

AGENDA ITEM MEMO

BOARD MEETING DATE: October 7, 2021

TO: Board Members

THROUGH: Jeff Walker, 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, P.E., Director, Flood Science and Community Assistance
Kathy Hopkins, Manager, Grant Coordination

Federal Fiscal Year 2020 Flood Mitigation Assistance

SUBJECT:

ACTION REQUESTED

Consider authorizing the Executive Administrator to negotiate and execute contracts as approved and directed by the Federal Emergency Management Agency in a total amount not to exceed \$63.6 million for subgrants from the 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 in Texas and serves as the point of contact for the distribution of these federal grants for mitigation planning and project implementation. The TWDB also provides technical assistance in the development of applications and the implementation of the grant program. The goal of the FMA grant program is to provide federal funding to political subdivisions to mitigate flood damages and prevent future losses associated with Severe Repetitive Loss, Repetitive Loss, or substantially damaged structures insured under the National Flood Insurance Program (NFIP) through mitigation projects and long-term comprehensive mitigation planning.

Grant applications funded for FMA follow several eligibility and funding criteria:

- Sub-applicants must be participants in the NFIP and properties included in project proposals must have and maintain flood insurance,

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Leading the state's efforts in ensuring a secure water future for Texas and its citizens

Board Members

Brooke T. Paup, Chairwoman | Kathleen Jackson, Board Member

Jeff Walker, Executive Administrator

- 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 through acquisition, relocation, demolition, elevation, mitigation reconstruction, and flood-proofing of historical structures.
- FEMA may contribute up to 75 percent of the total eligible cost for mitigation of all other structures insured through the NFIP, Community Flood Mitigation Projects (e.g. drainage 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 2020 FMA Notice of Funding Opportunity (DHS-19- MT-029-000-99) identified the nationwide application period (September 30, 2019 through January 30, 2020), the funding priorities, the period of performance, and the availability of \$200 million in funding. As provided in Title 44 of the Code of Federal Regulations Part 78 and in current FEMA guidance, the TWDB's responsibilities include the review of sub-applications submitted by political subdivisions. Eligible sub-applications are forwarded to FEMA for final approval and authorization to fund. Contracting responsibilities are then performed by the TWDB once funding approval is received from FEMA.

KEY ISSUES

For the Fiscal Year 2020 funding opportunity, the TWDB received 27 FMA project grant sub-applications. After eligibility and administrative review, the TWDB forwarded 19 of the 27 sub-applications to FEMA for a total federal funding request of \$73.5 million. A list of the 19 sub-applications is in Attachment A. FEMA notified the TWDB that 13 of the 19 sub-applications, totaling \$63.6 million in federal funding with a community match requirement of \$10.23 million for a total of \$73.82 million were "Identified for Further Review."

Table 1 lists the 13 selected sub-applications and Attachment B provides a project summary for each. FEMA defines "Identified for Further Review" as the sub-applications that have been selected for funding (award) once all pre-award activities are completed. Staff continues to work with FEMA Region VI to complete pre-award activities for these sub-applications prior to FEMA making the official award.

Twelve of the 13 sub applications will be mitigating 2,207 flood prone structures through either elevation, drainage projects, or acquisition. There is one sub-application to specifically update the District's Hazard Mitigation Plan.

¹ A 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.

² A 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.

Table 1. Summary of the Fiscal Year 2020 FMA sub-applications “Identified for Further Review” by FEMA

| Applicant | Mitigation Type | Number of Structures | Federal Share (\$) | Local Share (\$) | Total Project Cost (\$) |
|--|-----------------|----------------------|--------------------|------------------|-------------------------|
| Harris County | Drainage | 1,421 | 8,494,368 | 2,831,457 | 11,325,825 |
| Harris County Flood Control District | Acquisition | 61 | 14,662,361 | 2,058,367 | 16,720,728 |
| Harris County Flood Control District | Acquisition | 1 | 3,760,150 | 0 | 3,760,150 |
| Houston, City of | Elevation | 5 | 1,456,947 | 0 | 1,456,947 |
| Jefferson County | Elevation | 5 | 1,010,727 | 0 | 1,010,727 |
| Jefferson County Drainage District No. 6 | Drainage | 234 | 10,138,258 | 3,379,420 | 13,517,678 |
| Jefferson County Drainage District No. 6 | Drainage | 273 | 2,139,870 | 713,290 | 2,853,160 |
| Jefferson County Drainage District No. 6 | Drainage | 140 | 1,715,078 | 571,693 | 2,286,770 |
| Jefferson County Drainage District No. 6 | Plan | NA | 25,000 | 20,000 | 45,000 |
| Jersey Village, City of | Elevation | 16 | 4,536,131 | 391,639 | 4,927,770 |
| Montgomery County | Acquisition | 40 | 12,403,485 | 242,456 | 12,645,941 |
| Pearland, City of | Elevation | 2 | 499,760 | 0 | 499,760 |
| Taylor Lake Village, City of | Elevation | 9 | 2,754,104 | 23,715 | 2,777,819 |
| Totals | | 2,207 | 63,596,239 | 10,232,036 | 73,828,275 |

In addition to the 13 selected sub-applications, FEMA also selected TWDB’s Management Cost sub-application in the amount of \$2,409,781 of federal funds with a required state general revenue match of \$387,712 over the grant’s three-year period of performance. Management costs contribute to TWDB staff salary, travel, and other administrative costs.

RECOMMENDATION

The Executive Administrator recommends approval to negotiate and execute contracts as approved and directed by FEMA in a total amount not to exceed \$63.6 million for sub-grants from the FMA grant program upon notification of award. This program meets the agency’s objectives of providing financial assistance to communities to reduce or eliminate the long-term risk of flood damage and to become more flood resilient.

Attachments:

- Attachment A: Flood Mitigation Assistance Fiscal Year 2020 Sub-application Status
- Attachment B: Summary of FEMA-Selected Flood Mitigation Assistance Sub-applications

Attachment A
Flood Mitigation Assistance FY 2020 Subapplication Status

Below is a summary from the Federal Emergency Management Agency (FEMA) of the Fiscal Year 2020 Flood Mitigation Assistance (FMA) nationwide disposition announcement of selection (Table A.1). This shows the status of the 19 sub-applications along with the TWDB Management Cost sub-application submitted by the Texas Water Development Board (TWDB) for the Fiscal Year 2020 FMA application cycle. FEMA selected 13 sub-applications as “Identified for Further Review.”

For Fiscal Year 2020, \$200 million was appropriated for the FMA grant program. On August of 2020, FEMA posted the Notice of Funding Opportunity on www.grants.gov for FMA grants with an application period from September 30, 2020 through January 29, 2021. FEMA received 236 FMA sub-applications submitted by 24 states requesting over \$392.7 million in federal funding. FEMA has completed eligibility review to ensure compliance with Hazard Mitigation Assistance Guidance and has made selections based on the agency’s priorities and available funding. FEMA has identified for further review 117 FMA sub-applications from 18 applicants: 22 planning (includes 18 Community Mitigation Advance Assistance), 66 projects (includes four Community Flood Mitigation projects), nine technical assistance sub-applications, and 20 applicant management costs for \$200 million in federal funds.

Table A.1. Status of 19 TWDB submitted sub-applications and the TWDB Management Cost sub-application.

| Applicant | Mitigation Type | Number of Structures | Federal Share (\$) | Status |
|---|-----------------|----------------------|--------------------|-------------------------------|
| 1 Houston, City of | Elevation | 5 | 1,456,947 | Identified for Further Review |
| 2 Jersey Village, City of | Elevation | 16 | 4,536,131 | Identified for Further Review |
| 3 Pearland, City of | Elevation | 2 | 499,760 | Identified for Further Review |
| 4 Taylor Lake Village, City of | Elevation | 9 | 2,754,104 | Identified for Further Review |
| 5 Harris County | Drainage | 1,421 | 8,494,368 | Identified for Further Review |
| 6 Harris County Flood Control District | Acquisition | 61 | 14,662,361 | Identified for Further Review |
| 7 Harris County Flood Control District | Acquisition | 1 | 3,760,150 | Identified for Further Review |
| 8 Jefferson County | Elevation | 5 | 1,010,727 | Identified for Further Review |
| 9 Jefferson County Drainage District No. 6 | Drainage | 234 | 10,138,258 | Identified for Further Review |
| 10 Jefferson County Drainage District No. 6 | Drainage | 273 | 2,139,870 | Identified for Further Review |
| 11 Jefferson County Drainage District No. 6 | Drainage | 140 | 1,715,077 | Identified for Further Review |
| 12 Jefferson County Drainage District No. 6 | Plan | NA | 25,000 | Identified for Further Review |
| 13 Montgomery County | Acquisition | 40 | 12,403,485 | Identified for Further Review |
| 14 Mission, City of | Drainage | 445 | 2,474,406 | Not Eligible |
| 15 Hidalgo County Drainage District # 1 | Drainage | 4,600 | 7,802,180 | Not Eligible |
| 16 South Padre Island | Drainage | 1,483 | 5,325,218 | Not Eligible |
| 17 Bellaire, City of | Elevation | 10 | 808,862 | Not Selected |
| 18 Jersey Village, City of | Elevation | 14 | 4,507,967 | Not Selected |
| 19 Nassau Bay, City of | Elevation | 9 | 2,070,650 | Not Selected |

Source: Flood Mitigation Assistance FY 2020 Sub-application Status, <https://www.fema.gov/grants/mitigation/floods/fy2020-subapplication-status>

Attachment B
Summary of FEMA-Selected Flood Mitigation Assistance Applications

Harris County: Drainage Project

Proposed Project Funding:

Federal Share: \$8,494,368

Local Share: \$2,831,457

Total Project Cost: \$11,325,825

Period of Performance: 4 years

Project Description: Harris County seeks to mitigate 1,421 structures by drainage improvements and flooding reduction in the Bear Creek Village Subdivision. The current storm sewer system is designed for a 3-year event and is inadequate to collect and drain extreme event runoff. The proposed drainage improvements are intended to provide an additional flow path, so that excess storm water is contained within street right-of-way to an outfall. The project will incorporate a combination of channel construction, street regrading, and enhancement of outfalls. The project has a positive Benefit-Cost Ratio of 1.09.

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Harris County Flood Control District: Acquisition Project

Proposed Project Funding:

Federal Share: \$14,662,361

Local Share: \$2,056,367

Total Project Cost: \$16,720,728

Period of Performance: 3 years

Project Description: Harris County Flood District seeks to mitigate 61 structures: 23 Severe Repetitive Loss structures, 17 Repetitive Loss structures, and 21 are at risk of continual and future flooding 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. The project has a positive Benefit-Cost Ratio of 1.09.

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Harris County Flood Control District: Acquisition Project

Proposed Project Funding:

Federal Share: \$3,760,150

Local Share: \$0

Total Project Cost: \$3,760,150

Period of Performance: 3 years

Project Description: Harris County Flood Control District seeks to mitigate a hotel that is a severe repetitive loss structure by acquisition, demolition, and the conversion of land to open green space. The owner has voluntarily committed to the acquisition and demolition. The project has a positive Benefit-Cost Ratio of 1.84.

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City of Houston: Elevation Project

Proposed Project Funding:

Federal Share: \$1,456,947
Local Share: \$0
Total Project Cost: \$1,456,947

Period of Performance: 3 years

Project Description: The City of Houston seeks to mitigate five Severe Repetitive Loss structures. All structures will be mitigated two-feet above the 500-year flood level to reduce or eliminate future 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. The project has a positive Benefit-Cost Ratio of 1.1.

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Jefferson County: Elevation Project

Proposed Project Funding:

Federal Share: \$1,010,727
Local Share: \$ 0
Total Project Cost: \$1,010,727

Period of Performance: 3 years

Project Description: Jefferson County seeks to mitigate five Severe Repetitive Loss structures by elevation. All structures will be mitigated to base flood elevation height or the known high-water mark, whichever is higher to 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. The project has a positive Benefit-Cost Ratio of 1.58.

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Jefferson County Drainage District No. 6 (Ditch 505 Detention Project): Drainage Project

Proposed Project Funding:

Federal Share: \$10,138,258
Local Share: \$3,379,420
Total Project Cost: \$13,517,678

Period of Performance: 4 years

Project Description: Jefferson County Drainage District No. 6 seeks to mitigate 234 structures by construction of detention pond at the confluence of ditch 505 and another tributary of ditch 505B which is a tributary to Taylor Bayou. The detention pond will have a capacity to store 1,681 acre-feet of run-off which is the 1 percent chance flood event based on ATLAS 14. The project has a positive Benefit-Cost Ratio of 1.25.

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Jefferson County Drainage District No. 6 (East China Relief Project): Drainage Project

Proposed Project Funding:

Federal Share: \$2,139,870
Local Share: \$713,290
Total Project Cost: \$2,853,160

Period of Performance: 4 years

Project Description: Jefferson County Drainage District No. 6 seeks to mitigate 273 structures by increasing the capacity in ditch 600 and associated crossing and adding additional two detention ponds. The project will reduce the cost of flooding and recovery by lowering flood water surfaces and reducing the frequency and severity of flooding. The project has a positive Benefit-Cost Ratio of 1.6.

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Jefferson County Drainage District No. 6 (Southern Nome Relief Project): Drainage Project

Proposed Project Funding:

Federal Share: \$1,715,077
Local Share: \$571,693
Total Project Cost: \$2,286,770

Period of Performance: 4 years

Project Description: Jefferson County Drainage District No. 6 seeks to mitigate 140 structures by widening or redirecting existing ditches; enlarging existing culverts to adequately convey storm water; widening freshwater canals crossings; increasing the capacity of existing detention pond by excavation; improving existing drainage outlets; and, excavating earthen channel to direct and convey run off to the existing detention pond. The project has a positive Benefit-Cost Ratio of 1.21.

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Jefferson County Drainage District No. 6: Hazard Mitigation Plan

Proposed Project Funding:

Federal Share: \$25,000
Local Share: \$20,000
Total Project Cost: \$45,000

Period of Performance: 3 years

Project Description: Jefferson County Drainage District No. 6 seeks to update the flood component of their Hazard Mitigation plan. For the District to receive disaster assistance and mitigation funding, the district must maintain an approved plan with the Federal Emergency Management Agency.

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City of Jersey Village: Elevation Project

Proposed Project Funding:

Federal Share: \$4,536,131
Local Share: \$391,639
Total Project Cost: \$4,927,770

Period of Performance: 3 years

Project Description: The City of Jersey Village seeks to mitigate 16 structures: 10 structures are Severe Repetitive Loss, five Repetitive Loss and one structure at risk of continual and future flooding. Elevations will be conducted to raise structures one-foot above Base Flood Elevation per the City's freeboard requirements. These structures are single-family residential, and the owners have voluntarily committed to the elevation of their structure by the City of Jersey Village. The project has a positive Benefit-Cost Ratio of 1.32.

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Montgomery County: Acquisition and Demolition Project

Proposed Project Funding:

Federal Share: \$12,403,485
Local Share: \$242,456
Total Project Cost: \$12,645,941

Period of Performance: 3 years

Project Description: Montgomery County seeks to mitigate 40 flood prone structures (31 Severe Repetitive Loss and 9 Repetitive Loss structures) 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 by Montgomery County. The project has a positive Benefit-Cost Ratio of 1.36.

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City of Pearland: Elevation Project

Proposed Project Funding:

Federal Share: \$499,760
Local Share: \$0
Total Project Cost: \$499,760

Period of Performance: 3 years

Project Description: The City of Pearland seeks to mitigate two Severe Repetitive Loss structures by elevations. Elevations will be conducted to raise structures one-foot above the Base Flood Elevation per the City's freeboard requirements. These structures are single-family residential, and the owners have voluntarily committed to the elevation of their structure by the City of Pearland. The project has a positive Benefit-Cost Ratio of 1.08.

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City of Taylor Lake Village: Elevation Project

Proposed Project Funding:

Federal Share: \$2,754,104

Local Share: \$23,715

Total Project Cost: \$2,777,819

Period of Performance: 3 years

Project Description: The City of Taylor Lake Village to mitigate eight Severe Repetitive Loss and one Repetitive Loss structures. All structures will be mitigated by elevating to one-foot above the 100-year flood level to reduce or eliminate future 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 City of Taylor Lake Village. The project has a positive Benefit-Cost Ratio of 3.1.