

AGENDA ITEM MEMO

BOARD MEETING DATE: March 5, 2024

TO: Board Members

THROUGH: Jeff Walker, Executive Administrator
Ashley Harden, General Counsel
Jessica Pena, Deputy Executive Administrator, Water Supply & Infrastructure
Marvin Cole-Chaney, Director, Program Administration and Reporting

FROM: Sara Sopczynski, Flood Infrastructure Fund Program Coordinator, Program Administration

SUBJECT: 2024 Flood Infrastructure Fund Intended Use Plan

ACTION REQUESTED

Consider adopting the State Fiscal Year (SFY) 2024-2025 Flood Infrastructure Fund (FIF) Intended Use Plan (IUP).

BACKGROUND

In 2019, the 86th Texas Legislature created the FIF program and Texas Voters approved creation of the fund on November 5, 2019, to provide funding for flood mitigation projects. The purpose of the FIF is to assist in financing drainage, flood mitigation, and flood control projects. In conjunction with that amendment, the legislature made a one-time transfer of \$793 million from the Economic Stabilization Fund to the FIF.

The 88th Texas Legislature in 2023 appropriated an additional approximately \$624 million from the general revenue fund in additional funding to the FIF program. The Texas Water Development Board (TWDB) anticipates utilizing at least \$375 million during this two-year cycle (State Fiscal Years 2024-2025) to assist communities with their FIF projects.

A draft FIF IUP for SFY 2024-2025 was published on the TWDB website for a 33-day public comment period from December 1, 2023, through January 3, 2024. Twenty-three public comment submittals were received with a total of approximately 190 comments from citizens, non-profit advocacy groups, authorities, cities, counties, districts, regional flood planning groups, and engineering and consulting firms. Each public comment was reviewed in accordance with 31 Texas Administrative Code § 363.403.

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Jeff Walker, Executive Administrator

The public comments that were received, along with responses from TWDB staff, are included in Attachment 1. The recommended Final SFY 2024-2025 FIF IUP is included in Attachment 2.

Significant Program Changes from the SFY 2020 FIF IUP

Significant changes from the previous FIF IUP are listed below.

1. Only projects that are recommended in an amended regional flood plan are eligible for financial assistance through FIF. Upon adoption of the State Flood Plan, only projects recommended in that plan are eligible.
2. The Financial Assistance Categories have been updated to align with categories in the amended regional flood plans. The updated categories in the 2024 FIF IUP are Flood Management Evaluation (FME), Flood Mitigation Project (FMP), and Flood Management Strategy (FMS).
3. There will be three prioritized lists, one for each of the categories previously listed. FIF projects will be prioritized based on the respective regional flood plan list where they are derived.
4. FIF eligible projects that received a FEMA Flood Mitigation Assistance (FMA) grant for FMA Fiscal Years 2019-2022 may receive a grant for 70% of the required local match.
5. The maximum percentage of grant awarded to an FMP and FMS is now 70% of the project cost, based on criteria listed in the IUP.
6. Funds may be reimbursed if the applicable state procurement laws have been followed. Funds dispersed prior to December 1, 2023, are not eligible except for federal award matching funds.
7. The technical merits of the proposed project will be the primary criteria determining the prioritization of FIF projects.

SFY 2024-2025 Solicitation

Solicitation of projects for the SFY 2024-2025 cycle opened on December 15, 2023. To be included on the prioritization list, entities must submit a completed Abridged Application by April 15, 2024.

Projects will be reviewed and scored in Summer 2024, and a prioritized list will be published for public comment. The first round of invitations to apply will be sent to invited applicants in Fall 2024.

KEY ISSUES

The public comments ranged in various topics including project eligibility, prioritization, availability of funds, grant qualifiers, partial and phased projects, use of matching funds, defining entire watersheds, benefit cost analysis and ratio, memorandum of understanding, National Floodplain Insurance Program compliance, the abridged application, and general language used within the IUP. Staff throughout the agency assisted in addressing the public comments received.

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Minor changes and clarifications were made to the IUP. These changes include additional explanation on watersheds, federal award matching funds, affidavits, memorandum of understandings, FMS Category project requirements, nature-based solution projects, and reimbursements, along with minor grammatical editing.

RECOMMENDATION

The Executive Administrator recommends adoption of the SFY 2024-2025 FIF IUP with the ability to make non-substantive changes if necessary.

Attachment(s):

1. Response to public comments on the draft SFY 2024-2025 FIF IUP
2. Recommended Final SFY 2024-2025 FIF IUP

**Texas Water Development Board
Response to Comments on the Draft State Fiscal Year (SFY) 2024 - 2025 Flood
Infrastructure Fund (FIF) Intended Use Plan (IUP)**

The following provides a summary of the public comments received during the public comment period from December 1, 2023, to January 3, 2024, the Texas Water Development Board (TWDB) responses, and changes to the draft SFY 2024-2025 FIF IUP.

General Comments

Comment Submitted By: Kendall Hayes, Government Affairs Specialist, San Antonio River Authority

Comment Date: December 14, 2023

Comment:

I hope that the holiday season is treating you well. I am reaching out on behalf of the San Antonio River Authority to request a two week extension on the deadline to submit comments on the FIUP. We are greatly interested in reviewing and providing feedback; however, the holiday season will interfere with a thorough review of the materials. We kindly ask for a two week extension, so that we can provide comments by Jan 15th. Would an extension be permissible? Please advise.

Response:

The TWDB appreciates receiving the comments for the Draft SFY 2024-2025 FIF IUP. The comment period has been extended to Wednesday, January 3, 2024. Due to our scheduled deadline for the next FIF cycle, we cannot extend the comment period any further. Interested stakeholders are also always welcome to provide public comments at any TWDB board meeting or work session.

Change:

None.

Comment Submitted By: Yvette Barrera, PE, CFM, Assistant District General Manager, Hidalgo County Drainage District No. 1

Comment Date: December 18, 2023 & January 2, 2024

Comment:

Thank you for the opportunity to provide comments to the Draft SFY 2024-2025 Flood Infrastructure Fund IUP. We offer the following comments:

1. Please clarify whether an entity may combine 2 FMP's into 1 abridge (sic) application.
2. Please clarify whether an entity may submit multiple projects in 1 category.
3. Please provide clarification on applications containing partial projects. If a portion of an FMP has been completed, could the remaining portion be eligible for FIF funding?
4. Please clarify whether an FME can be submitted under the FMP category if the entity has completed the study by the application deadline.

Response:

The TWDB appreciates receiving the comments for the Draft SFY 2024-2025 FIF IUP.

1. One abridged application must be submitted for each Flood Mitigation Project (FMP) and cannot be combined. Each abridged application should describe proposed projects from a single category with a single associated 9-digit, regional flood plan unique ID number reference. The working ranking criteria and weights that are anticipated to be used in ranking all projects within the 2024 State Flood Plan, as required by statute, will be utilized for prioritization scoring under this IUP; therefore, individual FMPs cannot be combined. When submitting the full financial application, the entity may submit one application covering all invited abridged applications at that time. Any abridged applications that do not receive an invitation could not be included in that full financial application.
2. Applicants may submit multiple abridged applications regardless of the category (e.g., Flood Management Evaluation (FME) Category, FMP, Flood Management Strategy (FMS) Category).
3. If a portion of an FMP has already been completed, and the project scope of the remaining portion aligns with the FMP listed within the Board-approved regional flood plan, then the abridged application may be considered eligible for the FIF, provided all eligibility requirements in the IUP are met. If a project is divided into multiple parts, they can be considered as a phased project. However, the benefits of all the phases of the project selected for a single FIF application will be utilized to compute ranking score of the project. Thus, the data used for the ranking of the project associated with the FIF application will have to be updated to reflect any reduced benefits in the FIF funding prioritization.
4. Only projects from the regional flood plan FMP list are eligible to be submitted through an abridged application for FIF consideration. You may work through the regional planning process to amend the FMP list with a project that results from the completion of a FME project.

Change:

None.

Comment Submitted By: Adam Faschan, PhD, PE, Project Director, Ardurra on behalf of the City of Bellaire, Texas.

Comment Date: December 18, 2023

Comment:

In concert and on behalf of the City of Bellaire we offer the following comments on the SFY 2024-2025 Flood Infrastructure Fund Intended Use Plan:

- With \$624 Million available from the general revenue fund, why are the funds for the program limited to \$375 million. Should a greater amount of funds be made available?
- For Flood Mitigation Projects that are no grants for communities with AMHI's <85%. This precludes regions that have highly beneficial projects and potential BCRs from applying. Shouldn't all parties that apply be offered a degree of grant assistance since these are statewide funds?
- Nature based solutions and water supply benefits may not be available options for all potential applicants. Proximity to water supply sources and land availability for nature-based solutions may not be possible. This may present a disadvantage to communities that do not have these opportunities. Instead can points be obtained if it can be demonstrated these options have been evaluated and established as unavailable.

We appreciate your consideration of these comments.

Response:

The TWDB appreciates receiving the comments for the Draft SFY 2024-2025 FIF IUP.

- The TWDB will use grants and zero percent interest loans to offer at least \$375,000,000 for projects during the 2024-2025 FIF IUP cycle. The Board may increase the funds available in the 2024-2025 FIF IUP cycle. The remaining funds appropriated to the FIF by the 88th Texas Legislature will be utilized in the next FIF funding cycle.
- The proposed grant eligibilities were drafted to offer the limited grant funds to those communities with the greatest needs based on their socioeconomic conditions.
- The TWDB may assist a community through the FIF by offering financial assistance to complete whichever eligible proposed project best fits their needs. In accordance with Texas Water Code § 15.535(b), the application must include an analysis of whether the proposed flood project could use floodwater capture techniques for water supply purposes, including floodwater harvesting, detention or retention basins, or other methods of capturing storm flow or unappropriated flood flow.

Change:

None.

Comment Submitted By: Dr. Milton Rahman, PhD, P.E., PMP, CFM, ENV-SP, Executive Director/County Engineer, Office of the County Engineer, Harris County, Texas

Comment Date: December 19, 2023

Comment:

The Harris County Engineering Department (HCED) congratulates and thanks the Texas Water Development Board (TWDB) for developing the draft Flood Infrastructure Fund (FIF) SFY 2024- 2025 Intended Use Plan (IUP). HCED acknowledges that undertaking and completing this monumental task is a significant milestone, not just for the TWDB, but for the State of Texas as we progress towards a more flood-resilient and infrastructurally sound state. This letter contains HCED's feedback for consideration of the draft Flood Infrastructure Fund SFY 2024-2025 Intended Use Plan.

Flood Management Evaluation Category Comments

- Currently almost all evaluations of new projects would target an area identified at flood risk or a neighborhood identified with flood loss, not an entire watershed, due to the modeling effort required to determine the alternatives. Modeling an entire watershed to identify future projects would be extremely expensive and would require significant maintenance and modeling updates to justify new projects and demonstrate the benefit of constructed projects as the watershed develops.

Federal Award Matching Funds Comments

- We recommend a project sponsor be allowed to use costs already incurred such as ROW acquisition, preliminary engineering reports, or design plans as matching funds toward the total project costs.

Minimum Standards Comments

- While a project's benefit-cost ratio may be an indicator of the anticipated "Return on Investment" derived from funding a project, it does not provide an indicator of a project's ability to provide net benefits to life and property, which is a stated objective of the project ranking. Additionally, BCRs can disproportionately favor projects which benefit high-value structures, limiting project scoring in Low to Moderate Income areas. Further, consideration for the economic efficiency of a project may be more appropriately considered in future FIUPs as opposed to the statewide ranking of projects that produce the greatest reduction in flood risk.
- The benefit-cost ratio is not an equal measurement across all regions or jurisdictions, because each jurisdiction has varying minimum drainage design requirements and requires different hydrology (such as Atlas 14), hydraulic modeling requirements, freeboard, and downstream impact requirements. The benefit-cost ratios will be drastically different if all regions are not using similar design criteria or updated mapping criteria.

Required Memorandum of Understanding (MOU)

- We agree with the requirement of a MOU. However, the requirement for a complete

project application to have an MOU signed and approved by all governing bodies or eligible political subdivisions located within the watershed is not manageable or practical. We recommend an alternative that allows TWDB to submit evidence of notification to the non-responsive political subdivisions when completing the application.

National Floodplain Insurance Program (NFIP)

- How does an applicant demonstrate that they are enforcing floodplain management standards equivalent to or exceeding the NFIP minimum standards?
- Although all communities participating in the NFIP use the draft recommended floodplain regulations or criteria, FEMA requires each participating community to customize the floodplain regulations and submit to FEMA for approval. Once the floodplain regulations are approved by the participating community, they become the NFIP regulations or criteria for that community. Many communities approve higher or more stringent regulations, or participate in the Community Rating System (CRS) program which adds higher criteria such as freeboard requirements, no adverse downstream impacts, etc. This means the NFIP criteria for each community can vary significantly.

2024-2025 Project Solicitation Comment

- Please provide further clarification on how both criteria will be applied. Will data from the RFPs be used in all cases, or only in cases where the abridged application does not provide enough information?

Abridged Applications

- Depending on how 'partial projects' are defined within a watershed or neighborhood drainage projects, improving drainage on arterial streets and thoroughfares would not be eligible projects since they would not provide significant reduction in flooding compared to a whole watershed. Most counties, cities, municipal districts, etc. will not have eligible projects since the cost to improve an entire watershed could be billions of dollars.
 - A "program bundle" that is listed as a single project on the regional flood plan would include subdivision drainage projects or drainage improvements along a thoroughfare connecting to new or improved channels or bayous, and draining first into stormwater detention basins, then draining into a river or bay. The total cost of a program bundle would be beyond the reach of most jurisdictions.
 - An individual project contains multiple components, such as subdivision drainage or drainage improvements along a thoroughfare connecting to a channel or bayou and then to a stormwater detention. In this case, stormwater detention could be constructed as a standalone component followed by the channel conveyance and then the subdivision drainage improvement to provide benefits to homes that in many cases were originally designed and constructed prior to the existence of the NFIP and floodplain mapping. Providing flood mitigation to areas, regions, watersheds, and

communities that were constructed prior to the existence of the NFIP has proven to be extremely challenging but has been very important to improving the quality of life for citizens and residents in the neighborhoods and communities, which in many cases are low to moderate income.

Scoring Criteria Comments

- General: TWDB should consider ways to incorporate and account for benefits that projects provide during events more frequent than the 100-year storm, since many of the repetitive loss areas were constructed prior to the NFIP criteria and mapping being available.
- The percentage of floodplain removed: We recommend reducing the weighting, as it could unfairly score projects with very large reductions to floodplain, but not reduce structural flooding if the watershed has a very low structure count.
- Funding one entire master planned watershed could exceed the funding allocation for both the TWDB and the sponsor for several funding cycles.
- Again, our projects are scoped to address reported or identified flooding concerns, or infrastructure such as thoroughfares, roads, neighborhoods, and collectors.

Again, HCED thanks the TWDB for the opportunity to provide formal comments to the draft Flood Infrastructure Fund (FIF) SFY 2024-2025 Intended Use Plan (IUP). As the most populated county in Texas, comprising approximately 16% of the total Texas population, HCED has carefully considered all categories and criteria to best serve our constituency and communities. I hope the Board will consider the history of flood risks, flood impacts, and need to make data driven revisions to the ranking methodology to maximize benefits of legislatively awarded funds. HCED hopes our feedback is taken into consideration to benefit all regions. HCED supports the significant impact that the State Flood Plan will have, and our continued partnership.

Response:

The TWDB appreciates receiving the comments for the Draft SFY 2024-2025 FIF IUP.

Flood Management Evaluation Category Comments

The requirement of modeling an entire HUC10 watershed was removed for this cycle of FIF. However, it is required that the area of the entire upstream contributing watershed or sub-watershed to the discharge point of interest is considered and modeled when determining solution alternatives for an area identified at flood risk or a neighborhood identified with flood loss. A determination of 'no negative impact' both upstream and downstream of the project area is also required. The SFY 2024-2025 FIF IUP was updated to add clarification.

Federal Award Matching Funds Comments

For Federal Award Matching Funds projects, financial assistance may be provided for a portion of the applicant's required federal match amount. The applicant must have received a federal award for flood-related activities contingent on the availability of local matching funds. As stated in the FIF Program Guidance Manual (TWDB-0104), the TWDB

will not be reimbursing specific construction costs, only providing funds for the required local share or match for the federal award. The already incurred costs in this example, based on the limited information, could potentially count toward the local match that the applicant is responsible for. The TWDB will provide funds for the entity's required match that are associated with the project activities covered in the amount of federal program funds that have been awarded to date. Recipients may either use their own available funds or borrow FIF funds for any portion of the required local share not provided through the FIF grant funds. In-kind services may be substituted for any loan offered, but only with prior TWDB approval.

Minimum Standards Comments

The TWDB is using the benefit-cost ratio (BCR) as a tool to evaluate the investment of state funding towards the construction of flood projects similar to, but with more flexibility than, federal requirements (FEMA, DOT, etc.). The TWDB allows a variety of BCA tools and methods to assess a minimum level of cost effectiveness of a proposed construction project. Without some objective methodology, there would be no consistent way to assess the cost-effectiveness of a proposed FMP. If the reported BCR of the complete application for the proposed project is less than 1.0, the applicant must provide a detailed explanation for why the applicant considers the project to be justified, including a discussion of the primary benefits of the project, if any, that could not be quantified and were therefore not included in the BCR calculation. TWDB will assess those requests on a case-by-case basis.

TWDB is continuing to develop methods to improve how BCRs may be computed. The TWDB BCA Input Tool includes an option to normalize property damage of structure values across high/medium/low-income areas and accounts for certain health/safety factors. TWDB is also developing additional guidance on benefit-cost analyses (www.twdb.texas.gov/flood/research/benefit-cost-analysis-guidance/) that will provide additional ways to estimate losses associated with health/safety, transportation, environmental, socio-economic, and other factors. TWDB will provide updated information as it is available. FEMA has also been actively updating its benefit cost guidance to include additional factors and applicants are encouraged to use all the latest available guidance whenever possible. Applicants are not required to follow one specific BCA method. Each applicant can estimate additional benefits that may not be built into a given tool, include them in the BCA calculation, and submit those values and justifications to TWDB as part of their application.

Local or regional drainage design requirements that require higher factors of safety may drive up the cost of a given flood project. That higher cost, in turn, may drive down the BCR value computed for the project. This is one reason TWDB did not include BCR as a significant part of the scoring criteria (to avoid different drainage standards causing BCR, and thus competing scores, to go up or down significantly), but did include BCR as a minimum criterion for all projects to meet. If a project's BCR is less than one and the applicant feels that the local or regional drainage design criteria is a significant factor in driving that cost up, then the applicant is encouraged to approximately quantify the effect the higher drainage standard has on the BCR and provide that as part of their detailed explanation why the applicant considers the project to be justified.

Required Memorandum of Understanding (MOU)

The MOU requirement is required by Texas Water Code § 15.005. The TWDB does not have the authority to change or remove that statutory requirement. The requirement only necessitates MOUs with “eligible political subdivisions,” as that term is defined in Texas Water Code § 15.531 (a district or authority created under Section 52, Article III, or Section 59, Article XVI, Texas Constitution, a municipality, or a county.) The requirement applies if the project watershed, as defined in 31 Texas Administrative Code § 363.402 (the area upstream and downstream substantially affected by the proposed flood project, as documented in the project application, and sealed by a Professional Engineer or Professional Geoscientist) lies partially outside the applicant’s boundaries. The requirement applies to flood control projects, as that term is defined in 31 Texas Administrative Code § 363.402 (the construction or rehabilitation of structural mitigation or anything that retains, diverts, redirects, impedes, or otherwise modifies the flow of water). The IUP does allow the applicant to submit completed MOUs after the application due date, provided approval by TWDB. The statute prohibits the TWDB from acting on an application without all completed and signed MOUs.

National Floodplain Insurance Program (NFIP)

An applicant demonstrates that it is enforcing floodplain management standards by having a representative sign the certification included in the abridged application (Minimum Standard No. 5, pgs. 9-10 of the FIF IUP) and providing a copy or link to the floodplain management ordinances they have in place. A signed certification and link/copy of the floodplain ordinance is required.

While floodplain management ordinances and regulations may vary significantly between communities, especially those that may have higher standards, the TWDB is simply verifying that the NFIP minimum standard is in place and relying on the signed certification that active enforcement is occurring. Within Texas, there are approximately 1,400 cities and counties of those about 1,200 participate in the NFIP and thus have NFIP standards in place. Verification of NFIP-participating communities should be straightforward. Of the remaining 200 that do not participate in the NFIP, they may or may not have floodplain management standards in place. For those, the TWDB will review the ordinances and regulations provided to assess if they are comparable to NFIP minimum requirements.

2024-2025 Project Solicitation Comment

Data from regional flood plans will be used in all cases. Applicants are required to confirm that the regional flood plan data is still accurate at the time of the submission of the abridged application. If, for some reason, data submitted during the regional flood planning process has changed at the time of the application, the applicant is required to submit all pertinent data in an Excel spreadsheet template provided with the FIF Abridged Application, identify what has changed, and provide a description and justification for the change.

Unless the TWDB is informed otherwise as stated above, data from the regional flood plan will be the default basis for ranking and prioritizing FME, FMP, and FMSs submitted as

recommended in the regional flood plan; in most instances, applicants should not need to submit any of the data required for rankings. The TWDB will review abridged applications and full financial applications in reference to the project scope outlined within the regional flood plan FME, FMP, or FMS lists, respectively. FIF abridged applications do not roll-over and a new submission would be necessary during the open solicitation period. The draft FIF IUP allows for a submission of abridged applications at any time during the cycle, given that funds remain available and an amendment to the project list is approved.

Abridged Applications

Projects to improve the drainage on arterial streets and thoroughfares are eligible projects for the FIF. If a project is divided into multiple parts, they can be considered as a phased project. However, the benefits of all the phases of the project selected for a single FIF application will be utilized to compute ranking score of the project. Thus, the data used for the ranking of the project associated with the FIF application will have to be updated to reflect any reduced benefits in the FIF funding prioritization.

Scoring Criteria Comments

- TWDB acknowledges this comment and incorporated events more frequent than the 100-year storm for the second cycle of flood planning. During the first cycle, regional flood planning groups were not required to incorporate smaller storm events, but they could at their own discretion. With the limited time and resources, none of the regional flood planning groups incorporated information for smaller storm events for their recommended projects during the first cycle. However, BCRs, which are 2.5 percent of the FMP scoring criteria, typically includes the benefits associated with a wide range of flood recurrence events.
- The percentage of floodplain removed is one of the criteria that is generally favored by areas with smaller and rural communities. There are other criteria that address reducing flood risk to structures.
- Only FMEs, FMSs, and FMPs recommended in an approved regional flood plan are eligible under the SFY 2024-2025 FIF IUP. While the development of master plans, themselves, could be recommended in a regional flood plan (e.g., as FME or FMS), Section 2.4.B in the Exhibit C: Technical Guidelines for Regional Flood Planning (https://www.twdb.texas.gov/flood/planning/planningdocu/2023/doc/04_Exhibit_C_TechnicalGuidelines_April2021.pdf) specifically disallows regional flood planning groups from including FMPs for entire master plans and requires, instead, discrete FMPs must be recommended.
- The requirement of modeling an entire HUC10 watershed was removed for this cycle of FIF. However, it is required that the area of the entire upstream contributing watershed or sub-watershed to the discharge point of interest is considered when determining solution alternatives for an area identified at flood risk or a neighborhood identified with flood loss. A determination of ‘no negative impact’ both upstream and downstream of project area is also required. The FIF IUP was updated to add clarification.

Change:

1. The definition of watershed was updated in the IUP to provide clarification.

Comment Submitted By: Doug Canant, P.E., RPLS, Jefferson County Drainage District No. 6

Comment Date: December 19, 2023

Comment:

I see that helping fund local match for federally funded projects is already under consideration.

This is a great idea and very much appreciated because it helps us utilize more federal dollars for Texas, that we otherwise might not be able to afford.

Response:

The TWDB appreciates receiving the comments for the Draft SFY 2024-2025 FIF IUP.

Change:

None.

Comment Submitted By: Cindy J. Engelhardt, P.E., CFM, Vice President, Water Resources Deputy Practice Leader, Halff

Comment Date: December 20, 2023

Comment:

Good afternoon. Upon review of the draft Flood Infrastructure Fund (FIF) SFY 2024-2025 Intended Use Plan (IUP) we have formulated a few questions and comments. As we advance this review we will provide any additional items.

1. **Abridged Application Timeline** - With the comment period of the draft FIF IUP ending on January 1st, do you anticipate providing revisions to the FIF IUP prior to the March 15th abridged application due date?
2. **Partial Projects** - There are a couple of sentences in the IUP (pages 5 and 13) that indicate applications containing partial projects are not allowed. If a county included a county-wide drainage master plan as an FME, are they no longer allowed to conduct a phased study? A similar example would be Bastrop County, where they have obtained multiple TWDB grants (FPP and FIF) for a few watersheds per phase of their county-wide drainage master plan.
3. **Project Costs** - There does not appear to be language indicating that applicants can adjust the necessary cost of a FMX listed in the regional flood plan. Page 20 discusses the total project costs may be increased, but this appears to be an increase after FIF award. Since the flood plans collected readily available (sic) information, it is possible that some FMX costs might require refinement or increase for the FIF application. Will this be allowed?
4. **FME versus FMP Categories** - I have a few questions regarding the screen capture highlights below (page 6). At the bottom of the FME category, it seems to indicate that FMEs to advance mitigation projects (feasibility studies, H&H modeling, design) will fall under the FMP category. However, the first sentence in the FMP category indicates it is only for recommended FMPs.
 - a. Will applicants apply for FMEs that advance an identified mitigation project under the FMP Category? An example from Region 10 might be FME ID #101000233 - Hidden Lake Drive Improvements at Wilbarger Creek Tributary 200 (DMP WC-02). Additional modeling for NAI, construction cost update and BCA was needed so this one landed in the FME category for the regional flood plan.
 - b. Will applicants be able to apply funding to take a FME through construction?

Draft 2024-2025 Flood Intended Use Plan

Flood Management Evaluation Category

Proposed activities must be a recommended Flood Management Evaluation (FME) in a regional flood plan. Under this category, eligible applicants conduct studies to identify, assess, and quantify flood risk or identify, evaluate, and recommend flood risk reduction solutions. These studies involve planning of entire watersheds, as required by the TWDB regional flood planning program, to better inform the development of strategies using structural and nonstructural measures before a flood event. This may include determining and describing problems from or related to flooding, identifying, and planning solutions to flooding problems, and estimating the benefits and costs of these solutions.

All activities under this category must be considered "flood control planning" as defined in Texas Water Code Section 15.405; however, this does not mean all activities listed in that section are eligible under the FME Category. For example, design activities, including engineering plans and specifications, would be funded under the Flood Mitigation Projects (FMP) Category. The FME Category does not include the actual preparation of a Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM).

Flood Mitigation Project Category

Proposed activities must be a recommended Flood Mitigation Project (FMP) in a regional flood plan. Under this category, eligible applicants may undertake activities to construct or rehabilitate structural flood mitigation improvements or implement non-structural improvements.

Planning, Acquisition, and Design includes activities related to planning, land acquisition, and/or design of the project. Planning includes feasibility analyses, detailed hydraulic and hydrological studies, activities to obtain regulatory approval, and coordination of other related work.

Construction, Rehabilitation, and Implementation includes construction and rehabilitation activities, but may also include demolition, decommissioning, and other activities not necessarily thought of as construction.

5. **Affidavit / Public Meeting** – What is the notification requirement for the public meeting? Does a city council meeting or county commissioner meeting satisfy the public meeting?
6. **AMHI** – A population weighting only applies to census tracts. Should this computation also be area weighted? Additionally, what are you using as the state-wide AMHI? We found \$73,035 using the following website <https://www.census.gov/quickfacts/fact/table/TX/HSG860221>.

Response:

The TWDB appreciates receiving the comments for the Draft SFY 2024-2025 FIF IUP.

1. *Abridged Application Timeline*

The comment period was extended to Wednesday, January 3, 2024. The comments will be addressed at time of adoption of the SFY 2024-2025 FIF IUP by the TWDB board in March 2024.

2. *Partial Projects*

Abridged Applications submitted with partial projects from the Board-approved regional flood plan will be considered ineligible for the FIF (excluding phased projects). This eligibility criterion was established to align project scores with the benefits generated by a project. If a project is divided into multiple parts, they can be considered as a phased project. However, the benefits of all the phases of the project selected for a single FIF application will be utilized to compute ranking score of the project. Thus, the ranking of the project will change in FIF funding prioritization. For your example, a county's phased study may be eligible for the FIF, provided all eligibility requirements in the IUP are met.

3. *Project Costs*

Project costs requested in the FIF Abridged Application may vary from the project cost for that particular project in the Board-approved regional flood plans – this would be acceptable. However, the total project costs may not change significantly between the abridged application and submittal of the full application.

4. *FME versus FMP Categories*

Only FMEs, FMPs, and FMSs recommended in the Board-approved regional flood plan are eligible for financial assistance. An abridged application may only be submitted for projects on the FME/FMP/FMS corresponding list. For example, an applicant cannot apply for an FMP project if that project is listed as FME on the Board-approved regional flood plan. If the project needs to move from an FME to FMP, the sponsor will need to go through the process to amend the regional flood plan. The applicant can apply for funding as the stages progress and the projects fall under the correct FME/FMP/FMS list, given there is no redundant funding.

5. *Affidavit / Public Meeting*

In accordance with 31 Texas Administrative Code § 363.408(b)(2)(C), the eligible political subdivisions, separately or in cooperation, must hold a public meeting to accept comment on proposed flood projects from interested parties. The TWDB does not have any particular notice requirements for public meetings. A city council meeting or county commissioner meeting would satisfy the public meeting requirement if opportunity for public input is included. The applicant should follow its own notice requirements and those of the Open Meetings Act (if the public meeting would constitute a “meeting” under the Act).

6. *AMHI*

For the FME Category, the study area AMHI using a weighted average based on population will be used. For the FMP and FMS Categories, the project area AMHI using a weighted average based on population in each U.S. Census Bureau geographic area will be used. The U.S. Census Bureau American Community Survey (ACS) Data can be found here:

https://www.twdb.texas.gov/financial/programs/fif/doc/US_Census_Bureau_ACS_data.xlsx. The statewide AMHI that will be utilized for the 2024-2025 FIF Abridged Applications is \$73,035.

Change:

None.

Comment Submitted By: Johnathan M. St. Romain, P.E., Grants Administrator Harris County Flood Control District on behalf of Scott R. Elmer, P.E., Chief Partnerships and Programs Officer, Harris County Flood Control District

Comment Date: December 27, 2023

Comment:

Dear Members of the Texas Water Development Board:

The Harris County Flood Control District (HCFCD) appreciates the Texas Water Development Board (TWDB) for developing the draft Flood Infrastructure Fund (FIF) SFY 2024-2025 Intended Use Plan (IUP). This letter provides HCFCD's feedback for consideration of the draft Flood Infrastructure Fund SFY 2024-2025 Intended Use Plan.

1. Bottom of Page 4: Eligible Projects
HCFCD Comment: Requesting clarification on whether or not projects included in the regional flood plan that have already received FIF funding are eligible to receive additional FIF funding this time around.
2. Top of Page 6, "These studies involve planning of entire watersheds"
HCFCD Comment: The eligible project section of the IUP states that preliminary engineering and project design are eligible planning phase activities for FME. However, the above statement seems to contradict that, since most preliminary engineering and design activities would not cover entire watersheds. HCFCD recommends removal of this requirement, and if not removed, clarification on the specific requirement.
3. Bottom of Page 6, "The applicant must have received a federal award..."
HCFCD Comment: Request that the TWDB also consider currently pending applications for federal funding. One specific example is the FY23 FEMA BRIC and FMA grant opportunities.
4. Page 7: Requirement of BCR>1
While a project's BCR may be an indicator of anticipated "Return on Investment" derived from funding a project, it does not provide an indicator of a project's ability to provide net benefits to life and property, which is a stated objective of the project ranking. Additionally, BCRs can disproportionately favor projects which benefit high-value structures, limiting project scoring in Low or Moderate Income areas. Further, consideration for the economic efficiency of a project may be more appropriately considered in future FIUPs as opposed to the statewide ranking of projects that produce the greatest reduction in flood risk.
HCFCD recommends removal of this requirement, despite the opportunity to explain why a project with a BCR<1 should be included.
5. Page 8: BCA requirement for construction project
A BCA is required if the proposed project is construction-oriented, even if the federal grant program specifically exempts the specific project from having a BCA. Why is FIU (sic) limiting projects beyond what the federal grant programs require?
6. Page 9: MOU Requirements

The MOU requirement is extremely problematic in watersheds with literally hundreds of political subdivisions. The MOU requirement can allow even one political subdivision to “hold out” and effectively veto the opportunity for a project to apply for funding. P. 9 of the draft 2024-2025 FIUP includes the following language: “Providing adequate notice and ample opportunity to any such eligible political subdivision that elects not to participate further would also fulfill this requirement, provided evidence of notification is included within the application.” This language is extremely important but doesn’t have enough guidance or standards for an applicant to know whether they’ve met this standard. Can additional information be provided with respect to what is “adequate” and “ample” and what evidence of notification would need to be shown?

7. Top of page 12, “... projects are prioritized based on information submitted in the abridged application AND the relative scoring of the associated project, strategy, or evaluation based on data from the regional flood plans...”

HCFCDC Comment: Please provide further clarification on how both of these criteria will be applied. Will data from the RPPs be used in all cases, or only in cases where the abridged application does not provide enough information?

8. Middle of page 13, “Only complete projects from the regional flood plan will be considered for financial assistance. Abridged applications containing partial projects from the regional flood plan will be considered ineligible for the FIF.”

HCFCDC Comment: The Flood Control District believes this stipulation could be problematic, depending on what is meant by “partial” projects. We understand that TWDB would not want to fund projects that, in a partial or interim condition, would adversely impact other areas. However, as a practical matter, it is common for very large projects to be broken into manageable components for a variety of reasons. In addition, we can offer a few specific examples of different types of large projects included in the regional flood plan:

- A “program bundle” that is listed as a single project on the regional flood plan, is a watershed-wide strategy including many separate, self-sustaining stormwater detention basins. This single line item on the flood plan is comprised of many individual projects that could stand alone. They would be constructed separately and would ensure no adverse impact prior to construction, though the BCR for any one individual project may not be as advantageous as that of the whole.
- An individual project that contains multiple components, such as channel conveyance improvement + stormwater detention. In this case, stormwater detention could be constructed as a standalone piece first. It would not cause adverse impacts. There would be a small benefit in the interim condition of detention only, when compared to the benefit of the ultimate channel conveyance improvement + stormwater detention.
- An individual project that is a large detention basin that could be phased as additional funding becomes available.

9. Bottom of Page 13, similar to comment #3 above “... projects are prioritized based on information submitted in the abridged application AND the relative scoring of the associated project, strategy, or evaluation based on data from the regional flood plans...”

HCFCF Comment: Please provide further clarification on how both of these criteria will be applied. Will data from the RPPs be used in all cases, or only in cases where the abridged application does not provide enough information?

10. Page 15 item V, "... existing federal award"; also top of page 16 item II

HCFCF Comment: Similar to comment #2 above, request that the TWDB also consider currently pending applications for federal funding. One specific example is the FY23 FEMA BRIC and FMA grant opportunities.

11. Scoring Criteria Comments:

- a) General: TWDB should consider ways to incorporate and account for benefits that projects provide during events more frequent than the 100-year storm.
- b) General: It is recommended that all projects be evaluated using the Atlas 14 data which is the most up to date rainfall totals for the State of Texas so that all projects are based on the same rainfall data set.
- c) Item 9 Percentage of FP removed: Recommend this have a reduced weighting, as it could unfairly score projects with very large benefits, but within a large floodplain thus producing a small percentage.
- d) Request TWDB consider providing further clarification and examples of how green and NBS project will be scored.

12. General comment: HCFCF is disappointed that the call for abridged applications overlaps with the comment period. This makes it seem as if the comments are not intended to be taken into account. Also, the short comment period ending January 1 significantly inhibits stakeholders' ability to provide quality input given the holidays.

General Comment: Senate Bill 7 did not require the Flood Infrastructure Fund to require the use of benefit/cost ratio or a signed memorandum of understanding with "all governing bodies of eligible political subdivisions in the project watershed." The continued inclusion of these requirements in the draft 2024-2025 FIUP unnecessarily creates additional hurdles to flood projects that the Legislature did not intend.

HCFCF thanks the TWDB for the opportunity to provide formal comments to the draft Flood Infrastructure Fund (FIF) SFY 2024-2025 Intended Use Plan (IUP). We support the significant impact that the State Flood Plan will have, and we look forward to our continued partnership.

Response:

The TWDB appreciates receiving the comments for the Draft SFY 2024-2025 FIF IUP.

- 1. Only FMEs, FMPs, and FMSs recommended in the Board-approved regional flood plan are eligible for financial assistance. If a project is not a recommended FME, FMP, or FMS, then the project is not eligible for FIF funding. Past FIF funding would not preclude a project from receiving additional FIF funding for this cycle if the project is recommended in the Board-approved regional flood plan if all other eligibility requirements, including those related to partial projects, are met. It is not eligible to fund the same task or item that has already been funded by TWDB.

2. All activities under the FME Category must be considered “flood control planning” as defined in Texas Water Code Section § 15.405; however, this does not mean all activities listed in that section are eligible under the FME Category. For example, design activities, including engineering plans and specifications, would be funded under the FMP Category and not the FME Category. This is consistent with the regional flood planning process for the process of assigning projects to a respective FME, FMP, or FMS list.
3. Federal application must have been submitted by Abridged Application submission date, and federal funds must be awarded by TWDB commitment date. An applicant must show evidence they have received a federal award for flood-related activities contingent on the availability of local matching funds with the submission of the full financial application. Proposed activities must be a recommended FME, FMP, or FMS in the Board-approved regional flood plan and may fall in any of the categories.
4. The TWDB is using the BCR as a tool to evaluate the investment of state funding towards the construction of flood projects similar to, but with more flexibility than, federal requirements (FEMA, DOT, etc.). The TWDB allows a variety of BCA tools and methods to assess a minimum level of cost effectiveness of a proposed construction project. Without some objective methodology, there would be no consistent way to assess the cost-effectiveness of a proposed FMP. If the reported BCR of the complete application for the proposed project is less than 1.0, the applicant must provide a detailed explanation for why the applicant considers the project to be justified, including a discussion of the primary benefits of the project, if any, that could not be quantified and were therefore not included in the BCR calculation. The TWDB will assess those requests on a case-by-case basis.

The TWDB is continuing to develop methods to improve how BCRs may be computed. The TWDB BCA Input Tool already includes an option to normalize property damage of structure values across high/medium/low-income areas and accounts for certain health/safety factors. The TWDB is also developing additional guidance on benefit-cost analyses (www.twdb.texas.gov/flood/research/benefit-cost-analysis-guidance/) that will provide additional ways to estimate losses associated with health/safety, transportation, environmental, socio-economic, and other factors. More information will be provided as it is available. FEMA has also been actively updating its benefit cost guidance to include additional factors and applicants are encouraged to use all the latest available guidance whenever possible. Applicants are not required to follow one specific BCA method. Each applicant can estimate additional benefits that may not be built into a given tool, include them in the BCA calculation, and submit those values and justifications to the TWDB as part of their application.

Local or regional drainage design requirements that require higher factors of safety may drive up the cost of a given flood project. That higher cost, in turn, may drive down the BCR value computed for the project. This is one reason the TWDB did not include BCR as a significant part of the scoring criteria (to avoid different drainage standards causing BCR, and thus competing scores, to go up or down significantly), but did include

BCR as a minimum criterion for all projects to meet. If a project's BCR is less than one and the applicant feels that the local or regional drainage design criteria is a significant factor in driving that cost up, then the applicant is encouraged to approximately quantify the effect the higher drainage standard has on the BCR and provide that as part of their detailed explanation why the applicant considers the project to be justified.

5. The TWDB has considered FEMA's streamlined cost-effectiveness method, but FEMA has established an approach where FEMA will independently estimate the BCR of projects less than \$1 million with the information provided by the applicant. The TWDB does not have a similar approach established, therefore the TWDB will continue to require BCAs for projects as defined in the Intended Use Plan. Further, since the only projects that are eligible for FIF funding are those that are in the amended regional flood plans and BCAs were required in those plans, BCAs should already have been developed for relevant projects. An update to the BCA should only be needed if the prior BCAs were inadequate or if the project information has changed since it was listed in the amended regional flood plan.
6. The language included in the comment on providing adequate notice does not apply to the MOU requirement. The MOU requirement is required by the Texas Legislature in Texas Water Code § 15.005. The TWDB does not have the authority to change or remove that statutory requirement. The requirement only necessitates MOUs with "eligible political subdivisions," as that term is defined in Texas Water Code § 15.531 (a district or authority created under Section 52, Article III, or Section 59, Article XVI, Texas Constitution, a municipality, or a county). The requirement applies if the project watershed, as defined in 31 Texas Administrative Code § 363.402 (the area upstream and downstream substantially affected by the proposed flood project, as documented in the project application, and sealed by a Professional Engineer or Professional Geoscientist) lies partially outside the applicant's boundaries. The requirement applies to flood control projects, as that term is defined in 31 Texas Administrative Code § 363.402 (the construction or rehabilitation of structural mitigation or anything that retains, diverts, redirects, impedes, or otherwise modifies the flow of water.)
7. Data from regional floods plans will be used in all cases. Applicants are required to confirm that the regional flood plan data is still accurate at the time of the submission of the abridged application. If, for some reason, data submitted during the regional flood planning process has changed at the time of the application, the applicant is required to submit all pertinent data in an Excel spreadsheet template provided with the FIF Abridged Application, identify what has changed, and provide a description and justification for the change.

Unless the TWDB is informed otherwise as stated above, data from the regional floods plans will be the default basis for ranking and prioritizing FME, FMP, and FMSs submitted as recommended in the regional floods plans; in most instances, applicants should not need to submit any of the data required for rankings. The TWDB will review abridged applications and full financial applications in reference to the project scope outlined within the regional floods plans FME, FMP, or FMS lists, respectively. FIF

abridged applications do not roll-over and a new submission would be necessary during the open solicitation period. The draft FIF IUP allows for a submission of abridged applications at any time during the cycle, given that funds remain available and an amendment to the project list is approved.

8. Disallowing 'partial project' is intended to align project score with the benefits generated by a project.

If a project is divided into multiple parts, they can be considered as a phased project. However, the benefits of all the phases of the project selected for a single FIF application will be utilized to compute ranking score of the project. Thus, the data used for the ranking of the project associated with the FIF application will have to be updated to reflect any reduced benefits in the FIF funding prioritization.

If a portion of an FMP has already been completed, and the project scope of the remaining portion aligns with the FMP recommended in the Board-approved regional floods plan, then the abridged application may be considered eligible for the FIF, provided all eligibility requirements in the IUP are met.

9. Please see response to Comment No. 7.

10. See response to Comment No. 2.

11. a) The TWDB acknowledges this comment and incorporated events more frequent than the 100-year storm for the second cycle of flood planning. During the first FIF cycle, the regional flood planning groups were not required to incorporate smaller storm events, but they could at their own discretion. With the limited time and resources, none of the regional flood planning groups incorporated information for smaller storm events for their recommended projects during the first cycle. However, BCRs, which are 2.5 percent of the FMP scoring criteria, typically includes the benefits associated with a wide range of flood recurrence events.

b) The regional flood planning process requires use of best available information including the Atlas 14 data. All recommended FMPs in the regional flood plans are expected to have utilized the Atlas 14 rainfall dataset.

c) The percentage of floodplain removed is one of the criteria that is strongly favored by areas with smaller and rural communities. There are other criteria that address reducing flood risk to structures. The project area can be limited to the sub-watershed with contributing drainage area to the discharge point of interest.

d) All types of FMEs, FMEs, and FMSs will be scored in the 2024 FIUP using the same ranking methodology as presented in the FIF IUP. Percent nature-based solution (by cost), as identified by the regional flood plans, is 7.5 percent of total FMP score. Environmental Benefit Ranking is 2.5 percent of total FMP scoring. Environmental Benefit Ranking for regional flood planning process is described as ranking of expected

level of environmental benefits to be delivered by project to water quality, cultural heritage, habitat, air quality, natural resources, agricultural resources, and soils/erosion and sedimentation. Please refer to page 26 of Exhibit C: Technical Guidelines for Regional Flood Planning

([https://www.twdb.texas.gov/flood/planning/planningdocu/2023/doc/04 Exhibit C TechnicalGuidelines April2021.pdf](https://www.twdb.texas.gov/flood/planning/planningdocu/2023/doc/04_ Exhibit_C_TechnicalGuidelines_April2021.pdf)) for further information on this ranking criterion.

No change made.

12. The TWDB does intend on taking all comments into account and making revisions as seen fit. The timing of the public comment period and Abridged Application solicitation period were necessary to ensure the program progresses and funding can start being made available to projects as quickly as possible. This will be taken in account for future cycles when the schedule is being developed. If there are revisions that need to be made to the IUP that necessitate additional or different information than was asked for in the Abridged Application, TWDB staff will reach out to applicants to get that information.

General Comment on BCR:

The TWDB is using the BCR as a tool to evaluate the investment of state funding towards the construction of flood projects similar to, but with more flexibility than, federal requirements (FEMA, DOT, etc.). The TWDB allows a variety of BCA tools and methods to assess a minimum level of cost effectiveness of a proposed construction project. Without some objective methodology, there would be no consistent way to assess the cost-effectiveness of a proposed FMP. If the reported BCR of the complete application for the proposed project is less than 1.0, the applicant must provide a detailed explanation for why the applicant considers the project to be justified, including a discussion of the primary benefits of the project, if any, that could not be quantified and were therefore not included in the BCR calculation. TWDB will assess those requests on a case-by-case basis.

TWDB is continuing to develop methods to improve how benefit-cost ratios (BCRs) may be computed. The TWDB BCA Input Tool already includes an option to normalize property damage of structure values across high/medium/low-income areas and accounts for certain health/safety factors. TWDB is also developing additional guidance on benefit-cost analyses (www.twdb.texas.gov/flood/research/benefit-cost-analysis-guidance/) that will provide additional ways to estimate losses associated with health/safety, transportation, environmental, socio-economic, and other factors. TWDB will provide updated information as it is available. FEMA has also been actively updating its benefit cost guidance to include additional factors and applicants are encouraged to use all the latest available guidance whenever possible. Applicants are not required to follow one specific BCA method. Each applicant can estimate additional benefits that may not be built into a given tool, include them in the BCA calculation, and submit those values and justifications to TWDB as part of their application.

Local or regional drainage design requirements that require higher factors of safety may drive up the cost of a given flood project. That higher cost, in turn, may drive down the BCR value computed for the project. This is one reason TWDB did not include BCR as a

significant part of the scoring criteria (to avoid different drainage standards causing BCR, and thus competing scores, to go up or down significantly), but did include BCR as a minimum criterion for all projects to meet. If a project's BCR is less than one and the applicant feels that the local or regional drainage design criteria is a significant factor in driving that cost up, then the applicant is encouraged to approximately quantify the effect the higher drainage standard has on the BCR and provide that as part of their detailed explanation why the applicant considers the project to be justified.

General Comment on MOU:

The MOU requirement is required by Texas Water Code § 15.005. The TWDB does not have the authority to change or remove that statutory requirement. The requirement only necessitates MOUs with "eligible political subdivisions," as that term is defined in Texas Water Code § 15.531 (a district or authority created under Section 52, Article III, or Section 59, Article XVI, Texas Constitution, a municipality, or a county.) The requirement applies if the project watershed, as defined in 31 Texas Administrative Code § 363.402 (the area upstream and downstream substantially affected by the proposed flood project, as documented in the project application, and sealed by a Professional Engineer or Professional Geoscientist) lies partially outside the applicant's boundaries. The requirement applies to flood control projects, as that term is defined in 31 Texas Administrative Code § 363.402 (the construction or rehabilitation of structural mitigation or anything that retains, diverts, redirects, impedes, or otherwise modifies the flow of water). The IUP does allow the applicant to submit completed MOUs after the application due date, provided approval by TWDB. The statute prohibits the TWDB from acting on an application without all completed and signed MOUs.

Change:

None.

Comment Submitted By: Mike Garcia, Project Manager, Recovery & Resiliency Division, Harris County Engineering Department on behalf of Tim Buscha, Chairman, Industries Voting Member, San Jacinto RFPG

Comment Date: December 27, 2023

Comment:

The RFPG convened on December 14, 2023, and preliminarily discussed the FIF draft IUP issued for comment by the TWDB on December 1, 2023. RFPG members agreed to formalize concerns and consolidate comments to provide as a group. We appreciate the opportunity to review and provide feedback on the draft Flood Infrastructure Fund Intended Use Plan (FIUP). The RFPG would like to offer the following comments:

Overall and Federal Award Matching Funds

1. Recommend Increasing Total FIF Funds Available
The financial needs identified across the state in regional flood plans far exceeds the amount of funds available through the FY 2024-2025 FIF competition. The RFPG recommends making more of the \$625M appropriated to the FIF by the 88th Texas Legislature available during this FY 2024-2025 FIF competition.
2. Currently pending applications should be considered for funding
On P. 6 of the FIUP, as well as Section V. under Flood Management Evaluation Category Eligibility, and item II under Flood Mitigation Project Category Eligibility state that, "The applicant must have received a federal award for flood-related activities ... ". The RFPG requests that currently pending applications for federal funding should be considered for federal funding. Specific examples are the FY23 FEMA BRIC and FMA grant opportunities.
3. Recommend allowing costs already incurred as matching funds towards total project cost
The TWDB should consider allowing funds already expended as the local match for a federal award program to be reimbursable through the FIF.

Minimum Standards

4. Certain requirements are limiting flood projects
Senate Bill 7 did not require the Flood Infrastructure Fund to require the use of benefit/cost ratio or a signed memorandum of understanding with "all governing bodies of eligible political subdivisions in the project watershed." The continued inclusion of these requirements in the draft 2024-2025 FIUP unnecessarily creates additional hurdles to flood projects that the Legislature did not intend.
5. BCAs are beyond what some federal grant programs require
On P. 8 of the FIUP regarding federal award matching funds, the document requires a BCA if the proposed project is construction-oriented, even if the federal grant program specifically exempts the specific project from having a BCA. Why is FIUP limiting projects beyond what the federal grant programs require?
6. Request removal of the BCR greater than or equal to 1.0 requirement

While a project's BCR may be an indicator of anticipated "Return on Investment" derived from funding a project, it does not provide an indicator of a project's ability to provide net benefits to life and property, which is a stated objective of the project ranking. Additionally, BCRs can disproportionately favor projects which benefit high-value structures, limiting project scoring in Low or Moderate Income areas. Further, consideration for the economic efficiency of a project may be more appropriately considered in future FIUPs as opposed to the statewide ranking of projects that produce the greatest reduction in flood risk. This requirement is requested to be removed, despite the opportunity to explain why a project with a BCR below 1.0 should be included.

7. MOU can cause issues in watersheds with substantial overlapping political subdivisions

The RFPG understands the intent of requiring a memorandum of understanding (MOU) when a project watershed is partially outside the political subdivision filing the application. However, the requirement for a complete project application to have an MOU signed and approved by all governing bodies or eligible political subdivisions located within the watershed is not manageable or practical. This can also be problematic in watersheds with an abundance of overlapping political subdivisions. The MOU requirement can allow even one political subdivision to "hold out" and effectively veto the opportunity for a project to apply for and receive funding. We recommend an alternative that allows the sponsor to submit evidence of notification to the non-responsive political subdivisions when completing the application.

8. Request guidance on notification to political subdivisions for completing affidavit P. 9 of the FIUP includes the following language: "Providing adequate notice and ample opportunity to any such eligible political subdivision that elects not to participate further would also fulfill this requirement, provided evidence of notification is included within the application." This language is extremely important but doesn't provide enough guidance or standards for an applicant to know whether they've met this standard. Can additional information be provided with respect to what is "adequate" and "ample" and what evidence of notification would need to be shown?
9. Guidance requested on demonstrating floodplain management standards enforced to minimum NFIP standards

How does an applicant demonstrate that they are enforcing floodplain management standards equivalent to or exceeding the NFIP minimum standards? Is active participation in the NFIP or location within the jurisdiction of sponsors who are active participants in the NFIP sufficient?

Eligibilities and Financing Details by Category

10. Request clarification on how information from abridged application and relative scoring of project is applied

The FIUP states on P.12 and P.13, that "Projects are prioritized based on information submitted in the abridged application and the relative scoring of the associated project, strategy, or evaluation based on data from regional

flood plans ...". Please provide further clarification on how criteria from both the abridged application and the relative scoring of the associated project, strategy, or evaluation from regional flood plans will be applied to the prioritization of projects. Will data from the regional flood plan be used in all cases, or only in cases where the abridged application does not provide additional information?

11. Recommend against "Partial Projects" being considered ineligible and clarification is needed on what is considered "partial" projects

On P. 5 and 13, the FIUP states that, "Only complete projects from the regional flood plan will be considered for financial assistance. Abridged applications containing partial projects from the regional flood plan will be considered ineligible for the FIF". The stipulation of what could be considered 'partial projects' could prevent project components that could be completed individually, but that were grouped together with other project components in the Regional Flood Plan, from being eligible for funding. The RFP understands that TWDB would not want to fund projects that, in a partial or interim condition, would adversely impact other areas. However, as a practical matter, it is common for very large projects to be broken into manageable components for a variety of reasons. The following are a few specific examples of different types of large projects included in the regional flood plan:

- A "program bundle" that is listed as a single project on the regional flood plan, is a watershed-wide strategy including many separate, self-sustaining stormwater detention basins. This single line item on the flood plan is comprised of many individual projects that could stand alone. They would be constructed separately and would ensure no adverse impact prior to construction, though the BCR for any one individual project may not be as advantageous as that of the whole.
- An individual project that contains multiple components, such as channel conveyance improvement and stormwater detention. In this case, stormwater detention could be constructed as a standalone piece first. It would not cause adverse impacts. There would be a small benefit in the interim condition of detention only, when compared to the benefit of the ultimate channel conveyance improvement and stormwater detention.
- An individual project that is a large detention basin that could be phased as additional funding becomes available.

The TWDB's approach also risks penalizing sponsors who have made progress towards implementing components of a project or conducting further study to develop plans for phasing of large, regional projects. The TWDB should consider how sponsors can leverage FIF funds to complete the implementation of projects/FMPs or implement phases of a large regional project. Consider how sponsors may be able to submit all necessary data for ranking based on the phase or component of the project that is being

submitted for financial assistance by filling out Attachment 3 in the abridged application form.

12. Communities with an AMHI greater than 85% of state-wide AMHI should be eligible for a greater percentage of grant funds on FMSs and FMPs

The FIUP shows that for FMSs and FMPs, if the "study area" of the project or strategy has an AMHI greater than 85% of the state-wide AMHI, that project or strategy would only potentially be eligible for very limited grant funding (if meeting the "rural" definition and potentially also the green/nature-based requirements). Communities with an AMHI above 85% of the state-wide AMHI should be eligible for a greater percentage of grant funds on FMSs and FMPs. Flood projects can be very expensive, and just because a community is above 85% of the state-wide AMHI does not mean they can afford said projects.

13. Concern that FME projects are only eligible if they conduct planning for "entire watershed"

The eligible project section of the IUP states that preliminary engineering and project design are eligible planning phase activities for FME. However, the statement on P. 6 of the FIUP states that FMES are, "studies involve[ing] planning of entire watersheds" which seems to contradict that, since most preliminary engineering and design activities would not cover entire watersheds. Currently almost all evaluations of new projects would target an area identified at flood risk or a neighborhood identified with flood loss, not an entire watershed, due to the modeling effort required to determine the alternatives. Modeling an entire watershed to identify future projects would be extremely expensive, likely redundant, and would require significant maintenance and modeling updates to justify new projects and demonstrate the benefit of constructed projects as the watershed develops. This language on P.6 appears to be a holdover from the previous FIF IUP and is no longer consistent with the guidance provided to RFPGs when delineating FMEs for inclusion in the RFP. Please consider removing this restrictive language from the IUP.

Prioritization Criteria

14. Consider ways to incorporate and account for benefits projects provide during events more frequent than the 100-year event.

TWDB should consider ways to incorporate and account for benefits that projects provide during events more frequent than the 100-year storm, since many of the repetitive loss areas were constructed prior to the NFIP criteria and mapping being available.

15. Reduce weighting of criteria #13 - number of low water crossings removed from the 100yr floodplain

For FMPs, the number of low water crossings removed from 100yr floodplain criteria has the same weight as number of structures removed and number of residential structures removed combined. The RFPG recommends reducing the weight assigned to low water crossings in favor of prioritizing flood risk reduction to structures.

16. Reduce the weighting of criteria #9 - percent of structures removed from 100yr floodplain.

The RFPG recommends reducing the weight of item 9 from the scoring criteria, the percent of structures removed from 100yr, as this is not in alignment with the stated objective of the statewide ranking exercise to, "primarily focus on projects with the greater potential to mitigate the risk to life and property." The percentage of structures removed from 100yr floodplain is given more weight than number of structures removed. With the current weight, this would mean that a project that removes 2 out of 2 structures could score higher than another project that removes 900 out of 1,000 structures.

17. Provide further clarification on green infrastructure and NBS

Consider providing further clarification and examples of green infrastructure and nature based solutions that would meet the TWDB's requirements in order to qualify for additional grant funds.

Should you have any questions, please feel free to contact me at TBuscha@idseg.com or the San Jacinto RFPG Technical Consultant at SJRFPG.TechCon@freese.com.

Response:

The TWDB appreciates receiving the comments for the Draft SFY 2024-2025 FIF IUP.

Overall and Federal Award Matching Funds

1. The TWDB will use grants and zero percent interest loans to offer at least \$375,000,000 for projects during the 2024-2025 FIF IUP cycle. The Board may increase the funds available in the 2024-2025 FIF IUP cycle. The remaining funds appropriated to the FIF by the 88th Texas Legislature will be utilized in the next FIF funding cycle.
2. An applicant must have received a federal award for flood-related activities contingent on the availability of local matching funds. Proposed activities must be a recommended FME, FMP, or FMS in the Board-approved regional flood plan and may fall in any of the categories. Federal application must have been submitted by Abridged Application submission date, and federal funds must be awarded by TWDB commitment date. The IUP was updated to include the previous sentence.

At this time, the TWDB is only considering FEMA Flood Mitigation Assistance (FMA) grant awarded projects from FY 2019-2022 to be eligible for a FIF 70 percent grant. Consideration of future FEMA FMA grant awarded projects may occur should the TWDB amend the draft FIF IUP after its adoption or in a future FIF cycle. Other federal programs requiring matching funds must have the federal application submitted by Abridged Application submission date, and federal funds must be awarded prior to the TWDB commitment date in order to be eligible for FIF funds.

3. For federal award matching funds projects, grant funds may be provided for a portion of the applicant's required federal match amount. The applicant must have received a federal award for flood-related activities contingent on the availability of local matching funds. As stated in the FIF Program Guidance Manual (TWDB-0104), the TWDB will not

reimburse specific construction costs, only providing funds for the required local share or match for the federal award. The TWDB will provide funds for the entity's required match that are associated with the project activities covered in the amount of federal program funds that have been awarded to date. Recipients may either use their own available funds or borrow FIF funds for any portion of the required local share not provided through the FIF grant funds. In-kind services may be substituted for any loan offered, but only with prior TWDB approval.

Minimum Standards

4. The TWDB is using the BCR as a tool to evaluate the investment of state funding towards the construction of flood projects similar to, but with more flexibility than, federal requirements (FEMA, DOT, etc.). The TWDB allows a variety of BCA tools and methods to assess a minimum level of cost effectiveness of a proposed construction project. Without some objective methodology, there would be no consistent way to assess the cost-effectiveness of a proposed FMP. If the reported BCR of the complete application for the proposed project is less than 1.0, the applicant must provide a detailed explanation for why the applicant considers the project to be justified, including a discussion of the primary benefits of the project, if any, that could not be quantified and were therefore not included in the BCR calculation. TWDB will assess those requests on a case-by-case basis.

TWDB is continuing to develop methods to improve how BCRs may be computed. The TWDB BCA Input Tool already includes an option to normalize property damage of structure values across high/medium/low-income areas and accounts for certain health/safety factors. TWDB is also developing additional guidance on benefit-cost analyses (www.twdb.texas.gov/flood/research/benefit-cost-analysis-guidance/) that will provide additional ways to estimate losses associated with health/safety, transportation, environmental, socio-economic, and other factors. TWDB will provide updated information as it is available. FEMA has also been actively updating its benefit cost guidance to include additional factors and applicants are encouraged to use all the latest available guidance whenever possible. Applicants are not required to follow one specific BCA method. Each applicant can estimate additional benefits that may not be built into a given tool, include them in the BCA calculation, and submit those values and justifications to TWDB as part of their application.

Local or regional drainage design requirements that require higher factors of safety may drive up the cost of a given flood project. That higher cost, in turn, may drive down the BCR value computed for the project. This is one reason TWDB did not include BCR as a significant part of the scoring criteria (to avoid different drainage standards causing BCR, and thus competing scores, to go up or down significantly), but did include BCR as a minimum criterion for all projects to meet. If a project's BCR is less than one and the applicant feels that the local or regional drainage design criteria is a significant factor in driving that cost up, then the applicant is encouraged to approximately quantify the effect the higher drainage standard has on the BCR and provide that as part of their detailed explanation why the applicant considers the project to be justified.

The MOU requirement is required by Texas Water Code § 15.005. The TWDB does not have the authority to change or remove that statutory requirement. The requirement only necessitates MOUs with “eligible political subdivisions,” as that term is defined in Texas Water Code § 15.531 (a district or authority created under Section 52, Article III, or Section 59, Article XVI, Texas Constitution, a municipality, or a county.) The requirement applies if the project watershed, as defined in 31 Texas Administrative Code § 363.402 (the area upstream and downstream substantially affected by the proposed flood project, as documented in the project application, and sealed by a Professional Engineer or Professional Geoscientist) lies partially outside the applicant’s boundaries. The requirement applies to flood control projects, as that term is defined in 31 Texas Administrative Code § 363.402 (the construction or rehabilitation of structural mitigation or anything that retains, diverts, redirects, impedes, or otherwise modifies the flow of water). The IUP does allow the applicant to submit completed MOUs after the application due date, provided approval by TWDB. The statute prohibits the TWDB from acting on an application without all completed and signed MOUs.

5. The TWDB is using the BCR as a tool to evaluate the investment of state funding towards the construction of flood projects similar to, but with more flexibility than, federal requirements (FEMA, DOT, etc.). The TWDB allows a variety of BCA tools and methods to assess a minimum level of cost effectiveness of a proposed construction project. Without some objective methodology, there would be no consistent way to assess the cost-effectiveness of a proposed FMP.

As an example, the TWDB has considered FEMA’s streamlined cost-effectiveness method, but FEMA has established an approach where FEMA will independently estimate the BCR of projects less than \$1 million with the information provided by the applicant. The TWDB does not have a similar approach established, therefore the TWDB will continue to require BCAs for projects as defined in the Intended Use Plan. Further, since the only projects that are eligible for FIF funding are those that are in the amended regional flood plans and BCAs were required in those plans, BCAs should already have been developed for relevant projects. An update to the BCA should only be needed if the prior BCAs were inadequate or if the project information has changed since it was listed in the amended regional flood plan.

6. Refer to the TWDB response to bullet No. 4.
7. The MOU requirement is required by Texas Water Code § 15.005. The TWDB does not have the authority to change or remove that statutory requirement. The requirement only necessitates MOUs with “eligible political subdivisions,” as that term is defined in Texas Water Code § 15.531 (a district or authority created under Section 52, Article III, or Section 59, Article XVI, Texas Constitution, a municipality, or a county.) The requirement applies if the project watershed, as defined in 31 Texas Administrative Code § 363.402 (the area upstream and downstream substantially affected by the proposed flood project, as documented in the project application, and sealed by a Professional Engineer or Professional Geoscientist) lies partially outside the applicant’s boundaries. The requirement applies to flood control projects, as that term is defined in

31 Texas Administrative Code § 363.402 (the construction or rehabilitation of structural mitigation or anything that retains, diverts, redirects, impedes, or otherwise modifies the flow of water). The IUP does allow the applicant to submit completed MOUs after the application due date, provided approval by TWDB. The statute prohibits the TWDB from acting on an application without all completed and signed MOUs.

8. What constitutes “adequate” and “ample” may need to be discussed between the applicant and TWDB on a case-by-case basis. The applicant will need to attest to the fact that they provided adequate and ample opportunity to participate by signing the affidavit, so the appropriate representative must believe the notice provided was reasonable in order to sign. This explanation will be included in the FIF IUP.
9. An applicant demonstrates that it is enforcing floodplain management standards by having a representative sign the certification included in the abridged application (Minimum Standard No. 5, pgs. 9-10 of the FIF IUP) and providing a copy or link to the floodplain management ordinances they have in place. A signed certification and link/copy of the floodplain ordinance is required.

While floodplain management ordinances and regulations may vary significantly between communities, especially those that may have higher standards, the TWDB is simply verifying that the NFIP minimum standard is in place and relying on the signed certification that active enforcement is occurring. Within Texas there are approximately 1,400 cities and counties of those about 1,200 participate in the NFIP and thus have NFIP standards in place. Verification of NFIP-participating communities should be straightforward. Of the remaining 200 that do not participate in the NFIP, they may or may not have floodplain management standards in place. For those, TWDB will review the ordinances and regulations provided to assess if they are comparable to NFIP minimum requirements.

Eligibilities and Financing Details by Category

10. Data from regional flood plans will be used in all cases. Applicants are required to confirm that the regional flood planning data is still accurate at the time of the submission of the abridged application. If, for some reason, data submitted during the regional flood planning process has changed at the time of the application, the applicant is required to submit all pertinent data in an Excel spreadsheet template provided with the FIF Abridged Application, identify what has changed, and provide a description and justification for the change.

Unless the TWDB is informed otherwise as stated above, data from the regional flood plans will be the default basis for ranking and prioritizing FME, FMP, and FMSs submitted as recommended in the regional flood plan; in most instances, applicants should not need to submit any of the data required for rankings. The TWDB will review abridged applications and full financial applications in reference to the project scope outlined within the regional flood plan FME, FMP, or FMS lists, respectively. FIF abridged applications do not roll-over and a new submission would be necessary

during the open solicitation period. The draft FIF IUP allows for a submission of abridged applications at any time during the cycle, given that funds remain available and an amendment to the project list is approved.

11. Abridged Applications submitted with partial projects from the Board-approved regional flood plan will be considered ineligible for the FIF (excluding phased projects). This eligibility criterion was established to align project scores with the benefits generated by a project. If a project is divided into multiple parts, they can be considered as a phased project. However, the benefits of all the phases of the project selected for a single FIF application will be utilized to compute ranking score of the project. Thus, the ranking of the project will change in FIF funding prioritization. The TWDB will evaluate submittals case-by-case based on all applicable statutes and rules to ensure that projects funded through the FIF are recommended in the Board-adopted state flood plan.

If a portion of an FMP has already been completed, and the project scope of the remaining portion aligns with the FMP recommended in the Board-approved regional flood plan, then the abridged application may be considered eligible for the FIF, provided all eligibility requirements in the IUP are met.

12. The proposed grant eligibilities were drafted to offer the limited grant funds to those communities with the greatest needs based on their socioeconomic conditions.
13. The requirement of modeling an entire HUC10 watershed was removed for the SFY 2024-2025 FIF funding cycle. However, it is required that the area of the entire upstream contributing watershed or sub-watershed to the discharge point of interest is considered when determining solution alternatives for an area identified at flood risk or a neighborhood identified with flood loss. A determination of 'no negative impact' both upstream and downstream of project area is also required. The FIF IUP was updated to add clarification.

Prioritization Criteria

14. The TWDB acknowledges this comment and incorporated events more frequent than the 100-year storm for the second cycle of flood planning. During the first cycle, regional flood planning groups were not required to incorporate smaller storm events, but they could at their own discretion. With the limited time and resources, none of the regional flood planning groups incorporated information for smaller storm events for their recommended projects during the first cycle. However, BCRs, which are 2.5 percent of the FMP scoring criteria, typically includes the benefits associated with a wide range of flood recurrence events.
15. Low water crossings pose a significant hazard to public safety during flood events and often lead to loss of life. Further, flooded low water crossings can inhibit first responders from accessing communities in need of assistance during natural disasters.

16. The percentage of structures removed is just one of the criteria that is generally favored by areas with smaller and rural communities. There are other criteria that address reducing flood risk to structures.
17. Green projects may include establishment or restoration of permanent riparian buffers, floodplains, wetlands, or other vegetated buffers or soft bioengineered stream banks. They may also include projects to manage wet weather and restore natural hydrology by infiltration, evapotranspiration, or harvesting and using stormwater. Projects may include green stormwater infrastructure for transportation rights-of-way or parking areas. Please note this is not an exhaustive list. The final decision on green projects will be made by the TWDB. Nature-based projects are projects that use nature-based features to protect, mitigate, or reduce flood risk, as determined by TWDB, and are considered on a case-by-case basis.

Change:

1. An additional explanation on federal award matching funds will be included in the FIF IUP.
2. An additional explanation for the affidavit will be included in the FIF IUP.
3. An additional explanation for project watershed will be included in the FIF IUP.

Comment Submitted By: Deborah Reid, Technical Director, Greater Edwards Aquifer Alliance on behalf of Annalisa Peace, Executive Director, Greater Edwards Aquifer Alliance

Comment Date: December 27, 2023

Comment:

Please accept these comments on behalf of the fifty-seven member groups of the Greater Edwards Aquifer Alliance. As our entire service area resides within Texas' Flash Flood Alley, part of our mission is to advocate best management practices that will reduce and mitigate flooding. We are, therefore, grateful to the TWDB for administering funding and programs aimed at achieving these goals. respectively

Technical Director, Deborah Reid and I serve on the San Antonio and Guadalupe Regional Flood Planning Groups, respectively where we represent environmental interests. We appreciate this opportunity to serve and participate in this robust planning process and to submit these comments.

Attached are comments submitted on behalf of the Greater Edwards Aquifer Alliance and its partners on the Intended Use Plan document. It is intended that the comments will assist in providing clarity, transparency and equitability while promoting the use of green infrastructure and nature based solutions in managing flood risks.

Should you have any questions or require clarification, please contact me at your convenience.

**Submitted by the Greater Edwards Aquifer Alliance and Partners December 27, 2023
Comments on the Draft 2024-2025 Flood Infrastructure Intended Use Plan**

1. Overall comments:
 - a. Avoid requiring due dates for a comment period on a Federal or State holiday.
 - b. While TWDB has taken a progressive step in developing a guidance document on using nature based flood mitigation solutions (NBS) there is concern that during this cycle before the document is published, more traditional flood projects such as a detention basin, an enlarged channel, or a 3:1 trapezoidal earthen channel, each seeded in Bermuda grass will qualify for NBS credit without fully implementing the qualities needed to mimic natural ecosystems.
2. Program Overview section
This section seems disconnected from the Regional Flood Plan process and the resulting approved plans that contain the priority projects, evaluations and strategies. Therefore, it is recommended that a brief summary of the process be included before the Eligibility section where it states that projects must have been included in a TWDB approved plan.
3. Eligible project section
Under the Construction/Rehabilitation Phase Activities section, the listed projects seem to be somewhat random. It is recommended while utilizing more of the wording from the TAC and using headings, consider structuring the information to assist the reader in understanding the different types of eligible projects and how

NBS can be a stand-alone project or incorporated into a structural one, creating a hybrid grey/green project.

Examples are as follows:

- a. “Structural including projects that use nature-based features to protect, mitigate or reduce flood risks.
 - i. flood mitigation such as retention basins, detention ponds,
 - ii. flood control such as levees, dams, pumping stations
 - iii. drainage projects such as channels, ditches, ponds, pipes.
 - b. Nonstructural projects
 - i. Restoration of riparian corridors, floodplains, coastal areas, and wetlands
 - ii. Rehabilitation of existing natural flood mitigation features such as aquifer recharge features and headwaters of tributaries
 - iii. Property acquisitions determined to be the best solution for highest-risk properties with removal of buildings located in the floodplain.
 - iv. Land conservation in high flood risk areas or to prevent future flooding
 - c. NBS projects or features
 - i. Enlargement of stream channels using natural channel design; increase channel sinuosity, floodplain and streams provide habitat, flood resiliency and improved water quality
 - ii. Restore floodplain functioning within a drainage project
 - iii. Utilize regenerative agriculture practices, tree planting, etc. for natural erosion and runoff control
 - iv. Increase flood mitigation capabilities of acquired properties through tree planting in the floodplain and soil, vegetation and debris management practices
 - v. Utilize permeable pavers, bioswales, landscape features to reduce flooding and provide co-benefits
 - vi. Create constructed wetlands, prairies, woodlands, etc.
 - d. Rehabilitation of existing infrastructure taking into consideration methods of improving resiliency (not including costs associated with current or future operations and maintenance activities)
 - e. Reasonable number of improvements to ancillary systems directly related to the project as determined by TWDB”
4. Reconsider the inclusion of the following under this heading, Construction/Rehabilitation Phase Activities:
- a. Erosion control as this should be a part of any project and would be addressed in negative environmental impacts
 - b. Development of or amendments to flood related codes move to Other Eligible Activities
5. While the goal for giving flexibility for which BCA tool can be used, there is concern that it may be difficult to compare projects equally or fairly especially as it pertains to its impact to the environment, water supply and quality, community integrity, ability to provide co-benefits and address flooding issues in socially vulnerable neighborhoods.

6. Consider developing a separate application requirement checklist for a public education outreach program within the Flood Management Strategy Category. Currently, as stated the requirements are an undue burden for such an education project.

In addition, the following comments and recommendations were developed with partners and are provided to help further support the TWDB's efforts to distribute the funds equitably and to promote investments in green projects.

1. *Provide Additional Clarity on the Project Technical Merit Prioritization Criteria*

The purpose of an Intended Use Plan is to help guide funding decisions for a given period of time. The most important substantive sections of an intended use plan include the funding/financing available, and how projects will be ranked. We are unsure of the intent of the TWDB in utilization of the "Project Technical Merit" prioritization criteria. As noted in the Draft Plan, "[t]he TWDB will score abridged applications utilizing the criteria and methodology anticipated to be used in the ranking of projects for the 2024 State Flood Plan, in addition to the criteria listed under the Prioritization Criteria section of this IUP." (emphasis added). For the SFY 2024-2025 period, it is unclear whether the TWDB intends to either:

- a. Utilize the draft prioritization methodology;
- b. Utilize the finalized prioritization method once adopted in the State Flood Plan; or
- c. Utilize the draft prioritization method until the final methodology is adopted in the State Flood Plan.

Therefore, it is recommend (sic) that the TWDB provides clarity on how the draft and final prioritization methodologies will be used.

2. *Allow Meaningful Public Comment on the Ranking Prioritization Before Utilizing to Distribute Funds*

As noted above, we are unsure if the TWDB intends to utilize the draft prioritization scheme provided in Appendix A. While we understand that the TWDB has solicited public feedback on the draft State Flood Plan prioritization scheme, a formal public notice and comment period was not provided for the prioritization methodology. It appears that during this comment opportunity, the draft state flood plan methodology is not up for comment in the Draft Plan. We are concerned that the draft methodology provided in Appendix A will be utilized to distribute funds prior to a formal notice and comment period on that methodology. Therefore, we recommend that the TWDB either: 1) adds the draft methodology into this Intended Use Plan and open up the Draft Plan for another round of public comment; 2) Finalizes the State Flood Plan Prioritization Methodology with a proper notice and comment period before adoption of this IUP; 3) or a combination of option 1 and 2, where 2 is utilized once the State Flood Plan is adopted.

3. *Provide Guidance on When the TWDB May Use its Discretion When Bypassing Higher Scoring Projects*

We understand that available funding capacity is likely to limit TWDB's ability to provide financial assistance to many worthy flood projects and that the agency must have some flexibility to work within those limits to assist as many eligible projects as possible. However, we are concerned about the very open-ended statement in this section of the Draft Flood IUP that asserts that "[t]he Board may consider and allocate funding for any proposed project, including in cases that involve bypassing a higher scoring project."

We believe that TWDB needs to clarify – at least through examples – what the decision criteria would be for “bypassing a higher-ranking project.” Otherwise, the agency may leave itself open to criticism for what might potentially be considered an arbitrary and capricious decision process, thus undermining the credibility of the flood funding program.

4. *Increase Timespan Provided Under the 100% Grant Qualifier for Federal Disaster Declarations for Flood Management Evaluations*

We are concerned that the 100% grant qualifier for Flood Management Evaluations (FMEs) for federal disaster declarations is too short. For this qualifier, only FMEs that have received a federal disaster declaration in the past five years are eligible for 100% grants. However, just because a federal disaster happened in the recent past, doesn’t mean that community is more likely to flood than others. We suggest broadening the timespan to 10 years to include additional areas that have been recently impacted.

5. *Increase the Amount of Grants Available for the Lowest AMHI Areas for Flood Mitigation Projects and Flood Mitigation Strategies*

The greatest amount of grant financing that the lowest-income areas in Texas for Flood Mitigation Projects (FMPs) and Flood Mitigation Strategies (FMSs) will be 70%. This means that the most disadvantaged areas will need to pay back 30% financing for their FMPs and FMSs – given that the project is in a rural area and has at least 30% green or nature-based costs associated with the project. We are concerned that 70% grants will not be sufficient for the most disadvantaged areas – that may struggle with paying back 30% project costs through loans. Therefore, we encourage the TWDB to increase the percent grants available for the most disadvantaged areas to 90-100%.

6. *Make Grant Opportunities for the Green and Nature-Based Costs Available for All Applicants but Prioritize for Disadvantaged Communities*

Under this Draft Plan, only rural applicants and applicants that meet one of the AMHI requirements are eligible for additional grant funding for green/nature-based costs. These projects should be incentivized for all applicants. Green and nature-based infrastructure for flood mitigation offers several significant benefits. Enhanced absorption and water management is a key advantage, as systems like green roofs, rain gardens, and restored wetlands naturally absorb and manage rainwater. This approach reduces the intensity and frequency of floods by allowing water to percolate into the ground, preventing the overwhelming of urban drainage systems. Additionally, such infrastructure provides multiple benefits such as ecosystem restoration, and supports biodiversity, mimicking natural processes to enhance the resilience of areas to environmental changes and extreme weather events. Beyond environmental impacts, green infrastructure can be more cost-effective in the long term compared to traditional flood control methods and provides extra community benefits such as improved air quality, recreational spaces, and mitigating the urban heat island effect, as they help lower temperatures in densely built-up areas, contributing to a more comfortable and livable urban environment. Due to these reasons, and many more, we believe that all applicants should be eligible for the 5% additional grant opportunities for green and nature-based costs. However, we believe that these grants should be prioritized for the rural and disadvantaged communities that need projects most. This balance will work to incentivize applicants to incorporate green and nature-based components into their projects, while still prioritizing grant opportunities in communities that are least able to pay.

Response:

The TWDB appreciates receiving the comments for the Draft SFY 2024-2025 FIF IUP.

1. Overall Comments:

- a. The comment period was extended to Wednesday, January 3, 2024. Due to our scheduled deadline for the next FIF cycle, we cannot extend the comment period any further. The public is welcome to provide public comments at any TWDB Board Meeting or Work Session.
- b. Nature-based projects will be determined by the TWDB and are considered on a case-by-case basis.

2. Program Overview

The Program Overview section is a summary of the FIF program. The Eligible Projects section states that only FMEs, FMPs, and FMSs recommended in an amended regional flood plan approved by the TWDB are eligible for financial assistance.

3. Eligible Project Section

Thank you for your comment.

4. Construction/Rehabilitation Phase Activities

The list of eligible projects mentioned within the FIF IUP is not an exhaustive list.

5. Benefit Cost Analysis

The TWDB is using the BCR as a tool to evaluate the investment of state funding towards the construction of flood projects similar to, but with more flexibility than, federal requirements (FEMA, DOT, etc.). The TWDB allows a variety of BCA tools and methods to assess a minimum level of cost effectiveness of a proposed construction project. Without some objective methodology, there would be no consistent way to assess the cost-effectiveness of a proposed FMP. If the reported BCR of the complete application for the proposed project is less than 1.0, the applicant must provide a detailed explanation for why the applicant considers the project to be justified, including a discussion of the primary benefits of the project, if any, that could not be quantified and were therefore not included in the BCR calculation. The TWDB will assess those requests on a case-by-case basis.

TWDB is continuing to develop methods to improve how BCRs may be computed. The TWDB BCA Input Tool already includes an option to normalize property damage of structure values across high/medium/low-income areas and accounts for certain health/safety factors. The TWDB is also developing additional guidance on benefit-cost analyses (www.twdb.texas.gov/flood/research/benefit-cost-analysis-guidance/) that will provide additional ways to estimate losses associated with health/safety, transportation, environmental, socio-economic, and other factors. The TWDB will provide updated information as it is available. FEMA has also been actively updating its benefit cost guidance to include additional factors and applicants are encouraged to use all the latest available guidance whenever possible. Applicants are not required to follow one specific BCA method. Each applicant can estimate additional benefits that may not be built into a given tool, include them in the BCA calculation, and submit those values and justifications

to TWDB as part of their application.

Local or regional drainage design requirements that require higher factors of safety may drive up the cost of a given flood project. That higher cost, in turn, may drive down the BCR value computed for the project. This is one reason TWDB did not include BCR as a significant part of the scoring criteria (to avoid different drainage standards causing BCR, and thus competing scores, to go up or down significantly), but did include BCR as a minimum criterion for all projects to meet. If a project's BCR is less than one and the applicant feels that the local or regional drainage design criteria is a significant factor in driving that cost up, then the applicant is encouraged to approximately quantify the effect the higher drainage standard has on the BCR and provide that as part of their detailed explanation why the applicant considers the project to be justified.

6. Separate application requirement checklist for public education outreach.
Thank you for your comment.

Responses to the original commenter's partner comments

1. Provide Additional Clarity on the Project Technical Merit Prioritization Criteria

The TWDB anticipates that the *ranking* criteria and methodology used to develop the 2024-2025 FIF IUP funding prioritization will be closely aligned, if not fully aligned, with the ranking methodology that is used to develop the final ranked list of all FMEs, FMPs, and FMSs in the adopted state flood plan. The TWDB anticipates incorporating any changes made during the FIF IUP process into the draft state flood plan ranking.

However, these two ranking methodologies may not be identical since TWDB must solicit and consider additional, future comments on a draft state flood plan once it is developed. The ranking methodology used in the final, adopted state flood plan may differ from the ranking method used as part of this FIF IUP because of additional, future public comments received on the draft state flood plan.

The ranked list of projects included in the draft and final state flood plans will rely solely on the final, adopted, and Board-approved amended regional flood plan datasets that were submitted by the regional flood planning groups to the TWDB via their approved geodatabases.

The prioritized FIF IUP list of projects will only include a subset of all FME, FMP, and FMSs recommended in the Board-approved regional plans (those that applied for FIF funding via abridged application).

2. Allow Meaningful Public Comment on the Ranking Prioritization Before Utilizing to Distribute Funds

Refer to the response to the previous comment.

3. *Provide Guidance on When the TWDB May Use its Discretion When Bypassing Higher Scoring Projects*

There may be circumstances that may lead to the TWDB needing to bypass a higher-ranked project for a lower ranked project. For instance, the board may wish to bypass a higher scoring project to meet the 15 percent target for federal matching as stated on page 19 of the IUP. The TWDB proposes reserving the board’s ability to bypass higher-ranked projects.

4. *Increase Timespan Provided Under the 100% Grant Qualifier for Federal Disaster Declarations for Flood Management Evaluations*

The proposed grant eligibilities and time period for an acceptable federal disaster declaration were drafted to offer the limited grant funds to those communities with the greatest needs.

5. *Increase the Amount of Grants Available for the Lowest AMHI Areas for Flood Mitigation Projects and Flood Mitigation Strategies*

The TWDB has made a practice of providing financial assistance in a manner that promotes community engagement and follow-through in completing projects in a timely manner and fashion. One best management practice to achieve that has been requiring a financing component to financial assistance that includes grant or principal forgiveness. The TWDB also desires to revolve money through the FIF, which is only possible through lending a portion of the available funds to projects. Based on those agency needs, the levels of grant to loan provided through the FIF are anticipated to assist those communities with the greatest financial burden to complete their project.

6. *Make Grant Opportunities for the Green and Nature-Based Costs Available for All Applicants but Prioritize for Disadvantaged Communities*

The proposed grant eligibilities were drafted to offer the limited grant funds to those communities with the greatest needs based on their socioeconomic conditions. The FIF statute (Texas Water Code § 15.534) requires one of the following qualifiers be met before the TWDB may provide grants: the project serves a rural political subdivision, the FIF funds provide matching funds to enable the applicant to participate in a federal program, or the TWDB determines the applicant does not have the ability to repay a loan. The statute does not provide for grants for green and nature-based projects without one of the statutory grant qualifiers being met.

Change:

1. The deadline for the public comment period was extended to Wednesday, January 3, 2024.

Comment Submitted By: Marie Camino, Government Relations Program Manager, The Nature Conservancy Texas on behalf of Kathy Jack, PhD, Texas Climate Program Director, The Nature Conservancy Texas

Comment Date: December 28, 2023

Comment:

Re: Stakeholder Comment on Proposed Flood Infrastructure (FIF) SFY 2024-2025 Intended Use Plan (IUP)

The Nature Conservancy (TNC) appreciates the opportunity to submit the following comments to The Texas Water Development Board (TWDB) as feedback on the Proposed Flood Infrastructure (FIF) SFY 2024-2025 Intended Use Plan (IUP).

TNC's comments seek to bring more focus within the FIF to prioritize protection and restoration of natural areas and investment in Nature-Based Solutions (NBS) across urban and rural landscapes, to achieve hydrologic benefits critical to reducing flood risk while achieving additional benefits for water quality, habitat, community health, cost savings, and multiple additional co-benefits. Key flood mitigation benefits of NBS include increased storage and infiltration, reduced surface and peak flows, and pulse response. These benefits are maximized when implemented throughout a watershed, at all scales. Given the compounding threats of rapid loss and conversion of natural areas and greenspace to impervious surfaces, and increased intensity and frequency of storm events, it is imperative that NBS projects - including evaluations (FMEs), strategies (FMSs), and on the ground projects (FMPs) - be prioritized and incentivized to maximize watershed-level benefits and to mitigate against future additional losses of ecological and hydrological function. Additionally, TNC supports equitable access to flood mitigation resources and benefits, and recommends projects and funding be prioritized for communities most impacted by flood risk and with less capital and staff resources to plan, design, and implement priority projects.

We commend the TWDB for including consideration of "Green or nature-based solutions" and social vulnerability in the grant qualifiers for FMPs and FMSs and increasing the weight given to nature-based solutions for FMPs and FMSs in the updated draft Project Ranking Criteria (Appendix A). TWDB support and funding support of NBS more broadly, especially in the early rounds of the FIF, will increase demand for the development of technical competency and skills for NBS project designs thereby elevating the capacity for NBS projects to be accepted as viable project options. With the pending completion of the NBS guidance manual, project sponsors will have resources supported by the TWDB to advance the consideration of NBS within the design options for projects. TNC respectfully suggests the following additional points be considered as the IUP is finalized:

- (1) TNC recommends that NBS, environmental benefits, environmental impacts, and social vulnerability criteria be considered and evaluated as a part of all flood mitigation projects, and that projects with these components included should be weighted higher than those without. We therefore suggest:

- a. As TWDB finalizes the draft Project Ranking Criteria (presented in Appendix A) TNC recommends that NBS, multi-benefits (such as health, water quality etc.), environmental benefits, environmental impacts and social vulnerability criteria be included across all project types (FMEs, FMSs, and FMPs), with multi-benefit criteria being increased in weight to a minimum of 5%. The exclusion of these criteria from FME evaluation reduces likelihood of obtaining essential data for future prioritization of NBS FMPs.
 - b. TNC also recommends that “water quality” be explicitly added into the rating criteria, either independently and/or with the “water supply” or multi-benefit criteria in the prioritization criteria (presented in Appendix A).
 - c. TNC recommends a clear methodology be included for assessing potential negative environmental impacts of projects and that projects associated with more negative environmental impacts be rated lower than those with fewer negative environmental impact.
 - d. Additionally, we are unsure if the TWDB intends to distribute funds for SFY 2024-2025 based on (1) the draft prioritization methodology in Appendix A; (2) the finalized prioritization method once adopted in the State Flood Plan; or (3) a combination of these steps. We recommend that the TWDB clarify this and allow for thorough public comment on the ranking prioritization before utilizing to distribute funds.
- (2) TNC suggests that green/nature-based projects (and hybrid projects that substantially integrate these features) should be incentivized across all project types (FMPs, FMSs, and FMEs), for all applicants.
- a. As written, only rural applicants and applicants that meet one of the AMHI requirements are eligible for additional grant funding for green/nature-based costs for FMPs and FMSs. For Grant Qualifier rubric, we suggest:
 - i. Replacing “If \geq 30% of total costs are Green or Nature-Based and the project meets one of the income or rural applicant qualifiers above” with “If \geq 30% of total costs are Green or Nature-Based” and
 - ii. Including the “Green or Nature-Based” grant qualifier in FME project category to increase the likelihood of obtaining essential data for future prioritization of NBS FMPs.
 - b. For all project types (FME, FMP, FMS) we recommend an eligibility requirement be included that applicants will indicate how they have evaluated NBS as a part of all project types to receive grant or financing.
 - c. We recommend that the grant percent for eligible green/nature-based projects be weighted at the maximum potential percentage rating (suggest an increase from 5% to a minimum of 10%).
- (3) TNC supports standards that will encourages watershed-based planning and collaboration, and that discourage unintended negative consequences from projects such as habitat degradation or increased downstream environmental or flood impacts. TNC suggests the following:
- a. A clear methodology be included for assessing potential negative environmental impacts of projects.
 - b. In “Minimum Standards” Section 2 (p. 8), we recommend clarification of the types of FMSs for which these standards are applicable, and which may be

exempt. Most FMSs do not involve “the construction or rehabilitation of structural mitigation or anything that retains, diverts, redirects, impedes, or otherwise modifies the flow of water, and the project watershed.” We also suggest clarification of the applicable scale for “project watershed”. For example, TNC encourages adoption of ordinances and plans that encourage low impact development and could see this requirement as a deterrent for local governments in adopting such policies.

- c. We suggest considering and qualifying which type of FME needs to produce the notice outlined in “Additional Requirements and Exceptions for Flood Management Evaluation Category” Section (p. 10). For example, it is unclear if providing notice by certified mail to every listed entity makes sense or is realistic for a Basin-wide science-based FME.

(4) TNC suggests the following language to help clarify that stakeholder participation and nature-based solutions are important flood mitigation activities (pp. 4-5):

- a. For “Planning Phase Activities”, we suggest the addition of “Stakeholder planning processes.”
- b. For “Construction/Rehabilitation Phase Activities,” we suggest the addition of “nature-based solutions, including but not limited to:” and followed by example activities as sub-bullets, to include:
 - “Green Stormwater Infrastructure (eg. Bioretention basins, rainwater harvesting cisterns, permeable pavement)” (amended from “Permeable Pavement”);
 - “Stormwater Parks” (addition)
 - “Protection (addition) and Restoration of riparian corridors, floodplains, coastal areas, and wetlands”;
 - “Protection and restoration of natural areas, particular in or upstream of flood prone areas and areas at risk of conversion to impervious surfaces” (addition);
 - “Coastal protection or restoration, particularly in flood prone areas” (addition)
 - “Living shorelines” (addition).

(5) TNC suggests TWDB provide additional clarification on their definition of Federal Funds (p.18). We recommend that TWDB be consistent with FEMA and be explicit in their definition of “Federal Funds” that HUD CDBG funds are considered local match dollars and therefore do not affect the grant or loan amounts that are determined based on a percentage of the required local match.

Response:

The TWDB appreciates receiving the comments for the Draft SFY 2024-2025 FIF IUP.

(1)

a & b. Percent nature-based solution (by cost), as identified by the regional flood plans, is 7.5 percent of total FMP score. Environmental Benefit Ranking is 2.5 percent of total FMP scoring. Environmental Benefit Ranking for regional flood planning process is described as ranking of expected level of environmental benefits to be delivered by project to water

quality, cultural heritage, habitat, air quality, natural resources, agricultural resources, and soils/erosion and sedimentation. Please refer to page 26 of Exhibit C: Technical Guidelines for Regional Flood Planning

([https://www.twdb.texas.gov/flood/planning/planningdocu/2023/doc/04 Exhibit C TechnicalGuidelines April2021.pdf](https://www.twdb.texas.gov/flood/planning/planningdocu/2023/doc/04_ Exhibit_C_TechnicalGuidelines_April2021.pdf)) for further information on this ranking criterion.

c. A criteria is available for assessing potential negative environmental impacts of projects, Environmental Impact. Please refer to page 27 of Exhibit C: Technical Guidelines for Regional Flood Planning

([https://www.twdb.texas.gov/flood/planning/planningdocu/2023/doc/04 Exhibit C TechnicalGuidelines April2021.pdf](https://www.twdb.texas.gov/flood/planning/planningdocu/2023/doc/04_ Exhibit_C_TechnicalGuidelines_April2021.pdf)) for further information on this ranking criterion. The TWDB had to consider, accommodate, and prioritize available meaningful dataset from the RFP process, and feedback from multiple stakeholders regarding various criteria. Based on the information available during first cycle, assigning more weight (7.5 percent) to environmental benefit is more meaningful compared to environmental impact, where not much information was available for any of the recommended FMPs through the planning process.

d. The TWDB anticipates that the ranking criteria and methodology used to develop the SFY 2024-2025 FIF IUP funding prioritization will be closely aligned, if not fully aligned, with the ranking methodology that is used to develop the final ranked list of all FMEs, FMPs, and FMSs in the adopted state flood plan. The TWDB anticipates incorporating any changes made during the FIF IUP process into the draft state flood plan ranking. However, these two ranking methodologies may not be identical since the TWDB must solicit and consider additional, future comments on a draft state flood plan once it is developed.

The ranking methodology used in the final, adopted state flood plan may differ from the ranking method used as part of this FIF IUP because of additional future public comments received on the draft state flood plan. The ranked list of projects included in the draft and final state flood plans will rely solely on the final, adopted, and Board-approved amended regional flood plan datasets that were submitted by RFPGs to the TWDB via their approved geodatabases.

The prioritized FIUP list of projects will only include a subset of all FME, FMP and FMSs recommended in the regional plans (those that applied for FIF funding via abridged application).

(2)

a & c. The proposed grant eligibilities were drafted to offer the limited grant funds to those communities with the greatest needs based on their socioeconomic conditions. The FIF statute (Texas Water Code § 15.534) requires one of the following qualifiers be met before the TWDB may provide grants: the project serves a rural political subdivision, the FIF funds provide matching funds to enable the applicant to participate in a federal program, or the TWDB determines the applicant does not have the ability to repay a loan. The statute does not provide for grants for green and nature-based projects without one of the statutory grant qualifiers being met.

b. Thank you for this comment.

(3)

- a. Environmental review and approval of FIF projects is a requirement for the use of FIF financial assistance for the FMP and FMS categories. During the application phase, the TWDB Environmental Reviewer will determine which level of environmental review will be required based on the scope of the project and the potential for environmental impacts. This assessment will be made based on information provided in the application. If additional information is required by TWDB staff, a request for supplemental information will be sent to the Applicant or their consultant at that time.
- b. The MOU requirement is required by Texas Water Code § 15.005. The TWDB does not have the authority to change or remove that statutory requirement. The requirement only applies to flood control projects, as that term is defined in 31 Texas Administrative Code § 363.402 (the construction or rehabilitation of structural mitigation or anything that retains, diverts, redirects, impedes, or otherwise modifies the flow of water.)

TWDB agrees that FMSs typically do not involve the “construction or rehabilitation of structural mitigation or anything that retains, diverts, redirects, impedes, or otherwise modifies the flow of water;” those activities are typically FMPs. While FEWS projects may be considered “construction,” they are not “construction of structural mitigation”.

However, FMSs are a catch all category for activities that are not considered FMEs or FMPs, and it is possible that there may be FMSs that could trigger MOU requirements. TWDB will modify Minimum Criteria, Item 2 to make it clearer that most FMSs will not require an MOU.

- c. This requirement is established in TWDB rule, and no change has been made to those rules. The applicant may request of the TWDB to submit the copy of the notice after the application due date. If approved, the applicant may submit the copy of the notice after the application has been submitted. The Board may not act on an application until the applicant has provided a copy of all notices sent. The Board may not act on an application before the end of the 30-day notice period unless all political subdivisions to which notice is required to be sent agree in writing to waive the notice period.
- 4) The IUP will be updated to include examples.
 - 5) Federal funds are the amount of project funding a FIF applicant receives from the federal government. An applicant may be required to provide a local match to receive this federal funding. The federal fund amount does not count toward the FIF eligible amount.

Change:

1. The IUP was updated to include additional explanation on MOU requirement and FMS Category projects.
2. The IUP was updated to include nature-based solutions projects.

Comment Submitted By: Jonathan M. St. Romain, P.E., Grants Administrator, Harris County Flood Control District

Comment Date: December 29, 2023

Comment:

Also, I hope it's ok to follow up with two additional questions via email:

1. At the bottom of page 9 regarding item 4 redundant funding: Does this include projects that received FIF funding the first time around, or are those projects still eligible to receive additional FIF funding?
2. In the abridged application itself, under the BCR box under minimum standards, there's no checkbox for "N/A for FMEs or FMSs." Page 8 of the IUP states that BCRs are not required for FME and FMS category applications.

Response:

The TWDB appreciates receiving the comments for the Draft SFY 2024-2025 FIF IUP.

1. Redundant funding would be funding a task or item that has already been funded. If a project is on the amended Region Flood Plan, they may be eligible to receive FIF funding for this funding cycle. It is not eligible to fund the same task or item that has already been funded by TWDB.
2. Thank you for informing TWDB of this. The abridged application will be revised.

Change:

1. The abridged application was updated based on comment No. 2.

Comment Submitted By: Christine M. Lindsay, Executive Director, Houston Stronger on behalf of themselves and Alan Steinberg, Ph.D., Chair, Houston Stronger

Comment Date: December 29, 2023

Comment:

Thank you for the opportunity to provide comments on the draft Flood Infrastructure Fund (FIF) SFY 2024-2025 Intended Use Plan (IUP). Houston Stronger is a 501(c) 4 organization formed in response to Hurricane Harvey that advocates for federal, state and local funding and public policy to support flood resiliency throughout the greater Houston metropolitan region. We offer the following comments to the draft IUP.

1. Requirement for a BCR>1 is not a stated requirement in the original legislation establishing the Flood Infrastructure Fund, Senate Bill 7. Use of a BCR>1 almost always works against projects in areas of low or moderate income areas due to lower property values.
2. Requirement for a Memorandum of Understanding (MOU): This seems overly burdensome especially in large metropolitan areas with significantly large numbers of jurisdictions. Perhaps a notification requirement only would be sufficient rather than a MOU. This also was not a required component in Senate Bill 7.
3. Grants are a very important funding source for rural or small communities who do not have the financial resources to use for loans of the size usually needed for flood infrastructure projects and which most likely would be for a long-term payout. It's imperative to re-consider the planned use of grants to a higher factor than currently being contemplated.

Thank you for your consideration of our opinions. Please do not hesitate to contact either of us for any additional information.

Response:

The TWDB appreciates receiving the comments for the Draft SFY 2024-2025 FIF IUP.

1. The TWDB is using the BCR as a tool to evaluate the investment of state funding towards the construction of flood projects similar to, but with more flexibility than, federal requirements (FEMA, DOT, etc.). The TWDB allows a variety of BCA tools and methods to assess a minimum level of cost effectiveness of a proposed construction project. Without some objective methodology, there would be no consistent way to assess the cost-effectiveness of a proposed FMP. If the reported BCR of the complete application for the proposed project is less than 1.0, the applicant must provide a detailed explanation for why the applicant considers the project to be justified, including a discussion of the primary benefits of the project, if any, that could not be quantified and were therefore not included in the BCR calculation. The TWDB will assess those requests on a case-by-case basis.

The TWDB is continuing to develop methods to improve how BCRs may be computed. The TWDB BCA Input Tool already includes an option to normalize property damage of structure values across high/medium/low-income areas and accounts for certain health/safety factors. The TWDB is also developing additional guidance on benefit-cost

analyses (www.twdb.texas.gov/flood/research/benefit-cost-analysis-guidance/) that will provide additional ways to estimate losses associated with health/safety, transportation, environmental, socio-economic, and other factors. The TWDB will provide updated information as it is available. FEMA has also been actively updating its benefit cost guidance to include additional factors and applicants are encouraged to use all the latest available guidance whenever possible. Applicants are not required to follow one specific BCA method. Each applicant can estimate additional benefits that may not be built into a given tool, include them in the BCA calculation, and submit those values and justifications to TWDB as part of their application.

Local or regional drainage design requirements that require higher factors of safety may drive up the cost of a given flood project. That higher cost, in turn, may drive down the BCR value computed for the project. This is one reason TWDB did not include BCR as a significant part of the scoring criteria (to avoid different drainage standards causing BCR, and thus competing scores, to go up or down significantly), but did include BCR as a minimum criterion for all projects to meet. If a project's BCR is less than one and the applicant feels that the local or regional drainage design criteria is a significant factor in driving that cost up, then the applicant is encouraged to approximately quantify the effect the higher drainage standard has on the BCR and provide that as part of their detailed explanation why the applicant considers the project to be justified.

2. The MOU requirement is required by Texas Water Code § 15.005. The TWDB does not have the authority to change or remove that statutory requirement. The requirement only necessitates MOUs with "eligible political subdivisions," as that term is defined in Texas Water Code § 15.531 (a district or authority created under Section 52, Article III, or Section 59, Article XVI, Texas Constitution, a municipality, or a county.) The requirement applies if the project watershed, as defined in 31 Texas Administrative Code § 363.402 (the area upstream and downstream substantially affected by the proposed flood project, as documented in the project application, and sealed by a Professional Engineer or Professional Geoscientist) lies partially outside the applicant's boundaries. The requirement applies to flood control projects, as that term is defined in 31 Texas Administrative Code § 363.402 (the construction or rehabilitation of structural mitigation or anything that retains, diverts, redirects, impedes, or otherwise modifies the flow of water). The IUP does allow the applicant to submit completed MOUs after the application due date, provided approval by TWDB. The statute prohibits the TWDB from acting on an application without all completed and signed MOUs.
3. The proposed grant eligibilities were drafted to offer the limited grant funds to those communities with the greatest needs based on their socioeconomic conditions.

Change:
None.

Comment Submitted By: Stephen G. Nichols, P.E., CFM, Stormwater Program Manager, Transportation & Public Works Department, City of Fort Worth

Comment Date: January 1, 2024

Comment:

Thank you for the opportunity to comment on the 2024-2025 FIF IUP. Please see comments listed below:

- The financial need identified in the Amended 2023 Regional Flood Plans far exceeds the funding appropriated by the 88th Texas Legislature. As such, please consider distributing the full \$625M as opposed to just a portion of that amount as currently proposed in the Draft IUP.
- The IUP states that, “Only complete projects from the regional flood plan will be considered for financial assistance. Abridged applications containing partial projects from the regional flood plan will be considered ineligible.” The abridged application states that this exclusion does not apply to phased projects. What qualifies as a phased project?
- TWDB should consider how federal matching funds could be applied for ahead of formal receipt of FMA or other federal grants. Consider how, for example, sponsors may be able to leverage FIF funding towards the local match required for FY23 FEMA BRIC and FMA applications, especially if a project is selected by FEMA before the FIF funding agreement is finalized.
- Please clarify within the IUP whether or under what terms a sponsor may be reimbursed for funds already expended on an FMP, FME, or FMS ahead of the funding assistance being awarded.
- More details on the timeframes associated with the future steps of the funding distributions would be helpful for sponsors for planning purposes.

Additionally, we are in favor of the current ranking system and support its use for the 2024-2025 IUP. The current ranking system seems to appropriately prioritize risk and risk reduction for FMPs along with other factors.

Please feel free to reach out with any questions or concerns.

Response:

The TWDB appreciates receiving the comments for the Draft SFY 2024-2025 FIF IUP.

- The TWDB will use grants and zero percent interest loans to offer at least \$375,000,000 for projects during the 2024-2025 FIF IUP cycle. The Board may increase the funds available in the 2024-2025 FIF IUP cycle. The remaining funds appropriated to the FIF by the 88th Texas Legislature will be utilized in the next FIF funding cycle.
- Abridged Applications submitted with partial projects from the Board-approved regional flood plan will be considered ineligible for the FIF (excluding phased projects). This eligibility criterion was established to align project scores with the benefits

generated by a project. If a project is divided into multiple parts, they can be considered as a phased project. However, the benefits of all the phases of the project selected for a single FIF grant application will be utilized to compute ranking score of the project. Thus, the ranking of the project will change in FIF funding prioritization. For your example, a county's phased study may be eligible for the FIF, provided all eligibility requirements in the IUP are met.

- An applicant must have received a federal award for flood-related activities contingent on the availability of local matching funds. Proposed activities must be a recommended FME, FMP, or FMS in a regional flood plan and may fall in any of the categories. Federal application must have been submitted by Abridged Application submission date, and federal funds must be awarded by TWDB commitment date. At this time, the TWDB is only considering FEMA Flood Mitigation Assistance (FMA) grant awarded projects from FY 2019-2022 to be eligible for a FIF 70 percent grant. Consideration of future FEMA FMA grant awarded projects may occur should the TWDB amend the draft FIF IUP after its adoption or in a future FIF cycle. Other federal programs requiring matching funds must have the federal application submitted by Abridged Application submission date, and federal funds must be awarded prior to the TWDB commitment date in order to be eligible for FIF funds.
- Funds may be reimbursed if any applicable local or state procurement requirements have been followed; note the FIF program does not include any of its own particular procurement requirements. Funds dispersed prior to December 1, 2023, are not eligible.
- The abridged application solicitation period opened on December 15, 2023, and will close on March 15, 2024. Please sign up for the TWDB mailing list to be notified of important deadlines and information.
- Thank you for your comment on the ranking system and criteria.

Change:

1. The FIF IUP was updated to provide clarification on reimbursements.

Comment Submitted By: Matt Barrett, P.E., Water Resources and Flood Management Division Manager, San Jacinto River Authority

Comment Date: January 1, 2024

Comment:

Please find below comments on the Proposed Flood Infrastructure Fund SFY 2024-2025 Intended Use Plan. Thank you very much for the opportunity to review the IUP and provide comments, and for TWDB's consideration of these comments.

1. Page 5 of the IUP states that "Only complete projects from the regional flood plan will be considered for financial assistance. Abridged applications containing partial projects from the regional flood plan will be considered ineligible for the FIF." I recommend against this requirement as it could prevent projects that could be completed individually, but that were grouped together with other projects in Regional Flood Plans, from being eligible for funding. Specific examples are several projects initially identified in the San Jacinto Regional Watershed Master Drainage Plan which were grouped together by watershed in the San Jacinto (Region 6) Regional Flood Plan.
2. Item 1 on page 7 of the IUP states that a complete application must include a BCR greater than or equal to 1.0, or justification information if the BCR is less than 1.0. I recommend against this requirement as reaching a 1.0 BCR on major, regional-scale flood mitigation projects can be challenging, especially as development continues to spread and available land diminishes. A project may provide extensive flood mitigation benefits and still have a BCR less than 1.0. BCR could be used as a criteria in ranking projects, but should not act as a "pass/fail" criteria.
3. Item 2 on page 8 of the IUP states that "If the project watershed lies wholly within the applicant's boundaries, no MOU is required."
 - a. How does this apply to an entity such as SJRA, whose service area/boundaries encompass many other political subdivisions, including cities, counties, etc.? Can this be clarified?
 - b. The IUP states that the "project watershed" as used above is the area substantially affected by the proposed project. This does not need to be a full HUC-10 or similar watershed in which the project is located? Can this be verified/clarified?
4. Item 3 on page 9 states that an applicant must hold public meetings to accept comments on a proposed flood project prior to submitting a complete application. Will there be sufficient time between abridged and complete application due dates to hold public meetings? Does TWDB know when complete applications will be due? Please consider all requirements for complete applications when scheduling this due date.
5. Can TWDB please confirm, is "An analysis determining whether floodwater capture techniques could be used for water supply purposes, in accordance with Texas Water Code § 15.535(b)" (item 7 on page 10 of the IUP) only required in complete applications (not abridged)?
6. The "Abridged Applications" section on page 13 of the IUP seems to indicate that multiple projects from a single category (FME, FMP, FMS) can be submitted in a single abridged application. Is that correct? Please clarify.

7. The IUP states that in-kind services may substituted for any loan offered (with TWDB approval) for each project category (pages 15, 16, and 17). Can in-kind services also be substituted for the local match portion of a grant-funded project, as was allowed in the previous FIF cycle? Can this be clarified? I recommend this continue to be allowed, as it allows an entity such as SJRA without flood mitigation-related revenue to support a project through in-kind services.
8. The IUP shows that for FMSs and FMPs, if the “study area” of the project or strategy has an AMHI greater than 85% of the state-wide AMHI, that project or strategy would only potentially be eligible for very limited grant funding (if meeting the “rural” definition and potentially also the green/nature-based requirements). I recommend that communities with an AMHI above 85% of the state-wide AMHI should be eligible for a greater percentage of grant funds on FMSs and FMPs. Flood mitigation projects are often very expensive, and just because a community is above 85% of the state-wide AMHI does not mean they can afford said projects, especially if the projects are large-scale/regional in nature.
9. The concept of “non-recurring non-capital cost” on FMSs (page 17 of the IUP) is confusing as presented. I recommend clarification be provided on this topic.
10. Should the following paragraph (from page 18 of the IUP) be edited to read as: “...non-zero capital cost...”?:

Flood Mitigation Project - A proposed project, both structural and nonstructural, that has a non-zero capital costs or other non-recurring cost and that when implemented will reduce flood risk and mitigate flood hazards to life or property.

11. Can information be provided as to the timing, process, etc. for adding projects to Regional Flood Plans? For example, if a project was not included in the initial, amended RFPs, is there any possibility to have it added in time for consideration in this round of FIF funding?
12. Should the language after “other funding categories” be removed from the following paragraph (last paragraph on page 19)? Wouldn’t redirected funds not necessarily be meeting the goals/targets, hence the reason they would be redirected?
eligible political subdivision to participate in a federal program for a flood project. If there are insufficient projects to award these funds according to the category goal or federal match goals, the Executive Administrator may redirect the remaining funds to projects within other funding categories to meet these category goal or federal match targets.
13. Change “update” to “updated” in the last line of this paragraph (page 21)?:

Prioritization Criteria

The working ranking criteria and weights that are anticipated to be used in ranking all projects within the 2024 State Flood Plan, as required by statute, will be utilized for prioritization scoring under this IUP. The applicant must also provide updated planning data with submission of the abridged application. After the abridged applications have been separated into their respective FIF categories, the following criteria will be utilized to score and prioritize them, with the addition of the update flood planning data.

14. Page 22, 2nd row of the table: how is the “entity’s associated county” determined? For example, SJRA’s service area includes one full and multiple partial counties.

15. Ranking Criteria and Weight

- a. The weight applied to low water crossings seems high compared to other categories.
 - i. For example, for FMPs, number of low water crossings removed from 100yr floodplain has the same weight as number of structures removed and number of residential structures removed combined.
 - ii. Also, line 19 seems to indicate that low water crossings are given additional extra points on FMPs.
- b. Consider making population at risk/benefited the highest weighted scoring category for all project types (FMEs, FMSs, FMPs).
- c. For FMSs, consider including weighting/points for critical facilities removed from floodplain.
- d. For FMPs: percent of structures removed from 100yr floodplain is given more weight than number of structures removed. This means a community that removes 2 out of 2 structures could get more points than one that removes 900 out of 1000. This doesn't seem appropriate.

Response:

The TWDB appreciates receiving the comments for the Draft SFY 2024-2025 FIF IUP.

1. Abridged Applications submitted with partial projects from the Board-approved regional flood plan will be considered ineligible for the FIF (excluding phased projects). This eligibility criterion was established to align project scores with the benefits generated by a project. If a project is divided into multiple parts, they can be considered as a phased project. However, the benefits of all the phases of the project selected for a single FIF grant application will be utilized to compute ranking score of the project. Thus, the ranking of the project will change in FIF funding prioritization. For your example, a county's phased study may be eligible for the FIF, provided all eligibility requirements in the IUP are met.
2. The TWDB is using the BCR as a tool to evaluate the investment of state funding towards the construction of flood projects similar to, but with more flexibility than, federal requirements (FEMA, DOT, etc.). The TWDB allows a variety of BCA tools and methods to assess a minimum level of cost effectiveness of a proposed construction project. Without some objective methodology, there would be no consistent way to assess the cost-effectiveness of a proposed FMP.

As an example, the TWDB has considered FEMA's streamlined cost-effectiveness method, but FEMA has established an approach where FEMA will independently estimate the BCR of projects less than \$1 million with the information provided by the applicant. The TWDB does not have a similar approach established, therefore the TWDB will continue to require BCAs for projects as defined in the Intended Use Plan. Further, since the only projects that are eligible for FIF funding are those that are in the amended regional flood plans and BCAs were required in those plans, BCAs should already have been developed for relevant projects. An update to the BCA should only be

needed if the prior BCAs were inadequate or if the project information has changed since it was listed in the amended regional flood plan.

3. a. If the project watershed lies wholly within an entity's boundaries, no MOUs would be required. If the project watershed lies partially outside of an entity's boundaries, MOUs with each eligible political subdivision within the project watershed would be required if the project is a flood control project.
3. b. The TWDB definition does not include any specific HUC-10 or similar requirement. The project watershed is established by the applicant in the application. The project watershed must be sealed by a Professional Engineer or Professional Geoscientist in the application. A project watershed does not need to align with the boundaries of a full HUC-10, only the area upstream and downstream substantially affected by the proposed project.
4. The TWDB will provide ample time between the receipt of an invitation letter to submit a financial application and the deadline to submit the full financial application. Applicants may request with a justification to the TWDB to consider allowing an extension to this deadline.
5. This analysis is only required with the submission of the full financial application.
6. One abridged application must be submitted for each FME, FMP, or FMS respectively and cannot be combined. Each abridged application should describe proposed projects from a single category with a single associated 9-digit, regional flood plan unique ID number reference. The working ranking criteria and weights that are anticipated to be used in ranking all projects within the 2024 State Flood Plan, as required by statute, will be utilized for prioritization scoring under this IUP; therefore, individual FMPs cannot be combined.

Applicants may submit multiple abridged applications regardless of the category (e.g., FME, FMP, FMS). When submitting the full financial application, an applicant may submit one application covering all invited abridged applications at that time.

Project scopes and claimed project benefits as stated in the Abridged Application will be verified against the actual projects in the regional flood plan during the review process. Any projects that are subsequently found to diverge from the information presented in the Abridged Application may be subject to reprioritization and/or removal from the prioritization list, regardless of their initial prioritization. It is important that all project information be presented accurately in this abridged application.

7. Yes, in-kind services may also be substituted for the local match portion of a grant-funded project as was previously the case in the SFY 2020 FIF IUP.
8. The proposed grant eligibilities were drafted to offer the limited grant funds to those communities with the greatest needs based on their socioeconomic conditions.

9. A “non-recurring non-capital cost” occurs on a one-time basis and is unlikely to occur again.
10. This is the definition of FMPs as stated in 31 TAC § 361.10.
11. Regional flood planning groups may, at their discretion, amend regional flood plans in accordance with 31 TAC § 361.51. The draft FIF IUP allows for a submission of abridged applications at any time during the cycle, given that funds remain available and an amendment to the project list is approved.
12. Thank you for noting this. The correction has been made in the IUP.
13. Thank you for noting this. The correction has been made in the IUP.
14. This section has been updated to reflect the AMHI of the entity’s study area.
15.
 - a)
 - i) Low water crossings pose a significant hazard to public safety during flood events and often lead to loss of life. Further, flooded low water crossings can inhibit first responders from accessing communities in need of assistance during natural disasters. No change made.
 - ii) Correct. No change made.
 - b) Population is indirectly considered under other criteria, for example, related to buildings removed from floodplain and low water crossings etc. No change made.
 - c) Due to the nature of FMSs and the analyses in the planning process, regional flood planning groups did not provide comparable and reliable data regarding critical facilities on which to rank FMSs across the state. No change made.
 - d) The percentage of structures removed is just one of the criteria that is generally favored by areas with smaller and rural communities. There are other criteria that address reducing flood risk to structures. No change was made.

Change:

1. Removed “to meet these category goal or federal match targets” from page 19 of the IUP.
2. Changed “update” to “updated” in the last line of this paragraph on page 21 of the IUP.
3. Changed “associated county” to “study area” for the FME Methodology/Notes on page 22 of the IUP.

Comment Submitted By: Sally Bakko, Director of Policy and Governmental Relations, Community Outreach Department, City of Galveston on behalf of Brian A. Maxwell, City Manager, City of Galveston

Comment Date: January 2, 2024

Comment:

I greatly appreciate the opportunity to provide comments on the Texas Water Development Board ("TWDB") Draft Flood Infrastructure Fund (FIF) SFY 2024-2025 Intended Use Plan (IUP) released on December 1, 2023, which outlines eligibility, minimum standards, program timeline, financial assistance categories, prioritization criteria, and other information.

The Texas Legislature has entrusted TWDB with responsibilities for funding flood mitigation efforts and coordinating regional and subsequent statewide planning approaches to address future flooding events. I welcomed the opportunity to participate as the Coastal Communities Representative voting member on the San Jacinto Region 6 Regional Flood Planning Group. Flood Management Evaluations (FME), Flood Mitigation Projects (FMP), and Flood Management Strategies (FMS) submitted under the San Jacinto Region 6 Amended Regional Flood Plan are eligible to receive FIF funds. TWDB must implement IUP project prioritization and funding criteria that considers the unique facets of flood hazards in coastal communities.

Hurricanes and tropical storms are only one aspect of flood hazard for Galveston Island. The City of Galveston ("the City") is the largest community in the United States on a barrier island and is subject to tidal inundation. The City is impacted by flood risk from sea-level rise and heavy rain occurrences exacerbated by aged infrastructure that threatens the physical well-being of residents and local businesses each year. Relative sea level recorded at Pier 21 in the City has risen more than two (2) feet in 100 years. From the escalating severity and frequency of tropical events to sea level rise which affects daily tide levels, coastal communities will likely continue to bear the highest flood risks, perhaps disproportionately to the remainder of the state.

Aged and structurally unsound street drainage systems in the City lack capacity to handle the current volume of water caused during heavy rain events resulting in severe flooding. Except for the vicinity near the Seawall, most of the City is flat where natural water runoff is slow and difficult.

Due to this low elevation and flat topography, gravity drainage has its limitations due to slow flow. Instead of draining into Galveston Bay or bayous, the water backs up onto the streets during high tides and rainfall events.

The City of Galveston's storm systems were designed for rainfall intensities that are a fraction of what we see today. Some of the City's challenges include inadequate system capacity contributing to backflow in drainage pipes during high tide events, clogging of outfalls due to marine growth, and deposition of sand in drainage systems. Warm sunny

day flooding also occurs due to tidal backflow. Construction of new storm drain systems and pump stations will significantly mitigate this flood risk and avoid economic losses.

Tidal backflow control is only possible with pump stations with backflow valves. Thus, pump stations working along with gravity drainage systems serve as more effective stormwater flood mitigation models for our citizens Island wide. However, pump stations are cost prohibitive without grant funding to supplement local match.

When applying criteria and methodology used to rank projects for funding, TWDB should consider unique geographic, topographic, and environmental circumstances that will drive formation of the best, most effective flood mitigation tools for that area. A delicate balance approach is needed when evaluating criteria that involve flood risk, nature-based solutions and the flood mitigation needs of unique coastal communities.

Evaluating FMPs, FMEs, and FMSs for Coastal Communities

Projects to strengthen coastal resilience against future flood damages should be prioritized through metrics that reflect their contribution to the socio-economic resilience of the community, region and the state. In addition to vital life-saving features, three (3) critical resilience metric categories are essential when evaluating flood control and mitigation projects for coastal communities: 1) economic resilience; 2) human health and safety; and 3) property and infrastructure protection and enhancement.

1. Economic Resilience

The travel and tourism industries are a leading component of the Texas economy, generating an estimated \$91.7 billion in direct spending in 2022, resulting in \$187.5 billion economic impact on the state. Tourism is the lifeblood for Galveston Island's economy that significantly contributes to the state's economy as well. The City of Galveston hosts over 8 million tourists a year and is home to the 4th busiest cruise line port in the nation. Moreover, one-in-five Galveston residents live at or below the poverty line, many of whom rely upon the one-in-three jobs sustained by Galveston's tourism industry.

Where flood control and mitigation projects singularly affect a coastal community like Galveston, it is essential TWDB heavily weigh economic sectors susceptible to flood hazard and assess the rippling impacts on the regional and state economy. TWDB should evaluate the following metrics:

- Reduction in share of local and regional economic output at risk to flood hazard.
 - Percentage reduction in number of businesses affected by a flood event.
 - Reduction of percentage of local economic output potentially exposed to damage or disruption.
 - Reduction of number of jobs potentially affected by a flood event.
 - Avoided economic losses (total value and % of local output)
- Reduction in quantity of tourism and recreational infrastructure at risk to flood hazard.

- Reduction in number of buildings (e.g., hotels and summer rentals), recreational facilities, and amenities exposed to flood hazard.
- Reduction of number of visitors affected.
- Avoided user days lost.
- Avoided replacement cost.
- Avoided economic losses (lost revenue)

2. Human Health and Safety

Maintaining a destination image that protects Galveston's ecosystem attractions also supports the local tourism industry that vigorously contributes to the regional and state economy. Flood mitigation efforts to protect reefs, marshes, or dunes during storms, improve water quality, provide wildlife habitat, and enhance recreational opportunities may involve projects uniquely designed for an island community like Galveston.

When evaluating human health and safety factors, TWDB should assess flood mitigation project impacts on reducing nutrients and pollutants to avoid conditions that impede and often reverse aquatic habitat restoration and water quality improvement efforts. Flooding occurring from hurricane tidal surge, significant rain events as well as continued relative sea level rise further exacerbates adverse water quality conditions in Galveston subdivisions with septic systems.

Aging septic systems are examples of stressors effecting water quality by producing pollutants following each flood event, thus diminishing habitat protection and restoration. Galveston's highwater table, sandy soils, dense home concentrations, reduced leach field areas and many aging septic systems create a "perfect storm" for non-point source pollutants into the surrounding soils, groundwater and ultimately the Gulf of Mexico and West Bay.

TWDB should evaluate the following metrics.

- Reduce number of people at risk for injury, casualty, or other health effects from a particular health event
 - Percentage of households in the area potentially affected by a project.
 - Percentage reduction in number of households exposed with the project as compared to without
- Reduce the number of people at risk for negative effects from contaminated water, soil, and mosquito-borne disease.
 - Percentage reduction in number of households exposed to water-borne disease with the project as compared to without.
 - Percentage reduction in number of households exposed to a toxic pollutant with the project as compared to without.
 - Reduction in number of households exposed to toxic pollutant with the project as compared to without.
- Improve fish and shellfish habitat, increase fish and shellfish abundance and diversity.

3. Property and Infrastructure Protections

Flood damages to residential and commercial properties creates economic losses that impact and disrupt local economies and people directly. Minimizing potential disruption to critical infrastructure from hurricanes and heavy rains ensures continued critical services, reduces economic losses, and increases the resilience of communities.

TWDB should evaluate the following prioritization criteria metrics.

- Reduction in the amount of property and critical infrastructure exposed to damage from a major flood event as well as nuisance flooding that occurs at least every year.
 - Reduction in number of properties exposed to a flood event with the projects as compared to without.
 - Reduction in percentage of total residential and commercial property value expected to be damaged in floods with the project as compared to without.
 - Property value of residential and commercial properties exposed to a flood event with and without the project.
 - Reduced flood insurance premiums or National Flood Insurance Program (NFIP) Community Rating system (CRS) rating changes achieved with the project.
 - Tax base increase attributed to residential and commercial properties exposed to a flood event with and without project.
 - Reduction in expected damages to properties from floods with the project as compared to without.
- Enhancement of residential and commercial properties as well as infrastructure components from improved natural amenities.
 - Percentage of residential, commercial, cultural, and heritage properties benefiting from improvement.
 - Increase in property value of residential and commercial properties benefiting from improvement.
 - Tax base increase or change attributed to residential and commercial properties benefiting from improvement.

Nature-based Solutions

Natural and nature-based solutions are appropriate and effective for unique flood mitigation needs. Nature-based features needed and effective for inland heavy rain flood situations are different from such approaches that integrate with flood mitigation protections against sea level rise or storm surge in coastal areas.

The City is concerned a heavy emphasis on nature-based solutions could place projects for an island community like Galveston at a severe competitive disadvantage for ranking critical projects. A delicate balance approach is needed when evaluating criteria that involve flood risk, nature-based solutions and the flood mitigation needs of unique communities.

In some cases, a hybrid approach with nature-based and structural infrastructure may be most effective and efficient. The City incorporates low impact development concepts to advance aesthetics, increase the permeable landscape, and address drainage capacity onsite to reduce offsite/street flooding. Further, there are innovative materials that can be used when constructing fortified dunes that provide essential storm surge protection but also sensitive to the environment.

Benefit-cost calculation methodology

The BCA methodology should allow for both benefits based on historic damages and on expected future damages. This will ensure that the full range of benefits of a particular project can be accounted for, and that projects are given their best opportunity for funding. Standardized or default factors (such as depth-damage curves) would help to level the playing field and allow for easier comparison of like project types.

Reducing loss of life is the highest public policy priority but is not an effective or precise indicator for evaluating financial investment in flood mitigation projects and should not be a factor in BCA calculations or evaluations. While everyone recognizes flooding leads to otherwise preventable deaths and injuries, the primary purpose of flood mitigation projects should be flood risk reduction. Adding protection of life or avoidance of injuries/fatalities distracts from the true project purpose and leads to astronomically high BCA ratios, rendering them functionally useless for comparing and ranking projects. A worse practice is projects are favored for funding based on comparison of incompatible criteria. For these reasons, the Federal Emergency Management Agency does not allow the consideration of preventing injuries and fatalities in flood mitigation projects.

Effective Use of Memorandums of Understanding

Included in minimum standards, the IUP requires when a proposed flood control project is partially located outside the applicant political subdivision boundaries, the applicant must submit to TWDB a written MOU approved by all affected political subdivisions located in the watershed.

The City urges TWDB to carefully consider the unique geographical configuration and infrastructure needs of coastal areas when applying the MOU requirement to flood control projects. In our view, the MOU requirement could displace some coastal communities like Galveston from competitive consideration for project funding. The City urges TWDB to recognize local priorities may serve a significant flood mitigation purpose for a singular community, but provide a tremendous benefit to the state.

The City greatly appreciates this opportunity to submit written comments on the Draft SPY 2024-2025 IUP. As a coastal island community with experience facing flood challenges and recovery, the City of Galveston wants to be a valuable partner in this process.

If you have any questions or comments, please do not hesitate to contact us.

Response:

The TWDB appreciates receiving the comments for the Draft SFY 2024-2025 FIF IUP.

General Comment

- Thank you for your comment.

Economic Resilience

- Thank you for your comment.

Human Health & Safety

- Thank you for your comment.

Property and Infrastructure Protections

- Thank you for your comment.

Nature-Based Solutions

- Nature-based projects are projects that use nature-based features to protect, mitigate, or reduce flood risk, as determined by TWDB. The TWDB evaluates the projects as a whole and this is one consideration.

Benefit-cost calculation methodology

- The TWDB is using the BCR as a tool to evaluate the investment of state funding towards the construction of flood projects similar to, but with more flexibility than, federal requirements (FEMA, DOT, etc.). The TWDB allows a variety of BCA tools and methods to assess a minimum level of cost effectiveness of a proposed construction project. Without some objective methodology, there would be no consistent way to assess the cost-effectiveness of a proposed FMP.

As an example, the TWDB has considered FEMA's streamlined cost-effectiveness method, but FEMA has established an approach where FEMA will independently estimate the BCR of projects less than \$1 million with the information provided by the applicant. The TWDB does not have a similar approach established, therefore the TWDB will continue to require BCAs for projects as defined in the Intended Use Plan. Further, since the only projects that are eligible for FIF funding are those that are in the amended regional flood plans and BCAs were required in those plans, BCAs should already have been developed for relevant projects. An update to the BCA should only be needed if the prior BCAs were inadequate or if the project information has changed since it was listed in the amended regional flood plan.

Effective Use of Memorandums of Understanding

- The MOU requirement is required by Texas Water Code § 15.005. The TWDB does not have the authority to change or remove that statutory requirement. The requirement only necessitates MOUs with "eligible political subdivisions," as that term is defined in Texas Water Code § 15.531 (a district or authority created under

Section 52, Article III, or Section 59, Article XVI, Texas Constitution, a municipality, or a county.) The requirement applies if the project watershed, as defined in 31 Texas Administrative Code § 363.402 (the area upstream and downstream substantially affected by the proposed flood project, as documented in the project application, and sealed by a Professional Engineer or Professional Geoscientist) lies partially outside the applicant's boundaries. The requirement applies to flood control projects, as that term is defined in 31 Texas Administrative Code § 363.402 (the construction or rehabilitation of structural mitigation or anything that retains, diverts, redirects, impedes, or otherwise modifies the flow of water).

Change:

None.

Comment Submitted By: Alan Steinberg, Ph.D., President/CEO, West Houston Association on behalf of themselves and Marlene Gafrick, Chairman of the Board, West Houston Association

Comment Date: January 3, 2024

Comment:

Thank you for the opportunity to provide comments on the 2024-2025 Draft Flood Intended Use Plan on behalf of the West Houston Association.

The West Houston Association (WHA) believes that everyone should find great experiences and opportunities to live, work, and play across the Greater West Houston region and beyond. We are industry leaders who collaborate, educate, and advocate to achieve the best quality of life, by promoting high quality development, sustainable infrastructure, long-term planning, and sound public policy.

We ask that you please consider the following as you finalize this document and begin the process to award funds for much needed flood resiliency projects across the State of Texas.

- Page 4: Program Overview, line 6: Please consider utilizing the full \$625 million appropriated by the 88th Legislature, rather than the \$375 million indicated here.
- Page 6: Federal Award Matching Funds, 2nd line: The requirement to have already secured a federal award prior to requesting State support on the local match will be a severely limiting factor in the ability for agencies to secure funds in a timely manner. Please consider also allowing requests for local match support on projects who are currently in application to Federal programs and change from “must have received” to “have received or are applying for.”
- Page 7: Minimum Standards, Item 1: While the draft FIUP states that a BCR>1 is “generally preferred” in practice it was used to reject multiple applications in the 2020 FIUP. Please consider the following alternates:
 - Removing requirement for a BCR>1 altogether.
 - Expand the use of other benefits that are not easily quantified. Please look to USACE’s equal treatment of all four accounts (National Economic Development, Environmental Quality, Regional Development, & Social Well Being) as a possible template.
 - Consider providing more clear criteria that will be used for projects with a BCR<1 that may still be considered for award.
- Page 8: Federal Award Matching Funds, 2nd bullet: It is noted that a BCA is required if the proposed project is construction-oriented. Please consider following FEMA’s streamlined cost-effectiveness determination method, where projects with a total cost of less than \$1 million can provide a narrative of the project benefits.
- Page 8: Required Memoranda of Understanding: In certain parts of the State, there are many, sometimes hundreds, of municipal utility districts (MUD’s) in a single watershed. The requirement for MOU’s with every entity is excessive. Please consider reducing this

requirement to notification letters. Alternatively, a threshold based on the responsibility of the municipality could be established where an MOU is not required.

- Page 8: Required MOU, 2nd to last line: “they must be consistent in the management of the watershed”: It is commonly stated that flooding does not respect political boundaries. Watersheds span multiple counties all across the State. Further, it is quite common for adjacent counties to have different development and watershed management criteria, sometimes dramatically so. The requirement here in the draft FIUP is therefore impractical. Please consider including language such as “generally consistent” or provisions such that where management is different, that the more stringent criteria of the two is applied.
- Page 10: Best/Most Recent Available Data: In the Houston area, MAAPNext models exist, and are considered best, but are not currently released for public use until FEMA releases for public comment. Please consider “encouraging” use of best/most recent available data.
- Page 10: Additional Requirements and Exceptions for Flood Management Evaluation Category: Please consider removing this requirement. Undertaking a study in a watershed where hundreds of municipalities exist is overly burdensome. Perhaps consider accepting a good faith effort for community outreach, such as through publicly held meetings.
- Page 13: Abridged Applications, 4th line: Please consider allowing applications to construct partial elements of a project included in the regional flood plan. The Coastal Texas Project is a good example (albeit extreme). Some items listed in the regional flood plan are programmatic in nature and not realistic to be considered “all or none.” Especially when considering the limits on grant amounts for most projects.
- Page 13: Prioritization and Selection Process, 2nd line “The TWDB will score abridged applications utilizing the criteria and methodology anticipated to be used in the ranking of projects.” In 2023 the TWDB sought (and received) comments on the draft rubric for ranking projects, but it does not appear that the comments (and responses) have been publicized. Please consider providing closure on this process prior to utilizing a modified rubric.
- Page 14, 3rd paragraph: Please consider providing criteria that the Board may use in choosing to bypass a project.
- Page 15, Eligibility Item IV: Please consider allowing abridged applications to proceed on the possibility of a federal grant.
- Page 15, Grant Qualifier table, first criteria: Please consider changing the timeframe for an area subject to a disaster to the past 10 years. Otherwise, this ages out Hurricane Harvey. Page 16, Eligibility item II: Please consider allowing abridged applications to proceed on the possibility of a federal grant.
- Grants in General for FME, FMP, FMS: As in the 2020 FIUP, the TWDB continues to favor loans over grants. This makes sense for water/wastewater SRF’s because those infrastructure projects generate revenue. However, most flood damage reduction projects do not generate revenue. Emphasizing loans will put smaller and rural agencies at a disadvantage as they are not likely prepared to enter into long term re-payment of a large project without a source of revenue to make those payments. Please consider

moving the scale more towards the federal model where the typical grant share runs in the 75-80% range.

- Page 19, Total Funds available for FIUP: Why limit the utilization of funds for grants to 50%. Please see prior comment about grants in general.
- Page 21, 5th paragraph regarding retainage: Please consider limiting the use of retainage to construction contracts, and not professional services agreements.
- TWDB Scoring Criteria: Please provide responses to the public feedback and (ideally) updated spreadsheets online, which currently reflect the original draft criteria.

Again, thank you very much for your efforts to build a more resilient future for our State. Thank you for your time and please consider these comments while making meaningful changes to this important document.

Response:

The TWDB appreciates receiving the comments for the Draft SFY 2024-2025 FIF IUP.

Program Overview

The TWDB will use grants and zero percent interest loans to offer at least \$375,000,000 for projects during the 2024-2025 FIF IUP cycle. The Board may increase the funds available in the 2024-2025 FIF IUP cycle. The remaining funds appropriated to the FIF by the 88th Texas Legislature will be utilized in the next FIF funding cycle.

Federal Award Matching Funds

The federal application must be submitted by the Abridged Application submission date, and federal funds must be awarded by TWDB commitment date. This is stated in the abridged application. The IUP has been updated to include this statement.

Minimum Standards

The TWDB is using the BCR as a tool to evaluate the investment of state funding towards the construction of flood projects similar to, but with more flexibility than, federal requirements (FEMA, DOT, etc.). The TWDB allows a variety of BCA tools and methods to assess a minimum level of cost effectiveness of a proposed construction project. Without some objective methodology, there would be no consistent way to assess the cost-effectiveness of a proposed FMP.

As an example, the TWDB has considered FEMA's streamlined cost-effectiveness method, but FEMA has established an approach where FEMA will independently estimate the BCR of projects less than \$1 million with the information provided by the applicant. The TWDB does not have a similar approach established, therefore the TWDB will continue to require BCAs for projects as defined in the Intended Use Plan. Further, since the only projects that are eligible for FIF funding are those that are in the amended regional flood plans and BCAs were required in those plans, BCAs should already have been developed for relevant projects. An update to the BCA should only be needed if the prior BCAs were inadequate or if the project information has changed since it was listed in the amended regional flood plan.

If the reported BCR of the complete application for the proposed project is less than 1.0, the applicant must provide a detailed explanation for why the applicant considers the project to be justified, including a discussion of the primary benefits of the project, if any, that could not be quantified and were therefore not included in the BCR calculation. Applicants are encouraged to discuss project-specific questions on this item with TWDB staff.

Federal Award Matching Funds

Refer to the previous response to *Minimum Standards*.

Required Memoranda of Understanding & Required MOU

The MOU requirement is required by Texas Water Code § 15.005. The TWDB does not have the authority to change or remove that statutory requirement. The requirement only necessitates MOUs with “eligible political subdivisions,” as that term is defined in Texas Water Code § 15.531 (a district or authority created under Section 52, Article III, or Section 59, Article XVI, Texas Constitution, a municipality, or a county.) The requirement applies if the project watershed, as defined in 31 Texas Administrative Code § 363.402 (the area upstream and downstream substantially affected by the proposed flood project, as documented in the project application, and sealed by a Professional Engineer or Professional Geoscientist) lies partially outside the applicant’s boundaries. The requirement applies to flood control projects, as that term is defined in 31 Texas Administrative Code § 363.402 (the construction or rehabilitation of structural mitigation or anything that retains, diverts, redirects, impedes, or otherwise modifies the flow of water). The IUP does allow the applicant to submit completed MOUs after the application due date, provided approval by TWDB. The statute prohibits the TWDB from acting on an application without all completed and signed MOUs.

Best/Most Recent Available Data

For all categories, the proposed project must be developed using the best/most recent available data. For example, FME Category projects must use the latest freely available topographic data to perform studies. A brief, general description or acknowledgment should be provided in the abridged application and a more detailed description in the complete application.

Additional Requirements and Exceptions for Flood Management Evaluation Category

The TWDB appreciates this comment. This requirement is established in TWDB rule, and no change has been made to those rules. The applicant may request of the TWDB to submit the copy of the notice after the application due date. If approved, the applicant may submit the copy of the notice after the application has been submitted. The Board may not act on an application until the applicant has provided a copy of all notices sent. The Board may not act on an application before the end of the 30-day notice period unless all political subdivisions to which notice is required to be sent agree in writing to waive the notice period.

Abridged Applications

Disallowing 'partial project' is intended to align project score with the benefits generated by a project.

If a project is divided into multiple parts, they can be considered as a phased project. However, the benefits of all the phases of the project selected for a single FIF application will be utilized to compute ranking score of the project. Thus, the data used for the ranking of the project associated with the FIF application will have to be updated to reflect any reduced benefits change in the FIF funding prioritization.

If a portion of an FMP has already been completed, and the project scope of the remaining portion aligns with the FMP recommended in the Board-approved regional flood plan, then the abridged application may be considered eligible for the FIF, provided all eligibility requirements in the IUP are met.

Prioritization and Selection Process

Stakeholder comments received in 2023 on the initial draft version of a ranking methodology were considered in developing the current ranking methodology. The resulting current ranking criteria and methodology was fully presented as part of the posted draft FIF IUP.

Bypass a Project

There may be circumstances that may lead to the TWDB needing to bypass a higher-ranked project for a lower ranked project. For instance, the board may wish to bypass a higher scoring project to meet the 15 percent target for federal matching as stated on page 19 of the IUP. The TWDB proposes reserving the board's ability to bypass higher-ranked projects.

Eligibility Item IV

The federal application must be submitted by the Abridged Application submission date, and federal funds must be awarded by TWDB commitment date. This is stated in the abridged application.

Grant Qualifier Table

The proposed grant eligibilities and time period for an acceptable federal disaster declaration were drafted to offer the limited grant funds to those communities with the greatest needs.

Grants in general for FME, FMP, FMS

The TWDB has made a practice of providing financial assistance in a manner that promotes community engagement and follow-through in completing projects in a timely manner and fashion. One best management practice to achieve that has been requiring a financing component to financial assistance that includes grant or principal forgiveness. The TWDB also desires to revolve money through the FIF, which is only possible through lending a portion of the available funds to projects. Based on those agency needs, the levels of grant

to loan provided through the FIF are anticipated to assist those communities with the greatest financial burden to complete their project.

Total Funds Available for FIUP

Of the \$375,000,000 available for projects, the maximum amount allocated to grants is \$187,500,000 (50 percent of total available funds). The Executive Administrator may increase this amount allocated to grants. Please see previous response for more detail.

Retainage

The retainage is held to ensure the original project scope as approved by the TWDB Board is completed. This practice is consistent with other funding programs administered by the TWDB.

TWDB Scoring Criteria

The TWDB will provide the responses to these public comments as an attachment to the board item final FIF IUP will be considered.

Change:

1. The IUP was updated to state that a federal application must be submitted by the Abridged Application submission date, and federal funds must be awarded by TWDB commitment date, as stated on the abridged application.

Comment Submitted By: Chase Kronzer, Texas Director, American Flood Coalition

Comment Date: January 3, 2024

Comment:

I write to you on behalf of the American Flood Coalition (AFC), a nonprofit organization with over 400 members nationwide - including state legislators, county judges, mayors, and city council members across Texas - that focuses on working with communities, state agencies, lawmakers, and key stakeholders to advance solutions to flooding and sea level rise. We want to show our appreciation to the Texas Water Development Board (TWDB) for its administration of the Flood Infrastructure Fund (FIF) and the effort it has undertaken to ensure a thoughtful and transparent disbursement of FIF awards across the state to regions and communities in need of support.

At AFC, we stress the importance of incorporating a comprehensive and collaborative approach to addressing flood risk across watersheds, river basins, and the state. We applaud the work of TWDB as it continues its efforts to develop Texas' first State Flood Plan (SFP). Further, we are encouraged by its consistency and commitment to the SFP by requiring that projects considered under the new Intended Use Plan (IUP) are recommended in amended Regional Flood Plans (RFP) approved by TWDB and that appropriate MOU processes are taken to ensure adequate and responsible regional collaboration.

As TWDB finalizes the SFY 2024-2025 FIF IUP for award decisions for those projects contained in the RFPs, we offer the following comments to be taken under consideration.

Flood Management Evaluations (FME)

Assistance with FMEs is critical for many communities to truly understand their flood risk and put them in a position to develop actionable strategies. In order to qualify for a grant that provides 100 percent of the FME costs, a low income project area must also have been subject to a flood-related federal disaster declaration within the past five years. There are many low-income and under-resourced communities in need of an FME that were impacted by Hurricane Harvey and the devastating floods of 2018. We suggest extending the flood-related federal disaster declaration requirement beyond five years to include the communities impacted by these devastating storms.

Flood Management Strategies (FMS)

In the current IUP, FMS projects may qualify for a grant that provides 90 percent of the FMS costs. In the Draft SFY 2024-2025 IUP, the maximum percentage provided by an FMS grant is reduced to 70 percent of total project costs. The decrease in the allowable grant award may become cost prohibitive for some FMS applicants that were anticipating the possibility of a 90 percent grant award. We suggest maintaining a 90 percent maximum grant award or providing an explanation for the decrease.

Benefit Cost Analysis (BCA)

While we support the inclusion of a BCA for Flood Mitigation Projects (FMP), we suggest establishing a project cost threshold for which a BCA is not required for certain FMPs. For example, if an FMP is relatively low-cost, it may not be worth the time, cost, and resources of an applicant to conduct a BCA, nor may it be worth the time for TWDB staff to conduct an analysis of such a BCA.

Future Conditions for Roadway Construction-oriented Projects

For an abridged application for a roadway construction-oriented project, an applicant is required to submit inundation risk, including depths and velocities during 50%, 10%, 4%, 2%, 1%, and 0.2% annual chance storm events. We suggest also requiring these depths and velocities under future conditions where forward-looking data is available.

Funds Available

The Draft SFY 2024-2025 IUP identifies that \$375 million out of the FIF will be made available for project awards. Out of the \$375 million in available funds, 50 percent will be available for grants, and 50 percent will be available for loans. We suggest increasing the percentage available for grants to allow for more funds available to under-resourced applicants who do not have the ability to take on a project without FIF assistance and do not have the ability to pay back a loan, even at zero interest.

Federal Match

In the current IUP, applicants seeking a federal matching grant may qualify for up to 90 percent of the required local match. In the Draft SFY 2024-2025 IUP, other than when discussing FEMA Flood Mitigation Assistance (FMA) grant for FMA FY 2019-2022, the maximum federal matching grant amount an applicant may receive for a required local match is not specified. Given the various federal flood mitigation programs that are available, apart from the FMA grant, we suggest clarifying how much an applicant may receive when applying for a grant to provide for the local match of any other federal flood assistance programs.

Prioritization and Selection Process

In certain instances, the Board may consider and allocate funding for any proposed project, including in cases that involve bypassing a higher scoring project. For transparency purposes, we suggest providing an example of what would allow for a lower scoring project to “bypass” a higher scoring project.

Release of Funds

As noted in the Draft SFY 2024-2025 IUP, the FIF program generally releases funds through a reimbursement request (or outlay) submittal process, and advance disbursements will only be considered if TWDB determines it is absolutely necessary. Under-resourced and low-income communities often refrain from applying for funding or initiating a project due to a lack of assurances that funding will be available to provide for encumbered costs. We suggest providing a threshold or examples of when advanced disbursements will be considered.

AFC thanks TWDB for the opportunity to offer input on the Draft SFY 2024-2025 FIF IUP and is available to answer any questions or discuss further any of the submitted comments.

Response:

The TWDB appreciates receiving the comments for the Draft SFY 2024-2025 FIF IUP.

Flood Management Evaluations (FME)

The proposed grant eligibilities and time period for an acceptable federal disaster declaration were drafted to offer the limited grant funds to those communities with the greatest needs.

Flood Management Strategies (FMS)

The amount of funding available as loan and grant was determined with the goal of building a sustainable funding program that will be able to allocate funding to projects in the future, without relying solely on one-time appropriations from the legislature. The percentage of the project cost that can be provided by grant was reduced to be able to spread the total amount of grant available to more projects.

Benefit Cost Analysis (BCA)

TWDB did not propose BCR as a significant scoring criteria (2.5 percent and only for FMPs) but continues to propose it as a minimum standard to achieve to help ensure reasonable use of state funds. The TWDB is currently developing a BCA guidance document that will include other benefits that are not typically quantified, but the guidance document is not expected to be available in time for this FIF abridged application cycle (see more information on that project by visiting www.twdb.texas.gov/flood/research/benefit-cost-analysis-guidance/). Some interim BCA guidance may be available while the application cycle is open, and if so, the TWDB will publish it online for optional use in the FIF application process. Regardless, each applicant has the option to propose their own use of benefits that are not easily quantified and cite sources where those estimates were developed. The TWDB will review each BCA submission to assess the reasonableness of the assumptions made.

The TWDB has considered FEMA's streamlined cost-effectiveness method, but FEMA has established an approach where FEMA will independently estimate the BCR of projects less than \$1 million with the information provided by the applicant. The TWDB does not have a similar approach established, therefore the TWDB will continue to require BCAs for projects as defined in the Intended Use Plan. Further, since the only projects that are eligible for FIF funding are those that are in the amended regional flood plans and BCAs were required in those plans, BCAs should already have been developed for relevant projects. An update to the BCA should only be needed if the prior BCAs were inadequate or if the project information has changed since it was listed in the amended regional flood plan.

Future Conditions for Roadway Construction-Oriented Projects

Thank you for your comment.

Funds Available

The proposed grant eligibilities were drafted to offer the limited grant funds to those communities with the greatest needs based on their socioeconomic conditions. Of the \$375,000,000 available for projects, the maximum amount allocated to grants is \$187,500,000 (50 percent of total available funds). The Executive Administrator may increase this amount allocated to grants.

Federal Match

The grant amount will be based on which category the project falls under. This is detailed in the “Eligibilities and Financing Details by Category” section in the FIF IUP.

Prioritization and Selection Process

There may be circumstances that may lead to the TWDB needing to bypass a higher-ranked project for a lower ranked project. For instance, the board may wish to bypass a higher scoring project to meet the 15 percent target for federal matching as stated on page 19 of the IUP. The TWDB proposes reserving the board’s ability to bypass higher-ranked projects.

Release of Funds

Any entity with an ongoing FIF project may request advanced disbursements and include a detailed justification as to why that is necessary. Those requests are reviewed by the TWDB on a case-by-case basis.

Change:

None.

Comment Submitted By: Kendall Hayes, Government Affairs Specialist, San Antonio River Authority on behalf of Derek E. Boese, JD, PMP, General Manager, San Antonio River Authority

Comment Date: January 3, 2024

Comment:

Thank you to the Texas Water Development Board’s (TWDB) staff for the thoughtful and comprehensive draft SFY 2024-2025 Flood Infrastructure Fund Intended Use Plan. I am writing to provide the San Antonio River Authority’s (River Authority) recommendations on the proposed SFYs 2024-2025 Flood Infrastructure Fund Intended Use Plan. The River Authority was created in 1937 by the State of Texas to preserve, protect, and manage the resources and environment of the San Antonio River and its tributaries. Through the knowledge and skill of professional and technical staff, we are committed to safe, clean, and enjoyable creeks and rivers and to developing and sustaining the expertise needed to fulfil our service mission. As administrator for the San Antonio Regional Flood Planning Group, we are pleased to see continued investment in the state’s Flood Infrastructure Fund.

The River Authority complements TWDB for taking an integrated approach to evaluating submitted flood management strategies for state funding. In general, the eligible project examples and the project categories within the FIF Intended Use Plan are comprehensive and encompass the needs identified in the regional flood plans.

The River Authority proposes the following comments for consideration:

In the “Federal Award Matching Funds” section (p. 6), we advise clarification that the requested grant funds may be provided for a portion of the applicant’s local match for federal funds.

On the following page under “Minimum Standards” for Benefit/Cost Ratios, we would appreciate the consideration of projects with benefit cost ratios less than 1.0.

The “Additional Requirements and Exceptions for Flood Management Strategy Category” section (p. 11) states that the abridged application requirements include analysis of multiple storm events and additional project details. However, it does not appear that this information is used in the prioritization criteria or scoring. We propose that it would be helpful for roadway construction-oriented projects to be scored based on a factor that combines the reduction in flood frequency with the average daily traffic count/roadway classification and detour distance. For the River Authority’s Cibolo Creek Watershed Master Plan, we used a “Dangerous Crossing Score” which was a combination of a dangerous crossing factor (DCF), the average daily traffic count (ADT), and the distance to safe crossing (DSC). This was used to prioritize projects based on existing conditions:

$$\text{Dangerous Crossing Score} = (0.45 \times \text{DCF}_{\text{norm}}) + (0.35 \times \text{ADT}_{\text{norm}}) + (0.2 \times \text{DSC}_{\text{norm}})$$

The River Authority appreciates the opportunity to comment and provide suggestions to the draft Intended Use Plan. We look forward to working with TWDB as it implements the new round of Flood Infrastructure Fund appropriations. If there are any questions or if we can provide additional clarity, please reach out to Kendall Hayes khayes@sariverauthority.org or Erin Cavazos ecavazos@sariverauthority.org.

Response:

The TWDB appreciates receiving the comments for the Draft SFY 2024-2025 FIF IUP.

Federal Award Matching Funds

Grant funds may be provided for a portion of the applicant's required local federal match amount for federal award funding they have received. In addition, recipients may either use their own available funds or borrow FIF funds for any portion of the required local share not provided through the FIF grant funds. In-kind services may be substituted for any loan offered, but only with prior TWDB approval.

Minimum Standards

The TWDB is using the BCR as a tool to evaluate the investment of state funding towards the construction of flood projects similar to, but with more flexibility than, federal requirements (FEMA, DOT, etc.). The TWDB allows a variety of BCA tools and methods to assess a minimum level of cost effectiveness of a proposed construction project. Without some objective methodology, there would be no consistent way to assess the cost-effectiveness of a proposed FMP. If the reported BCR of the complete application for the proposed project is less than 1.0, the applicant must provide a detailed explanation for why the applicant considers the project to be justified, including a discussion of the primary benefits of the project, if any, that could not be quantified and were therefore not included in the BCR calculation. The TWDB will assess those requests on a case-by-case basis.

The TWDB is continuing to develop methods to improve how BCRs may be computed. The TWDB BCA Input Tool already includes an option to normalize property damage of structure values across high/medium/low-income areas and accounts for certain health/safety factors. The TWDB is also developing additional guidance on benefit-cost analyses (www.twdb.texas.gov/flood/research/benefit-cost-analysis-guidance/) that will provide additional ways to estimate losses associated with health/safety, transportation, environmental, socio-economic, and other factors. The TWDB will provide updated information as it is available. FEMA has also been actively updating its benefit cost guidance to include additional factors and applicants are encouraged to use all the latest available guidance whenever possible. Applicants are not required to follow one specific BCA method. Each applicant can estimate additional benefits that may not be built into a given tool, include them in the BCA calculation, and submit those values and justifications to TWDB as part of their application.

Local or regional drainage design requirements that require higher factors of safety may drive up the cost of a given flood project. That higher cost, in turn, may drive down the BCR value computed for the project. This is one reason TWDB did not include BCR as a significant part of the scoring criteria (to avoid different drainage standards causing BCR,

and thus competing scores, to go up or down significantly), but did include BCR as a minimum criterion for all projects to meet. If a project's BCR is less than one and the applicant feels that the local or regional drainage design criteria is a significant factor in driving that cost up, then the applicant is encouraged to approximately quantify the effect the higher drainage standard has on the BCR and provide that as part of their detailed explanation why the applicant considers the project to be justified.

Additional Requirements and Exceptions for Flood Management Strategy Category

The TWDB appreciates this comment. FMSs are currently ranked based on the Working 2024 State Flood Plan Ranking Criteria and Weight document on page 23 of the draft IUP. Roadway construction-oriented projects are being ranked against other FMS efforts that are not roadway-focused (like regulatory changes, emergency action plans, and educational campaigns) so metrics that can be applied to all ranges of projects would be preferable, like BCA. However, the FMS Category does not require computation of BCAs in the regional flood plans. The requested data is to help TWDB better understand a general picture of the problem and assess reasonableness to address it, without the benefit of a BCA.

Change:

None.

Comment Submitted By: William Kirkey, Chief Research & Technology Officer, Research Applied Technology, Education and Services, Inc. on behalf of themselves, Andrew Ernest PhD, PE, BCEE, D.WRE, Chief Executive Officer, Research Applied Technology, Education and Services, Inc.; Christopher Fuller PhD Chief Operating Officer, Research Applied Technology, Education and Services, Inc.; and Joseph Gutenson PhD, Chief Science Officer, Research Applied Technology, Education and Services, Inc.

Comment Date: January 3, 2024

Comment:

1 Introduction

Research Applied Technology, Education and Services Inc. (RATES), a 501c3 not-for-profit organization, is presently establishing a regional monitoring, modeling, and decision-support system for the Lower Rio Grande Valley (LRGV) Development Council as part of TWDB FIF project no. G1001288.

RATES staff have reviewed the draft IUP for the upcoming 2024-2025 FIF round of funding circulated by the TWDB. This document contains four comments regarding the draft IUP that we hope TWDB will address.

If there are any questions regarding these comments, please contact:

William Kirkey

Chief Research & Technology Officer

Research Applied Technology, Education and Services, Inc. (RATES)

wkirkey@ratesresearch.org

Cell: 315-261-2171

2 Comments

2.1 Comment #1

Comment: We suggest there be a mechanism for addressing multiple FMEs and / or FMSs via a single project application.

Explanation: The draft IUP (on page 13) indicates that each application must correspond to a specific FME, FMP, or FMS. We suggest that TWDB include a mechanism through which a single application could be submitted addressing multiple related FMEs and/or FMPs.

Example #1: The Table below shows cities that the Lower Rio Grande Valley Development Council (LRGVDC) grouped into seven geographic clusters, which aided in distributing monitoring and modeling efforts associated with its FIF Round 1 Category 1 project G1001288. “Holistic Flood Study” FMEs, each at a cost of \$1.5 million, have been recommended for many of these municipalities in the 2023 Region 15 Amended Regional Flood Plan (R15ARFP), as well as for four additional municipalities which are also included in the table. The table also includes the TWDB statewide ranking of each FME; better rankings correlate strongly with increasing population, indicating that it will be difficult for these studies to be funded for small communities. These communities are distributed throughout Cameron, Hidalgo, and Willacy counties that the LRGVDC represents. By

combining the following projects into an extension of project G1001288, significant (orders of magnitude) economies of scale could be achieved, and both small and large communities can continue to benefit from the work.

Table 1: FMEs discussed in Example #1 regarding Comment #1.

FME ID	Municipality	Cluster	Population	FME Ranking	G1001288 investment
151000450	Mission	1	86,223	460	RTHS, Regional, Basin, Urban
151000446	Alton	1	18,860	791	Regional, Basin, Urban
151000457	La Joya	1	4,587	1661	Regional, Basin, Urban
151000451	Palmhurst	1	2,602	1857	Regional, Basin, Urban
151000452	Palmview	1	15,884	1250	Regional, Basin, Urban
151000448	Weslaco	2	41,024	434	RTHS, Regional, Basin, Urban
151000443	Donna	2	16,821	648	Regional, Basin, Urban
None	Alamo	2	20,017	-	Regional, Basin, Urban
151000456	La Villa	3	2,712	945	RTHS, Regional, Basin, Urban
151000442	Elsa	3	5,680	897	Regional, Basin, Urban
None	Edcouch	3	2,720		Regional, Basin, Urban
151000444	Combes	4	3,040	1022	Regional, Basin, Urban
151000441	La Feria	4	6,814	1069	Regional, Basin, Urban
151000453	Primera	4	5,303	1295	Regional, Basin, Urban
151000449	San Benito	5	24,780	535	RTHS, Regional, Basin, Urban
None	Rancho Viejo	5	2,856	-	Regional, Basin
None	Port Isabel	5	5,094	-	Regional, Basin
None	South Padre Island	5	2,778		Regional, Basin
None	Raymondville	6	10,510	-	Regional, Basin, Urban
None	Lyford	6	2,210	-	Regional, Basin, Urban
None	San Perlita	6	531	-	Regional, Basin, Urban
151000445	Edinburg	7	102,483	429	RTHS, Regional, Basin
151000447	Cameron County		423,029	68	RTHS, Regional, Basin
151000455	Los Fresnos		8,152	748	RTHS, Regional, Basin
151000454	Mercedes		16,312	740	RTHS, Regional, Basin

Example #2: The R15ARFP includes 14 distinct recommended FMSs for “Flood Warning System, Planning, Operation & Maintenance” for 14 specific municipalities throughout Cameron and Hidalgo counties, each with a total cost of \$5,000,000. RATES envisions an application (led by an eligible municipality or regional entity) to develop and implement an integrated system covering all of these municipalities at a far lower cost than what it would take to develop individual systems for each municipality. Ideally, this would be an application submitted by the Lower Rio Grande Valley Development Council (LRGVDC) to expand upon the work accomplished in its initial Category 1 project (see comment 3 below). Less efficient, but with greater local responsiveness would be 7 separate cluster-scale (defined in Example #1) applications.

2.2 Comment #2

Comment 2: We suggest better defining “entire watersheds” pertinent to FMEs on pages 6 and 15.

Explanation: The explanation of FMEs on page 6 includes: *These studies involve planning of entire watersheds, as required by the TWDB regional flood planning program, to better inform the development of strategies using structural and nonstructural measures before a flood event.* Page 15 similarly states: *Eligible FME Category projects conduct planning of entire watersheds as determined by the regional flood planning group...* The R15ARFP discusses HUC-8, HUC-10, and HUC-12 watersheds at various points; we are unclear what scale applies to each individual FME listed in the R15ARFP. Further, some prior TWDB/FIF investments (viz. TWDB Commitment G1001288) are likely to have generated more refined watershed delineations based on recently available topographic and hydrologic data.

2.3 Comment #3

Comment 3: We suggest clarification on submission of applications which incorporate the continuation / expansion of TWDB investments from the initial round of FIF funding.

Explanation: The work completed in round 1 (TWDB commitment G1001288) dovetails with many of the FMEs submitted by Region 15 jurisdictions that participated in that project. We suggest that economies of scale can be accomplished if these FMEs are executed as part of a comprehensive continuation project. The continuation of the round 1 regional project was expected to be achieved through a combination of the jurisdictional FMEs, but the current IUP language does not explicitly permit such an integrative application (see comment 1 above).

2.4 Comment #4

Comment 4: We suggest clarification on how the inclusion of data collected during past FIF-funded projects will be interpreted during the evaluation phase of the upcoming round of FIF applications.

Explanation: Category 1 projects funded in round 1 are likely to have produced data that would be extremely beneficial (viz. watershed delineations from TWDB commitment G1001288) for FMEs, FMPs, and FMSs executed in the 2024 funding cycle. Promoting the use of data generated in the initial investment encourages efficiency and responsiveness in the overall FIF program. For example, RATES is making all data from the LRGVDC round 1 project (TWDB commitment G1001288) publicly available for use by all, and is making potential users (e.g., modelers, researchers, planners, etc.) aware of this data through ongoing outreach efforts.

Response:

The TWDB appreciates receiving the comments for the Draft SFY 2024-2025 FIF IUP.

Comment #1

One abridged application must be submitted for each FME, FMP, or FMS respectively and cannot be combined. Each abridged application should describe proposed projects from a single category with a single associated 9-digit, regional flood plan unique ID number

reference. The working ranking criteria and weights that are anticipated to be used in ranking all projects within the 2024 State Flood Plan, as required by statute, will be utilized for prioritization scoring under this IUP; therefore, individual projects cannot be combined.

Applicants may submit multiple abridged applications regardless of the category (e.g., FME, FMP, FMS). When submitting the full financial application, an applicant may submit one application covering all invited abridged applications at that time.

Project scopes and claimed project benefits as stated in the Abridged Application will be verified against the actual projects in the regional flood plan during the review process. Any projects that are subsequently found to diverge from the information presented in the Abridged Application may be subject to reprioritization and/or removal from the prioritization list, regardless of their initial prioritization. It is important that all project information be presented accurately in this abridged application.

Comment #2

The requirement of modeling an entire HUC10 watershed was removed for the SFY 2024-2025 FIF funding cycle. However, it is required that the area of the entire upstream contributing watershed or sub-watershed to the discharge point of interest is considered when determining solution alternatives for an area identified at flood risk or a neighborhood identified with flood loss. A determination of 'no negative impact' both upstream and downstream of project area is also required. The FIF IUP was updated to add clarification.

Comment #3

See response to *Comment #1*. In addition, existing FIF projects may be eligible for this round of FIF funding if they are listed as an FME, FMP, or FMS on an amended regional flood plan.

Comment #4

The TWDB promotes and encourages the use of data from a previous FIF project for further development of a phased project or a future FIF project.

Change:

1. The definition of watershed was updated in the IUP to provide clarification.

Comment Submitted By: Danielle Goshen on behalf of Jennifer Walker, Director, Texas Coast and Water Program, National Wildlife Federation; Ayanna Jolivet McCloud, Executive Director, Bayou City Waterkeeper; Linda Shead, Owner, Shead Conservation Solutions; Marisa Bruno, Water Program Manager, Hill Country Alliance; Jill Boullion, Executive Director, Bayou Land Conservancy; Bob Stokes, President, Galveston Bay Foundation; Stefania Tomaskovic, Coalition Director, Coalition for Environment, Equity and Resilience; and Cyrus Reed, Legislative and Conservation Director, Lone Star Chapter, Sierra Club

Comment Date: January 3, 2024

Comment:

This letter provides the formal comments on behalf of the undersigned organizations on the 2024-2025 Draft Flood Infrastructure Fund Intended Use Plan (hereinafter “Draft Plan”). As stated in the IUP, the TWDB anticipates utilizing at least \$375 million during SFY 2024-2025 to assist communities with FIF projects – and represents the first round of FIF funding where projects must be included in the Regional Flood Plans. We appreciate and support the immense undertaking the TWDB has taken to help protect communities from flooding across the state. We are encouraged by efforts to ensure FIF funds are distributed equitably and to further prioritize investments in green projects. We are encouraged by the following:

- Allowing applicants to choose the BCA tool appropriate for the project and applicant, in addition to the opportunity to fund projects with a BCA less than 1.0; and
- NFIP requirement showing the proposed project has floodplain ordinances or orders in place certifying the applicant is currently enforcing NFIP minimum standards, with the exception of an applicant seeking FIF funding to fulfill requirements to participate in NFIP.

In addition, the following comments and recommendations are provided to help further support the TWDB’s efforts to distribute the funds equitably and to promote investments in green projects.

1. Provide Additional Clarity on the Project Technical Merit Prioritization Criteria

The purpose of an Intended Use Plan is to help guide funding decisions for a given period of time. The most important substantive sections of an intended use plan include the funding/financing available, and how projects will be ranked. We are unsure of the intent of the TWDB in utilization of the “Project Technical Merit” prioritization criteria. As noted in the Draft Plan, “[t]he TWDB will score abridged applications utilizing the criteria and methodology anticipated to be used in the ranking of projects for the 2024 State Flood Plan, in addition to the criteria listed under the Prioritization Criteria section of this IUP.” (emphasis added). For the SFY 2024-2025 period, it is unclear whether the TWDB intends to either:

- a) Utilize the draft prioritization methodology;
- b) Utilize the finalized prioritization method once adopted in the State Flood Plan; or

- c) Utilize the draft prioritization method until the final methodology is adopted in the State Flood Plan.

Therefore, we recommend that the TWDB provides clarity on how the draft and final prioritization methodologies will be used.

- 2. Allow Meaningful Public Comment on the Ranking Prioritization Before Utilizing to Distribute Funds*

As noted above, we are unsure if the TWDB intends to utilize the draft prioritization scheme provided in Appendix A. While we understand that the TWDB has solicited public feedback on the draft State Flood Plan prioritization scheme, a formal public notice and comment period was not provided for the prioritization methodology. As we see this comment opportunity, the draft state flood plan methodology is not up for comment in the Draft Plan. We are concerned that the draft methodology provided in Appendix A will be utilized to distribute funds prior to a formal notice and comment period on that methodology. Therefore, we recommend that the TWDB either: 1) adds the draft methodology into this Intended Use Plan and open up the Draft Plan for another round of public comment; 2) Finalizes the State Flood Plan Prioritization Methodology with a proper notice and comment period before adoption of this IUP; 3) or a combination of option 1 and 2, where 2 is utilized once the State Flood Plan is adopted. Our comments on the stakeholder solicitation for the State Flood Plan prioritization scheme are attached.

- 3. Provide Guidance on When the TWDB May Use its Discretion When Bypassing Higher Scoring Projects*

We understand that available funding capacity is likely to limit TWDB's ability to provide financial assistance to many worthy flood projects and that the agency must have some flexibility to work within those limits to assist as many eligible projects as possible. However, we are concerned about the very open-ended statement in this section of the Draft Flood IUP that asserts that "[t]he Board may consider and allocate funding for any proposed project, including in cases that involve bypassing a higher scoring project."

We believe that TWDB needs to clarify – at least through examples – what the decision criteria would be for “bypassing a higher-ranking project.” Otherwise, the agency may leave itself open to criticism for what might potentially be considered an arbitrary and capricious decision process, thus undermining the credibility of the flood funding program.

- 4. Increase Timespan Provided Under the 100% Grant Qualifier for Federal Disaster Declarations for Flood Management Evaluations*

We are concerned that the 100% grant qualifier for Flood Management Evaluations (FMEs) for federal disaster declarations is too short. For this qualifier, only FMEs that have received a federal disaster declaration in the past five years are eligible for 100% grants. However, just because a federal disaster happened in the recent past, doesn't mean that community is more likely to flood than others. We suggest broadening the timespan to 10 years to include additional areas that have been recently impacted.

5. *Increase the Amount of Grants Available for the Lowest AMHI Areas for Flood Mitigation Projects and Flood Mitigation Strategies*

The greatest amount of grant financing that the lowest-income areas in Texas for Flood Mitigation Projects (FMPs) and Flood Mitigation Strategies (FMSs) will be 70%. This means that the most disadvantaged areas will need to pay back 30% financing for their FMPs and FMSs – given that the project is in a rural area and has at least 30% green or nature-based costs associated with the project. We are concerned that 70% grants will not be sufficient for the most disadvantaged areas – that may struggle with paying back 30% project costs through loans. Therefore, we encourage the TWDB to increase the percent grants available for the most disadvantaged areas to 90-100%.

6. *Refrain from Ending Public Comment Periods on Federal and State Holidays*

The end date of the first public comment period for this Draft Plan initially landed on January 1. New Year's Day (January 1) is a Federal and Texas State Holiday. While we appreciate the deadline comment extension, however, in the future we recommend refraining from starting or ending public comment periods on federal and state holidays as it effectively cuts the public comment period down.

7. *Make Grant Opportunities for the Green and Nature-Based Costs Available for All Applicants but Prioritize for Disadvantaged Communities*

Under this Draft Plan, only rural applicants and applicants that meet one of the AMHI requirements are eligible for additional grant funding for green/nature-based costs. We believe however, that these projects should be incentivized for all applicants. Green and nature-based infrastructure for flood mitigation offers several significant benefits. Enhanced absorption and water management is a key advantage, as systems like green roofs, rain gardens, and restored wetlands naturally absorb and manage rainwater. This approach reduces the intensity and frequency of floods by allowing water to percolate into the ground, preventing the overwhelming of urban drainage systems. Additionally, such infrastructure provides multiple benefits such as ecosystem restoration, and supports biodiversity, mimicking natural processes to enhance the resilience of areas to environmental changes and extreme weather events. Beyond environmental impacts, green infrastructure can be more cost-effective in the long term compared to traditional flood control methods and provides extra community benefits such as improved air quality, recreational spaces, and mitigating the urban heat island effect, as they help lower temperatures in densely built-up areas, contributing to a more comfortable and livable urban environment. Due to these reasons, and many more, we believe that all applicants should be eligible for the 5% additional grant opportunities for green and nature-based costs. However, we believe that these grants should be prioritized for the rural and disadvantaged communities that need projects most. This balance will work to incentivize applicants to incorporate green and nature-based components into their projects, while still prioritizing grant opportunities in communities that are least able to pay.

Thank you for the opportunity to submit these comments. We appreciate the time and immense effort the TWDB has taken to make Texas more resilient. Please don't hesitate to reach out with any questions or comments.

Response:

The TWDB appreciates receiving the comments for the Draft SFY 2024-2025 FIF IUP.

1. Provide Additional Clarity on the Project Technical Merit Prioritization Criteria

The TWDB will score abridged applications utilizing the criteria and methodology anticipated to be used in the ranking of projects for the 2024 State Flood Plan, which will be considered for adoption in September 2024, in addition to the criteria listed under the Prioritization Criteria section of this IUP. The abridged applications will be listed separately on one of three lists based on the FIF categories in order from the highest to lowest scores. The scores will first be taken from the amended regional flood plans. The score may change based on two additional criteria: (1) FMEs with an AMHI that is ≤ 85 percent the statewide AMHI; and (2) if there is a tie, the Social Vulnerability Index (SVI) will be used as a tie breaker in favor of the project with the highest SVI. Please also see further explanation in Response #2 below.

2. Allow Meaningful Public Comment on the Ranking Prioritization Before Utilizing to Distribute Funds

The draft state flood plan ranking methodology was updated based on feedback received in 2023 from stakeholders. The TWDB anticipates that the ranking criteria and methodology used to develop the 2024-2025 FIF IUP funding prioritization will be closely aligned, if not fully aligned, with the ranking methodology that is used to develop the final ranked list of all FMEs, FMPs, and FMSs in the adopted state flood plan. The TWDB anticipates incorporating any changes made during the FIF IUP process into the draft state flood plan ranking. However, these two ranking methodologies may not be identical since the TWDB must solicit and consider additional, future comments on a draft state flood plan once it is developed. The ranking methodology used in the final, adopted state flood plan may differ from the ranking method used as part of this FIF IUP as a result of additional and future public comments received on the draft state flood plan. The ranked list of projects included in the draft and final state flood plans will rely solely on the final, adopted, and Board-approved amended regional flood plan datasets that were submitted by regional flood planning groups to TWDB via their approved geodatabases. The prioritized FIF IUP list of projects will only include a subset of all FME, FMP and FMSs recommended in the regional plans (those that applied for FIF funding via abridged application).

3. Provide Guidance on When the TWDB May Use its Discretion When Bypassing Higher Scoring Projects

There may be circumstances that may lead to the TWDB needing to bypass a higher-ranked project for a lower ranked project. For instance, the board may wish to bypass a higher scoring project to meet the 15 percent target for federal matching as stated on page 19 of the IUP. The TWDB proposes reserving the board's ability to bypass higher-ranked projects.

4. Increase Timespan Provided Under the 100% Grant Qualifier for Federal Disaster Declarations for Flood Management Evaluations

The proposed grant eligibilities and time period for an acceptable federal disaster declaration were drafted to offer the limited grant funds to those communities with the greatest needs.

5. Increase the Amount of Grants Available for the Lowest AMHI Areas for Flood Mitigation Projects and Flood Mitigation Strategies

The proposed grant eligibilities were drafted to offer the limited grant funds to those communities with the greatest needs based on their socioeconomic conditions. The TWDB has made a practice of providing financial assistance in a manner that promotes community engagement and follow-through in completing projects in a timely manner and fashion. One best management practice to achieve that has been requiring a financing component to financial assistance that includes grant or principal forgiveness. The TWDB also desires to revolve money through the FIF, which is only possible through lending a portion of the available funds to projects. Based on those agency needs, the levels of grant to loan provided through the FIF are anticipated to assist those communities with the greatest financial burden to complete their project

6. Refrain from Ending Public Comment Periods on Federal and State Holidays

Thank you for your comment.

7. Make Grant Opportunities for the Green and Nature-Based Costs Available for All Applicants but Prioritize for Disadvantaged Communities

The proposed grant eligibilities were drafted to offer the limited grant funds to those communities with the greatest needs based on their socioeconomic conditions. The FIF statute (Texas Water Code § 15.534) requires one of the following qualifiers be met before the TWDB may provide grants: the project serves a rural political subdivision, the FIF funds provide matching funds to enable the applicant to participate in a federal program, or the TWDB determines the applicant does not have the ability to repay a loan. The statute does not provide for grants for green and nature-based projects without one of the statutory grant qualifiers being met.

Change:

None.

Comment Submitted By: Scott K. Hubley, P.E., CFM, Principal and Vice-President, North Texas Stormwater Group Manager, Freese and Nichols, Inc.

Comment Date: January 3, 2024

Comment:

Thank you for the opportunity to provide feedback on this FIF IUP as it serves as the first document which ties the efforts of the State Flood Planning process with much needed funding. The comments provided herein represent a compilation of feedback from FNI staff and leadership who worked across 12 out of the 15 flood planning regions to develop the Amended 2023 Regional Flood Plans, as well as staff who supported sponsors in applying for and winning FIF funding in the first competition.

General Comments on the FIF IUP:

- The financial need identified in the Amended 2023 Regional Flood Plans (RFPs) far exceeds the funding appropriated by the 88th Texas Legislature. As such, please consider distributing the full \$625M as opposed to just a portion of that amount as currently proposed in the Draft IUP.
- Because local sponsors must verify all data as part of the abridged application process, the TWDB should consider making available compiled GIS data sets from across the state in a centralized location (only the tabular data is available currently). This approach would help minimize the burden on the RFPs and local RFP sponsors especially considering that the last reimbursable date for technical consultants supporting the 2023 regional flood planning cycle is December 29, 2023.
- The IUP states that, “Only complete projects from the regional flood plan will be considered for financial assistance. Abridged applications containing partial projects from the regional flood plan will be considered ineligible.” Is this stemming from concern that major deviations from what was recommended by the RFP could constitute a completely different project and, therefore, no longer meet NAI or have the same details that resulted in the SFP ranking and prioritization for FIF funds? While that concern is valid and fair, as written/interpreted, this approach may penalize sponsors who have made progress towards implementing components of a project – more than likely a large, regional project. The TWDB should consider how sponsors can leverage FIF funds to complete the implementation of projects/FMPs or implement phases of a large regional project. Consider how sponsors may be able to submit all necessary data for ranking based on the phase or portion of the project that is being submitted for financial assistance by filling out Attachment 3 in the abridged application form. The abridged application also states that the exclusion of partial projects does not apply to phased projects. Please consider defining within the IUP what qualifies as a phased project.
- TWDB should consider how federal matching funds could be applied for ahead of formal receipt of FEMA or other federal grants. Consider how, for example, sponsors may be able to leverage FIF funding towards the local match required for FY23 FEMA BRIC and FMA applications (the IUP only makes reference to FY19-FY22 FEMA Programs), especially if a project is selected by FEMA before the FIF funding agreement

is finalized. The abridged application document states that “Federal application must have been submitted by Abridged Application submission date, and federal funds must be awarded by TWDB commitment date.” Based on this language, it would be helpful to confirm that FY23 FEMA programs are eligible for matching funds.

- Please clarify within the IUP whether or under what terms a sponsor may be reimbursed for funds already expended on an FMP, FME, or FMS ahead of the funding assistance being awarded.
- Please clarify within the IUP whether it is possible for a sponsor, who has already applied for or received federal funding assistance for a project, to apply for both federal local match (grant) funds as well as 0% loan to assist with costs of the project that go beyond the federal funding program cap. For example, FEMA grant programs have a federal contribution maximum of \$50M. For a \$90M project, could a sponsor pursue FEMA grant up to \$50M, matching grant dollars from the TWDB for up to 70% of the 25% local cost share, and 0% loan for the remainder of the funds needed to complete the entire project?
- If a project is recommended as an FMP, but the community identifies a need for additional study to optimize the regional solution or to adjust components based on changed circumstances (evaluate design based on Atlas 14 rainfall, update modeling to reflect recent developments/changes, update the proposed solution based on land no longer available due to recent development) is that project eligible for funds to support that study even if it is not recommended as an FME? Or is it necessary for the RFP and SFP to be amended before it can be eligible for those types of funds? Suggest specifying expectations for these types of scenarios within the IUP or other referenceable FAQ on the TWDB website. Listing example scenarios may be helpful for sponsors to reference.

State Flood Plan Ranking/Prioritization:

- When the preliminary methodologies for ranking FMEs, FMSs, and FMPs in the State Flood Plan were published in Spring 2023, the TWDB stated that the “ranking was not intended as the method for allocating state funding...although it was anticipated that the state flood plan ranking will be at least one of the considerations.” However, the Draft IUP released for public comment indicates that the state flood plan ranking is the primary prioritization methodology, and socio-economic factors determine grant/loan eligibility. Please consider publishing *supporting information*, similar to what was published to accompany the proposed methods for ranking recommended FMEs, FMSs, and FMPs, that clearly explains the objective(s) and approach within the IUP. Considering the magnitude of need relative to the available funding, additional background on the objectives and methodologies for the prioritization would be helpful for all involved parties and further the TWDB stated goal of maximum transparency.
- On page 22, the table states that an additional 10 points can be awarded to FMEs with an AMHI that is $\leq 85\%$ of the statewide AMHI. However, when considering the weights and max scores documented on page 24, it is not clear how a point is defined and how these additional points would be weighted as compared to other criteria that assesses the project’s technical merits. Please clarify or consider providing an example within the IUP. The updated statewide ranked lists included in the announcement for the call for abridged applications did not include consideration for AMHI.

- On page 22, the methodology associated with calculating whether an FME qualifies for additional points states that AMHI should be calculated for the county that the sponsor is located in. However, this approach appears to be inconsistent with other guidance throughout the IUP which recommends using the FME, FMP, or FMS boundary or project benefit area. Please consider revising to specify AMHI of the FME study area in the methodology/notes.

Various Inconsistencies or Minor Updates:

- Will the FIF Program Guidance Manual be updated to reflect changes to the IUP after adoption of regional flood plans? For example, TWDB 0104 still includes HUC-10 requirement for minimum study size. The Draft FIF IUP also appears to still include language from the previous IUP stating that FMEs are, “studies [that] involve planning of entire watersheds,” which is not consistent with guidance provided to RFPGs when defining FME study areas in regional flood plans.
- On page 13, a general timeframe for *Step 5: Close on Financial Assistance* was provided. Please consider adding general timeframes for each of the other steps in the process, in addition to step 5, to assist sponsors in planning and preparing for financial commitments.

Response:

The TWDB appreciates receiving the comments for the Draft SFY 2024-2025 FIF IUP.

General Comments on the FIF IUP:

- The TWDB will use grants and zero percent interest loans to offer at least \$375,000,000 for projects during the 2024-2025 FIF IUP cycle. The Board may increase the funds available in the 2024-2025 FIF IUP cycle. The remaining funds appropriated to the FIF by the 88th Texas Legislature will be utilized in the next FIF funding cycle.
- The TWDB is considering publishing a compiled geodatabase of all FME, FMP, and FMSs, including project details on the flood planning website with a caveat that these are considered draft datasets until the Board approves the first state flood plan.
- Abridged Applications submitted with partial projects from the Board-approved regional flood plan will be considered ineligible for the FIF (excluding phased projects). This eligibility criterion was established to align project scores with the benefits generated by a project. If a project is divided into multiple parts, they can be considered as a phased project. However, the benefits of all the phases of the project selected for a single FIF grant application will be utilized to compute ranking score of the project. Thus, the ranking of the project will change in FIF funding prioritization. For your example, a county’s phased study may be eligible for the FIF, provided all eligibility requirements in the IUP are met.
- At this time, the TWDB is only considering FEMA Flood Mitigation Assistance (FMA) grant awarded projects from FY 2019-2022 to be eligible for a FIF 70 percent grant. Consideration of future FEMA FMA grant awarded projects may occur should the TWDB amend the draft FIF IUP after its adoption or in a future FIF cycle. Other federal programs requiring matching funds must have the federal application submitted by

Abridged Application submission date, and federal funds must be awarded prior to the TWDB commitment date in order to be eligible for FIF funds.

- The FIF funds cannot be utilized to reimburse costs made prior to December 1, 2023, unless those initial costs are associated with a federal matching funds award.
- A federal funding application must have been submitted by Abridged Application submission date, and federal funds must be awarded by TWDB commitment date in order to be eligible for federal matching funds. Though more detail would be required, the example provided appears allowable.
- The TWDB is not able to accept any abridged applications for FME, FMP, or FMSs that are not recommended by the regional flood planning groups in the adopted and approved flood plans in the corresponding lists.

State Flood Plan Ranking/Prioritization:

- TWDB appreciates this comment. The state flood plan ranking criteria and methodology was developed prior to development of the proposed draft FIF IUP funding prioritization approach was developed. At that time, it was not possible and would have been inappropriate to attempt to speak to the specific role of the ranking in the future FIF IUP. Regardless, the final FIF IUP document has to go before the Board for approval, and all FIF IUP funding decisions will remain at the discretion of the Board Members. The TWDB Board Members will determine, partially based on public input received, including this comment, what the final role of the state food plan ranking will be in the FIF IUP prioritization.
- The TWDB will score abridged applications utilizing the criteria and methodology anticipated to be used in the ranking of projects for the 2024 State Flood Plan, which will be adopted in September 2024, in addition to the criteria listed under the Prioritization Criteria section of the IUP. The abridged applications will be listed separately on one of three lists based on the FIF categories in order from the highest to lowest scores. The scores will first be taken from the amended regional flood plans. The score may change based on two additional criteria: (1) FMEs with an AMHI that is ≤ 85 percent the statewide AMHI; and (2) if there is a tie, the SVI will be used as a tie braker in favor of the project with the highest SVI.
- This section has been updated to reflect the AMHI of the entity's study area.

Various Inconsistencies or Minor Updates:

- The FIF Program Guidance Manual (TWDB-0104) will be updated to reflect changes made in this IUP.
- Thank you for your comment.

Change:

1. Revised the FIF IUP to include clarification on reimbursement of funds.
2. Changed "associated county" to "study area" for the FME Methodology/Notes within the FIF IUP.

Comment Submitted By: Lissa M. Shepard, PE, CFM, Senior Bridge Engineer & Floodplain Manager, Dallas County Public Works Department

Comment Date: January 3, 2024

Comment:

I believe that I may have missed the deadline for making comments. However, I figure I would throw my 2 cents in, even though the date has passed.

I would recommend that a project (FMP) be considered by the TWDB if a Flood Mitigation Evaluation was provided to the Region and included within the Regional Plan and subsequent state plan. Many of the agencies were not able to provide all of the information by the deadline imposed by the TWDB with the initial plan. Those agencies submitted what was meant to be a project as an FME. Additionally, since the deadline those agencies still worked on the project and gathered the required information related to it, where it is now a viable FMP. I believe that if an agency submits an abridged application and identifies the project as an FME that made it into the plan, that project should be eligible for funding if the abridged application is acceptable to the TWDB.

Please reach out if further explanation is needed.

Response:

The TWDB appreciates receiving the comments for the Draft SFY 2024-2025 FIF IUP. Only FMEs, FMSs, and FMPs recommended in an approved regional flood plan are eligible under the 2024 FIF IUP. The abridged application must match up with an FME, FMP, or FMS in the corresponding list. The TWDB is not able to accept any abridged applications for FME, FMP, or FMSs that are not recommended by the regional flood planning groups in the adopted and approved flood plans. You may work through the regional planning process to amend the FMP list with a project that results from the completion of an FME project.

Change:

None.

Comment Submitted By: David Hill, Vice President & General Manager, Central Region, Resource Environmental Solutions

Comment Date: January 03, 2024

Comment:

On behalf of Resource Environmental Solutions (RES), I am pleased to provide public comment on the Texas Water Development Board's (TWDB) Draft SFY 2024-2025 FIFIUP. As the nation's largest ecosystem restoration and turnkey project provider, RES has planned, designed, engineered, constructed, and maintained thousands of acres across the country to maximize each acre for the greatest hydrologic and ecological uplift. Each of our solutions are optimized through design and engineering to solve a problem through natural systems. Quite often the problems we solve are the result of a clash between growth and climate change. Our nature-based solutions (NBS) projects are sustainable and adapt over time as climatic activity becomes more pronounced with more frequent and intense rainfall and drought events, sea level rise, and increased compound flood occurrences. Continued changing climate conditions demand projects placed in service "today" to be adaptable, sustainable, resilient; infrastructure development practices of "yesterday" have taught us that without adaptable water resources systems Texas will not be able to keep up with future conditions resulting in greater impacts resulting from growth: Compounded basin and coastal flooding and groundwater supply scarcity due to overdrawn aquifers and saltwater intrusion.

RES is a Texas based operating company and has watched the state grow and attempt to tackle water resources issues over the years. As a company providing nature-based water resources solutions in other resource challenged parts of the country, Florida, California, North Carolina, South Carolina, Louisiana, and others, we look forward to sharing with TWDB much of what we have learned developing projects in these locations. We are pleased to see Texas begin to take on water resources from a NBS perspective with the recent introduction of a guidance document by TWDB for communities pursuing "Nature-Based Solutions for Flood Mitigation". NBS projects can be engineered to solve many of our toughest water resource challenges, with a focus on flooding. With the new "Nature-Based Solutions for Flood Mitigation" guide, in addition to existing Texas Watershed Protection Plans (WPPs) administered under the Texas Commission on Environmental Quality and the Texas State Soil and Water Conservation Board, RES believes there are many opportunities where projects can be maximized to solve multiple water resources issues like flood protection, aquifer recharge, and water quality using both grey and green practices together.

It was concerning that the draft FIFIUP did not recognize the value of these maximized/multi-benefit projects in a way that placed priority ranking credit for projects submitted that 1) satisfy existing WPPs, and 2) were an adaptable NBS with potential for longer, improved benefit cost ratios. All communities look to maximize grant and loan dollars; where they can show defined benefit in additional programs and with adaptable, lower, long term total cost of ownership as a result of sustainable design, communities

should be given credit for the value of those efforts, and a higher ranking for coordinating solutions to meet the state’s multiple goals/initiatives laid out in WPPs and through NBS. RES also noted that the draft FIFIUP approach appears to be structured to only support traditional design-bid-build project delivery since communities apply for planning/design or construction funding. This approach limits applications from communities that may want to contract with their engineer and contractor through an alternative delivery method, such as Design-Build, Design-Build-Operate-Maintain, Public Private Partnership, Turnkey because the FIFIUP requires the applicant to be under contract and have a contract review by TWDB prior to applying for either design or construction funds. Further the FIFIUP appears to have a 1–2-year funding cycle, which places time/cost risk on the community as a result of needing a contract prior to applying for funds. For many projects, alternative delivery allows for faster implementation with potential for reduced risk and liability to a community. The process for funding through FIFUP is inconsistent with the Alternative Delivery process and should have alignment with the guidance document TWDB-0570 Rev. 1.5.2023 “Use of Alternative Delivery Methods for Texas Water Development Board Funded Projects”.

We encourage TWDB to leverage RES experience to ensure Texas' flood infrastructure is addressed utilizing modern, innovative solutions and efficient procurement to improve the overall cost, delivery, and performance of projects for taxpayers. We look forward to continued service and collaboration with the state of Texas in the future, supporting the development of the FIFIUP and its coordination and alignment with other Texas initiatives. We are pleased to respond to any questions regarding our comments at your convenience.

Enclosure:

Comments on [Draft SFY2024-2025 Flood Infrastructure Fund Intended Use Plan](#)

Program Overview

Eligible Projects, Page 4

The FIF program allows for a wide range of flood projects. Only Flood Management Evaluations (FME), Flood Mitigation Projects (FMP), and Flood Management Strategies (FMS) recommended in an amended regional flood plan approved by the TWDB are eligible for financial assistance.

Commented [A1]: By limiting funds to only those solutions in the regional plan, innovative solutions that may be more cost-effective and result in better, long term, adaptable capabilities would be excluded from seeking funds. Nature Based solutions are non-existent for the most part in the regional plan. Environmental benefits are poorly captured in the plan as well for those projects that do provide some benefit. The Limitation of funds as stated here in excludes practices in other parts of the country that are being used to resolve the same flood issues we are experiencing in Texas. Without the incorporation of these into the regional plan, or at least allowing an alternative analysis to be provided to prove the same benefits as the project in the plan, Texas loses out on some sustainable, multi- benefit solutions. Recommend change to language "Only Flood Management Evaluations (FME), Flood Mitigation Projects (FMP), and Flood Management Strategies (FMS) recommended in amended regional flood plan approved by the TWDB are eligible

for financial assistance. The TWDB will also accept alternatives to those projects listed, if an alternatives analysis is provided by the applicant demonstrating the benefits to the region of the alternate project are commensurate with the benefits provided by a project(s) in the TWDB approved plan."

Other Eligible Activities, Page 5

Only complete projects from the regional flood plan will be considered for financial assistance. Abridged applications containing partial projects from the regional flood plan will be considered ineligible for the FIF.

Commented [A2]: See Comment 1 on pg. 3 regarding innovation and the acceptance of alternatives.

Commented [A3]: The size of some projects require funding to carry over several years to get the project to completion. To allow for those projects that are very large to move forward and not necessarily consume all of the funds available each funding cycle when not all of the funds going to the project can be expended in that funding cycle, recommend accepting projects and funding projects in complete phases/milestones. Each funded phase must be completed within that funding cycle to limit locking up dollars that cant be spent for years. This should allow more projects to be funded for each cycle. Further, phasing of funds consistent with project phases can substantially derisk Texas' individual project investment if fund dispersal is tied to critical project milestones. Such a pay for performance approach ensures funds are directly supporting project outcomes. Pay for performance also simultaneously promotes outcome driven vendors/suppliers participation transferring some of the liability for a successful project to the vendor/supplier.

Financial Assistance Categories

Loans and grants, depending on the grant qualifier eligibility, are offered in the FIF program depending on the activity funded. Eligible activities are organized into three categories, Page 5.

Commented [A4]: Larger projects and larger issues likely will need more assistance, no matter their location. Recommend establishing a protocol for funding large and small projects that may be driven by impact and/or benefit to different types of communities.

Flood Mitigation Project Category, Page 6

Proposed activities must be a recommended Flood Mitigation Project (FMP) in a regional flood plan. Under this category, eligible applicants may undertake activities to construct or rehabilitate structural flood mitigation improvements or implement non-structural improvements.

Commented [A5]: See Comment 1 on pg. 3 regarding innovation and the acceptance of alternatives.

Commented [A6]: Recommend changing to "and/or" to be considerate of multi-benefit gray/green/blue solutions.

Flood Mitigation Project Category, Page 6

Planning, Acquisition, and Design includes activities related to planning, land acquisition, and/or design of the project. Planning includes feasibility analyses, detailed hydraulic and hydrological studies, activities to obtain regulatory approval, and coordination of other related work.

Construction, Rehabilitation, and Implementation includes construction and rehabilitation activities, but may also include demolition, decommissioning, and other activities not necessarily thought of as construction.

Commented [A7]: For projects procured using alternative delivery mechanisms: Design Build, CMAR, DBOM, Turnkey, which funds should be applied to execute the project, Planning or Construction? These project delivery mechanisms inherently often include adaptive management, monitoring, and a level of maintenance to ensure project performance is consistent with required project outcomes, ultimately reducing risk and improving long term price certainty of project performance for the community.

Flood Management Strategy Category, Page 6

Proposed activities must be a recommended Flood Management Strategy (FMS) in a regional flood plan.

Commented [A8]: See Comment 1 on pg. 3 regarding innovation and the acceptance of alternatives.

Federal Award Matching Funds

Grant funds may be provided for a portion of the applicant's required federal match amount. Page 6.

Commented [A9]: If the applicant secures funds from sources other than Federal, can they also be considered for grant funds or only loans?

Minimum Standards

1. Benefit/Cost Ratio, Page 7

There are no specific BCA tools that must be used in determining the BCR.

- USACE BCA – www.hec.usace.army.mil/software/hec-fda/
- TWDB's BCA Input Tool that works with FEMA BCA

Commented [A10]: Recommend creating parameters/conditions to create consistency across all BCA/BCR used so that an apples to apples comparison can be made between projects. Parameters should include specifics on rates for Time Value of money that should be applied and What economic impacts should be considered? The FEMA BCA does not put a value on impacts to environment, which can be costly to fix and can create future impacts to community infrastructure if not stabilized. Because Texas is developing an NBS Flood solutions manual, recommend including the benefits of NBS into the BCA/BCR.

Example of factors that when not clearly defined and normalized can cause two similar projects to score very differently on a BCA/BCR:

- A. when total years evaluated are different, affecting total performance and total cost of ownership and return on project.

- B. Seasonality of project performance is considered on one project and not the other. This results in one project appearing far more beneficial than the other, which when both run with the same conditions may not be true.
- C. Period of Record of data is short for one project and long for another. A short period of record could make one project look far better or far worse than it truly is.
- D. When site location/land values are not included. The total cost of ownership should include the cost of land from the time it was purchased for this use, as well as any opportunity cost for its lack of continued entitlements and whether development rights were/weren't transferred. This fair value assessment of land included is very valuable to understanding true cost of ownership. Most entities failure to recognize the cost of original land purchase, its carrying cost, and lost of revenue as a result of that land purchase for public use.
- E. when site location of project A is in high land cost market and project B it is not. Land values in the BCA/BCR need to be normalized for a true comparison of performance benefit

Commented [A11]: How will this account for risk reduction resulting from alternative delivery procurements?

2. Required Memoranda of Understanding (MOU), Page 8

...Substantially affected...

Commented [A12]: What is substantial?

If the project watershed lies wholly within the applicant's boundaries, no MOU is required.

Commented [A13]: Since there are many watershed's that cross jurisdictional boundaries, to expedite implementation of projects and reduce the number of MOUs necessary, are subwatershed boundaries applicable in lieu of watershed?

FME Category projects.

Commented [A14]: Is there a limitation or goal under FME to develop plans (projects) to limit the need for MOUs?

7. Request for Construction Funds – Page 10

For the FMP and FMS Categories, applicants for construction funds must be able to document within the complete application the following:

Commented [A15]: Recommend adding a bullet that requires entities to document whether the floodwater capture technique is consistent with the Texas Watershed Protection Program under the Texas Soil and Water Conservation District, and whether the project has a natural systems restoration component to it to allow the project to be adaptable and sustainable over time, consistent with the TWDB initiative for NBS for Flood Mitigation currently in drafting. Projects that provide multiple benefits should be better positioned/prioritized to receive funding.

Note: Operations and maintenance (O&M) are not eligible costs under this program.

Commented [A16]: From our experience across the country, communities needing to make improvements for non-regulatory activities, which flood protection is, often elect to not

implement projects for which they do not have a long term fund to satisfy O&M. It is our experience that if an O&M investment fund is made available to an entity through a one time installment, effectively an endowment to cover future O&M costs, which the entity or their contractor can provide, the entity is far more likely to implement projects of interest. In an effort to put as many projects in service as possible, recommend allowing for the payment of a one time investment dedicated to a long term O&M fund under this program as a part of a design and/or construction funding application. Applicants seeking these funds should be required to demonstrate the financial instrument and assurances for completing the project, the long term O&M plan to ensure continued long term operations, financial performance of the long term financial instrument used to fund the long term O&M. RES has found that this type of funding support is highly motivating to entities to move forward with projects that have long sat on shelves waiting for all the funding to fall in place. This gets projects out on the landscape faster to begin providing flood protection resilience, and water supply certainty for the future. This is a key ingredient to creating real impact.

Response:

The TWDB appreciates receiving the comments for the Draft SFY 2024-2025 FIF IUP.

Program Overview

Eligible Projects

Comment [A1]:

- Only FMEs, FMPs, and FMSs recommended in an amended regional flood plan approved by the TWDB are eligible for financial assistance for the SFY 2024-2025 FIF IUP. In accordance with Texas Water Code § 15.534(c), upon adoption of the first state flood plan in 2024, only FMEs, FMPs, and FMSs recommended in the Board-adopted state flood plan will be eligible for financial assistance. As commitments for the cycle of FIF covered by this FIF IUP will occur after adoption of the first state flood plan, only abridged applications for FMEs, FMSs, or FMPs recommended in an amended regional flood plan approved by the TWDB will be accepted.

Other Eligible Activities

Comment [A2 & A3]:

- Abridged Applications submitted with partial projects from the Board-approved regional flood plan will be considered ineligible for the FIF (excluding phased projects). This eligibility criterion was established to align project scores with the benefits generated by a project. If a project is divided into multiple parts, they can be considered as a phased project. However, the benefits of all the phases of the project selected for a single FIF grant application will be utilized to compute a ranking score of the project. Thus, the ranking of the project will change in FIF funding prioritization. FIF projects are not required to expend the FIF financial assistance received through the program during that cycle. For your example, the initial phases of a project that take several years to complete may be eligible for the FIF, provided all eligibility requirements in the IUP are met.

Financial Assistance Categories

Loans and Grants

Comment [A4]:

- The proposed grant eligibilities were drafted to offer the limited grant funds to those communities with the greatest needs based on their socioeconomic conditions.

Flood Mitigation Project Category

Comment [A5]:

- Please see response to Comment [A1].

Comment [A6]:

- Projects that combine both structural and non-structural solutions may be eligible if all other eligibility criteria are met.

Comment [A7]:

- The funds needed to execute planning or construction phase activities should be identified accordingly. Refer to TWDB-0570 for additional information related to release of funds for planning, acquisition, design, or construction phase. Additionally, the TWDB team working with the applicant can provide additional guidance based on the specific project needs.

Flood Management Strategy Category

Comment [A8]:

- Thank you for your comment.

Federal Award Matching Funds

Grant & Federal Funds

Comment [A9]:

- Yes, the applicant may still be considered for grant and/or loan funds based on the FIF eligible project amount and grant qualifiers.

Minimum Standards

Benefit/Cost Ratio

Comment [A10]:

- TWDB appreciates and agrees with the general theme of the comment to promote and improve consistency in BCA calculations. TWDB is currently developing a BCA guidance document that will improve consistency and include other benefits that are not typically quantified, however the guidance document is not expected to be available in time for this FIF abridged application cycle (see more information on that project here: <https://www.twdb.texas.gov/flood/research/benefit-cost-analysis-guidance/index.asp>). Some interim BCA guidance may be available while the application cycle is open, and if so, TWDB will publish it online for optional use in the

FIF application process. Regardless, each applicant has the option to propose their own use of benefits that are not easily quantified and cite sources where those estimates were developed. TWDB will review each BCA submission to assess the reasonableness of the assumptions made. Further, TWDB did not propose BCR as a significant scoring criteria (2.5 percent and only for FMPs) but continues to propose it as a minimum standard to achieve to help ensure reasonable use of state funds.

Regarding FEMA BCA, they do have some values associated with environmental impacts, see <https://www.fema.gov/grants/guidance-tools/benefit-cost-analysis/resources> and search for Ecosystem Service and also Green Infrastructure. TWDB will consider the example factors cited and may include additional guidance related to those topics.

Alternative Delivery Methods

Comment [A11]:

- FIF projects can utilize alternative delivery. The Use of Alternative Delivery Methods for Texas Water Development Board Funded Projects Guidance (TWDB-0570) applies to state funding programs, which includes FIF. The funds needed to execute planning or construction phase activities should be identified accordingly. Refer to TWDB-0570 for additional information related to release of funds for planning, acquisition, design, or construction phase. Additionally, the TWDB team working with the applicant can provide additional guidance based on the specific project needs. It is recommended that the applicant contacts the TWDB team as soon as possible if alternative delivery mechanisms are being considered.

Memorandum of Understanding

Comment [A12]

- The MOU requirement is required by Texas Water Code § 15.005. The TWDB does not have the authority to change or remove that statutory requirement. The requirement only applies if the project watershed, as defined in 31 Texas Administrative Code § 363.402 (the area upstream and downstream substantially affected by the proposed flood project, as documented in the project application, and sealed by a Professional Engineer or Professional Geoscientist) lies partially outside the applicant's boundaries. The project watershed, including what constitutes "substantially affected," is established by the applicant in the application. The project watershed must be sealed by a Professional Engineer or Professional Geoscientist in the application.

Comment [A13]:

- The MOU requirement is required by Texas Water Code § 15.005. The TWDB does not have the authority to change or remove that statutory requirement. The requirement only applies if the project watershed, as defined in 31 Texas Administrative Code § 363.402 (the area upstream and downstream substantially affected by the proposed flood project, as documented in the project application, and sealed by a Professional Engineer or Professional Geoscientist) lies partially outside the applicant's boundaries. The project watershed is established by the applicant in the application. The project

watershed must be sealed by a Professional Engineer or Professional Geoscientist in the application. A project watershed does not need to align with the boundaries of a full HUC-10, only the area upstream and downstream substantially affected by the proposed project.

Comment [A14]:

- There is no limitation in the FME category that would require future applicants to only construct flood control projects within their own boundaries, thereby limiting the need for MOUs. The MOU requirement does not apply to the FME category because it only applies to construction-oriented flood control projects.

Request for Construction Funds

Comment [A15]:

- Thank you for your comment.

Comment [A16]:

- Thank you for your comment.

Change:

None.

STATE OF TEXAS

Flood Infrastructure Fund

Intended Use Plan

SFY 2024–2025

TEXAS WATER DEVELOPMENT BOARD
PO BOX 13231 ■ AUSTIN, TX 78711



2024-2025 Flood Intended Use Plan

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2024-2025 Flood Intended Use Plan

Program Overview

The 86th Texas Legislature passed several bills entrusting the Texas Water Development Board (TWDB) with responsibilities related to funding flood mitigation projects and planning for future flood events. On November 5, 2019, Texas voters approved Proposition 8, a constitutional amendment providing for the creation of the Flood Infrastructure Fund (FIF). During the 88th Legislative Session, Senate Bill 30 provided over \$624 million from the general revenue fund in additional funding to the FIF program. The TWDB anticipates utilizing at least \$375 million during this two-year cycle (SFYs 2024-2025) to assist communities with their FIF projects.

The FIF program assists in the financing of drainage, flood mitigation, and flood control projects, including:

- planning and design activities,
- work to obtain necessary regulatory approvals, and
- construction and/or implementation of flood projects.

Administrative rules for the flood mitigation project funding are found in 31 Texas Administrative Code (TAC) Part 10, Chapter 363. This Intended Use Plan (IUP) contains the eligibility criteria, structure of financial assistance, including any subsidies, and criteria to be used by the executive administrator in prioritization of applications and recommendations to the Board.

Eligible Applicants

Political subdivisions may apply for financial assistance for flood projects. Specifically, eligible political subdivisions are cities, counties, and any district or authority created under [Article III, Section 52](#) or [Article XVI, Section 59](#) of the Texas Constitution.

Other political subdivisions and nonprofit water supply corporations operating under Chapter 67 of the Texas Water Code are only eligible to apply for financial assistance for the Flood Management Evaluation (FME) Category.

Eligible Projects

The FIF program allows for a wide range of flood projects. Only Flood Management Evaluations (FME), Flood Mitigation Projects (FMP), and Flood Management Strategies (FMS) recommended in an amended regional flood plan approved by the TWDB are eligible for financial assistance. Upon adoption of the first state flood plan in 2024, only FMEs, FMPs, and FMSs recommended in the Board-adopted state flood plan will be eligible for financial assistance. Eligible project examples include, but are not limited to, the following:

Planning Phase Activities

- Preliminary engineering
- Project design
- Feasibility assessments
- Coordination and development of regional projects
- Obtaining regulatory approvals

2024-2025 Flood Intended Use Plan

- Hydraulic and hydrologic studies

Construction/Rehabilitation Phase Activities

- Drainage infrastructure (e.g., channels, ditches, ponds, pipes, etc.)
- Flood control infrastructure
- Flood mitigation infrastructure
- Retention basins
- Detention ponds
- Sustainable infrastructure
- Nonstructural flood mitigation
- Development of or amendments to flood related codes
- Permeable pavement
- Erosion control
- Levees
- Pump stations
- Rehabilitation of existing infrastructure taking into consideration methods of improving resiliency (not including costs associated with current or future operations and maintenance activities)
- Property acquisitions determined to be the best solution for highest-risk properties
- Restoration of riparian corridors, floodplains, coastal areas, and wetlands
- Natural erosion and runoff control
- Reasonable number of improvements to ancillary systems directly related to the project as determined by TWDB

Nature-Based Solution Activities

- Green stormwater infrastructure
- Stormwater parks
- Living shorelines
- Protection and restoration of riparian corridors, floodplains, coastal area, wetlands

Other Eligible Activities

The assistance is also able to support activities that may not traditionally be thought of as flood projects. These include:

- Warning systems
- Stream gages
- Educational campaigns
- Crossing barriers

Applicants are encouraged to discuss the eligibility of prospective requests with the TWDB. Only complete projects from the regional flood plan will be considered for financial assistance. Abridged applications containing partial projects from the regional flood plan will be considered ineligible for the FIF. Disallowing partial projects is intended to align project score with the benefits generated by a project. If a project is divided

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into multipart projects, it may be considered as a phased project. However, the benefits of all the phases of the project selected for a single FIF application will be utilized to compute a ranking score of the project. Thus, the data used for the ranking of the project in the FIF funding prioritization associated with the FIF application may have to be updated to reflect any reduced benefits due to phasing the project.

For more detailed, project specific guidance about the FIF program, please review the FIF Program Guidance found here: www.twdb.texas.gov/financial/instructions/doc/TWDB-0104.pdf.

Financial Assistance Categories

Loans and grants, depending on the grant qualifier eligibility, are offered in the FIF program depending on the activity funded. Eligible activities are organized into three categories.

Flood Management Evaluation Category

Proposed activities must be a recommended Flood Management Evaluation (FME) in a regional flood plan. Under this category, eligible applicants conduct studies to identify, assess, and quantify flood risk or identify, evaluate, and recommend flood risk reduction solutions. These studies involve planning of entire watersheds or sub-watersheds, as required by the TWDB regional flood planning program, to better inform the development of strategies using structural and nonstructural measures before a flood event. This may include determining and describing problems from or related to flooding, identifying, and planning solutions to flooding problems, and estimating the benefits and costs of these solutions. The requirement of modeling an entire HUC10 watershed was removed for the SFY 2024-2025 FIF funding cycle. However, it is required that the area of the entire upstream contributing watershed or sub-watershed to the discharge point of interest is considered when determining solution alternatives for an area identified as being at flood risk or a neighborhood identified with flood loss. A determination of 'no negative impact' both upstream and downstream of project area is also required.

All activities under this category must be considered "flood control planning" as defined in Texas Water Code Section 15.405; however, this does not mean all activities listed in that section are eligible under the FME Category. For example, design activities, including engineering plans and specifications, would be funded under the Flood Mitigation Projects (FMP) Category. The FME Category does not include the actual preparation of a Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM).

Flood Mitigation Project Category

Proposed activities must be a recommended Flood Mitigation Project (FMP) in a regional flood plan. Under this category, eligible applicants may undertake activities to construct or rehabilitate structural flood mitigation improvements or implement non-structural improvements.

Planning, Acquisition, and Design includes activities related to planning, land acquisition, and/or design of the project. Planning includes feasibility analyses, detailed hydraulic and hydrological studies, activities to obtain regulatory approval, and coordination of other related work.

Construction, Rehabilitation, and Implementation includes construction and rehabilitation activities, but may also include demolition, decommissioning, and other activities not necessarily thought of as construction.

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Flood Management Strategy Category

Proposed activities must be a recommended Flood Management Strategy (FMS) in a regional flood plan. An FMS is a flood risk reduction solution idea or strategy that does not belong in FME or FMP categories. Examples may include regulatory enhancements, development of entity-wide buyout programs, and public outreach and education. This category may include projects that can be implemented quickly and are understood to be immediately effective in protecting life and property. Eligible FMS Category projects include warning systems, crossing barriers, gages, and public education and outreach. TWDB does not maintain an exhaustive list of activities eligible under the FMS Category, and applicants are encouraged to discuss possible FMS Category proposals with the TWDB.

Federal Award Matching Funds

Grant funds may be provided for a portion of the applicant's required federal match amount. The applicant must have received a federal award for flood-related activities contingent on the availability of local matching funds. Proposed activities must be a recommended FME, FMP, or FMS in a regional flood plan and may fall in any of the categories. A federal application must be submitted by the abridged application submission date, and federal funds must be awarded by the TWDB's commitment date.

United States Iron and Steel Requirement

For informational purposes to applicants, the United States Iron and Steel (US I&S) requirements in Texas Government Code, Chapter 2252, Subchapter G apply to the FIF. Construction of projects funded through the FIF are required to use iron and steel products made in the United States. However, if the recipient can justify a claim made under one of the following categories, a waiver may be granted. Until a waiver is granted by the TWDB, the recipient must adhere to the US I&S requirements.

A waiver may be granted if TWDB determines that:

- Iron and steel products produced in the United States are not produced in sufficient quantities, reasonably available, or of satisfactory quality;
- Use of iron and steel products produced in the United States will increase the cost of the overall project by more than 20 percent; or
- Complying with the US I&S requirements is inconsistent with the public interest.

Minimum Standards

Items on this list constitute minimum eligibility criteria that must be met by all projects seeking funding consideration.

1. Benefit/Cost Ratio

A Benefit/Cost Ratio (BCR) is the result of a Benefit Cost Analysis (BCA). For all construction-oriented projects (e.g., structural flood improvements, elevations, and buyouts) to be eligible, both the costs and the benefits of proposed projects **must** be quantified and reported. The benefits may include a variety of items including, but not limited to, property losses avoided, risk of injuries or fatalities prevented, and

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economic disruption or environmental losses avoided. A BCR must be reported as a number with at least one decimal place (e.g., "1.1").

A BCR greater than or equal to 1.0 is generally preferred to justify investments in the construction of flood projects. If an abridged application is submitted with a BCR of less than 1.0, the applicant will be required to submit the complete application with an updated BCR of greater than or equal to 1.0 and supporting documentation. If the reported BCR of the complete application for the proposed project is less than 1.0, the applicant must provide a detailed explanation for why the applicant considers the project to be justified, including a discussion of the primary benefits of the project, if any, that could not be quantified and were therefore not included in the BCR calculation.

The following information **is required in the abridged applications** to satisfy minimum standards:

- For construction-oriented project applications, including PAD-only:
 - A description of the BCA methodology used, including the specific analysis tool and version used.
 - A list of the key assumptions/parameters used to generate the BCA.
 - A detailed BCA calculation.
 - Identify and explain the responsible party for operation and maintenance (O&M) of the infrastructure and from what funding source O&M will be provided. O&M costs should be included within the BCA.

There are no specific BCA tools that must be used in determining the BCR. Free BCA tools that can be utilized include the following:

- FEMA BCA – www.fema.gov/benefit-cost-analysis
- USACE BCA – www.hec.usace.army.mil/software/hec-fda/
- TWDB's BCA Input Tool that works with FEMA BCA – <https://www.twdb.texas.gov/flood/planning/planningdocu/2028/doc/BCA-Input-Workbook.xlsm>

BCRs are not required to be provided for the following projects:

- Flood Management Evaluations (FME) Category
- Flood Management Strategies (FMS) Category
- Federal Award Matching Funds if the following are true:
 - If a project has an associated BCA developed and reviewed for a federal award. Verification of the prior BCA approval is required.
 - When a federal grant program generally requires a BCA, but specifically exempts it for certain projects (e.g., projects with lesser costs or non-construction projects), then the TWDB will also not require a BCA for FIF consideration. However, the TWDB will require a BCA if the proposed project is construction-oriented.

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2. Required Memorandum of Understanding (MOU)

The MOU requirement was imposed by the Texas Legislature in Texas Water Code § 15.005. The MOU requirement only applies to flood control projects (defined in 31 Texas Administrative Code § 363.402), which include the construction or rehabilitation of structural mitigation or anything that retains, diverts, redirects, impedes, or otherwise modifies the flow of water. The requirement only applies if the project watershed (defined in 31 Texas Administrative Code § 363.402 as the area upstream and downstream substantially affected by the proposed flood project, as documented in the project application, and sealed by a Professional Engineer or Professional Geoscientist) lies partially outside the applicant's boundaries. If the project watershed lies wholly within the applicant's boundaries, no MOU is required. The requirement only necessitates MOUs with "eligible political subdivisions" (as defined in Texas Water Code § 15.531 as a district or authority created under Section 52, Article III, or Section 59, Article XVI, Texas Constitution, a municipality, or a county).

If applicable, the applicant **must** submit an MOU relating to management of the project watershed. If applicable, the MOU must be approved and signed by all governing bodies of eligible political subdivisions located in the project watershed. The applicant must submit either a single MOU that includes all governing bodies of all political subdivisions required to sign or develop individual MOUs with each political subdivision or groups of political subdivisions within the watershed. All the required MOUs must relate to the management of the watershed. If individual MOUs are submitted, they must be consistent in the management of the watershed and cannot conflict on that issue. Note that this minimum standard on MOUs does not apply to FME Category projects. Although this minimum standard on MOUs does apply generally to the FMS Category, most of those projects will not meet the definition of a flood control project; therefore, this requirement will not apply to most FMS projects. For the FMP Category and FMS Category, the following information **is required in the abridged application** to satisfy the MOU requirement, **if applicable**:

- A list of all eligible political subdivisions that will be required to approve and sign an MOU.
- A certification that the applicant has provided a copy of the proposed MOU and an adequately detailed description of the proposed project to all eligible political subdivisions on the list. A copy of a TWDB-approved MOU template is available on the TWDB website. Applicants may also use their own template if approved by the Executive Administrator.
- Map types detailing all proposed project components and all boundaries for cities, districts, etc. within the proposed project watershed area:
 1. FMP Category: PDF maps and GIS/KMZ files must be submitted.
 2. FMS Category: PDF maps and GIS/KMZ files must be submitted.

For the FMP and FMS Categories, the following information **is required in the complete application** to satisfy the MOU requirement, if applicable:

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- An MOU approved and signed by all governing bodies of eligible political subdivisions located in the project watershed. If requested by the applicant and approved by TWDB, this may be submitted after the application due date.

3. Affidavit

For all categories, an affidavit attesting that: (1) the applicant has acted cooperatively with other political subdivisions to address flood control needs in the area in which the eligible political subdivisions are located; and (2) all eligible political subdivisions substantially affected by the proposed flood project have participated in the process of developing the proposed flood project. Providing adequate notice and ample opportunity to any such eligible political subdivision that elects not to participate further would also fulfill this requirement, provided evidence of notification is included within the application. What constitutes “adequate” and “ample” may need to be discussed between the applicant and TWDB on a case-by-case basis. The applicant will need to attest to the fact that they provided adequate and ample opportunity to participate by signing the affidavit, so the appropriate representative must believe the notice provided was reasonable in order to sign. Template affidavits are available on the TWDB website.

The following information, if applicable, **is required with the complete application** to satisfy the affidavit requirement:

- The applicant has held public meetings to accept comments on the proposed flood project from interested parties (FMP Category and FMS Category).
- The technical requirements for the proposed flood project have been completed and compared against any other potential flood project in the same area (Construction Only).

4. Redundant Funding

For all categories, the funding request must not include redundant funding for activities already performed and/or funded through another source.

5. National Floodplain Insurance Program (NFIP)

For all categories, the following information **is required with the abridged application** to satisfy the NFIP requirement:

- The area to be benefitted by the proposed project must have floodplain ordinances or orders in place, as applicable, and the appropriate entity must certify they are currently enforcing floodplain management standards at least equivalent to or exceeding National Flood Insurance Program (NFIP) minimum standards. The only exception to the certification is an entity that is requesting FIF funding to fulfill additional requirements for participation in the NFIP. The TWDB is here to help communities meet the NFIP requirements.
- For the FME Category and FMS Category (e.g., FEWS projects), communities without floodplain management standards may be part of a larger study or benefitted area. In that case, the

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applicant will not be required to show/certify that those communities must have floodplain ordinances or orders in place. However, the applicant should work with the TWDB to encourage those communities to adopt floodplain ordinances or orders. Additionally, projects where the applicant itself does not have floodplain management standards are not eligible unless those communities are requesting FIF funds to develop floodplain management standards.

6. Best/Most Recent Available Data

For all categories, the proposed project must be developed using the best/most recent available data. For example, FME Category projects must use the latest freely available topographic data to perform studies. A brief, general description or acknowledgment should be provided in the abridged application and a more detailed description in the complete application.

7. Request for Construction Funds

For the FMP and FMS Categories, applicants for construction funds must be able to document within the complete application the following:

- The applicant has planned for operations and maintenance costs associated with the proposed facilities. Note: Operations and maintenance (O&M) are not eligible costs under this program.
- An analysis determining whether floodwater capture techniques could be used for water supply purposes, in accordance with Texas Water Code § 15.535(b). The analysis should demonstrate through engineering, regulatory, or economic approaches by means of a feasibility assessment whether the flood project could include water supply and why the decision was made to include or exclude water supply from the flood project.

Additional Requirements and Exceptions for Flood Management Evaluation Category

For FME Category Projects Only, in accordance with 31 TAC § 355.8, prior to the complete application, but not prior to the submittal of the abridged application, applicants must notify all cities, counties, non-profit water supply corporations, regional planning agencies, regional water planning groups, and all districts and authorities created under the Texas Constitution, Article III, Chapter 52, or Article XVI, Chapter 59, in the planning area by certified mail that an application for planning assistance is being filed with the TWDB. The notice shall include the following:

- Name and address of the applicant.
- Name of the applicant's manager or official representative.
- Brief description of the planning area.
- Purposes of the planning project.
- TWDB's name, address, and the name of a contact person with the TWDB.
- A statement that any comments must be filed with the TWDB Executive Administrator and the applicant within 30 days of the date on which the notice is mailed.

As part of the complete application, and prior to action by the TWDB, the applicant must provide the following:

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- A copy of the notice sent to affected political subdivisions.
- A list of the political subdivisions to which notice was sent.
- The date on which the notice was sent.

The applicant may request of the TWDB to submit the copy of the notice after the application due date. If approved, the applicant may submit the copy of the notice after the application has been submitted; however, the TWDB may not act on an application before the end of the 30-day notice period unless all political subdivisions to which notice is required to be sent agree in writing to waive the notice period.

Additional Requirements and Exceptions for Flood Management Strategy Category

The following is required in the abridged application for FMS Category non-study funding applications, which include construction-oriented projects and implementation projects, such as regulatory changes, flood warning improvements, emergency action plans, and education campaigns.

- Detail of the current flood risk in the project area.
- Detail of the revised flood risk of the project area if the project is constructed/implemented.
- The level of protection (i.e., 4%, 2%, 1% annual chance storm events) provided by the proposed project must be reported, when possible. For example, some implementation projects (like regulatory changes) may have defined levels of protection, others (like education campaigns) may not.

The following is required in the abridged application for roadway construction-oriented projects:

- Roadway classification
- Traffic count
- Detour distances
- Accident data
- Inundation risk including depths and velocities during 50%, 10%, 4%, 2%, 1% and 0.2% annual chance storm events.

The following is required in the abridged application for Flood Early Warning Systems (FEWS) construction-oriented projects:

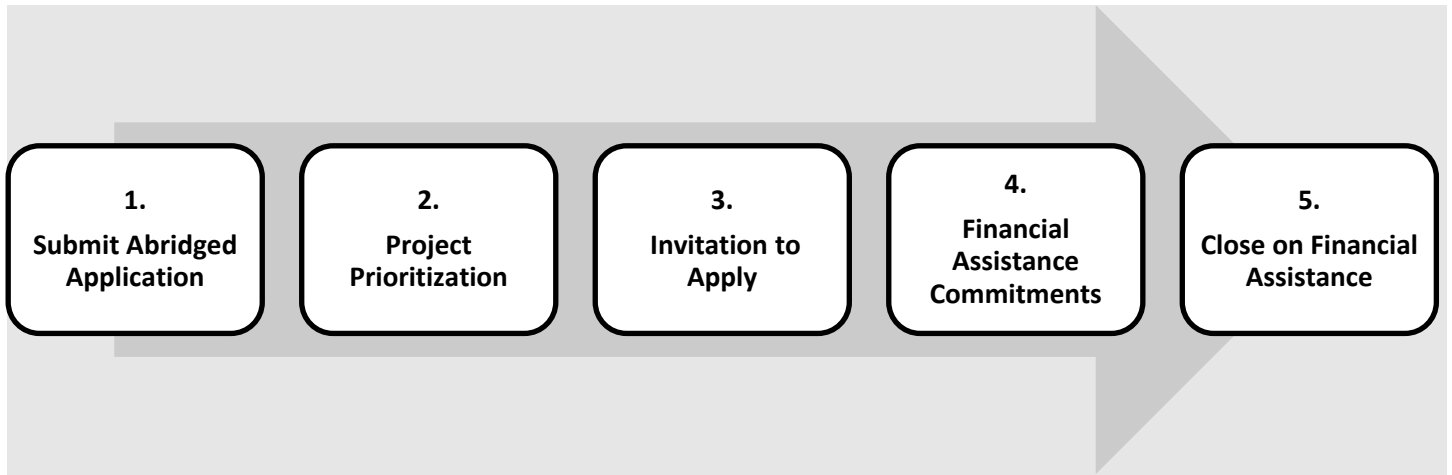
- Quantitative information on the population impacted.

2024-2025 Project Solicitation

Funding for flood projects operates on a biennial funding cycle with a two-stage application process. As of the publishing of this IUP, projects are prioritized based on information submitted in the abridged application and the relative scoring of the associated project, strategy, or evaluation based on data from the regional flood plans (RFPs) and working criteria and methodologies anticipated to be used in the State Flood Plan rankings. Entities are then invited to submit complete financial assistance applications based on project prioritization and a determination of funding availability. All entities are required to confirm that data provided in RFPs are still accurate at the time of the abridged application submittal. If any data relevant to the calculation of score for state flood plan ranking has changed since the adoption of the RFPs, the applicants must provide justification

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for the change and submit all relevant data in a TWDB-provided template available with the abridged application.



Process

The process for the funding cycle is as follows:

Step 1: Submit Abridged Application

The abridged application is a form designed to help the TWDB collect the information necessary to prioritize projects and determine the best source of funding without requiring interested entities to fill out a complete TWDB financial assistance application. In mid-December 2023, the 2024-2025 FIF Abridged Application will be posted on the FIF webpage (www.twdb.texas.gov/financial/programs/FIF/) and the solicitation period will commence. Please sign-up for the TWDB mailing list (www.twdb.texas.gov/newsmedia/signup.asp) to be notified of any other programmatic updates.

Step 2: Project Prioritization

The TWDB will prioritize projects into three project lists according to the IUP and submit them to the Board for review and consideration.

Step 3: Invitation to Apply

After the prioritization is approved by the Board, the TWDB will invite selected applicants to submit complete applications for financial assistance. Prior to submitting an application, entities are required to participate in a pre-application meeting with the TWDB to discuss the application process and project requirements.

An invited applicant must submit a complete application and all information requested by the TWDB deadlines to remain in active consideration for funding. The complete application is a TWDB document that asks for the detailed engineering, legal, fiscal, and other information necessary to make a funding recommendation. Final confirmation of compliance with applicable Minimum Standards must occur prior to Board consideration of a financial assistance commitment.

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Step 4: Financial Assistance Commitments

After reviewing each complete application, the Executive Administrator will make a financial assistance recommendation to be considered by the Board in a public meeting.

Step 5: Close on Financial Assistance

Entities in receipt of financial assistance commitments will have a specific amount of time to close on their financing, as shown on the following table.

Type of Financial Assistance	Closing Deadline
Commitments that include only grant	3 months
Commitments that include grant and loan	6 months
Commitments that include only loan	12 months

Abridged Applications

Each abridged application should describe proposed projects from a single category. Applicants may submit multiple abridged applications if they seek to propose projects from multiple categories in a single prioritization cycle. One abridged application must be submitted for each FME, FMP, or FMS respectively and cannot be combined. Each abridged application should describe proposed projects from a single category with a single associated 9-digit, regional flood plan unique ID number reference. The working ranking criteria and weights that are anticipated to be used in ranking all projects within the 2024 State Flood Plan, as required by statute, will be utilized for prioritization scoring under this IUP; therefore, individual FME/FMP/FMSs cannot be combined. Only complete projects from the regional flood plan will be considered for financial assistance. Abridged applications containing partial projects from the regional flood plan will be considered ineligible for the FIF.

Every application (abridged and full) must include the associated 9-digit, regional flood plan unique ID (identification) number reference (each starting with the 2-digit regional flood planning area number) and project name that corresponds to the specific, recommended FME, FMP, or FMS in the regional plan for which the application is being submitted. A list of the names and unique IDs may be found in the corresponding regional flood plan and, for convenience, is also provided on the TWDB website.

Prioritization and Selection Process

Following the deadline to submit abridged applications, the TWDB will review submissions and match them with the corresponding FME, FMP, or FMS from the regional flood plans. The TWDB will score abridged applications utilizing the criteria and methodology anticipated to be used in the ranking of projects for the 2024 State Flood Plan, in addition to the criteria listed under the Prioritization Criteria section of this IUP. The resulting scores will determine the prioritization of funding for this IUP cycle of the FIF. Abridged applications will be listed separately on one of three lists based on the FIF categories in order from the highest to lowest scores.

The Board will approve prioritization scoring of projects and then invitations will be sent to entities to submit complete financial assistance applications.

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The Board may consider and allocate funding for any proposed project, including in cases that involve bypassing a higher scoring project.

All initial determinations of overall eligibility, eligible category, compliance with minimum standards, grant percentage, and priority order for all projects are subject to change upon further review of the projects.

Year-Round Submittals

Only abridged applications received by the initial deadline for 2024-2025 FIF IUP cycle will be considered in the initial prioritization. The project list may be amended as necessary to include new submittals received after the initial deadline if funds remain available.

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Eligibilities and Financing Details by Category

Flood Management Evaluation Category

Eligibility

- I. Must be recommended in a Regional Flood Plan as a Flood Management Evaluation (FME).
- II. All activities under this category must be considered “flood control planning” as defined in Texas Water Code Section 15.405.
- III. Eligible FME Category projects conduct planning of entire watersheds as determined by the regional flood planning group to better inform the development of strategies using structural and nonstructural measures before a flood event, such as determining and describing problems related to flooding, identifying and planning solutions to flooding problems, and estimating the benefits and costs of these solutions.
- IV. Preparation of a Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) is not an eligible activity.
- V. For federal award matching funds, applicant must provide documentation of an existing federal award contingent on availability of matching funds.
- VI. FIF eligible projects that received a FEMA Flood Mitigation Assistance (FMA) grant for FMA FY 2019-2022 may receive a grant for 70% of the required local match that has been provided regardless of the qualifiers listed below.

Financing

- I. Eligible to receive a grant up to 100% of the total FIF eligible project cost.
- II. Loans with an interest rate of 0%.
- III. Recipients may either use their own available funds or borrow FIF funds at 0% for any portion of the required local share not provided through the FIF grant funds.
- IV. In-kind services may be substituted for any loan offered, but only with prior TWDB approval.

Grants are based on the following:

Grant Qualifier	Grant %
If the AMHI of the study area \leq 50% of the state-wide AMHI and the project area was the subject of a flood-related federal disaster declaration within the past 5 years, OR	100
If the AMHI of the study area \leq 75% of the state-wide AMHI, OR	90
If the AMHI of the study area $>$ 75% and \leq 125% of the state-wide AMHI, OR	75
If the AMHI of the study area $>$ 125% of the state-wide AMHI	50
Maximum Grant Percentage	100

Note: Examples of the Grant Percentage Calculations are found in Attachment 1.

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Flood Mitigation Project Category

Eligibility

- I. Must be recommended in a regional flood plan as a Flood Mitigation Project (FMP).
- II. For federal award matching funds, applicant must provide documentation of an existing federal award contingent on availability of matching funds.
- III. FIF eligible projects that received a FEMA Flood Mitigation Assistance (FMA) grant for FMA FY 2019-2022 may receive a grant for 70% of the required local match that has been provided regardless of the qualifiers listed below.

Financing

- I. The sum of all qualifying grant percentages below will represent the overall grant allocation. The maximum grant for FMP Category projects may not exceed 70% of the total FIF eligible costs.
- II. Loans with an interest rate of 0%.
- III. Recipients may either use their own available funds or borrow FIF funds at 0% for any portion of the required local share not provided through the FIF grant funds.
- IV. In-kind services may be substituted for any loan offered, but only with prior TWDB approval.

Grants are based on the following:

Grant Qualifier	Grant %
If the AMHI of the project area is \leq 85% of the state-wide AMHI.	30
If the AMHI of the project area is \leq 75% of the state-wide AMHI.	40
If the AMHI of the project area is \leq 65% of the state-wide AMHI.	50
If the AMHI of the project area is \leq 50% of the state-wide AMHI.	60
If the applicant meets the "Rural" definition.	5
If \geq 30% of total costs are Green or Nature-Based and the project meets one of the income or rural applicant qualifiers above.	5
Maximum Grant Percentage	70

Note: Examples of the Grant Percentage Calculations are found in Attachment 1.

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Flood Management Strategy Category

Eligibility

- I. Must be recommended in a regional flood plan as a Flood Management Strategy (FMS) with non-recurring non-capital cost.
- II. Some example projects include the following: warning systems; crossing barriers; public education and outreach; reverse 911 systems; dam emergency action plans; and proposed regulatory changes, such as investigations or implementation efforts to adopt or improve floodplain management standards.
- III. For federal award matching funds, applicant must provide documentation of an existing federal award contingent on availability of matching funds
- IV. FIF eligible projects that received a FEMA Flood Mitigation Assistance (FMA) grant for FMA FY 2019-2022 may receive a grant for 70% of the required local match that has been provided regardless of the qualifiers listed below.

Financing

- I. The sum of all qualifying grant percentages below will represent the overall grant allocation. The maximum grant for FMS Category projects may not exceed 70% of the total FIF eligible costs.
- II. Loans with an interest rate of 0%.
- III. Recipients may either use their own available funds or borrow FIF funds at 0% for any portion of the required local share not provided through the FIF grant funds.
- IV. In-kind services may be substituted for any loan offered, but only with prior TWDB approval.

Grants are based on the following:

Grant Qualifier	Grant %
If the AMHI of the project area ≤ 85% of the state-wide AMHI.	30
If the AMHI of the project area ≤ 75% of the state-wide AMHI.	40
If the AMHI of the project area ≤ 65% of the state-wide AMHI.	50
If the AMHI of the project area ≤ 50% of the state-wide AMHI.	60
If the applicant meets the "Rural" definition.	5
If ≥ 30% of total costs are Green or Nature-Based and the project meets one of the income or rural applicant qualifiers above.	5
Maximum Grant Percentage	70

Note: Examples of the Grant Percentage Calculations are found in Attachment 1.

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Definitions used in Grant Percentage Calculations

Annual Median Household Income (AMHI) – From the U.S. Census Bureau 2018-2022 American Community Survey (ACS) 5-year estimates, or the most recent ACS 5-year estimates available at the time of publishing this plan.

- FME Category: The study area AMHI, using a weighted average based on population.
- FMP & FMS Categories: The project area AMHI, using a weighted average, all based on population in each U.S. Census Bureau geographic area used.

Current Population – For the project area from U.S. Census Bureau 2018-2022 ACS 5-year estimates using the sum of the population in each U.S. Census Bureau geographic area used.

Federal Funds - The amount of project funding a FIF applicant receives from the federal government. An applicant may be required to provide a local match to receive this federal funding.

Flood Management Evaluation - A proposed study to identify and assess and quantify flood risk or identify, evaluate, and recommend flood risk reduction solutions.

Flood Management Strategy - Long term flood risk reduction solution ideas that are not considered an FME or FMP (e.g., regulatory enhancements, development of entity-wide buyout programs, and public outreach and education).

Flood Mitigation Project - A proposed project, both structural and nonstructural, that has a non-zero capital costs or other non-recurring cost and that when implemented will reduce flood risk and mitigate flood hazards to life or property.

Green – May include establishment or restoration of permanent riparian buffers, floodplains, wetlands, or other vegetated buffers or soft bioengineered stream banks. May include projects to manage wet weather and restore natural hydrology by infiltration, evapotranspiration, or harvesting and using stormwater. May include green stormwater infrastructure for transportation rights-of-way or parking areas. This is not an exhaustive list. The final decision on green projects will be made by the TWDB.

Nature-Based - Projects that use nature-based features to protect, mitigate, or reduce flood risk, as determined by TWDB.

Rural Applicant – An applicant that is:

- (A) a nonprofit water supply or sewer service corporation created and operating under Chapter 67 of the Texas Water Code or a district or authority created under Section 52, Article III, or Section 59, Article XVI, Texas Constitution, no part of the service area of which is located in an urban area with a population of more than 50,000;
- (B) a municipality:
 - (i) with a population of 10,000 or less; or
 - (ii) located wholly in a county in which no urban area has a population of more than 50,000;
- (C) a county in which no urban area has a population of more than 50,000; or
- (D) an entity that:
 - (i) is a nonprofit water supply or sewer service corporation created and operating under Chapter 67 of the Texas Water Code, a district or authority created under Section 52, Article III, or Section 59, Article XVI, Texas Constitution, a municipality, county, or other political subdivision of the state, or an interstate compact commission to which the state is a party; and

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(ii) demonstrates in a manner satisfactory to the board that the entity is rural or the area to be served by the project is a wholly rural area despite not otherwise qualifying under Paragraph (A), (B), or (C).

Notes

- U.S. Census Bureau 2018-2022 ACS 5-year estimates may be found on the TWDB website here (most recently available census data will be on this link): www.twdb.texas.gov/financial/programs/FIF/doc/US_Census_Bureau_ACS_data.xlsx or the required data may be obtained directly from the U.S. Census Bureau here: www.data.census.gov/cedsci/advanced.
- Loans with an interest rate of 0% are a funding option available in all project categories.
- Grants – the TWDB may limit the amount of funds available for grants (see “Allocation of Funds”).
- Although the definition of “Rural Applicant” describes all types of political subdivisions that may be eligible under the FME Category, note that this list of entities is broader than those that are eligible applicants for the FMP and FMS Categories.

Amount Available

The FIF fund is a special fund in the state treasury outside the general revenue fund. The TWDB will use grants and zero percent (0%) interest loans to offer at least \$375,000,000 for projects during the 2024-2025 FIF IUP cycle. The Board may increase the funds available in the 2024-2025 FIF IUP cycle if needed. The sources of funds include new appropriations for the 2024-2025 biennium and a portion of remaining funds from the SFY 2020 IUP. Of the \$375,000,000 available for projects, the maximum amount allocated to grants is \$187,500,000 (50% of total available funds). The Executive Administrator may increase this amount allocated to grants. No project will receive more than \$18,750,000 in grant funding (approximately 10% of the total grant funds available). The interest rate on all loans will be zero percent (0%).

Total Funds Available for 2024-2025 FIF IUP	
New FIF Appropriations Allocated	\$312,474,540
Funds Rolled Over from SFY2020	\$62,525,460
Total FIF Funds Available for 2024-2025	\$375,000,000

Amount Available by Category

The TWDB anticipates awarding the available FIF funds according to the following goals. Within each category, the TWDB anticipates awarding 15 percent of each category’s goal to provide matching funds to enable the eligible political subdivision to participate in a federal program for a flood project. If there are insufficient projects to award these funds according to the category goal or federal match goals, the Executive Administrator may redirect the remaining funds to projects within other funding categories.

Category	Percent	Total	15% Target for Federal Matching
FME	25%	\$93,750,000	\$14,062,500
FMP	65%	\$243,750,000	\$36,562,500
FMS	10%	\$37,500,000	\$5,625,000
TOTAL	100%	\$375,000,000	\$56,250,000

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Allocations of Funds

The TWDB may limit the amount of grant funding and loan financing available in each category and in total as well as the total amount of grant or loan funding provided to a project or applicant.

The TWDB does not anticipate allocating a large proportion of the total available grant and/or loan funds under this program to a single project or applicant.

The Board may bypass a higher scoring project, if necessary, including in order to fulfill these allocation goals.

To the extent a project on the prioritization list does not move forward to commitment or closing, funds may be reallocated to other eligible projects in any category that are on the prioritization list, as determined by the TWDB.

The total project costs may be increased if the entity shows that additional funds are necessary to implement the project. If the project includes a grant, the total amount of grant allocated to the project may not increase from the amount listed in the Board-approved FIF Prioritization List unless additional grant funding is available during the cycle and the Board approves of an additional grant commitment for the project.

Financing Terms

In general, the TWDB will establish loan terms appropriate for the type of activities being financed. Specifically, for this biennial cycle, the following terms will apply:

- 1) The interest rate on financing will be zero percent.
- 2) For Cities, Counties, Districts, and Authorities, financial assistance will be provided through TWDB's purchase of applicant's bonds or certificates of obligation. For water supply corporations (which are only eligible for the FME Category), financial assistance may be provided through a loan agreement.
- 3) For construction projects, financing may be offered for a term of up to 30 years, provided it does not exceed the projected useful life of the project, and principal payments will commence no later than 18 months after estimated completion of project construction.
- 4) For planning, acquisition, and/or design-only projects, financing may be offered for a term of up to 10 years and principal payments will commence no later than 18 months after estimated completion of the last activity phase being financed.
- 5) No additional deferrals of principal will be offered.
- 6) Level principal repayments will be required.
- 7) The recipient of financing must establish an adequate source of revenue and/or demonstrate adequate security for the repayment of the financing as it becomes due.
- 8) All bonds/loans must be rounded to the nearest \$5,000 increment.
- 9) Considering a certain level of contingency in the project budget is strongly encouraged.
- 10) TWDB funds are not eligible for operations and maintenance.
- 11) Applicants must be up to date with financial auditing requirements prior to commitment.

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Release of Funds – Outlays, Escrow Releases, and Other Methods of Disbursements

The FIF program generally releases funds through a reimbursement request (or outlay) submittal process. Advance disbursements will only be considered if TWDB determines it is absolutely necessary.

Funds may be reimbursed if applicable state and federal (if associated with federal matching program) procurement laws and regulations have been followed. Funds dispersed prior to December 1, 2023, are not eligible except for federal matching funds. Federal matching funds through the FIF will be reimbursed according to the federal program's performance period.

Release of FIF grant funds requires submittal of an outlay report or reimbursement request, as applicable, with invoices to document costs for project expenditures. For projects with federal award matching funds, the amount disbursed may not exceed the required local share or match for the federal award and the proof of federal reimbursement and required local share or match must be provided before payment is made. If the FIF financial assistance consists of loan funds only, TWDB will use an escrow release authorization process and invoices will not be required to receive the funds. A project progress report must be included with each escrow release request, except for projects with federal award matching funds.

Grant and loan funds that are not eligible for release at the time of closing will be held in an escrow account until TWDB has approved the release of funds. The cost of the escrow accounts may be paid from either FIF grant and/or loan funds that have been disbursed to the FIF project account or construction account, as applicable. TWDB may approve an exception to the use of an escrow account on a case-by-case basis if determined that it is necessary. Installment funding for loans will be allowed on a case-by-case basis.

Escrow and FIF project/construction accounts should be interest bearing accounts. Any interest earned on grant funds must be applied to the FIF project or returned to TWDB, at TWDB's discretion. Any interest earned on loan funds must be used in accordance with the bond ordinance/resolution or the loan agreement, as applicable. Funds released from escrow must be deposited into the recipient's separate FIF project/construction bank account to issue payments for the project's expenses.

A minimum of 5 percent (5%) of the project funds for retainage will be withheld, except for federal award matching funds projects, which will not have retainage withheld. Any remaining retainage will be disbursed upon receipt by TWDB of all close-out documents. For disbursements related to construction contracts, TWDB will reimburse 95% of each outlay of TWDB's share of eligible activities considering any retainage already deducted from the invoices or other supporting documents.

Project administration/delivery fees and charges and engineering costs must be reasonable as determined by TWDB to be considered eligible FIF activity costs. TWDB may consider the FIF award amount(s), size of the FIF eligible amount or project, and/or nature of project activities in making this determination of a reasonable amount that would be considered eligible FIF activity costs.

Prioritization Criteria

The working ranking criteria and weights that are anticipated to be used in ranking all projects within the 2024 State Flood Plan, as required by statute, will be utilized for prioritization scoring under this IUP. The applicant

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must also provide updated planning data with submission of the abridged application. After the abridged applications have been separated into their respective FIF categories, the following criteria will be utilized to score and prioritize them, with the addition of the updated flood planning data.

Criteria	Points	Methodology/Notes
Project's Technical Merits*	FME, FMP, or FMS score based on working state flood planning criteria and methodology	The technical merit score is based on working ranking criteria and methodology anticipated to be used for the first State Flood Plan. (Appendix A)
Flood Management Evaluations (FME) with an AMHI that is \leq 85% the statewide AMHI	10	Additional points if the entity's study area has an AMHI that is \leq 85% the statewide AMHI.
<u>TIEBREAKER</u>		
<u>Social Vulnerability Index (SVI)</u> The SVI uses 15 U.S. Census Bureau variables to help local officials identify communities that may need support in preparing for hazards or recovering from disaster. SVI values range from 0 to 1.	The tie is broken in favor of the project with the highest SVI.	Average SVI of the benefitting area, verified using online SVI map: www.atsdr.cdc.gov/placeandhealth/svi/interactive_map.html May use the Census tract or County data depending on the size and shape of the benefitting area.

* See Appendix A, Working State Flood Plan Flood Management Evaluation (FME), Flood Mitigation Project (FMP), and Flood Management Strategy (FMS) Ranking Criteria and Weight that have been modified in response to stakeholder feedback received on a previous publicly available version.

Flood Information Clearinghouse Committee

Information included in the abridged applications will be shared with the Flood Information Clearinghouse Committee (FLICC), a cooperative effort between the TWDB, Texas General Land Office, Texas Division of Emergency Management, and other state and federal agencies that administer flood mitigation financial assistance programs. After review by the FLICC, the applicant may be advised of other available source(s) of funding. More information on the FLICC is available at www.texasfloodclearinghouse.org/.

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Appendix A: Working 2024 State Flood Plan Flood Management Evaluation (FME), Flood Mitigation Project (FMP), and Flood Management Strategy (FMS) Ranking Criteria and Weight

Working 2024 State Flood Plan Flood Management Evaluation (FME), Flood Mitigation Project (FMP) and Flood Management Strategy (FMS) Ranking Criteria and Weight

Texas Water Code Sec. 16.061, "(b) The state flood plan must include: ... (2) a statewide, ranked list of ongoing and proposed flood control and mitigation projects and strategies necessary to protect against the loss of life and property from flooding..."
 TWDB rules state that the state flood plan shall incorporate "a statewide, ranked list of recommended FMEs, FMSs, and FMPs that have associated one-time capital costs derived from the Board-approved RFPs (31 TAC § 362.4 (c)(5))."
 All flood risk and risk reduction information are for 1% annual chance storm.
 *Select reported data were normalized on the curve (ArcSinh), scoring 0-10.

		Criteria Name	Criteria Type	Criteria Grouping	FME Ranking Criteria	FME Ranking Weight	FME Grouping Weight	FMP Ranking Criteria	FMP Ranking Percent Weight	FMP Grouping Weight	FMS Ranking Criteria	FMS Ranking Percent Weight	FMS Grouping Weight	Max Score
REPORTED DATA FROM FME, FMP, and FMS FEATURE CLASSES	1	Estimated number of structures at 100yr flood risk*	Flood Risk	Life, Safety and Structures	Yes	15.0%	75.0%	No	0.0%	0.0%	Yes	10.0%	40.0%	10
	2	Estimated Population at 100-year flood risk*	Flood Risk		Yes	15.0%		No	0.0%		Yes	10.0%		10
	3	Critical facilities at 100-year flood risk (#)*	Flood Risk		Yes	25.0%		No	0.0%		Yes	10.0%		10
	4	Number of low water crossings at flood risk (#)*	Flood Risk		Yes	20.0%		No	0.0%		Yes	10.0%		10
	5	Estimated number of road closures (#)*	Flood Risk	Mobility	Yes	5.0%	15.0%	No	0.0%	0.0%	Yes	5.0%	15.0%	10
	6	Estimated length of roads at 100-year flood risk (Miles)*	Flood Risk		Yes	10.0%		No	0.0%		Yes	10.0%		10
	7	Estimated farm & ranch land at 100-year flood risk (acres)*	Flood Risk	Agriculture	Yes	10.0%	10.0%	No	0.0%	0.0%	Yes	5.0%	5.0%	10
	8	Number of structures removed from 100yr (1% annual chance) Floodplain*	Flood Risk Reduction	Life, Safety and Structures				Yes	5.0%	45.0%	Yes	10.0%	25.0%	10
	9	Percent of structures removed from 100yr (1% annual chance) Floodplain (Calculated by TWDB from reported data)	Flood Risk Reduction					Yes	10.0%		Yes	5.0%		10
	10	Residential structures removed from 100yr (1% annual chance) Floodplain*	Flood Risk Reduction					Yes	2.5%		Yes	10.0%		10
	11	Estimated Population removed from 100yr (1% annual chance) Floodplain*	Flood Risk Reduction					Yes	10.0%		Yes	10.0%		10
	12	Critical facilities removed from 100yr (1% annual chance) Floodplain (#)*	Flood Risk Reduction					Yes	10.0%		No	0.0%		10
	13	Number of low water crossings removed from 100yr (1% annual chance) Floodplain (#)*	Flood Risk Reduction					Yes	7.5%		No	0.0%		10
	14	Estimated length of roads removed from 100yr floodplain (Miles)*	Flood Risk Reduction	Mobility				Yes	5.0%	5.0%	No	0.0%	0.0%	10
	15	Estimated farm & ranch land removed from 100yr floodplain (acres)*	Flood Risk Reduction	Agriculture				Yes	5.0%	5.0%	No	0.0%	0.0%	10
	16	Percent Nature-based Solution (by cost)	Other					Yes	5.0%		Yes	7.5%		10
	17	Benefit-Cost Ratio	Other					Yes	2.5%					10
	18	Water Supply Benefit (Y/N)	Other					Yes	5.0%		Yes	5.0%		10
	19	FMP Project Type (10 points) Low water crossing (4 points) Preparedness	Other					Yes	2.5%		No			
	20	FMS Project Type (10 points) Flood Measurement and Warning (8 points) Regulatory and Guidance (6 points) Education and Outreach (4 points) Property Acquisition and Structural Elevation (4 points) Infrastructure Projects (2 points) Other	Other					No	0.0%		Yes	2.5%		10
Subtotal					100.0%			70.0%			100.0%			
FMP PROJECT DETAILS SCORING (COMPUTED BY RFPs)	21	Score 1: Severity - Pre-Project Average Depth of Flooding (100-year)	Flood Risk					Yes	5.0%					10
	22	Score 2: Severity - Community Need (% Population)	Flood Risk					Yes	5.0%					10
	23	Score 6: Life and Safety	Flood Risk Reduction					Yes	5.0%					10
	24	Score 8: Social Vulnerability	Other					Yes	5.0%					10
	25	Score 10: Multiple Benefits	Other Benefits					Yes	2.5%					10
	26	Score 13: Environmental Benefit	Other Benefits					Yes	2.5%					10
	27	Score 15: Mobility	Other Benefits					Yes	5.0%					10
	Subtotal					0.0%			30.0%			0.0%		
Total (Must add up to 100%)					100.0%			100.0%			100.0%			

Please refer to RFP Exhibit C (pages 114 - 135) for definition of Project Details Scoring:

[Exhibit C: Technical Guidelines for Regional Flood Planning](#)

- 1 Severity Ranking - Pre-Project Average Depth of Flooding (100-year): Ranking of severity based on the baseline/pre-project average 100-year flood depth.
- 2 Severity Ranking - Community Need (% Population): Ranking of severity based on a community's need by percentage of project community affected by population.
- 6 Life and Safety Ranking (Injury/Loss of life): Ranking project based on life/injury risk percentage using estimates of area hazard rating, area vulnerability rating, and historical loss of life injury data for project.
- 8 Social Vulnerability Ranking: A ranking based on the Center for Disease Control SVI data for Texas, by calculating an average project SVI by census tract and classifying the vulnerability level.
- 10 Multiple Benefit Ranking: Ranking a project based on the reporting of significant, measurable, expected benefits to: recreation, transportation, social and quality of life, local economic impacts, meeting sustainability goals, and/or project resilience goals.
- 13 Environmental Benefit Ranking: Ranking of expected level of environmental benefits to be delivered by project to water quality, cultural heritage, habitat, air quality, natural resources, agricultural resources, and soils/erosion and sedimentation.
- 15 Mobility Ranking: Ranking project improvement and protection of mobility during flood events, with particular emphasis on emergency service access and major access routes.

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Attachment 1: Examples of Grant Percentage Calculation for Each Category

Flood Management Evaluation Category - The FME category only has one grant qualifier. The applicant's grant percentage will be based on that eligible grant percentage.

Grant Qualifier	Potential Example	Eligible Grant Percentage
AMHI \leq 50% state-wide AMHI and the project area was the subject of a flood-related federal disaster declaration within the past 5 years	AMHI is 48% of the state-wide AMHI and the project area was the subject of a flood-related Presidential disaster declaration in 2019.	100
AMHI \leq 75% state-wide AMHI	AMHI is 72% of the state-wide AMHI	90
AMHI at \leq 125% of the state-wide AMHI	AMHI is 105% of the state-wide AMHI	75
AMHI $>$ 125% of the state-wide AMHI)	AMHI is 135% of the state-wide AMHI	50

Flood Mitigation Project Category - The applicant's grant percentage will be the sum of the three grant qualifiers. The maximum grant possible is 70%.

Grant Qualifier	Potential Example	Eligible Grant Percentage
AMHI	AMHI is 72% of the state-wide AMHI.	40
Rural	Applicant meets the "rural" definition.	5
Green/Nature-based	Nature-based costs are 40% of the total project costs	5
Total Grant Percentage		50

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Flood Management Strategy Category - The applicant's grant percentage will be the sum of the three grant qualifiers. The maximum grant possible is 70%.

Grant Qualifier	Potential Example	Eligible Grant Percentage
AMHI	AMHI is 90% of the state-wide AMHI.	0
Rural	Applicant does not meet the "rural" definition.	0
Green/Nature-based	Nature-based costs are 40% of the total project costs; however, no other grant qualifier was met.	0
Total Grant Percentage		0

Attachment 2: Project List

A project list will be incorporated after prioritization is complete.