate two sever repetitive loss structures by elevating the structures two feet above the base flood elevation or to the 500-year BFE, whichever is higher, will reduce or eliminate National Flood Insurance Program claims, economic loss, and disruption that results from the repeated flood of residential structures. These structures are single-family residential, and the owners have voluntarily committed to the elevation of their structure by the City of Baytown.
Brazoria Drainage District No 4	Drainage	465	26,237,947.00	19,678,460.25	6,559,486.75	Brazoria County Drainage District No. 4's Cowart Creek Channel Modification Project seeks to improve existing channels and add approximately 546 ac-ft of new detention including a potential expansion of an existing detention basin. The goal of this project is to relieve upstream flooding where the channel has less than three-year capacity. Once implemented, this project will mitigate damages to at least 465 structures of which 20 are NFIP insured, 37 are repetitive loss, and 10 are designated as severe repetitive loss.
Brazoria Drainage District No 4	Drainage	430	28,803,258.00	21,602,443.50	7,200,814.50	Brazoria County Drainage District No. 4's Cannon Ditch Channel Flood Control Project seeks to improve by widening and deepening existing channels. The goal of this project is to relieve flooding upstream where data indicates as many as 280 structures are located. In addition, approximately 980 ac-ft of detention is planned. Once implemented, this project will reduce flooding to approximately 430 structures of which seven are NFIP insured, 10 are repetitive loss.
Brazoria Drainage District No 4	Drainage	1668	39,015,684.00	29,261,763.00	9,753,921.00	Brazoria County Drainage District No. 4's Hickory Slough Channel project seeks to mitigate damage during extreme weather events. If implemented, this project will affect at least 1,668 structures in the benefit area. Some of those structures will still be at risk after the project, but those risk will be reduced or largely eliminated in some cases.

Community Name	Mitigation Type	Number of Structures	Total Project Cost (\$)	Federal Share (\$)	Local Share (\$)	Project Description
Bridge, City of	Elevation	6	956,930.00	943,745.09	13,184.91	The City of Bridge City seeks to mitigate six floodprone structures (five severe repetitive Loss structures and one repetitive loss structure that are at risk of continual and future flooding. By elevating the structures two feet above the base flood elevation or flood of record; whichever is higher, to reduce or eliminate National Flood Insurance Program claims, economic loss, and disruption that results from the repeated flood of residential structures. These structures are single-family residential, and the owners have voluntarily committed to the elevation of their structure by the City.
Cameron County Drainage District No. 3	Project Scoping	236	408,060.00	367,254.00	40,806.00	Cameron County Drainage District No. 3 seeks to develop a Drainage Master Plan. This will be a Drainage Master Plan for the region encompassing the City of San Benito urban center, located in Cameron County, TX, and within the jurisdictional boundary of Cameron County Drainage District No. 3. The Drainage Master Plan will assist the District and San Benito by developing recommended construction activities and grant applications.
Bryan, City of	Project Scoping	675	650,000.00	585,000.00	65,000.00	The City of Bryan seeks to utilize engineering to identify additional areas of flooding and enhance information and data compilation of the floodways and floodplains inside the City limits for the purpose of modeling and developing a strategic approach to Community-wide flood mitigation. The Project Scoping will lay the groundwork for selecting future Community flood mitigation projects, updating the Hazard Mitigation Plan accordingly, improving the City's readiness and responsiveness to storm events, and increasing safety awareness to its citizens related to flooding events. The City will also utilize the Project Scoping output to prepare project prioritization that will factor and account for the City's limited funding in order to responsibly address areas that pose potential safety problems to the residents of Bryan in flood-prone areas, many of which are living in low-income neighborhoods.

Community Name	Mitigation Type	Number of Structures	Total Project Cost (\$)	Federal Share (\$)	Local Share (\$)	Project Description
Conroe, City of	Elevation	1	153,640.00	153,640.00	-	The City of Conroe seeks to elevate one severe repetitive loss structure at risk of continual and future flooding by elevating the structure 3 feet above the base flood elevation, to reduce or eliminate National Flood Insurance Program claims, economic loss, and disruption that results from the repeated flood of residential structures. This structure is single-family residential, and the owners have voluntarily committed to the elevation of their structure by the City of Conroe.
Conroe, City of	Acquisition	3	1,521,076.00	1,521,076.00	-	The City of Conroe seeks to mitigate three severe repetitive loss structure by acquisition, demolition, and the conversion of land to open green space. The structures are single-family residential, and the owners have voluntarily committed to the acquisition and demolition.
El Campo, City of	Project Scoping	4550	601,315.00	541,183.50	60,131.50	The City of El Campo seeks to develop a Drainage Master for the region encompassing the City of El Campo located in Wharton County. This drainage master plan will include new hydrologic and hydraulic modeling, Identification of flood risk areas with these watersheds, development of flood reduction strategies (including [but not limited to] dams, levees, channel widening, regional detention, diversion channels, and buy-outs), environmental constraints assessment of identified flood reduction strategies. The Drainage Master Plan will assist Wharton County and City of El Campo with future activities and future grant applications for recommended construction activities.
Friendswood, City of	Project Scoping	236	175,840.00	158,256.00	17,584.00	The City of Friendswood seeks to evaluate flood mitigation projects, including channel improvements and detention basins, to reduce damage from increasingly frequent and heavy rainfall events. The major flooding source is Clear Creek which can overtop its banks and flood neighborhoods adjacent to the channel.

Community Name	Mitigation Type	Number of Structures	Total Project Cost (\$)	Federal Share (\$)	Local Share (\$)	Project Description
Harris County	Drainage	700	11,465,110.67	8,598,833.00	2,866,277.67	Harris County in partnership with Harris County Pct. No. 4's seeks to improve drainage to the current system in Sherwood Oaks subdivision. The subdivision was developed over 50 years ago and does not meet current City of Houston or Harris County drainage criteria and engineering standards. The goal of this project is intended to mitigate existing flooding hazards in the Sherwood Oaks subdivision which includes over 700 homes, (307 NFIP insured, 44 repetitive loss and five severe repetitive loss) that are at risk from frequent flooding from moderate to extreme rainfall events.
Harris County Flood Control District	Acquisition	49	15,673,049.57	14,850,565.47	822,484.10	Harris County Flood Control District seeks to mitigate 49 floodprone structures (25 severe repetitive loss structures, 11 repetitive loss structures, and 13 NFIP insured with one or more loss), by acquisition, demolition, and the conversion of land to open green space. The structures are single-family residential, and the owners have voluntarily committed to the acquisition and demolition.
Houston, City of	Elevation	7	1,837,487.29	1,837,487.29	-	The City of Houston seeks to mitigate seven severe repetitive loss structures by elevating the structures two feet above the 500-year flood event, to reduce or eliminate NFIP claims, economic loss, and disruption that results from the repeated flood of residential structures. These structures are single-family residential, and the owners have voluntarily committed to the elevation of their structure by the City of Houston.
Houston, City of	Elevation	24	3,998,901.79	3,696,320.97	302,580.82	The City of Houston seeks to mitigate 24 structures (12 severe repetitive loss structures, two Repetitive loss structures, and 10 are NFIP insured with claims and are at risk of continual and future flooding) by elevating the structures two feet above the 500-year flood event, to reduce or eliminate National Flood Insurance Program claims, economic loss, and disruption that results from the repeated flood of residential structures. These structures are single-family residential, and the owners have voluntarily committed to the elevation of their structure by the City of Houston.

Community Name	Mitigation Type	Number of Structures	Total Project Cost (\$)	Federal Share (\$)	Local Share (\$)	Project Description
Jackson County	Project Scoping	150	679,579.24	611,621.31	67,957.93	Jackson County seeks to develop a Drainage Master Plan for the Cox's Creek and Keller's Creek Watersheds, located in Jackson County. This drainage master plan will include; new hydrologic and hydraulic modeling, identification of flood risk areas with these watersheds, development of flood reduction strategies (including [but not limited to] dams, levees, channel widening, regional detention, diversion channels, and buy-outs). The development of an implementation strategy focused on identifying funds to implement identified construction measures. The Drainage Master Plan will assist Jackson County, La Ward, Lolita, and LNRA with future activities and future FMA and BRIC grant applications for recommended construction activities.
Jefferson County	Elevation	37	7,403,717.48	6,520,662.75	883,054.73	Jefferson County seeks to mitigate 37 floodprone structures (10 severe repetitive loss structures, six repetitive loss structures, and 21 NFIP insured with flood losses by elevating the structures 3-foot above the base flood elevation or 1-foot above the high-water mark, whichever is higher, to reduce or eliminate National Flood Insurance Program claims, economic loss, and disruption that results from the repeated flood of residential structures. These structures are single-family residential, and the owners have voluntarily committed to the elevation of their structure by Jefferson County.
Jefferson County Drainage District No. 6	Drainage	1980	67,572,253.00	50,000,000.00	17,572,253.00	Jefferson County Drainage District No. 6's Bayou Dinn flood control project seeks to control the flow rate and adequately divert stormwater. The goal of this project is to mitigate damage, loss of life and property caused by flooding of Hildebrandt Bayou by constructing detention and diversion facilities along with channel improvements. Flooding consists of approximately 1,800 residential buildings and 180 commercial buildings including the Good Year manufacturing plant which has suffered nearly \$100 Million in damages since 2017 alone. The proposed improvements will also prevent flooding of Interstate 10, the primary evacuation route for residents during disaster level events.

Community Name	Mitigation Type	Number of Structures	Total Project Cost (\$)	Federal Share (\$)	Local Share (\$)	Project Description
Jefferson County Drainage District No. 6	Project Scoping	9828	907,348.67	816,613.80	90,734.87	Jefferson County Drainage District No. 6 seeks to develop large-scale regional flood reduction solutions for Hillebrandt Bayou Watershed to address flood damages and prepare a path to implementation for the projects that includes costs, benefits, challenges, and prioritization. This Scoping project will result in a complete and successful project application for future funding opportunities and for development and selection of future Community flood mitigation projects. This Scoping project will develop and conduct engineering, environmental feasibility analyses and benefit-cost analyses in anticipation of future Community flood mitigation projects that positively impact NFIP insured properties within the District.
Jefferson County Drainage District No. 6	Project Scoping	1627	907,348.67	816,613.80	90,734.87	Jefferson County Drainage District No. 6 (DD6) plans to develop large-scale regional flood reduction solutions for Pine Island Bayou Watershed to address flood damages and prepare a path to implementation for the projects that includes costs, benefits, challenges, and prioritization. This project will result in a complete and successful project application for future funding opportunities and for development and selection of future Community flood mitigation projects. This project will develop and conduct engineering, environmental feasibility analyses and benefit-cost analyses in anticipation of future Community flood mitigation projects that positively impact NFIP insured properties within the District.
Jefferson County Drainage District No. 6	Project Scoping	3095	907,348.67	816,613.80	90,734.87	Jefferson County Drainage District No. 6 seeks to develop large-scale regional flood reduction solutions for Taylors Bayou Watershed to address flood damages and prepare a path to implementation for the projects that includes costs, benefits, challenges, and prioritization. Recent extreme events, including Hurricane Harvey and Tropical Storm Imelda have resulted in significant flooding and structural flood loss. The study will build on the ongoing DD6 drainage study that is developing existing conditions hydrologic and hydraulic models for the entire DD6 region. The Taylors Bayou watershed encompasses more than 600 square miles and major streams within the watershed include Taylors Bayou, Green Pond Gully, Ground Bridge Gully, Spindletop Bayou, the South Fork of Taylors Bayou, and the area contributing to the Intracoastal Waterway.

Community Name	Mitigation Type	Number of Structures	Total Project Cost (\$)	Federal Share (\$)	Local Share (\$)	Project Description
Jefferson County Drainage District No. 7	Hazard Mitigation Plan	14148	50,000.00	25,000.00	25,000.00	Jefferson County Drainage District No. 7 seeks to update District's Hazard Mitigation Plan. The purpose of this Hazard Mitigation Plan is to reduce or avoid the impacts of hazards by identifying and analyzing hazards and outlining mitigation actions that will help the District reach this goal. The majority of this HMP update (approximately 90 percent) is focused on the flood hazard and hazards that cause flooding (e.g. Hurricanes, Tropical Storms and Severe Storms).
Jersey Village, City of	Elevation	14	4,664,499.00	4,427,150.00	237,349.00	The City of Jersey Village seeks to mitigate 14 floodprone structures (10 severe repetitive loss structures, two repetitive loss structure, and 2 NFIP insured structures) by elevating the structures 36 inches above the base flood elevation or the 100-year flood, to reduce or eliminate National Flood Insurance Program claims, economic loss, and disruption that results from the repeated flood of residential structures. These structures are single-family residential, and the owners have voluntarily committed to the elevation of their structure by the City of Jersey Village.
Jersey Village, City of	Elevation	14	4,824,911.00	4,639,809.03	185,101.97	The City of Jersey Village seeks to mitigate 14 floodprone structures (10 severe repetitive loss structures, three repetitive loss structures, and one NFIP insured by elevating the structures 36 inches above the base flood elevation or the 100-year flood, whichever is higher, to reduce or eliminate National Flood Insurance Program claims, economic loss, and disruption that results from the repeated flood of residential structures. These structures are single-family residential, and the owners have voluntarily committed to the elevation of their structure by the City of Jersey Village.
Longview, City of	Acquisition	1	184,204.00	165,783.60	18,420.40	The City of Longview seeks to mitigate one structure which is built in the Special Flood Hazard Area, by acquisition and demolition. The structure is a single-family residential, and the owners have voluntarily committed to the acquisition and demolition.
Medina County	Project Scoping	402	542,680.00	488,412.00	54,268.00	Medina County seeks to develop and conduct engineering (H&H) to identify flood risk areas within the County and develop mitigation projects to reduce these risks, complete environmental feasibility analyses and benefit-cost analyses on proposed mitigation projects. The county currently has 146 NFIP claims and 402 NFIP insured structures.

Community Name	Mitigation Type	Number of Structures	Total Project Cost (\$)	Federal Share (\$)	Local Share (\$)	Project Description
Medina County	Drainage	345	12,489,604.13	11,240,643.71	1,248,960.42	Medina County seeks to reduce flooding in the 10-, 25-, 50- and 100-year floodplain within the unincorporated D'Hanis community. This drainage project will benefit 39 NFIP insured properties and will also increase the level of service on US Highway 90. Construction activities for the project include channel regrading and clearing, riparian restoration of channels, and culvert improvements.
Mineral Wells, City of	Project Scoping	30	525,000.00	472,500.00	52,500.00	The City of Mineral Wells seeks to develop a storm water master plan, including Crystal Creek and particularly Crystal Canal, for the purpose of identifying cost effective and efficient mitigation capital projects including scope, schedule, and budget. The project being considered are channel and bridge/culvert improvements, detention, and storm sewer improvements. These will all have different levels of protection from the flood hazard and the final projects selected will be determined by those that protect the most residents and properties.
Mission, City of	Project Scoping	200	320,000.00	288,000.00	32,000.00	The City of Mission's Spike & Jupiter project seeks to upgrade stormwater pipes, a stormwater pipe extension, and two detention basins. These improvements are expected to increase storm and wastewater drainage during and after adverse weather events and reduce flooding in the affected areas.
Montgomery County	Project Scoping	80280	876,750.00	789,075.00	87,675.00	Montgomery County seeks to develop flood mitigation projects to improve drainage and help reduce flooding within Precinct 4 which is in eastern Montgomery County, Texas and includes the cities of Splendora, Patton Village, Roman Forest, Woodbranch, Cut and Shoot, as well as unincorporated areas within its boundary. The major channels in the Precinct include the San Jacinto River, the West Fork of the San Jacinto River, the East Fork of the San Jacinto River, White Oak Creek, Caney Creek, and Peach Creek. Montgomery County has experienced five declared flooding disasters since 2015 and historically the majority of flood damage occurs in Precinct 4.

Community Name	Mitigation Type	Number of Structures	Total Project Cost (\$)	Federal Share (\$)	Local Share (\$)	Project Description
Nassau Bay, City of	Project Scoping	1300	219,500.00	164,625.00	54,875.00	The City of Nassau Bay seeks to evaluate and develop a plan to mitigate repetitive loss residential buildings within the City Limits through elevation by raising the finished floors of residential homes above the base flood elevation. This will lead to projects that will reduce flood claims by identifying homes in or near the 100-year floodplain and prioritizing and outlining projects that will remove these homes from harm's way or significantly reduce future claims.
Nassau Bay, City of	Elevation	18	5,819,800.00	4,952,476.02	867,323.98	The City of Nassau Bay seeks to mitigate 18 floodprone structures (seven severe repetitive loss structures, two repetitive loss structures, and nine insured properties that are at risk of continual and future flooding) by elevating the structures two feet above the base flood elevation as per the City's freeboard requirements, whichever is higher, to reduce or eliminate National Flood Insurance Program claims, economic loss, and disruption that results from the repeated flood of residential structures. These structures are single-family residential, and the owners have voluntarily committed to the elevation of their structure by the City of Nassau Bay.
Orange County	Elevation	5	1,055,787.00	1,014,750.51	41,036.49	Orange County seeks to mitigate five floodprone structures (four severe repetitive loss structures and one NFIP insured, these properties are at risk of continual and future flooding) by elevating the structures 2 feet above the base flood elevation or flood of record, whichever is higher, to reduce or eliminate National Flood Insurance Program claims, economic loss, and disruption that results from the repeated flood of residential structures. These structures are single-family residential, and the owners have voluntarily committed to the elevation of their structure by Orange County.

Community Name	Mitigation Type	Number of Structures	Total Project Cost (\$)	Federal Share (\$)	Local Share (\$)	Project Description
Silsbee, City of	Drainage	205	713,175.00	641,857.50	71,317.50	The City of Silsbee's Timberlane Drainage Flood Control Project seeks to reduce the loss and damages due to an inability of the existing structure to drain water away properly and efficiently from structures and streets. The City proposes to mitigate damages during future storm events by increasing the size of the outfall structure at Timerlane Dr and concrete lining of the channel that directs runoff from the nearby neighborhood. This will control the flow of stormwater and minimize the likelihood and amount of time that the nearby roadways may be under water. Once implemented the project will reduce flooding to 205 residential structures, of which 8 are insured.
Silsbee, City of	Drainage	832	3,416,950.00	3,075,255.00	341,695.00	The City of Silsbee's Hendricks Drainage Flood Control Project seeks to reduce the loss and damage due to structural flooding. The goal of this project is to increase the outfall capacity at the Hendricks channel and apply concrete lining to the Channel that directs the run-off from the neighborhood to the outfall. This will control the flow of stormwater and minimize the likelihood and amount of time that the nearby roadways may be under water. When implemented this project will reduce flooding to 832 structures of which 164 are insured, 26 are repetitive loss, and one is a severe repetitive loss designated property.
Taylor Lake Village, City of	Project Scoping	973	560,000.00	420,000.00	140,000.00	The City of Taylor Lake Village seeks to identify projects to reduce flooding in the repetitive loss areas impacted by non-surge storm events such as Hurricane Harvey and Tropical Storm Allison rather than surge events like Hurricane Ike to prevent many future flood claims. Taylor Lake Village has experienced numerous flood events and has identified Repetitive Loss Areas which experience the majority of the damage in the area. These areas include 38 repetitive loss, 13 severe repetitive loss, and 973 NFIP insured properties.
Totals		124,858	247,695,507.24	197,659,537.75	50,035,969.49	