DATE: October 17th, 2022

TO: San Jacinto Regional Flood Planning Group

FROM: Evan Adrian, PE, CFM, ENV SP; Jacob Torres, PhD, PE, CFM, D.WRE (Torres & Associates, LLC)
      Cristian Ayala; Inok Jun, PhD, EIT (Torres & Associates, LLC)
      Cory Stull, PE, CFM; Brian Edmondson, PE, CFM; Maggie Puckett, PE, CFM (Freese and Nichols, Inc.)

PROJECT NO.: 10-220120-00

PROJECT: TWDB San Jacinto Regional Flood Plan

SUBJECT: Task 12 Prioritization Framework

Executive Summary

Torres & Associates and Freese and Nichols, Inc. have developed preliminary selection criteria and a prioritization framework for assisting the San Jacinto Regional Flood Planning Group (RFPG) with prioritizing the flood management evaluations (FME) for use during Task 12. The objective of Task 12 as described by the Texas Water Development Board (TWDB) is to perform identified FMEs to recommend additional potentially feasible flood mitigation projects (FMP). The goal of the prioritization framework was to develop a transparent framework for ranking the FMEs based on available data developed as part of Task 4A, Task 4B, and Task 5 of the Draft Region Flood Plan project. The prioritization of the FMEs will be used by the Technical Consultant to execute FMEs in order of prioritization until Task 12 funds are exhausted. Execution of a FME is contingent on any comments received to the draft plan and concurrence by the sponsor entity. If a sponsor is unresponsive or does not wish to pursue a particular FME then a reasonable effort can be made to identify another sponsor for the FME. If no other sponsor is found, then next FME in order will be pursued. Based on the analysis described within this memorandum, a draft prioritization framework was developed for the FMEs within the San Jacinto region with criteria based on available data used to develop a score for each FME that is in line with the goals of the San Jacinto RFPG. The prioritization framework is provided in Appendix 01 with a spatial visual of the prioritized FMEs within the San Jacinto region provided in Exhibit 01.
The need for a prioritization framework was determined based on the constraints inherent to Task 12 including budget, schedule, a significant number of recommended FMEs (374 FMEs), and a wide array of sponsors. Based on these constraints, certain FMEs were filtered from the prioritization evaluation including FMEs with a level of effort exceeding $150,000 to maximize the number of FMEs evaluated, FMEs labeled as “Not Recommended” by the RFPG, FMEs that will not likely produce an FMP, and FMEs identified by public comment as duplicates or ongoing efforts. The filtering process reduced the number of FMEs from 374 to 191 FMEs included in the prioritization effort. Exhibit 02 provides a visual of the FMEs that were excluded from the prioritization analysis.

The prioritization framework is comprised of different criteria based on available data to differentiate the FMEs. Each criterion was chosen as important factors to achieve the RFPGs overall goals for the Task 12 effort. The criteria used include the following: level-of-effort, model/data availability, known flood risk, number of entities benefitted, critical facilities at risk, structures at risk, nature-based solutions, social vulnerability index (SVI), mobility, population at risk, unique sponsor, and sub-watershed priority. For each criteria listed above, different thresholds were used to determine if an FME was a low, medium, or high priority for a certain criterion to differentiate the FMEs and prioritize FMEs with a higher need. A statistical analysis was conducted for several of the criteria to determine effective thresholds to set for low, medium, and high priority. Documentation of the statistical analysis is provided in Appendix 05.

Weights were assigned to each of the criteria based on the ranking of the selection criteria gathered from the survey results of the Technical Committee and RFPG (Appendix 03 and 04) and further discussion during the October 2022 RFPG meeting. Criteria at the top of the survey results were assigned a weight of 1 while criteria further down on the list have a corresponding weight. These weights were multiplied with the priority ranking of the criteria and factored into the overall prioritization rank. Based on the feedback received from the RFPG during the October RFPG meeting, additional investigation of the results of the prioritized list was warranted to determine if any refinements could be made that would elevate some FMEs from smaller entities and provide a more diverse mix of FMEs higher in the prioritized list. The consultant team reviewed the FME prioritized list and criteria and determined that multiple criteria are similar and each capture different aspects of flood risk which influenced the overall ranking to be primarily reflective of flood risk. Based on this observation, the “Known Flood Risk”, “Critical Facilities at Risk”, “Structures at Risk”, and “Population at Risk” had their respective weighting revised from one (1) to 0.25
to represent an overall category of flood risk. The “Unique Sponsor” and “Subwatershed Priority” criteria were also revised to a value of one (1) to help elevate different sponsors and geographic representation.

The results of the prioritization framework show the higher priority FMEs are mainly located in the middle to lower portion of the San Jacinto Region with a spread between sponsors however, many of the FMEs executed during the Task 12 effort may be for a limited number of sponsors as a function of the number of FMEs certain sponsors have that are only missing a BCA and the likelihood that there may be limited response to proceed with an FME from many sponsors. There are also FMEs included in the prioritized list that may be evaluated by the sponsor themselves. These FMEs are primarily benefit cost analyses (BCA). Based on coordination efforts, the City of Houston and City of Friendswood have indicated a potential for conducting the FMEs internally by the sponsor to elevate the FMEs to FMPs. Coordination is ongoing to ensure that there is no duplicated effort for Task 12. The completed draft prioritization framework is provided in Appendix 01 with a spatial visual of the prioritized FMEs within the San Jacinto region provided in Exhibit 01. Appendix 06 includes the FME One-Page fact sheets in ranked order for reference and Appendix 07 includes the ranked FME list in excel form to provide an overall summary of the FMEs with the data used in the analysis and the FMEs removed based on different constraints.
Feedback from RFPG and Technical Committee

A preliminary prioritization framework was presented to the San Jacinto RFPG Technical Committee on September 2nd, 2022, and to the full RFPG on September 8th, 2022, to facilitate discussion and obtain feedback on the initial list. Appendix 02 provides the preliminary prioritization framework presented at the meeting for reference. The preliminary framework has been refined based on the feedback from the RFPG and Technical Committee and is provided in Appendix 01. General feedback from the Technical Committee included the addition of criteria in line with the RFPG’s overall goals including a criterion for nature-based solutions, mobility, and spatial prioritization by sub-watershed. A survey was conducted to gather feedback from the Technical Committee (Appendix 03). The overall desired outcome of Task 12 from the Technical Committee was to maximize the reduction in flood risk and exposure followed by FMP benefit coverage. The importance of the selection criteria to the Technical Committee was in line with the overall goal with criteria focused on reduction in flood risk and exposure being towards the top of the survey list. The Technical Committee also preferred a distribution of FMEs evaluated under Task 12 that were primarily benefit cost analyses with a few moderate effort FMEs.

General feedback gathered from the RFPG during the September 8th meeting added an emphasis on the importance to consider nature-based solutions in the prioritization framework and focus on elevation of as many FMEs to FMPs as possible within the constraints of Task 12. The same survey presented to the Technical Committee was performed to gather feedback from the entire RFPG (Appendix 04). The overall desired outcome of Task 12 from the RFPG was in line with the Technical Committee with the goal to maximize the reduction in flood risk and exposure followed by Number of FMPs and then FMP benefit coverage. The importance of the selection criteria to the RFPG was in line with the overall goal with criteria focused on reduction in flood risk and exposure being towards the top of the survey list. There were some differences in the overall ranking of importance of the selection criteria between the Technical Committee and the RFPG, however the overall tendencies appear to be similar. The RFPG had a tie in ranking between performing all benefit cost analyses and a distribution of FMEs evaluated under Task 12 that were primarily benefit cost analyses with a few moderate effort FMEs.

A refined framework and weighting were provided to the RFPG for review for the October 13th meeting to discuss any further refinements to the criteria if necessary. Based on the feedback received from the RFPG, additional investigation of the results of the prioritized list was warranted to determine if any
refinements could be made that would elevate some FMEs from smaller entities and provide a more diverse mix of FMEs that may be performed through Task 12. The consultant team reviewed the FME prioritized list and criteria and determined that multiple criteria are similar and each capture different aspects of flood risk which influenced the overall ranking to be primarily reflective of flood risk while discounting the influence of other criteria. Based on this observation, the “Known Flood Risk”, “Critical Facilities at Risk”, “Structures at Risk”, and “Population at Risk” had their respective weighting revised from one (1) to 0.25 to represent an overall category of flood risk. The “Unique Sponsor” and “Subwatershed Priority” criteria were also revised to a value of one (1) to help elevate different sponsors and geographic representation. Table 1 provides a summary of the previous criteria weights and the revised weights that account for the overemphasis on flood risk and elevation of different sponsors and geographic representation.

Table 1. Summary of Criteria Weights and Revision

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Weight presented at RFPG Meeting (10/13)</th>
<th>Revised Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of Effort</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Model/Data Availability</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td><strong>Known Flood Risk</strong></td>
<td><strong>1.0</strong></td>
<td><strong>0.25</strong></td>
</tr>
<tr>
<td>Number of Entities Benefitted</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td><strong>Critical Facilities at Risk</strong></td>
<td><strong>1.0</strong></td>
<td><strong>0.25</strong></td>
</tr>
<tr>
<td><strong>Structures at Risk</strong></td>
<td><strong>1.0</strong></td>
<td><strong>0.25</strong></td>
</tr>
<tr>
<td>Nature-Based Solutions</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Social Vulnerability Index (SVI)</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Mobility</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td><strong>Population at Risk</strong></td>
<td><strong>1.0</strong></td>
<td><strong>0.25</strong></td>
</tr>
<tr>
<td><strong>Unique Sponsor</strong></td>
<td><strong>0.2</strong></td>
<td><strong>1.0</strong></td>
</tr>
<tr>
<td><strong>Subwatershed Priority</strong></td>
<td><strong>0.6</strong></td>
<td><strong>1.0</strong></td>
</tr>
</tbody>
</table>
Prioritization Criteria

The prioritization framework is comprised of different criteria based on available data to differentiate the FMEs. Each criterion was chosen as important factors to achieve the RFPGs overall goals for the Task 12 effort. The criteria used include the following: level-of-effort, model/data availability, known flood risk, number of entities benefitted, critical facilities at risk, structures at risk, nature-based solutions, social vulnerability index (SVI), mobility, population at risk, unique sponsor, and sub-watershed priority. For each criteria listed above, different thresholds were used to determine if an FME was a low, medium, or high priority for a certain criterion to differentiate the FMEs and prioritize FMEs with a higher need. The overall prioritization framework is provided in Table 1. A low priority criterion determined for the FME receives a value of 1, medium priority receives a value of 3, and high priority receives a value of 5. The values were chosen to provide variation between low, medium, and high priority. Once the criterion priorities were determined, they were summed together to generate an overall priority score that was used to determine the ranking of the individual FMEs. A statistical analysis was conducted for several of the criteria to determine effective thresholds to set for low, medium, and high priority. Documentation of the statistical analysis is provided in Appendix 05.

Table 2. Summary of DRAFT Prioritization Framework (Appendix 01)

<table>
<thead>
<tr>
<th>Recommended Criteria</th>
<th>Priority Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low Priority (1)</td>
</tr>
<tr>
<td>Level of Effort</td>
<td>Effort may be outside of budget constraints ($190k to &gt; $100k)</td>
</tr>
<tr>
<td>Model/Data Availability</td>
<td>No model/project data available</td>
</tr>
<tr>
<td>Known Flood Risk</td>
<td>Low Known Flood Risk</td>
</tr>
<tr>
<td>Number of Entities Benefitted</td>
<td>1-2</td>
</tr>
<tr>
<td>Critical Facilities at risk</td>
<td>Less than Median</td>
</tr>
<tr>
<td>Structures at risk</td>
<td>Less than Median</td>
</tr>
<tr>
<td>Population at risk</td>
<td>Less than Median</td>
</tr>
<tr>
<td>Unique Sponsor</td>
<td>Another FME has higher priority for Sponsor</td>
</tr>
<tr>
<td>Nature Based Solutions</td>
<td>No Nature Based Solution considered in the evaluation</td>
</tr>
<tr>
<td>Priority within Subwatershed (HUC10)</td>
<td>Another FME has higher priority for Subwatershed based on other criteria</td>
</tr>
<tr>
<td>Social Vulnerability Index (SVI)</td>
<td>Low (Less than 0.33)</td>
</tr>
<tr>
<td>Mobility/Length of Inundated Roadway</td>
<td>Less than Median</td>
</tr>
</tbody>
</table>
Level-of-Effort

Level-of-Effort refers to the amount of effort based on an estimated cost needed to complete the evaluation and turn the FME into an FMP. This is an important factor due to a limited budget and schedule for Task 12 to promote an FME to an FMP. Based on feedback from the RFPG, maximizing the number of FMEs that are evaluated in the Task 12 effort is one of their priorities and is captured by this criterion. Exhibits 3-5 provide visualization of three different level-of-effort scenarios with different threshold values. Table 2 provides the different thresholds shown in Exhibits 3-5. After reviewing the data and distribution for this field, it was determined that the high priority FMEs are based on those that can be completed quickly and efficiently including FMEs with an estimated level-of-effort less than or equal to $30,000. The medium priority FMEs are those that are believed to have a reasonable level-of-effort greater than $30,000 to $100,000. The low priority FMEs are those that may be significant in effort compared to the budget and schedule greater than $100,000 to $150,000. The low priority was determined based on the logic that if one of those FMEs were selected for evaluation, the level-of-effort captures around one-third of the total effort allocated for Task 12 and would limit the number of FMEs that would be evaluated.

<table>
<thead>
<tr>
<th>Criteria Alternative</th>
<th>Low Priority</th>
<th>Medium Priority</th>
<th>High Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of Effort Alternative 1</td>
<td>$150,000 to greater than $100,000</td>
<td>$100,000 to greater than $30,000</td>
<td>Less than or equal to $30,000</td>
</tr>
<tr>
<td>Level of Effort Alternative 2</td>
<td>$150,000 to greater than $80,000</td>
<td>$80,000 to greater than $30,000</td>
<td>Less than or equal to $30,000</td>
</tr>
<tr>
<td>Level of Effort Alternative 3</td>
<td>$150,000 to greater than $100,000</td>
<td>$100,000 to greater than $20,000</td>
<td>Less than or equal to $20,000</td>
</tr>
</tbody>
</table>

Model/Data Availability

Model and data availability is a factor in determining an FMEs priority. If a project does not have any data available, then the FME would be ranked as a low priority as it might suggest that the FME would need more effort to complete and thus also raise the cost to elevate the FME to an FMP. For those FMEs that have data readily available would be considered high priority as it will indicate that the evaluation will not require any significant additional effort. Lastly, in small cases an FME can have some project data available and may take a little effort to collect the remaining information needed. These FMEs are labeled as
medium priority. Exhibit 6 provides visualization of the spatial distribution of low, medium, and high priority for model and data availability.

**Known Flood Risk**

An FME that is within an area of known flood risk is an important factor aligning with the San Jacinto RFPG’s desired outcome for Task 12. A spatial join between the FMEs and the flood risk map developed for Task 4A was conducted in GIS to determine the known flood risk. From the spatial analysis, the FMEs were labeled as high, medium, or low depending on the flood risk associated. The flood risk map is provided in Figure 1. Exhibit 7 provides visualization of the spatial distribution of low, medium, and high priority for known flood risk.

![San Jacinto Region Greatest Flood Risk Map](image-url)
**Number of Entities Benefitted**

Entities are classified as political subdivisions with flood-related authority within the San Jacinto region. An entity can be a city, county, river authority, soil and water conservation district, water control and improvement districts, etc. This criterion is based on the number of entities that may see direct benefit from an FME and gives high priority to FMEs that benefit multiple entities. **Exhibits 8-10** provide visualization of three different number of entities benefitted scenarios with different threshold values. **Table 3** provides the different thresholds shown in **Exhibits 8-10**. Based on the analysis, an FME considered as a high priority benefit more than 3 entities as it will scale and help more communities than an FME that only benefits one entity. An FME that benefits 3 entities are labeled as a medium priority and anything below that threshold is considered low priority. These thresholds were chosen based on the available data from all FMEs and distributing the data in a way to emphasize the difference in benefits between FMEs.

**Table 4. Summary of Threshold Alternatives for Number of Entities Benefitted**

<table>
<thead>
<tr>
<th>Criteria Alternative</th>
<th>Low Priority</th>
<th>Medium Priority</th>
<th>High Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Entities Alternative 1</td>
<td>1-2</td>
<td>3</td>
<td>Greater than 3</td>
</tr>
<tr>
<td>Number of Entities Alternative 2</td>
<td>1-2</td>
<td>3-4</td>
<td>Greater than 4</td>
</tr>
<tr>
<td>Number of Entities Alternative 3</td>
<td>1</td>
<td>2-3</td>
<td>Greater than 3</td>
</tr>
</tbody>
</table>

**Critical Facilities at Risk**

The critical facilities at risk represents the number of facilities within the 1% AEP floodplain within an FME area that provide services and functions essential to a community, especially during and after a disaster. Typical critical facilities include hospitals, fire stations, police stations, storage of critical records, utilities, and similar facilities. Larger number of critical facilities at risk within an FME area should have a higher priority. A statistical review was conducted for this criterion to determine the thresholds of low, medium, and high priority. This data has a right-skewed distribution (or positively skewed distribution) in which most values are clustered around a smaller number of critical facilities at risk while the larger values vary significantly. In addition, the standard deviation of the distribution is high, even when removing outliers. Different threshold values were looked at to determine the best distribution of priority of FMEs for this criterion. Many different scenarios were analyzed in this effort and visualization of three different threshold groups are provided in **Exhibits 11-13**. **Table 4** provides the different thresholds shown in **Exhibits 11-13**. Based on the statistical analysis, the average and median values appear to be
representative threshold values for this dataset meaning that if the number of critical facilities at risk is greater than the average value, then the FME would be ranked as a high priority or if the number is less than the median value, then the FME would be as a low priority for this criterion.

Table 5. Summary of Threshold Alternatives for Critical Facilities at Risk

<table>
<thead>
<tr>
<th>Criteria Alternative</th>
<th>Low Priority</th>
<th>Medium Priority</th>
<th>High Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Facilities</td>
<td>Less than Median</td>
<td>Greater than Median</td>
<td>Greater than Average</td>
</tr>
<tr>
<td>Alternative 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical Facilities</td>
<td>Less than Average</td>
<td>Greater than Average</td>
<td>Greater than Average + 1 Standard Deviation</td>
</tr>
<tr>
<td>Alternative 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical Facilities</td>
<td>Less than Median</td>
<td>Greater than Median</td>
<td>Greater than Median + 1 Standard Deviation</td>
</tr>
<tr>
<td>Alternative 3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Structures at Risk

The structures at risk represent the number of structures within the 1% AEP floodplain within an FME area. Larger number of structures at risk within an FME area should have a higher priority. A statistical review was conducted for this criterion to determine the thresholds of low, medium, and high priority. This data has a right-skewed distribution (or positively skewed distribution) in which most values are clustered around a smaller number of structures at risk while the larger values vary significantly. In addition, the standard deviation of the distribution is high, even when removing outliers. Different threshold values were looked at to determine the best distribution of priority of FMEs for this criterion. Many different scenarios were analyzed in this effort and visualization of three different threshold groups are provided in Exhibits 14-16. Table 5 provides the different thresholds shown in Exhibits 14-16. Based on the statistical analysis, the average and median values appear to be representative threshold values for this dataset meaning that if the number of structures at risk is greater than the average value, then the FME would be ranked as a high priority or if the number is less than the median value, then the FME would be as a low priority for this criterion.
### Table 6. Summary of Threshold Alternatives for Structures at Risk

<table>
<thead>
<tr>
<th>Criteria Alternative</th>
<th>Low Priority</th>
<th>Medium Priority</th>
<th>High Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structures at Risk Alternative 1</td>
<td>Less than Median</td>
<td>Greater than Median</td>
<td>Greater than Average</td>
</tr>
<tr>
<td>Structures at Risk Alternative 2</td>
<td>Less than Average</td>
<td>Greater than Average</td>
<td>Greater than Average + 1 Standard Deviation</td>
</tr>
<tr>
<td>Structures at Risk Alternative 3</td>
<td>Less than Median</td>
<td>Greater than Median</td>
<td>Greater than Median + 1 Standard Deviation</td>
</tr>
</tbody>
</table>

**Nature-Based Solutions**

A nature-based solution is a sustainable planning, design, and engineering practice that utilizes the natural features of the environment to build more resilient communities. It is important to attempt to incorporate a green infrastructure to minimize the damage to the natural environment. Those FMEs that include considerations for nature-based solutions are given a high priority for this criterion while all others are labeled as low priority since there is no middle priority identifier. **Exhibit 17** provides visualization of the spatial distribution of low and high priority for nature-based solutions. Limited information on the FMEs and nature-based solutions led to a limited number of FMEs that have a high priority for this criterion.

**Social Vulnerability Index (SVI)**

The SVI is ranking of recorded data from the U.S. census, analyzed at a census tract level based, “on 15 social factors, including poverty, lack of vehicle access, and crowded housing, and groups them into four related themes.” A dataset from the Texas Water Development Board (TWDB) was used to conduct a spatial analysis to determine the average SVI for an FME area from 0 to 1. Many different scenarios of threshold values were analyzed in this effort and visualization of three different threshold groups are provided in **Exhibits 18-20**. **Table 6** provides the different thresholds shown in **Exhibits 18-20**. Based on the analysis, FMEs with a ranking above 0.66 was given a high priority, rankings between 0.33 and 0.66 are medium priorities, and anything less than a 0.33 was a low priority. These thresholds were based on the sensitivity analysis to differentiate the FMEs and their SVI priority ranking.
Table 7. Summary of Threshold Alternatives for SVI

<table>
<thead>
<tr>
<th>Criteria Alternative</th>
<th>Low Priority</th>
<th>Medium Priority</th>
<th>High Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>SVI Alternative 1</td>
<td>Less than 0.33</td>
<td>0.33 – 0.66</td>
<td>Greater than 0.66</td>
</tr>
<tr>
<td>SVI Alternative 2</td>
<td>Less than 0.3</td>
<td>0.3 – 0.7</td>
<td>Greater than 0.7</td>
</tr>
<tr>
<td>SVI Alternative 3</td>
<td>Less than 0.4</td>
<td>0.4 – 0.6</td>
<td>Greater than 0.6</td>
</tr>
</tbody>
</table>

**Mobility**

Mobility refers to the length of inundated roadway during a 1% AEP storm event within an FME area. This criteria factors in public safety and the ability to reach critical facilities or escape areas of flooding without being impeded by flood waters overtopping roadways. Many different scenarios of threshold values were analyzed in this effort and visualization of three different threshold groups are provided in Exhibits 21-23. Table 7 provides the different thresholds shown in Exhibits 21-23. Based on the statistical data for the miles of inundated road, the FMEs that have a value less than the median would be noted as a low priority. Medium priority applies to FMEs that have a value that is above the median but below the average. The high priority rating is reserved for those FMEs that are above the average.

Table 8. Summary of Threshold Alternatives for Mobility

<table>
<thead>
<tr>
<th>Criteria Alternative</th>
<th>Low Priority</th>
<th>Medium Priority</th>
<th>High Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility Alternative 1</td>
<td>Less than Median</td>
<td>Greater than Median</td>
<td>Greater than Average</td>
</tr>
<tr>
<td>Mobility Alternative 2</td>
<td>Less than Average</td>
<td>Greater than Average</td>
<td>Greater than Average + 1 Standard Deviation</td>
</tr>
<tr>
<td>Mobility Alternative 3</td>
<td>Less than Median</td>
<td>Greater than Median</td>
<td>Greater than Median + 1 Standard Deviation</td>
</tr>
</tbody>
</table>

**Population at Risk**

Population at risk refers to the population within the 1% AEP existing floodplain within an FME area. The statistical data was collected from the FMEs and ranked accordingly. Many different scenarios of threshold values were analyzed in this effort and visualization of three different threshold groups are provided in Exhibits 24-26. Table 8 provides the different thresholds shown in Exhibits 24-26. The population at risk for an FME below the median is ranked as a low priority and those above the median and below the
average are labeled as medium priority. The high priority rating is reserved for those FMEs that are above the average.

**Table 9. Summary of Threshold Alternatives for Population at Risk**

<table>
<thead>
<tr>
<th>Criteria Alternative</th>
<th>Low Priority</th>
<th>Medium Priority</th>
<th>High Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population at Risk Alternative 1</td>
<td>Less than Median</td>
<td>Greater than Median</td>
<td>Greater than Average</td>
</tr>
<tr>
<td>Population at Risk Alternative 2</td>
<td>Less than Average</td>
<td>Greater than Average</td>
<td>Greater than Average + 1 Standard Deviation</td>
</tr>
<tr>
<td>Population at Risk Alternative 3</td>
<td>Less than Median</td>
<td>Greater than Median</td>
<td>Greater than Median + 1 Standard Deviation</td>
</tr>
</tbody>
</table>

**Unique Sponsor**

The Unique Sponsor criteria refers to the priority that the Sponsor would like to advocate for a promotion to FMP. If the sponsor does not indicate a priority FME within the list, then it is assumed that the project with the highest ranking based on the other criteria will be given the high priority. In the case that multiple FMEs for a sponsor have an equal prioritization score, the FME that has the highest population at risk will be considered the highest priority FME for the sponsor. The other projects that the sponsor has will be labeled as low priority. In addition, those sponsors that only have one project will be given a high priority ranking to possibly introduce equal opportunity for sponsors to elevate their FMEs to FMPs.

**Sub-Watershed Priority**

The sub watershed priority is a criterion that was introduced to aid the spatial variability of priority FMEs throughout the San Jacinto region. A spatial join was conducted with the HUC10 watersheds and the FME list. From this list, the FMEs that have the same HUC10 ID were compared to each other. The highest priority FMEs based on the preliminary ranking was determined to be that HUC10’s highest priority FME. All other FMEs were labeled as low priorities. This process is repeated across all HUC10s located within the San Jacinto region.
Criteria Weighting

A sensitivity analysis was conducted to determine the criteria driving the prioritization of the FMEs. The analysis was conducted by changing assigned weights to criteria between 0 and 1 to determine the influence each criterion has on the overall result of the prioritization. A weight of zero would remove the criteria from consideration in the ranking score and a weight of 1 includes the full value of the criteria in the ranking score. Table 9 provides a summary of the weighting sensitivity analysis. For the analysis, all other criteria are set at a value of 1 to isolate the influence each criterion has on the overall ranking. From the sensitivity analysis, it was noted that many of the higher ranking FMEs tend to stay within the higher ranks and are not dependent on the weighting. The weighting of the criteria appears to primarily influence the rank of the middle to lower ranking FMEs.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>0.5 Weight Observation</th>
<th>0.0 Weight Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of Effort</td>
<td>Many FMEs have an altered ranking outside of the top 20 FMEs</td>
<td>Many FMEs have an altered ranking outside of the top 20 FMEs</td>
</tr>
<tr>
<td>Model/Data Availability</td>
<td>Many FMEs have an altered ranking outside of the top 20 FMEs</td>
<td>Many FMEs have an altered ranking outside of the top 12 FMEs</td>
</tr>
<tr>
<td>Known Flood Risk</td>
<td>Many of the lower ranked items have an altered ranking</td>
<td>Many FMEs have an altered ranking outside of the top 35 FMEs</td>
</tr>
<tr>
<td>Number of Entities Benefitted</td>
<td>Many results have an altered ranking, including higher ranked FMEs</td>
<td>Many of the lower ranked FMEs have an altered ranking</td>
</tr>
<tr>
<td>Critical Facilities at Risk</td>
<td>Many FMEs have an altered ranking outside of the top 20 FMEs</td>
<td>Many FMEs have an altered ranking outside of the top 18 FMEs</td>
</tr>
<tr>
<td>Structures at Risk</td>
<td>Many FMEs have an altered ranking outside of the top 20 FMEs</td>
<td>Many FMEs have an altered ranking outside of the top 19 FMEs</td>
</tr>
<tr>
<td>Nature-Based Solutions</td>
<td>Many of the rankings remain the same outside of the first 14 FME which have an altered ranking</td>
<td>Many of the rankings remain the same outside of the first 18 FME which have an altered ranking</td>
</tr>
<tr>
<td>Social Vulnerability Index (SVI)</td>
<td>Many FMEs have an altered ranking outside of the top 20 FMEs</td>
<td>Most FMEs have an altered ranking</td>
</tr>
<tr>
<td>Mobility</td>
<td>Many FMEs have an altered ranking outside of the top 20 FMEs</td>
<td>Many FMEs have an altered ranking outside of the top 20 FMEs</td>
</tr>
<tr>
<td>Population at Risk</td>
<td>Many FMEs have an altered ranking outside of the top 20 FME</td>
<td>Many FMEs have an altered ranking outside of the top 20 FMEs</td>
</tr>
</tbody>
</table>
Weights were assigned to each of the criteria based on the ranking of the selection criteria gathered from the survey results of the Technical Committee and RFPG (Appendix 03 and 04) as well as feedback from the RFPG during the October RFPG meeting. Criteria at the top of the survey results were assigned a weight of 1 while criteria further down on the list have a corresponding weight. These weights were multiplied with the priority ranking of the criteria and factored into the overall prioritization rank meaning that a criterion with a weight of 1 get the entirety of points determined by the criteria while a criterion with a weight of 0.5 gets half of the points determined by the criteria. Based on the feedback received from the RFPG during the October RFPG meeting, additional investigation of the results of the prioritized list was warranted to determine if any refinements could be made that would elevate some FMEs from smaller entities and provide a more diverse mix of FMEs higher in the prioritized list. The consultant team reviewed the FME prioritized list and criteria and determined that multiple criteria are similar and each capture different aspects of flood risk which influenced the overall ranking to be primarily reflective of flood risk. Based on this observation, the “Known Flood Risk”, “Critical Facilities at Risk”, “Structures at Risk”, and “Population at Risk” had their respective weighting revised from one (1) to 0.25 to represent an overall category of flood risk. The “Unique Sponsor” and “Subwatershed Priority” criteria were also revised to a value of one (1) to help elevate different sponsors and geographic representation. Table 10 provides a summary of the weights assigned to each of the criteria. The total weights sum up to just above six (6.2) giving a maximum FME prioritization score of thirty-one (31) if it receives the maximum score for each individual criteria and a minimum score of just above six (6.2).

### Table 11. Summary of Criteria Weights

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of Effort</td>
<td>1.0</td>
</tr>
<tr>
<td>Model/Data Availability</td>
<td>0.7</td>
</tr>
<tr>
<td>Known Flood Risk</td>
<td>0.25</td>
</tr>
<tr>
<td>Number of Entities Benefitted</td>
<td>0.2</td>
</tr>
<tr>
<td>Critical Facilities at Risk</td>
<td>0.25</td>
</tr>
<tr>
<td>Structures at Risk</td>
<td>0.25</td>
</tr>
<tr>
<td>Nature-Based Solutions</td>
<td>0.5</td>
</tr>
<tr>
<td>Social Vulnerability Index (SVI)</td>
<td>0.5</td>
</tr>
<tr>
<td>Mobility</td>
<td>0.3</td>
</tr>
<tr>
<td>Population at Risk</td>
<td>0.25</td>
</tr>
<tr>
<td>Unique Sponsor</td>
<td>1.0</td>
</tr>
<tr>
<td>Subwatershed Priority</td>
<td>1.0</td>
</tr>
</tbody>
</table>
Conclusion

Torres & Associates and Freese and Nichols, Inc. have developed preliminary selection criteria and a prioritization framework for assisting the San Jacinto Regional Flood Planning Group (RFPG) with prioritizing the flood management evaluations (FME) for use during Task 12. The objective of Task 12 as described by the Texas Water Development Board (TWDB) is to perform identified FMEs to recommend additional potentially feasible flood mitigation projects (FMP). The prioritization of the FMEs will be used by the Technical Consultant to execute FMEs in order of prioritization until Task 12 funds are exhausted. Execution of a FME is contingent on any comments received to the draft plan and concurrence by the sponsor entity. If a sponsor is unresponsive or does not wish to pursue a particular FME then a reasonable effort can be made to identify another sponsor for the FME. If no other sponsor is found, then next FME in order will be pursued. Based on the analysis described within this memorandum, a draft prioritization framework was developed for the FMEs within the San Jacinto region with criteria based on available data used to develop a score for each FME that is in line with the goals of the San Jacinto RFPG.

The need for a prioritization framework was determined based on the constraints inherent to Task 12 including budget, schedule, a significant number of recommended FMEs (374 FMEs), and a wide array of sponsors. Based on these constraints, certain FMEs were filtered from the prioritization evaluation including FMEs with a level of effort exceeding $150,000 to maximize the number of FMEs evaluated, FMEs labeled as “Not Recommended” by the RFPG, FMEs that will not likely produce an FMP, and FMEs identified by public comment as duplicates or ongoing efforts. The filtering process reduced the number of FMEs from 374 to 191 FMEs included in the prioritization effort. Exhibit 02 provides a visual of the FMEs that were excluded from the prioritization analysis.

The prioritization framework is comprised of different criteria based on available data to differentiate the FMEs. Each criterion was chosen as important factors to achieve the RFPGs overall goals for the Task 12 effort. The criteria used include the following: level-of-effort, model/data availability, known flood risk, number of entities benefitted, critical facilities at risk, structures at risk, nature-based solutions, social vulnerability index (SVI), mobility, population at risk, unique sponsor, and sub-watershed priority. For each criteria listed above, different thresholds were used to determine if an FME was a low, medium, or high priority for a certain criterion to differentiate the FMEs and prioritize FMEs with a higher need. A statistical
analysis was conducted for several of the criteria to determine effective thresholds to set for low, medium, and high priority. Documentation of the statistical analysis is provided in Appendix 05.

Weights were assigned to each of the criteria based on the ranking of the selection criteria gathered from the survey results of the Technical Committee and RFPG (Appendix 03 and 04). Criteria at the top of the survey results were assigned a weight of 1 while criteria further down on the list have a corresponding weight. These weights were multiplied with the priority ranking of the criteria and factored into the overall prioritization rank. Based on the feedback received from the RFPG during the October RFPG meeting, additional investigation of the results of the prioritized list was warranted to determine if any refinements could be made that would elevate some FMEs from smaller entities and provide a more diverse mix of FMEs higher in the prioritized list. The consultant team reviewed the FME prioritized list and criteria and determined that multiple criteria are similar and each capture different aspects of flood risk which influenced the overall ranking to be primarily reflective of flood risk. Based on this observation, the “Known Flood Risk”, “Critical Facilities at Risk”, “Structures at Risk”, and “Population at Risk” had their respective weighting revised from one (1) to 0.25 to represent an overall category of flood risk. The “Unique Sponsor” and “Subwatershed Priority” criteria were also revised to a value of one (1) to help elevate different sponsors and geographic representation.

The results of the prioritization framework show the higher priority FMEs are mainly located in the middle to lower portion of the San Jacinto Region with a decent spread between sponsors however, many of the FMEs executed during the Task 12 effort may be for a limited number of sponsors as a function of the number of FMEs certain sponsors have that are only missing a BCA and the likelihood that there may be limited response to proceed with an FME from many sponsors. There are also FMEs included in the prioritized list that may be evaluated by the sponsor themselves. These FMEs are primarily benefit cost analyses (BCA). Based on coordination efforts, the City of Houston and City of Friendswood have indicated a potential for conducting the FMEs internally by the sponsor to elevate the FMEs to FMPs. Coordination is ongoing to ensure that there is no duplicated effort for Task 12. The completed draft prioritization framework is provided in Appendix 01 with a spatial visual of the prioritized FMEs within the San Jacinto region provided in Exhibit 01. Appendix 06 includes the FME One-Page fact sheets in ranked order for reference and Appendix 07 includes the ranked FME list in excel form to provide an overall summary of the FMEs with the data used in the analysis and the FMEs removed based on different constraints.
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Appendix 03 – San Jacinto RFPG Technical Committee Task 12 Survey Results (9/2/2022)
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Appendix 06 – FME One-Page Fact Sheets in order of Revised DRAFT Prioritization List
Appendix 07 – Revised DRAFT Prioritization List of FMEs
SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)
LEVEL OF EFFORT PRIORITY
ALTERNATIVE 3

Legend
- San Jacinto River
- San Jacinto Region

Level of Effort Priority
- Low
- Medium
- High

Scale: As Noted

Date: Oct 2022

Prepared: CAA
Checked: ESA
Approved: JMT

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SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME) MODEL AVAILABILITY PRIORITY

Legend
- San Jacinto River
- San Jacinto Region
- Model Availability Priority
  - Low
  - Medium
  - High

Scale: As Noted

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Prepared: CAA
Checked: ESA
Approved: JMT

Date: Oct 2022

Checked: ESA
Approved: JMT

Exhibit 6
SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)
CRITICAL FACILITIES BENEFITTED PRIORITY
ALTERNATIVE 1

Legend
- San Jacinto River
- San Jacinto Region

Critical Facilities Priority
- Low
- Medium
- High

Scale: As Noted
Checked: ESA
Approved: JMT
Prepared: CAA

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SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)
CRITICAL FACILITIES BENEFITED PRIORITY
ALTERNATIVE 3

Legend
- San Jacinto River
- San Jacinto Region

Critical Facilities Priority
- Low
- Medium
- High

Scale: As Noted
Checked: ESA
Approved: JMT
Prepared: CAA

Date: Oct 2022
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SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)

NATURE BASED SOLUTION PRIORITY

Exhibit 17
Date: Oct 2022
Scale: As Noted

Checked: ESA
Approved: JMT
Prepared: CAA

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Legend

- San Jacinto River
- San Jacinto Region
- Nature Based Priority
  - High
  - Low
SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)
SVI PRIORITY
ALTERNATIVE 1

Legend
- Blue: San Jacinto River
- Green: San Jacinto Region
- Red: Low
- Yellow: Medium
- Green: High

Scale: As Noted

Date: Oct 2022

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Prepared: CAA
Checked: ESA
Approved: JMT
SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)

SVI PRIORITY

ALTERNATIVE 3

Legend

- San Jacinto River
- San Jacinto Region
- SVI Priority
  - Low
  - Medium
  - High

SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)

SVI PRIORITY

ALTERNATIVE 3

Legend

- San Jacinto River
- San Jacinto Region
- SVI Priority
  - Low
  - Medium
  - High

SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)

SVI PRIORITY

ALTERNATIVE 3

Legend

- San Jacinto River
- San Jacinto Region
- SVI Priority
  - Low
  - Medium
  - High

SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)

SVI PRIORITY

ALTERNATIVE 3

Legend

- San Jacinto River
- San Jacinto Region
- SVI Priority
  - Low
  - Medium
  - High

SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)

SVI PRIORITY

ALTERNATIVE 3

Legend

- San Jacinto River
- San Jacinto Region
- SVI Priority
  - Low
  - Medium
  - High

SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)

SVI PRIORITY

ALTERNATIVE 3

Legend

- San Jacinto River
- San Jacinto Region
- SVI Priority
  - Low
  - Medium
  - High

SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)

SVI PRIORITY

ALTERNATIVE 3

Legend

- San Jacinto River
- San Jacinto Region
- SVI Priority
  - Low
  - Medium
  - High

SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)

SVI PRIORITY

ALTERNATIVE 3

Legend

- San Jacinto River
- San Jacinto Region
- SVI Priority
  - Low
  - Medium
  - High

SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)

SVI PRIORITY

ALTERNATIVE 3

Legend

- San Jacinto River
- San Jacinto Region
- SVI Priority
  - Low
  - Medium
  - High

SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)

SVI PRIORITY

ALTERNATIVE 3

Legend

- San Jacinto River
- San Jacinto Region
- SVI Priority
  - Low
  - Medium
  - High

SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)

SVI PRIORITY

ALTERNATIVE 3

Legend

- San Jacinto River
- San Jacinto Region
- SVI Priority
  - Low
  - Medium
  - High

SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)

SVI PRIORITY

ALTERNATIVE 3

Legend

- San Jacinto River
- San Jacinto Region
- SVI Priority
  - Low
  - Medium
  - High

SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)

SVI PRIORITY

ALTERNATIVE 3

Legend

- San Jacinto River
- San Jacinto Region
- SVI Priority
  - Low
  - Medium
  - High

SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)

SVI PRIORITY

ALTERNATIVE 3

Legend

- San Jacinto River
- San Jacinto Region
- SVI Priority
  - Low
  - Medium
  - High

SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)

SVI PRIORITY

ALTERNATIVE 3

Legend

- San Jacinto River
- San Jacinto Region
- SVI Priority
  - Low
  - Medium
  - High

SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)

SVI PRIORITY

ALTERNATIVE 3

Legend

- San Jacinto River
- San Jacinto Region
- SVI Priority
  - Low
  - Medium
  - High

SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)

SVI PRIORITY

ALTERNATIVE 3

Legend

- San Jacinto River
- San Jacinto Region
- SVI Priority
  - Low
  - Medium
  - High

SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)

SVI PRIORITY

ALTERNATIVE 3

Legend

- San Jacinto River
- San Jacinto Region
- SVI Priority
  - Low
  - Medium
  - High

SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)

SVI PRIORITY

ALTERNATIVE 3

Legend

- San Jacinto River
- San Jacinto Region
- SVI Priority
  - Low
  - Medium
  - High

SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)

SVI PRIORITY

ALTERNATIVE 3

Legend

- San Jacinto River
- San Jacinto Region
- SVI Priority
  - Low
  - Medium
  - High

SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)

SVI PRIORITY

ALTERNATIVE 3

Legend

- San Jacinto River
- San Jacinto Region
- SVI Priority
  - Low
  - Medium
  - High

SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)

SVI PRIORITY

ALTERNATIVE 3

Legend

- San Jacinto River
- San Jacinto Region
- SVI Priority
  - Low
  - Medium
  - High

SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)

SVI PRIORITY

ALTERNATIVE 3

Legend

- San Jacinto River
- San Jacinto Region
- SVI Priority
  - Low
  - Medium
  - High

SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)

SVI PRIORITY

ALTERNATIVE 3

Legend

- San Jacinto River
- San Jacinto Region
- SVI Priority
  - Low
  - Medium
  - High

SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)

SVI PRIORITY

ALTERNATIVE 3

Legend

- San Jacinto River
- San Jacinto Region
- SVI Priority
  - Low
  - Medium
  - High

SAN JACINTO REGIONAL FLOOD PLAN

FLOOD MANAGEMENT EVALUATIONS (FME)

SVI PRIORITY

ALTERNATIVE 3

Legend

- San Jacinto River
- San Jacinto Region
- SVI Priority
  - Low
  - Medium
  - High

SAN JACINTO REGIONAL FLOOD PLAN

Flood Management Evaluations (FME)

SVI Priority

Alternative 3
SAN JACINTO REGIONAL FLOOD PLAN
FLOOD MANAGEMENT EVALUATIONS (FME)
MOBILITY PRIORITY
ALTERNATIVE 2

Legend
- San Jacinto River
- San Jacinto Region
- Mobility Priority
  - Low
  - Medium
  - High

0 5 10 20 Miles

Exhibit: 22
Date: Oct 2022
Scale: As Noted
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SAN JACINTO REGIONAL FLOOD PLAN
FLOOD MANAGEMENT EVALUATIONS (FME)
MOBILITY PRIORITY
ALTERNATIVE 2
SAN JACINTO REGIONAL FLOOD PLAN
FLOOD MANAGEMENT EVALUATIONS (FME)
MOBILITY PRIORITY
ALTERNATIVE 3

Legend
- San Jacinto River
- San Jacinto Region
- Mobility Priority
  - Low
  - Medium
  - High

Exhibit 22
Date: Oct 2022
Scale: As Noted
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TORRES & ASSOCIATES, LLC
ENGINEERS | SCIENTISTS | PROFESSIONALS
# APPENDIX 1

## Revised DRAFT Prioritization Ranking of FMEs

<table>
<thead>
<tr>
<th>Recommended Criteria</th>
<th>Priority Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low Priority (1)</td>
</tr>
<tr>
<td><strong>Level of Effort</strong></td>
<td>Effort may be outside of budget constraints ($150k to &gt; $100k)</td>
</tr>
<tr>
<td><strong>Model/Data Availability</strong></td>
<td>No model/project data available</td>
</tr>
<tr>
<td><strong>Known Flood Risk</strong></td>
<td>Low Known Flood Risk</td>
</tr>
<tr>
<td><strong>Number of Entities Benefitted</strong></td>
<td>1-2</td>
</tr>
<tr>
<td><strong>Critical Facilities at risk</strong></td>
<td>Less than Median</td>
</tr>
<tr>
<td><strong>Structures at risk</strong></td>
<td>Less than Median</td>
</tr>
<tr>
<td><strong>Population at risk</strong></td>
<td>Less than Median</td>
</tr>
<tr>
<td><strong>Unique Sponsor</strong></td>
<td>Another FME has higher priority for Sponsor</td>
</tr>
<tr>
<td><strong>Nature Based Solutions</strong></td>
<td>No Nature Based Solution considered in the evaluation</td>
</tr>
<tr>
<td><strong>Priority within Subwatershed (HUC10)</strong></td>
<td>Another FME has higher priority for Subwatershed based on other criteria</td>
</tr>
<tr>
<td><strong>Social Vulnerability Index (SVI)</strong></td>
<td>Low (Less than 0.33)</td>
</tr>
<tr>
<td><strong>Mobility/Length of Inundated Roadway</strong></td>
<td>Less than Median</td>
</tr>
</tbody>
</table>

**NOTE:** If sponsor concurrence is not received, FME may not be considered.
## Preliminary DRAFT Prioritization Ranking of FMEs
(For Reference Only)

<table>
<thead>
<tr>
<th>Recommended Criteria</th>
<th>Priority Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low Priority (1)</td>
</tr>
<tr>
<td><strong>Level of Effort</strong></td>
<td>Significant Effort outside of budget constraints (&gt;150k)</td>
</tr>
<tr>
<td><strong>Model/Data Availability</strong></td>
<td>No model/project data available</td>
</tr>
<tr>
<td><strong>Known Flood Risk</strong></td>
<td>Low Known Flood Risk</td>
</tr>
<tr>
<td><strong>Number of Entities Benefitted</strong></td>
<td>NA</td>
</tr>
<tr>
<td><strong>Critical Facilities at risk</strong></td>
<td>Less than Average</td>
</tr>
<tr>
<td><strong>Structures at risk</strong></td>
<td>Less than Average</td>
</tr>
<tr>
<td><strong>Population at risk</strong></td>
<td>Less than Average</td>
</tr>
<tr>
<td><strong>Unique Sponsor</strong></td>
<td>Another FME has higher priority for Sponsor based on other criteria</td>
</tr>
</tbody>
</table>

**NOTE:** If sponsor concurrence is not received, FME may not be considered.
Appendix 03 – San Jacinto RFPG Technical Committee
Task 12 Survey Results (9/2/2022)

What is the desired outcome of Task 12? Maximize...

![Bar chart showing the desired outcome of Task 12.
1st: Reduction in flood risk and exposure
2nd: FMP Benefit Coverage
3rd: Number of FMPs
4th: Sponsor Involvement
5th: Nature-based Solutions]

*Figure 1: Survey Question #1 – What is the desired outcome of Task 12? Maximize...*

Which selection criteria are most important to consider?

![Bar chart showing the selection criteria.
1st: Known Flood Risk
2nd: Population-at-Risk
3rd: Critical Facilities at Risk
4th: Level of Effort/ME Cost
5th: Structures at Risk
6th: Priority within each subwatershed/geography
7th: Model/Data Availability
8th: Includes nature-based solutions
9th: Number of Entities Benefited
10th: Unique Sponsor Priority
11th: Mobility/Length of inundated roadway
12th: SW]

*Figure 2: Survey Question #2 – Which selection criteria are most important to consider?*
What is the preferred distribution of FME types?

![Bar chart showing survey results]

*Figure 3: Survey Question #3 – What is the preferred distribution of FME types?*
What is the desired outcome of Task 12? Maximize...

Figure 1: Survey Question #1 – What is the desired outcome of Task 12? Maximize...

Which selection criteria are most important to consider?

Figure 2: Survey Question #2 – Which selection criteria are most important to consider?
What is the preferred distribution of FME types?

Figure 3: Survey Question #3 – What is the preferred distribution of FME types?
The statistical analysis was performed for all criteria to determine the boundaries of prioritization for the San Jacinto Regional Flood Planning Group (RFPG). The criteria included in the statistical analysis include the following: Level-of-Effort, Number of Entities Benefitted, Critical Facilities at Risk, Structures at Risk, Social Vulnerability Index (SVI), Mobility/Length of Inundated Roadway, and Population at Risk. In Appendix 05, the statistical terms which are used for the analysis is explained and the result of statistical analysis is shown for each criterion.

Glossary of Statistical Terms

**Mean**

The sum of a list of numbers, divided by the total number of elements in the list.

**Median**

"Middle value" of a list. The smallest number such that at least half the numbers in the list are no greater than it. If the list has an odd number of entries, the median is the middle entry in the list after sorting the list into increasing order. If the list has an even number of entries, the median is the smaller of the two middle numbers after sorting. The median can be estimated from a histogram by finding the smallest number such that the area under the histogram to the left of that number is 50%.

**Mode**

For lists, the mode is a most frequent value. A list can have more than one mode. For histograms, a mode is a relative maximum.

**Standard Deviation**

A measure of the amount of variation or dispersion of a set of values. A low standard deviation indicates that the values tend to be close to the mean of the set, while a high standard deviation indicates that the values are spread out over a wider range.

**Skewness**

A measure of the asymmetry of the probability distribution of a real-valued random variable about its mean. The skewness value can be positive, zero, negative, or undefined.

**Skewed Distribution**

A distribution that is not symmetrical.
Positively skewed distribution (or right-skewed distribution)  A type of distribution in which most values are clustered around the left tail of the distribution while the right tail of the distribution is longer. (Mean > Median > Mode)

Negatively skewed distribution (or left-skewed distribution)  A type of distribution in which more values are concentrated on the right side of the distribution graph while the left tail of the distribution graph is longer. (Mode > Median > Mean)

Results of Statistical Analysis

The summary of statistical analysis results for each criterion are shown in Table 1 and Table 2. There are three commonly used metrics for the measures of central tendency: Mean, Median, and Mode. These values were calculated for each criterion as well as the standard deviation as a measure of spread (variability). Also, the skewness was checked as a measure of the asymmetry of the distribution. Table 1 provides the results of the whole dataset, while Table 2 shows the results when the most extreme outliers are removed from the dataset.

### Table 1. Summary of Statistical Analysis for Each Criteria

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>STD</th>
<th>Skewness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level-of-Effort</td>
<td>50,131</td>
<td>30,000</td>
<td>30,000</td>
<td>36,939</td>
<td>-</td>
</tr>
<tr>
<td>Number of Entities Benefitted</td>
<td>2.95</td>
<td>3.00</td>
<td>3.00</td>
<td>1.04</td>
<td>-</td>
</tr>
<tr>
<td>Critical Facilities at Risk</td>
<td>19</td>
<td>4</td>
<td>0</td>
<td>79</td>
<td>Positive</td>
</tr>
<tr>
<td>Structures at Risk</td>
<td>1,773</td>
<td>511</td>
<td>0</td>
<td>5,318</td>
<td>Positive</td>
</tr>
<tr>
<td>Social Vulnerability Index (SVI)</td>
<td>0.46</td>
<td>0.45</td>
<td>0.64</td>
<td>0.24</td>
<td>-</td>
</tr>
<tr>
<td>Mobility/Length of Inundated Roadway</td>
<td>33.5</td>
<td>9.9</td>
<td>9.9</td>
<td>99</td>
<td>Positive</td>
</tr>
<tr>
<td>Population at Risk</td>
<td>8,726</td>
<td>2,324</td>
<td>0</td>
<td>30,182</td>
<td>Positive</td>
</tr>
</tbody>
</table>
Appendix 06

FME One-Page Fact Sheets in order of Revised

DRAFT Prioritization List
Flood Management Evaluation (FME)

Title: Halls Bayou - Planning, Right-Of-Way, Design and Construction of Halls Bayou Flood Risk Management Project

ID#: 061000404

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend?: Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Other

Study description: Develop BCA to become a FMP. Projects as part of the Halls Ahead Bond Implementation Program, could reduce the risk of flooding for more than 700 structures in an Atlas 14 1% rainfall event.

New Hydrologic or Hydraulic model?: No

Emergency Need?: No

Existing/Anticipated models in near term?: Yes

County: Harris

Watershed HUC# (if known): 120401040605, 120401040601, 120401040302, 120401040604, 120401040

Drainage area (Square miles, est.): 44

Goal(s): 060000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 43,171

# of structures: 12,422

Critical facilities: 98

Flood risk type: Riverine? Yes

Coastal? No

Local? Yes

Playa? No

Farm/Ranch land impacted (acres): 10

Roadway(s) impacted (length): 122

Number of low water crossings: 7

Historical road closures: 7

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

Title: Greens Bayou, Jackson Bayou, White Oak Bayou, Cypress Creek and San Jacinto River Areas Subdivision Drainage Mitigation Project

ID#: 061000438

Sponsor (name of entity, not person): Harris (County)

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: This proposed solution recommends establishing positive drainage and clear flow lines, which are expected to reduce the water surface elevation in the subdivision to mitigate the structural flood risk for all 1,445 beneficiaries.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes
County: Harris, Waller, Liberty, Montgomery
Watershed HUC#: 120402040300, 120402040200, 120402040400, 120402040100
Drainage area (Square miles, est.): 1,042
Goal(s): 060000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 335,950
# of structures: 53,765
Critical facilities: 937
Flood risk type: Riverine? No
Coastal? No
Local? Yes
Playa? No
Farm/Ranch land impacted (acres): 2,742
Roadway(s) impacted (length): 1,052
Number of low water crossings: 47
Historical road closures: 47

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: CDBG-MIT
Flood Management Evaluation (FME)

Title: Catalina

ID: 061000465

Sponsor (name of entity, not person): Houston (Municipality)

RFPG recommend? Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Study to develop a BCR and other data needed to elevate project to a FMP. FIF application information unavailable.

New Hydrologic or Hydraulic model? No

Emergency Need? No

Existing/Anticipated models in near term? Yes

County: Harris

Watershed HUC# (if known): 120402004100

Drainage area (Square miles, est.): 262

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 155,360

# of structures: 33,653

Critical facilities: 395

Flood risk type: Riverine? Yes

Coastal? No

Local? Yes

Playa? No

Farm/Ranch land impacted (acres): 597

Roadway(s) impacted (length): 578

Number of low water crossings: 16

Historical road closures: 16

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999

[Map images of FME Area and Regional view of FME area]
Flood Management Evaluation (FME)

Title: Rivershire West - Grand Lake Creek Watershed

ID#: 061000453

Sponsor (name of entity, not person): Conroe (Municipality)

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Develop a benefits cost analysis in support of this project identified in the City of Conroe Master Drainage Plan.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes

County: Montgomery
Watershed HUC# (if known): 120401010207, 120401010401

Drainage area (Square miles, est.): 10
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 4,662
# of structures: 879
Critical facilities: 6

Flood risk type: Riverine? Yes
Coastal? No
Local? Yes
Playa? No

Farm/Ranch land impacted (acres): 5
Roadway(s) impacted (length): 17
Number of low water crossings: 9
Historical road closures: 9

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: 999999

[Map of Conroe and surrounding area with labels for FME Area and Regional view of FME area]
Flood Management Evaluation (FME)

Title: 37th Street, Galveston, Drainage Project

ID#: 061000311

Sponsor (name of entity, not person): Galveston (Municipality)

RFPG recommend?: Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Further study and FMP development of existing storm sewer system replacement and upgrades using the city’s updated drainage criteria that now require a 25-year storm drainage capacity.

New Hydrologic or Hydraulic model?: No

Emergency Need?: No

Existing/Anticipated models in near term?: No

County: Brazoria, Galveston

Watershed HUC# (if known): 120402040200

Drainage area (Square miles, est.): 253

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 150,807

# of structures: 40,153

Critical facilities: 648

Flood risk type: Riverine? No, Coastal? Yes, Local? Yes, Playa? No, Other? No

Farm/Ranch land impacted (acres): 2,683

Roadway(s) impacted (length): 723

Number of low water crossings: 26

Historical road closures: 26

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: CDBG-MIT
Title: Brays Bayou Restore Channel Conveyance Capacity Along D115-00-00

ID#: 061000187

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Further study of channel improvements from partnership project to restore channel conveyance including Atlas 14 rainfalls.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes

County: Harris
Watershed HUC# (if known): 120401040401
Drainage area (Square miles, est.): 6
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 34,583
# of structures: 5,579
Critical facilities: 75
Flood type: Riverine? Yes, Coastal? No, Local? No, Playa? No, Other? No
Farm/Ranch land impacted (acres): 1
Roadway(s) impacted (length): 59
Number of low water crossings: 0
Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $1,020,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: 999999
Flood Management Evaluation (FME)

Title: Goose Creek Flood Risk Reduction Phase 1

ID#: 061000334

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Study to develop a Benefit Cost Analysis needed for this project to become a FMP. 1.65 Miles of Goose Creek channel modifications (Downstream of IH 10) with proposed detention basin "J".

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes

County: Harris
Watershed HUC# (if known): 120401040705, 120401040706

Drainage area (Square miles, est.): 35
Goal(s): 060000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 9,371
# of structures: 1,883
Critical facilities: 64

Flood risk type: Riverine? Yes
Coastal? No
Local? Yes
Playa? No

Farm/Ranch land impacted (acres): 73
Roadway(s) impacted (length): 33

Number of low water crossings: 1
Historical road closures: 1

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: HCFCD

[Maps showing area and regional view of FME area]
Title: City of Alvin Flood Gauges

ID#: 061000037

Sponsor (name of entity, not person): Alvin (Municipality)

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Study to identify areas where best to purchase additional flood gauges to be placed at bayous and key high water areas within City of Alvin.

New Hydrologic or Hydraulic model?: No

Emergency Need?: No

Existing/Anticipated models in near term?: No

County: Brazoria, Galveston, Fort Bend

Watershed HUC# (if known): 120402040300, 120402040200, 120402040400, 120402040100

Goal(s): 06000001, 06000011, 06000012, 06000015

Drainage area (Square miles, est.): 25

100-Year Flood Risk Summary

Population at risk: 21,569

# of structures: 3,445

Critical facilities: 18

Flood risk type: Riverine? No

Coastal? No

Local? Yes

Playa? No

Other? No

Farm/Ranch land impacted (acres): 262

Roadway(s) impacted (length): 57

Number of low water crossings: 0

Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $75,000

Amount of Available Funding: $99,999

Federal funding availability: Yes

Funding source: $99,999
**Study Details**

- **Study type**: Project Planning
- **Study description**: Study to develop a BCA to become FMP. This stormwater detention basin compliments the federal project on White Oak Bayou which will reduce the risk of flooding for 1,800 structures in an Atlas 14 1/5 rainfall event.

**100-Year Flood Risk Summary**

- Population at risk: 90,865
- # of structures: 11,098
- Critical facilities: 90
- Flood risk type: Riverine? Yes, Coastal? No, Local? Yes
- Farm/Ranch land impacted (acres): 24
- Number of low water crossings: 0
- Roadway(s) impacted (length): 164
- Historical road closures: 0

**Estimated Cost and Funding Availability**

- Total Cost: $30,000
- Amount of Available Funding: 999,999
- Federal funding availability: Yes
- Funding source: 999,999
Flood Management Evaluation (FME)

Title: Stormwater Drainage Improvement - Nottingham ditch

ID: 061000115

Sponsor (name of entity, not person): League City (Municipality)

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: No
County: Galveston, Harris
Drainage area (Square miles, est.): 53

Watershed HUC# (if known): 120402040200, 120402040100
Goal(s): 06000001, 060000011, 060000012, 060000015

100-Year Flood Risk Summary

Population at risk: 20,978
# of structures: 5,251
Critical facilities: 25

Flood risk type: Riverine? No
Coastal? No
Local? Yes
Playa? No

Farm/Ranch land impacted (acres): 1,308
Roadway(s) impacted (length): 105

Number of low water crossings: 2
Historical road closures: 2

Estimated Cost and Funding Availability

Total Cost: $50,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: 999999
# Flood Management Evaluation (FME)

**Title:** Evaluation of Dredging of Channels that Exit Into Lake Houston

**ID:** 061000437

**Sponsor (name of entity, not person):** Harris (County)

**RFPG recommend:** Yes  
**Reason for Recommendation:** Alignment with RFPG goals and TWDB guidance principles.

## Study Details

**Study type:** Project Planning

**Study description:** Study to develop a Benefit Cost Analysis needed for this project to become a FMP. FIF application information unavailable.

**New Hydrologic or Hydraulic model:** No

**Emergency Need:** No

**Existing/Anticipated models in near term:** Yes

**County:** Harris, Liberty, Montgomery

**Watershed HUC# (if known):** 120401010501, 120401030205, 120401030402

**Drainage area (Square miles, est.):** 156

**Goal(s):** 060000001, 060000011, 060000012, 060000015

## 100-Year Flood Risk Summary

<table>
<thead>
<tr>
<th>Population at risk</th>
<th>25,574</th>
</tr>
</thead>
<tbody>
<tr>
<td># of structures</td>
<td>6,662</td>
</tr>
<tr>
<td>Critical facilities</td>
<td>64</td>
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</table>

<table>
<thead>
<tr>
<th>Flood risk type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riverine? No</td>
</tr>
<tr>
<td>Coastal? No</td>
</tr>
<tr>
<td>Local? Yes</td>
</tr>
<tr>
<td>Playa? No</td>
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</table>

<table>
<thead>
<tr>
<th>Farm/Ranch land impacted (acres)</th>
<th>327</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roadway(s) impacted (length)</td>
<td>169</td>
</tr>
<tr>
<td>Number of low water crossings</td>
<td>1</td>
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## Estimated Cost and Funding Availability

<table>
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<tr>
<th>Total Cost</th>
<th>$30,000</th>
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<tr>
<td>Amount of Available Funding</td>
<td>999999</td>
</tr>
<tr>
<td>Federal funding availability</td>
<td>Yes</td>
</tr>
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**Funding source:** Unknown
Flood Management Evaluation (FME)

Title: Liberty County Culvert Replacement Project

ID#: 061000148

Sponsor (name of entity, not person): Liberty (County)

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Increase culvert size in identified flood hazard problem areas within Liberty County.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: No

County: Liberty
Watershed HUC# (if known): 120401030201, 120401030108, 120401030109, 120401030205, 120401030

Drainage area (Square miles, est.): 1,170
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 4,854
# of structures: 3,618
Critical facilities: 8

Flood risk type: Riverine: No
Coastal: No
Local: Yes
Playa: No

Farm/Ranch land impacted (acres): 1,379
Roadway(s) impacted (length): 144

Number of low water crossings: 7
Historical road closures: 7

Estimated Cost and Funding Availability

Total Cost: $120,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

Title: Houston Sunnyside Area Flood Mitigation

ID: 061000468

Sponsor (name of entity, not person): Houston (Municipality)

RFPG recommend? Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Further study to develop into a FMP. Includes new storm sewer trunk systems on major thoroughfares & new or improved neighborhood storm sewer systems. Will also require construction of detention basins to mitigate the proposed improvements.

New Hydrologic or Hydraulic model? No

Emergency Need? No

Existing/Anticipated models in near term? Yes

County: Harris

Watershed HUC# (if known): 120401040402, 120401040502, 120401040501, 120402040100

Drainage area (Square miles, est.): 24

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 5,236

# of structures: 1,640

Critical facilities: 5

Flood risk type: Riverine? Yes

Coastal? No

Local? Yes

Playa? No

Farm/Ranch land impacted (acres): 10

Roadway(s) impacted (length): 22

Number of low water crossings: 0

Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

Title: Willow Creek Watershed Plan - M120 Detention/Preservation Site

ID#: 061000339
Sponsor (name of entity, not person): Harris County Flood Control District
RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Study to develop BCA to become a FMP. Pursue purchase of property for regional detention, floodplain preservation, & habitat preservation.

New Hydrologic or Hydraulic model?: NO
Emergency Need?: NO
Existing/Anticipated models in near term?: YEs
County: Harris
Watershed HUC# (if known): 120401020106, 120401020105, 120401020210
Drainage area (Square miles, est.): 11
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 2,443
# of structures: 828
Critical facilities: 6
Flood risk type: Riverine? Yes
Coastal? No
Local? Yes
Playa? No
Other? No
Farm/Ranch land impacted (acres): 56
Roadway(s) impacted (length): 25
Number of low water crossings: 5
Historical road closures: 5

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: 2018 Bond Fund

FME Area

Regional view of FME area
Flood Management Evaluation (FME)

Title: Fort Bend County Willow Fork Channel Improvements

ID# 061000318

Sponsor (name of entity, not person): Fort Bend County Drainage District

RFPG recommend? Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Further study and BCA development. Combo of 11 different channel improvements were identified along Willow Fork and its tributaries as part of the Fort Bend County Master Drainage Plan that, when combined, will provide a 100-year level of service.

New Hydrologic or Hydraulic model? No
Emergency Need? No
Existing/Anticipated models in near term? No
County: Fort Bend, Harris, Waller
Watershed HUC# (if known): 120401040102, 120401040103, 120401040104, 120401040101, 12040104010
Drainage area (Square miles, est.): 46
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 1,450
# of structures: 404
Critical facilities: 10
Flood risk type: Riverine? Yes
Coastal? No
Local? No
Playa? No
Farm/Ranch land impacted (acres): 80
Roadway(s) impacted (length): 8
Number of low water crossings: 2
Historical road closures: 2

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: $999,999
Federal funding availability: Yes
Funding source: Unknown

[Maps of FME Area and Regional view of FME area]
Flood Management Evaluation (FME)

Title: Brazoria County Camp Mohawk County Park Development
ID#: 061000440
Sponsor (name of entity, not person): Brazoria (County)
RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Develop Benefit Cost Analysis in support of the purchase of approximately 160 acres of flood prone area adjacent to and surrounding Camp Mohawk County Park to be used as open space.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes
County: Brazoria
Watershed HUC# (if known): 120402040300, 120402040200, 120402040400, 120402040100
Drainage area (Square miles, est.): 1,482
Goal(s): 060000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 65,547
# of structures: 18,848
Critical facilities: 248
Flood risk type: Riverine? No, Coastal? No, Local? Yes, Playa? No
Farm/Ranch land impacted (acres): 8,584
Roadway(s) impacted (length): 328
Number of low water crossings: 0
Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: 999999
Flood Management Evaluation (FME)

Title: City of Pasadena - Hurricane Harvey Drainage Mitigation Project

ID#: 061000370

Sponsor (name of entity, not person): Pasadena (Municipality)

RFPG recommend?: Yes  Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Further study to develop & elevate project into a FMP. Previously submitted by the Flood Infrastructure Fund (FIF) but was not approved at the time. Projects included in this application will be updated to include BCA and Atlas 14 rainfall consideration.

New Hydrologic or Hydraulic model?: No

Emergency Need?: No

Existing/Anticipated models in near term?: No

County: Harris

Watershed HUC# (if known): 120401040706, 120402030105, 120402030106

Drainage area (Square miles, est.): 1,771

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 976,798

# of structures: 143,642

Critical facilities: 2,332

Flood risk type: Riverine? No  Coastal? No  Local? No  Playa? No

Farm/Ranch land impacted (acres): 5,993

Roadway(s) impacted (length): 2,408

Number of low water crossings: 89

Historical road closures: 89

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: Unknown
Flood Management Evaluation (FME)

Title: Addicks Reservoir - Right-Of-Way Acquisition, Design and Construction of Channel Conveyance Improvements, Bypass Channel, and Detention for South Mayde Creek

ID# 061000315

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend? Yes Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Study to develop a BCA needed for this project to become a FMP. This project is part of the South Mayde Creek Plan to reduce flood risk 70+ homes & reduce the rainfall event by 340+ acres in pre-Atlas 1% rainfall event.

New Hydrologic or Hydraulic model? NO Emergency Need? NO Existing/Anticipated models in near term? YES

County: Harris

Watershed HUC# (if known): 120401040202, 120401040104, 120401040203, 120401040303

Drainage area (Square miles, est.): 13 Goal(s): 060000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 5,217

# of structures: 944

Critical facilities: 21

Flood risk type: Riverine? Yes Coastal? No Local? Yes Playa? No Other? No

Farm/Ranch land impacted (acres): 19

Roadway(s) impacted (length): 16

Number of low water crossings: 0

Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000 Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999

FME Area

Regional view of FME area
Flood Management Evaluation (FME)

Title: City of Friendswood - Clear Creek Inline & Offline Detention - Bay Area Blvd. Phase 1

ID# 061000424

Sponsor (name of entity, not person): Friendswood (Municipality)

RFPG recommend? Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: This project, which includes terraces, detention, and a trail network, will reduce water surface elevations on Clear Creek within the City of Friendswood and will make the Blackhawk Wastewater Treatment Facility more resilient.

New Hydrologic or Hydraulic model? No
Emergency Need? No
Existing/Anticipated models in near term? Yes

County: Galveston, Harris
Watershed HUC# (if known): 120402040200, 120402040100

Drainage area (Square miles, est.): 21
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 5,467
# of structures: 1,680
Critical facilities: 2

Flood risk type: Riverine? No
Coastal? No
Local? Yes
Playa? No

Farm/Ranch land impacted (acres): 18
Roadway(s) impacted (length): 38
Number of low water crossings: 5
Historical road closures: 5

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: CDBG-MIT
# Flood Management Evaluation (FME)

**Title:** City of Manvel Rogers Rd. Drainage Improvements  
**ID:** 061000415  
**Sponsor:** Manvel (Municipality)  
**RFPG recommend?** Yes  
**Reason for Recommendation:** Alignment with RFPG goals and TWDB guidance principles.

### Study Details

**Study type:** Project Planning  
**Study description:** Further study Alleluia Trail Rogers Rd & All Roads off Rogers drainage improvements, including storm sewer rehabilitation and ditch deepening.

| New Hydrologic or Hydraulic model? | NO | Emergency Need? | NO | Existing/Anticipated models in near term? | NO | County | Brazoria | Watershed HUC# (if known) | 120402040100,120402040400,120402040200 |
|-----------------------------------|----|-----------------|----|------------------------------------------|----| Drainage area (Square miles, est.) | 27 | Goal(s) | 060000001,06000011,06000012,06000015 |

### 100-Year Flood Risk Summary

<table>
<thead>
<tr>
<th>Population at risk</th>
<th>8,190</th>
<th># of structures</th>
<th>1,250</th>
<th>Critical facilities</th>
<th>8</th>
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<tr>
<td>Flood risk type:</td>
<td>Riverine?</td>
<td>No</td>
<td>Coastal?</td>
<td>No</td>
<td>Local?</td>
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<tr>
<td>Farm/Ranch land impacted (acres)</td>
<td>179</td>
<td>Roadway(s) impacted (length)</td>
<td>43</td>
<td></td>
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<tr>
<td>Number of low water crossings</td>
<td>0</td>
<td>Historical road closures</td>
<td>0</td>
<td></td>
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### Estimated Cost and Funding Availability

<table>
<thead>
<tr>
<th>Total Cost</th>
<th>$30,000</th>
<th>Amount of Available Funding</th>
<th>999999</th>
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</thead>
<tbody>
<tr>
<td>Funding source</td>
<td>999999</td>
<td><strong>FME Area</strong></td>
<td><strong>Regional view of FME area</strong></td>
<td></td>
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</table>
Flood Management Evaluation (FME)

Title: Halls Bayou - Design and Construction of a Stormwater Detention Basin in Brock Park

ID#: 061000403

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend?: Yes  Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Develop BCA to become a FMP. Provides additional stormwater detention in support of flood damage reduction as part of the Halls Ahead Bond Implementation Program. The project will be a partnership with the City of Houston.

New Hydrologic or Hydraulic model?: NO  Emergency Need?: NO  Existing/Anticipated models in near term?: YES

County: Harris  Watershed HUC# (if known): 120401040605,120401040601,120401040302,120401040604,120401040

Drainage area (Square miles, est.): 44  Goal(s): 06000001,06000011,06000012,06000015

100-Year Flood Risk Summary

Population at risk: 43,171  # of structures: 12,422  Critical facilities: 98

Flood risk type: Riverine? Yes  Coastal? No  Local? Yes  Playa? No  Other? No

Farm/Ranch land impacted (acres): 10  Roadway(s) impacted (length): 122

Number of low water crossings: 7  Historical road closures: 7

Estimated Cost and Funding Availability

Total Cost: $30,000  Amount of Available Funding: 999999  Federal funding availability: Yes

Funding source: 999999

[Maps of FME Area and Regional View of FME area]
# Flood Management Evaluation (FME)

**Title:** Mary's Creek Middle Segment  
**ID:** 061000063  
**Sponsor:** Pearland (Municipality)  
**RFPG recommend:** Yes  
**Reason for Recommendation:** Alignment with RFPG goals and TWDB guidance principles.

## Study Details

**Study type:** Project Planning  
**Study description:** Further study including Atlas 14 rainfall incorporation and Benefit Cost Analysis of proposed channel modifications included in the City of Pearland master drainage plan.

<table>
<thead>
<tr>
<th>New Hydrologic or Hydraulic model?</th>
<th>No</th>
<th>Emergency Need?</th>
<th>No</th>
<th>Existing/Anticipated models in near term?</th>
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</thead>
<tbody>
<tr>
<td><strong>County</strong></td>
<td>Brazoria</td>
<td><strong>Watershed HUC# (if known)</strong></td>
<td>120402040100</td>
<td><strong>Goal(s)</strong></td>
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<td><strong>Drainage area (Square miles, est.)</strong></td>
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<td><strong>Goal(s)</strong></td>
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</table>

## 100-Year Flood Risk Summary

<table>
<thead>
<tr>
<th>Population at risk</th>
<th>2,861</th>
<th><strong># of structures</strong></th>
<th>994</th>
<th><strong>Critical facilities</strong></th>
<th>5</th>
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<tbody>
<tr>
<td>Flood risk type:</td>
<td>Riverine?</td>
<td>Yes</td>
<td>Coastal?</td>
<td>No</td>
<td>Local?</td>
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<tr>
<td>Farm/Ranch land impacted (acres)</td>
<td>10</td>
<td>Roadway(s) impacted (length)</td>
<td>19</td>
<td>Historical road closures</td>
<td>0</td>
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<tr>
<td>Number of low water crossings</td>
<td>0</td>
<td>Roadway(s) impacted (length)</td>
<td>19</td>
<td>Historical road closures</td>
<td>0</td>
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## Estimated Cost and Funding Availability

<table>
<thead>
<tr>
<th>Total Cost</th>
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<th><strong>Amount of Available Funding</strong></th>
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<th><strong>Federal funding availability</strong></th>
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<td><strong>Funding source</strong></td>
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<td><strong>Funding source</strong></td>
<td>999999</td>
<td><strong>Funding source</strong></td>
<td>999999</td>
</tr>
</tbody>
</table>
Flood Management Evaluation (FME)

Title: City of Southside Place - Auden Street Drainage Improvement Project

ID: 051000435
Sponsor (name of entity, not person): Southside Place (Municipality)
RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details
Study type: Project Planning
Study description: This project provides for design and construction of a new stormwater conveyance system for the City of Southside Place, that will have the capacity to convey a City standard storm event (2-year storm).

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes
County: Harris
Watershed HUC# (if known): 120401040402
Drainage area (Square miles, est.): 46
Goal(s): 060000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary
Population at risk: 93,959
# of structures: 8,855
Critical facilities: 146
Flood risk type: Riverine? No, Coastal? No, Local? Yes, Playa? No, Other? No
Farm/Ranch land impacted (acres): 9
Roadway(s) impacted (length): 125
Number of low water crossings: 1
Historical road closures: 1

Estimated Cost and Funding Availability
Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: CDBG-MIT
Title: Greens Bayou (P100-00-00) Mid-Reach Channel Conveyance Improvements From John F. Kennedy Blvd to Veterans Memorial Drive (Ultimate Project)

ID#: 061000365

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend?: Yes  Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Study to develop a BCR required for this project to become a FMP. 2,000 ac-ft proposed Hardy stormwater detention basin and channel conveyance improvements throughout the Green's Bayou Mid-Reach (From John F. Kennedy Blvd to Veterans Memorial Drive).

New Hydrologic or Hydraulic model?: No

Emergency Need?: No

Existing/Anticipated models in near term?: Yes

County: Harris

Watershed HUC# (if known): 120401010502,120401010501,120401020106,120401020107,120401040

Drainage area (Square miles, est.): 14

Goal(s): 06000001,06000011,06000012,06000015

100-Year Flood Risk Summary

Population at risk: 58,451

# of structures: 3,247

Critical facilities: 72

Flood risk type: Riverine? Yes  Coastal? No  Local? Yes  Playa? No  Other? No

Farm/Ranch land impacted (acres): 14

Roadway(s) impacted (length): 71

Number of low water crossings: 0

Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

Title: Goose Creek Flood Risk Reduction Phase 2

ID: 061000335

Sponsor: Harris County Flood Control District

RFPG recommend: Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Study to develop a Benefit Cost Analysis needed for this project to become a FMP. 1.00 Mile of Goose Creek channel modifications (Upstream of IH 10) with proposed detention basin "I".

New Hydrologic or Hydraulic model?: No

Emergency Need?: No

Existing/Anticipated models in near term?: Yes

County: Harris

Watershed HUC# (if known): 120401040705, 120401040706

Drainage area (Square miles, est.): 35

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 9,371

# of structures: 1,883

Critical facilities: 64

Flood risk type: Riverine? Yes

Coastal? No

Local? Yes

Plana? No

Other? No

Farm/Ranch land impacted (acres): 73

Roadway(s) impacted (length): 33

Number of low water crossings: 1

Historical road closures: 1

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999
# Flood Management Evaluation (FME)

**Title**: Goose Creek Flood Risk Reduction Phase 3  
**ID#**: 061000336  
**Sponsor (name of entity, not person)**: Harris County Flood Control District  
**RFPG recommend?**: Yes  
**Reason for Recommendation**: Alignment with RFPG goals and TWDB guidance principles.

## Study Details

<table>
<thead>
<tr>
<th>Study type</th>
<th>Project Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study description</td>
<td>Study to develop a Benefit Cost Analysis needed for this project to become a FMP. Local channel modifications and crossing structure improvements along O117 and O126.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>New Hydrologic or Hydraulic model?</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Need?</td>
<td>No</td>
</tr>
<tr>
<td>Existing/Anticipated models in near term?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>County</th>
<th>Harris</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watershed HUC# (if known)</td>
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<tr>
<td>Drainage area (Square miles, est.)</td>
<td>35</td>
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<tr>
<td>Goal(s)</td>
<td>06000001,06000011,06000012,06000015</td>
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## 100-Year Flood Risk Summary

<table>
<thead>
<tr>
<th>Population at risk</th>
<th>9,371</th>
</tr>
</thead>
<tbody>
<tr>
<td># of structures</td>
<td>1,883</td>
</tr>
<tr>
<td>Critical facilities</td>
<td>64</td>
</tr>
<tr>
<td>Flood risk type: Riverine?</td>
<td>Yes</td>
</tr>
<tr>
<td>Coastal?</td>
<td>No</td>
</tr>
<tr>
<td>Local?</td>
<td>Yes</td>
</tr>
<tr>
<td>Playa?</td>
<td>No</td>
</tr>
<tr>
<td>Farm/Ranch land impacted (acres)</td>
<td>73</td>
</tr>
<tr>
<td>Roadway(s) impacted (length)</td>
<td>33</td>
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<tr>
<td>Number of low water crossings</td>
<td>1</td>
</tr>
<tr>
<td>Historical road closures</td>
<td>1</td>
</tr>
</tbody>
</table>

## Estimated Cost and Funding Availability

| Total Cost | $30,000 |
| Amount of Available Funding | 999999 |
| Federal funding availability | Yes |
| Funding source | 999999 |

---

![FME Area](image1.png)

![Regional view of FME area](image2.png)
Flood Management Evaluation (FME)

Title: Halls Bayou - Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-21-00

ID# 061000396

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend? Yes  Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Develop BCA to become a FMP. Part of Halls Ahead Bond Implementation Program, could reduce flood risk for 60+ structures & floodplain by 40+ acres.

New Hydrologic or Hydraulic model? No  Emergency Need? No  Existing/Anticipated models in near term? Yes

County: Harris  Watershed HUC# (if known): 120401040605, 120401040601, 120401040302, 120401040604, 120401040

Drainage area (Square miles, est.): 6  Goal(s): 060000001, 060000011, 060000012, 060000015

100-Year Flood Risk Summary

Population at risk: 12,360  # of structures: 3,555  Critical facilities: 35

Flood risk type: Riverine? Yes  Coastal? No  Local? Yes  Playa? No  Other? No

Farm/Ranch land impacted (acres): 2  Roadway(s) impacted (length): 29

Number of low water crossings: 1  Historical road closures: 1

Estimated Cost and Funding Availability

Total Cost: $30,000  Amount of Available Funding: 999999  Federal funding availability: Yes

Funding source: 999999

[Maps showing FME Area and Regional view of FME area]
Flood Management Evaluation (FME)

**Title**: Brays Bayou - Keegans Bayou (D118-00-00) Flood Risk Reduction

**ID**: 061000328

**Sponsor**: Harris County Flood Control District

**RFPG recommend?**: Yes  
**Reason for Recommendation**: Alignment with RFPG goals and TWDB guidance principles.

**Study Details**

**Study type**: Project Planning

**Study description**: Study to develop a BCR required for this project to become a FMP. A project could reduce the risk flooding for over 2,500 structures and could reduce the frequency and duration of flooding along about 100 miles of roadway.

**New Hydrologic or Hydraulic model?**: No  
**Emergency Need?**: No  
**Existing/Anticipated models in near term?**: Yes

**County**: Fort Bend, Harris  
**Watershed HUC# (if known)**: 120401040401

**Drainage area (Square miles, est.)**: 23  
**Goal(s)**: 06000001, 06000011, 06000012, 06000015

**100-Year Flood Risk Summary**

**Population at risk**: 30,383  
**# of structures**: 2,549  
**Critical facilities**: 27

**Flood risk type**:
- Riverine: No
- Coastal: No
- Local: Yes
- Playa: No

**Farm/Ranch land impacted (acres)**: 3

**Number of low water crossings**: 0

**Roadway(s) impacted (length)**: 39

**Historical road closures**: 0

**Estimated Cost and Funding Availability**

**Total Cost**: $30,000  
**Amount of Available Funding**: 999999  
**Federal funding availability**: Yes

**Funding source**: 999999
Flood Management Evaluation (FME)

Title: Danubina Drainage Improvements
ID#: 061000422
Sponsor (name of entity, not person): Baytown (Municipality)
RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Study to further this project and develop an FMP. This CDBG-MIT application involves the installation and construction of various storm sewer and detention infrastructure.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: No
County: Chambers, Harris
Watershed HUC# (if known): 120402030106
Drainage area (Square miles, est.): 48
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 2,324
# of structures: 550
Critical facilities: 7
Flood risk type: Riverine? No
Coastal? No
Local? Yes
Playa? No
Farm/Ranch land impacted (acres): 98
Roadway(s) impacted (length): 14
Number of low water crossings: 0
Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: CDBG-MIT

[Maps showing location of Baytown and surrounding areas]
Flood Management Evaluation (FME)

Title: Halls Bayou Drainage Project Bond C-01

ID#: 061000355

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend? Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Study to develop a Benefit Cost Analysis needed for this project to become a FMP. FIF application information unavailable.

New Hydrologic or Hydraulic model? No
Emergency Need? No
Existing/Anticipated models in near term? Yes

County: Harris
Watershed HUC# (if known): 120401040605, 120401040601, 120401040302, 120401040604, 120401040

Drainage area (Square miles, est.): 6
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 10,940
# of structures: 3,188
Critical facilities: 13

Flood risk type: Riverine? No
Coastal? No
Local? No
Playa? No

Farm/Ranch land impacted (acres): 0
Roadway(s) impacted (length): 32

Number of low water crossings: 1
Historical road closures: 1

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: Unknown

![FME Area](image1)

![Regional view of FME area](image2)
Title: Halls Bayou - Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-25-00 & P118-25-01

ID#: 061000399

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Study to develop a BCR required for this project to become a FMP. Would reduce flood risk for 600+ structures. Facilitates future drainage projects by more outfall depth.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes

County: Harris
Watershed HUC# (if known): 120401040605, 120401040601, 120401040302, 120401040604, 120401040

Drainage area (Square miles, est.): 6
Goal(s): 060000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 10,940
# of structures: 3,188
Critical facilities: 13

Flood risk type: Riverine? Yes
Coastal? No
Local? Yes
Playa? No

Farm/Ranch land impacted (acres): 0
Roadway(s) impacted (length): 32

Number of low water crossings: 1
Historical road closures: 1

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: 999999

---

[Maps showing FME Area and Regional view of FME area]
Flood Management Evaluation (FME)

**Title**: Halls Bayou - Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-27-00

**ID**: 061000400

**Sponsor (name of entity, not person)**: Harris County Flood Control District

**RFPG recommend?**: Yes

**Reason for Recommendation**: Alignment with RFPG goals and TWDB guidance principles.

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### Study Details

**Study type**: Project Planning

**Study description**: Develop BCA to become a FMP. Part of Halls Ahead Bond Implementation Program, could reduce flood risk for 150+ structures, size of the floodplain by 90+ acres, frequency & duration of flooding along 3+ miles of roadway in an Atlas 14 1% event.

**New Hydrologic or Hydraulic model?**: No

**Emergency Need?**: No

**Existing/Anticipated models in near term?**: Yes

**County**: Harris

**Watershed HUC# (if known)**: 120401040601, 120401040602, 120401040603, 120401040604, 120401040605

**Drainage area (Square miles, est.)**: 6

**Goal(s)**: 06000001, 06000011, 06000012, 06000015

---

### 100-Year Flood Risk Summary

- **Population at risk**: 10,940
- **# of structures**: 3,188
- **Critical facilities**: 13
- **Flood risk type**: Riverine? Yes, Coastal? No, Local? Yes, Playa? No
- **Farm/Ranch land impacted (acres)**: 0
- **Roadway(s) impacted (length)**: 32
- **Number of low water crossings**: 1
- **Historical road closures**: 1

---

### Estimated Cost and Funding Availability

- **Total Cost**: $30,000
- **Amount of Available Funding**: 999999
- **Federal funding availability**: Yes
- **Funding source**: 999999
Flood Management Evaluation (FME)

Title: Blalock Road Drainage Improvement Project

ID#: 061000327

Sponsor (name of entity, not person): Piney Point Village (Municipality)

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Study to further the proposed project that includes increasing the capacity of the drainage system with a 9'x9' RCB to replace dual 36-inch RCP along the east side of the road and an open ditch with driveway culverts on the west side of the road.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: No

County: Harris
Watershed HUC# (if known): 120401040302, 120401040303

Drainage area (Square miles, est.): 7
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 365
# of structures: 35
Critical facilities: 1

Flood type: Riverine? No
Coastal? No
Local? Yes
Playa? No

Farm/Ranch land impacted (acres): 999,999
Roadway(s) impacted (length): 0

Number of low water crossings: 0
Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: CDBG-MIT

Maps:
- FME Area
- Regional view of FME area
Flood Management Evaluation (FME)

Title: Sawdust Road Bridge Elevation Project

ID #: 061000426

Sponsor (name of entity, not person): Montgomery (County)

RFPG recommend?: Yes  Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Further study of study, design, elevation, & replacement of the Sawdust Road Bridge to mitigate the risks associated with riverine flooding for the citizens residing in the Grogan’s Point and Timberlakes - Timberridge Subdivisions.

New Hydrologic or Hydraulic model?: No

Emergency Need?: No

Existing/Anticipated models in near term?: No

County: Harris, Montgomery

Watershed HUC#: (if known) 120401010402, 120401010404, 120401020107, 120401020210, 120401020

Drainage area (Square miles, est.): 33

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 5,042

Structures at risk: 794

Critical facilities: 5

Flood risk type: Riverine? Yes

Coastal? No

Local? No

Playa? No

Other? No

Farm/Ranch land impacted (acres): 15

Roadway(s) impacted (length): 18

Number of low water crossings: 0

Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: CDBG-MIT
Flood Management Evaluation (FME)

Title: Jester Detention Basin

ID: 061000353

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend? Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Study to develop a Benefit Cost Analysis needed for this project to become a FMP. Construction of a 25 acre stormwater detention basin. Estimated construction cost is $10,047,910. This application is requesting $10,000,000.00 of these funds.

New Hydrologic or Hydraulic model? No
Emergency Need? No
Existing/Anticipated models in near term? Yes

County: Harris
Watershed HUC# (if known): 120401020106,120401020107,120401020210,120401020212,120401020

Drainage area (Square miles, est.): 93
Goal(s): 06000001,06000011,06000012,06000015

100-Year Flood Risk Summary

Population at risk: 18,540
# of structures: 2,995
Critical facilities: 53

Flood risk type: Riverine? No
Coastal? No
Local? Yes
Playa? No
Other? No

Farm/Ranch land impacted (acres): 44
Roadway(s) impacted (length): 60
Number of low water crossings: 4
Historical road closures: 4

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: CDBG-MIT

[Maps showing FME Area and Regional view of FME area]
**Flood Management Evaluation (FME)**

**Title**: Westador Stormwater Detention Basin

**ID**: 061000356

**Sponsor (name of entity, not person)**: Harris County Flood Control District

**RFPG recommend?** Yes  
**Reason for Recommendation**: Alignment with RFPG goals and TWDB guidance principles.

### Study Details

- **Study type**: Project Planning
- **Study description**: Study to develop a BCR required for this project to become a FMP. The Westador Detention Basin is a proposed detention mitigation project within the Cypress Creek Watershed and located south of Cypress Creek and east and west of K141-00-00.

<table>
<thead>
<tr>
<th>New Hydrologic or Hydraulic model?</th>
<th>NO</th>
<th>Emergency Need?</th>
<th>NO</th>
<th>Existing/Anticipated models in near term?</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>County</td>
<td>Harris</td>
<td></td>
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<tr>
<td>Watershed HUC# (if known)</td>
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<tr>
<td>Drainage area (Square miles, est.)</td>
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<tr>
<td>Goal(s)</td>
<td>060000001, 06000001, 060000012, 06000015</td>
<td></td>
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</tr>
</tbody>
</table>

### 100-Year Flood Risk Summary

- **Population at risk**: 18,540
- **# of structures**: 2,995
- **Critical facilities**: 53
- **Flood risk type**: Riverine? Yes, Coastal? No, Local? Yes, Playa? No, Other? No
- **Farm/Ranch land impacted (acres)**: 44
- **Number of low water crossings**: 4
- **Roadway(s) impacted (length)**: 60
- **Historical road closures**: 4

### Estimated Cost and Funding Availability

- **Total Cost**: $30,000
- **Amount of Available Funding**: 999999
- **Federal funding availability**: Yes
- **Funding source**: CDBG-MIT
Flood Management Evaluation (FME)

Title: G103-38-00 (Kingwood Diversion Ditch)

ID: 061000360

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend? Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Study to develop a BCR required for this to become a FMP. Improvements to the Kingwood Diversion Ditch include channel modifications, flow diversion from Bens Branch, bridge replacements, as well as a new outfall to the West Fork San Jacinto River.

New Hydrologic or Hydraulic model? NO
Emergency Need? NO
Existing/Anticipated models in near term? YES
County: Harris, Montgomery
Watershed HUC# (if known): 120401010501, 120401010404, 120401030110, 120401030402
Drainage area (Square miles, est.): 27
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 17,400
# of structures: 3,464
Critical facilities: 54
Flood risk type: Riverine? YES
Coastal? NO
Local? NO
Playa? NO
Farm/Ranch land impacted (acres): 9
Roadway(s) impacted (length): 61
Number of low water crossings: 2
Historical road closures: 2

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: YES
Funding source: 999999

[Maps showing FME Area and Regional view of FME area]
**Flood Management Evaluation (FME)**

**Title:** G103-80-03.18 (Taylor Gully)

**ID #:** 061000361

**Sponsor (name of entity, not person):** Harris County Flood Control District

**RFPG recommend?** Yes  
**Reason for Recommendation:** Alignment with RFPG goals and TWDB guidance principles.

### Study Details

**Study type:** Project Planning

**Study description:** Study to develop a BCR required for this project to become a FMP. Improvements to Taylor Gully include two miles of channel conveyance improvements to the upper limits of Taylor Gully and a concrete low flow structure.

### 100-Year Flood Risk Summary

<table>
<thead>
<tr>
<th>Population at risk</th>
<th>16,230</th>
</tr>
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<tbody>
<tr>
<td># of structures</td>
<td>3,223</td>
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<tr>
<td>Critical facilities</td>
<td>47</td>
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</table>

**Flood risk type:** Riverine? Yes  
Coastal? No  
Local? No  
Playa? No  
Other? No

<table>
<thead>
<tr>
<th>Farm/Ranch land impacted (acres)</th>
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</thead>
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<tr>
<td>Number of low water crossings</td>
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<td>Roadway(s) impacted (length)</td>
<td>58</td>
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<tr>
<td>Historical road closures</td>
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### Estimated Cost and Funding Availability

<table>
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<tr>
<th>Total Cost</th>
<th>$30,000</th>
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<tbody>
<tr>
<td>Funding source</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Amount of Available Funding</th>
<th>999999</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal funding availability</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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![FME Area](image1.png)  
![Regional view of FME area](image2.png)
Flood Management Evaluation (FME)

Title: Hostetter and Gourd Creek Bridges Elevation Evaluation

ID: 061000130

Sponsor: Montgomery, San Jacinto, Walker

RFPG recommend: Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Further study to elevate and install culverts on Hostetter and Gourd Creek roadways to prevent flooding and/or flood damage on roadway.

New Hydrologic or Hydraulic model: No

Emergency Need: No

Existing/Anticipated models in near term: No

County: Montgomery, San Jacinto, Walker

Watershed HUC#: 120401010201, 120401010204, 120401030101, 120401030301, 120401030

Drainage area (Square miles, est.): 76

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 1,900

# of structures: 1,169

Critical facilities: 0

Flood risk type: Riverine: No, Coastal: No, Local: Yes, Playa: No

Farm/Ranch land impacted (acres): 25

Roadway(s) impacted (length): 10

Number of low water crossings: 2

Historical road closures: 2

Estimated Cost and Funding Availability

Total Cost: $130,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

Title: Brays Bayou - Poor Farm Ditch

ID#: 061000186

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend?: Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Study to develop a BCR and elevate project to a FMP. Further study of channel improvements from partnership project to restore channel conveyance including Atlas 14 rainfalls.

New Hydrologic or Hydraulic model?: No

Emergency Need?: No

Existing/Anticipated models in near term?: Yes

County: Harris

Watershed HUC# (if known): 120401040402

Drainage area (Square miles, est.): 3

Goal(s): 060000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 25,842

# of structures: 3,295

Critical facilities: 34

Flood risk type:
- Riverine?: Yes
- Coastal?: No
- Local?: No
- Playa?: No
- Other?: No

Farm/Ranch land impacted (acres): 0

Roadway(s) impacted (length): 37

Number of low water crossings: 0

Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $690,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

Title: 100-WP06 for Vince Bayou Watershed Planning Project

ID#: 061000329

Sponsor (name of entity, not person): Harris (County)

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Study to develop a Benefit Cost Analysis needed for this project to become a FMP. Right-of-way acquisition, design, and construction of a stormwater detention basin and schannel widening near Strawberry Road and Young Street.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes

County: Harris
Watershed HUC# (if known): 120401040703, 120401040502, 120402040100

Drainage area (Square miles, est.): 4
Goal(s): 060000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 4,153
# of structures: 948
Critical facilities: 8

Flood risk type: Riverine? Yes
Coastal? No
Local? Yes
Playa? No

Farm/Ranch land impacted (acres): 2
Roadway(s) impacted (length): 14
Number of low water crossings: 1
Historical road closures: 1

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: 999999

[Maps showing FME Area and Regional view of FME area]
Flood Management Evaluation (FME)

Title: 100-WP10 for Vince Bayou Watershed Planning Project

ID#: 061000330

Sponsor (name of entity, not person): Harris (County)

RFPG recommend: Yes  Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

**Study Details**

- **Study type**: Project Planning
- **Study description**: Study to develop a Benefit Cost Analysis needed for this project to become a FMP. Right-of-way acquisition, Design, and Construction of Two Stormwater Detention Basins near Westside Dr. and Westside Ct.

**New Hydrologic or Hydraulic model**: No  **Emergency Need**: No  **Existing/Anticipated models in near term**: Yes

<table>
<thead>
<tr>
<th>County</th>
<th>Watershed HUC# (if known)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harris</td>
<td>120401040703, 120401040502, 120402040100</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Drainage area (Square miles, est.)</th>
<th>Goal(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>060000001, 06000011, 06000012, 06000015</td>
</tr>
</tbody>
</table>

**100-Year Flood Risk Summary**

<table>
<thead>
<tr>
<th>Population at risk</th>
<th># of structures</th>
<th>Critical facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,153</td>
<td>948</td>
<td>8</td>
</tr>
</tbody>
</table>

- **Flood type**: Riverine? No  Coastal? No  Local? Yes  Playa? No  Other? No

<table>
<thead>
<tr>
<th>Farm/Ranch land impacted (acres)</th>
<th>Roadway(s) impacted (length)</th>
<th>Number of low water crossings</th>
<th>Historical road closures</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>14</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

**Estimated Cost and Funding Availability**

- **Total Cost**: $30,000
- **Amount of Available Funding**: 999999
- **Federal funding availability**: Yes

**Funding source**: 999999

---

**Maps**

- **FME Area**
- **Regional view of FME area**
Flood Management Evaluation (FME)

Title: 100-WP07 for Vince Bayou Watershed Planning Project

ID#: 051000331

Sponsor (name of entity, not person): Harris (County)

RFPG recommend?: Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Study to develop a BCR needed for this project to become a FMP. Pasadena (CIP) Street Lowering (Various). Right-of-way acquisition, Design, and Construction of Stormwaters Detention Basin and construction of Culverts near Pasadena Blvd.

New Hydrologic or Hydraulic model?: No

Emergency Need?: No

Existing/Anticipated models in near term?: Yes

County: Harris

Watershed HUC#: 120401040703, 120401040502, 120402040100

Drainage area (Square miles, est.): 4

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 4,153

# of structures: 948

Critical facilities: 8

Flood risk type: Riverine? No

Coastal? No

Local? Yes

Playa? No

Other? No

Farm/Ranch land impacted (acres): 2

Roadway(s) impacted (length): 14

Number of low water crossings: 1

Historical road closures: 1

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999

[Map of the area showing Pasadena, Golden Acres, South Houston, East Haven, Allendale, Genoa, and FME Area.]
Flood Management Evaluation (FME)

Title 1100-WP11 for Vince Bayou Watershed Planning Project
ID# 061000332
Sponsor (name of entity, not person) Harris (County)
RFPG recommend? Yes
Reason for Recommendation Alignment with RFPG goals and TWDB guidance principles.

Study Details
Study type Project Planning
Study description Study to develop a Benefit Cost Analysis needed for this project to become a FMP. Right-of-way acquisition, Design, and Construction of Stormwater Detention Basins near Spencer Hwy. and Tulip Street.
New Hydrologic or Hydraulic model? No
Emergency Need? No
Existing/ Anticipated models in near term? Yes
County Harris
Watershed HUC# (if known) 120401040703, 120401040502, 120402040100
Drainage area (Square miles, est.) 4
Goal(s) 06000001, 0600001, 06000012, 06000015

100-Year Flood Risk Summary
Population at risk 4,153
# of structures 948
Critical facilities 8
Flood risk type: Riverine? No
Coastal? No
Local? Yes
Playa? No
Farm/Ranch land impacted (acres) 2
Roadway(s) impacted (length) 14
Number of low water crossings 1
Historical road closures 1

Estimated Cost and Funding Availability
Total Cost $30,000
Amount of Available Funding 999999
Federal funding availability Yes
Funding source 999999

FME Area
Regional view of FME area
Title: Houston Kashmere Gardens Area Flood Mitigation

ID#: 061000434

Sponsor (name of entity, not person): Houston (Municipality)

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Further study to develop this project into a FMP. The project includes improvements to storm sewer, roadside ditch systems, culverts, sewer inlets, and the construction of detention basins.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes
County: Harris
Watershed HUC# (if known): 120401040703, 120401040604, 120401040606, 120401040304, 120401040
Drainage area (Square miles, est.): 31
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 34,523
# of structures: 6,244
Critical facilities: 98
Flood risk type: Riverine?: No
Coastal?: No
Local?: Yes
Playa?: No
Other?: No
Farm/Ranch land impacted (acres): 21
Roadway(s) impacted (length): 102
Number of low water crossings: 6
Historical road closures: 6

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: CDBG-MIT

[Map of the FME Area]
Flood Management Evaluation (FME)

Title: Shoreacres Drainage Assessment

ID#: 061000031

Sponsor (name of entity, not person): Shoreacres (Municipality)

RFPG recommend?: Yes  Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Further analysis necessary to determine downstream impacts and whether any additional volume in A104-11-00 would be available during a coincident event on Taylor Bayou.

New Hydrologic or Hydraulic model?: No  Emergency Need?: No  Existing/Anticipated models in near term?: Yes

County: Chambers, Harris  Watershed HUC# (if known): 120402040100

Drainage area (Square miles, est.): 1  Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 2,456  # of structures: 801  Critical facilities: 3

Flood risk type: Riverine?: Yes  Coastal?: No  Local?: Yes  Playa?: No

Farm/Ranch land impacted (acres): 0  Roadway(s) impacted (length): 17

Number of low water crossings: 1  Historical road closures: 1

Estimated Cost and Funding Availability

Total Cost: $100,000  Amount of Available Funding: 999999  Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

Title: Rush Creek Lake - Lake Conroe Estates Watershed

ID# 061000461

Sponsor (name of entity, not person): Conroe (Municipality)

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Develop a benefits cost analysis in support of this project identified in the City of Conroe Master Drainage Plan.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes

County: Montgomery
Watershed HUC# (if known): 120401010207, 120401010206
Drainage area (Square miles, est.): 2
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 130
# of structures: 80
Critical facilities: 0

Flood risk type: Riverine? Yes
Coastal? No
Local? Yes
Playa? No
Other? No

Farm/Ranch land impacted (acres): 1
Roadway(s) impacted (length): 0
Number of low water crossings: 1
Historical road closures: 1

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: 999999
Flood Management Evaluation (FME)

Title: Barker Reservoir Flood Risk Reduction and Park Project

ID#: 061000324
Sponsor (name of entity, not person): Willow Fork Drainage District
RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details
Study type: Project Planning
Study description: Study to further the proposed project. FIF application information unavailable.
New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes
County: Fort Bend, Harris, Waller
Watershed HUC# (if known): 120401040103
Drainage area (Square miles, est.): 27
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary
Population at risk: 306
# of structures: 115
Critical facilities: 2
Flood risk type: Riverine? Yes
Coastal? No
Local? Yes
Playa? No
Farm/Ranch land impacted (acres): 20
Roadway(s) impacted (length): 1
Number of low water crossings: 0
Historical road closures: 0

Estimated Cost and Funding Availability
Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: Unknown
Title: Clear Creek - Hughes Stormwater Detention (SWD) Basin

ID#: 061000421

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Develop BCA to become a FMP. Project identified in Clear Creek Federal Project study for flood management but did not yield high enough cost benefit ratio for Federal funding. Therefore, Harris and Galveston County have decided to fund this effort.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes

County: Brazoria, Galveston, Fort Bend, Harris
Watershed HUC# (if known): 120401040502, 120401040501, 120402040200, 120402040400, 1204020400

Drainage area (Square miles, est.): 200
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 120,966
# of structures: 27,164
Critical facilities: 233

Flood risk type: Riverine? Yes
Coastal? No
Local? Yes
Playa? No

Farm/Ranch land impacted (acres): 533
Roadway(s) impacted (length): 458

Number of low water crossings: 12
Historical road closures: 12

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: Harris and Galveston County
Flood Management Evaluation (FME)

Title: Cypress Creek Implementation Plan - Various Detention Sites

ID: 061000357

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend? Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Study to develop a Benefit Cost Analysis needed for this project to become a FMP. The Implementation Plan identifies that approximately 14,000 acre-feet of stormwater detention volume across 23 different sites reducing flooding risk.

New Hydrologic or Hydraulic model? NO

Emergency Need? NO

Existing/Anticipated models in near term? YES

County: Harris

Watershed HUC# (if known): 120401020104, 120401020106, 120401020105, 120401020107, 120401020

Drainage area (Square miles, est.): 118

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 21,959

# of structures: 4,100

Critical facilities: 73

Flood risk type:

Riverine? YES

Coastal? NO

Local? YES

Playa? NO

Farm/Ranch land impacted (acres): 75

Roadway(s) impacted (length): 80

Number of low water crossings: 3

Historical road closures: 3

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

Title: Luce Bayou (Z100-00-00-P026) Bypass Channel

ID#: 061000407

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes

County: Harris
Watershed HUC# (if known): 120401010502, 120401010501, 120401030205, 120401030402, 120401040

Drainage area (Square miles, est.): 75
Goal(s): 060000001, 060000011, 060000012, 060000015

100-Year Flood Risk Summary

Population at risk: 5,763
# of structures: 1,939
Critical facilities: 25

Riverine?: Yes
Coastal?: No
Local?: Yes
Playa?: No

Farm/Ranch land impacted (acres): 1,122
Roadway(s) impacted (length): 40

Number of low water crossings: 0
Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: 999999
# Flood Management Evaluation (FME)

## Title
Luce Bayou (2100-00-00-P026) Channelization

## ID#
061000412

## Sponsor (name of entity, not person)
Harris County Flood Control District

## RFPG recommend?
Yes

## Reason for Recommendation
Alignment with RFPG goals and TWDB guidance principles.

## Study Details

<table>
<thead>
<tr>
<th>Study type</th>
<th>Project Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study description</td>
<td>Study to develop a Benefit Cost Analysis needed for this project to become a FMP. Construction of channel improvements along Luce main stem.</td>
</tr>
<tr>
<td>New Hydrologic or Hydraulic model?</td>
<td>No</td>
</tr>
<tr>
<td>Emergency Need?</td>
<td>No</td>
</tr>
<tr>
<td>Existing/Anticipated models in near term?</td>
<td>Yes</td>
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<tr>
<td>County</td>
<td>Harris</td>
</tr>
<tr>
<td>Watershed HUC# (if known)</td>
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<tr>
<td>Drainage area (Square miles, est.)</td>
<td>75</td>
</tr>
<tr>
<td>Goal(s)</td>
<td>06000001, 06000011, 06000012, 06000015</td>
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</table>

## 100-Year Flood Risk Summary

| Population at risk | 5,763 |
| # of structures | 1,939 |
| Critical facilities | 25 |
| Flood risk type: Riverine? | Yes |
| Coastal? | No |
| Local? | Yes |
| Playa? | No |
| Farm/Ranch land impacted (acres) | 1,122 |
| Roadway(s) impacted (length) | 40 |
| Number of low water crossings | 0 |
| Historical road closures | 0 |

## Estimated Cost and Funding Availability

| Total Cost | $30,000 |
| Amount of Available Funding | 999999 |
| Federal funding availability | Yes |
| Funding source | 999999 |

---

[Image of a map showing FME Area and Regional view of FME area]
Title: Luce Bayou (Z100-00-00-P026) Upstream Detention

ID#: 061000413

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend? Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Study to develop a Benefit Cost Analysis needed for this project to become a FMP. Construction of regional detention upstream of Luce Bayou, including acquiring open land north of Harris County.

New Hydrologic or Hydraulic model? No

Emergency Need? No

Existing/Anticipated models in near term? Yes

County: Harris

Watershed HUC# (if known): 120401010502, 120401010501, 120401030205, 120401030402, 1204010400

Drainage area (Square miles, est.): 75

Goal(s): 060000001, 060000011, 060000012, 060000015

100-Year Flood Risk Summary

Population at risk: 5,763

# of structures: 1,939

Critical facilities: 25 Riverine? Yes

Flood risk type: Coastal? No

Local? Yes

Playa? No

Other? No

Farm/Ranch land impacted (acres): 1,122

Roadway(s) impacted (length): 40

Number of low water crossings: 0

Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

Title: Widen Drainage Systems and Culverts in City of Kemah

ID#: 061000121

Sponsor (name of entity, not person): Kemah (Municipality)

RFPG recommend?: Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Further study to widen drainage systems and increase culvert size to accommodate increased water flows. Coordinate efforts with water district.

New Hydrologic or Hydraulic model?: NO

Emergency Need?: NO

Existing/Anticipated models in near term?: NO

County: Galveston, Chambers

Watershed HUC# (if known): 120402040200, 120402040100

Drainage area (Square miles, est.): 2

Goal(s): 060000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 3,492

# of structures: 562

Critical facilities: 7

Flood risk type: Riverine? No

Coastal? No

Local? Yes

Playa? No

Other? No

Farm/Ranch land impacted (acres): 1

Roadway(s) impacted (length): 12

Number of low water crossings: 999,999

Historical road closures: 999,999

Estimated Cost and Funding Availability

Total Cost: $100,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

Title: Little Cypress Creek - Management, Right-of-Way Acquisition, Design and Construction of the Little Cypress Creek Frontier Program

ID#: 061000358

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend?: Yes  Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Study to develop a BCR required for this to become a FMP. The Little Cypress Creek Frontier program will reduce the risk of flooding and include detention, sediment control, vegetation management and other flood risk management projects.

New Hydrologic or Hydraulic model?: No  Emergency Need?: No  Existing/Anticipated models in near term?: Yes

County: Harris  Watershed HUC# (if known): 120401020103, 120401020104, 120401020106, 120401020101, 120401020

Drainage area (Square miles, est.): 52  Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 2,896  # of structures: 1,213  Critical facilities: 15
Flood risk type: Riverine? Yes  Coastal? No  Local? No  Playa? No  Other? No
Farm/Ranch land impacted (acres): 192  Roadway(s) impacted (length): 19
Number of low water crossings: 4  Historical road closures: 4

Estimated Cost and Funding Availability

Total Cost: $30,000  Amount of Available Funding: 999999  Federal funding availability: Yes
Funding source: 999999
Flood Management Evaluation (FME)

Title: Hunting Bayou Wallisville Outfall (H103-00-00) - Gellhorn Drive

ID# 061000405

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend? Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Study to develop a Benefit Cost Analysis needed for this project to become a FMP. Diversion channel expansion for Gellhorn Drive flood reductions.

New Hydrologic or Hydraulic model? NO
Emergency Need? NO
Existing/Anticipated models in near term? YES

County: Harris
Watershed HUC# (if known): 120401040601, 120401040701

Drainage area (Square miles, est.): 5
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 10,304
# of structures: 396
Critical facilities: 1

Flood risk type: Riverine? Yes
Coastal? No
Local? Yes
Playa? No

Farm/Ranch land impacted (acres): 1
Roadway(s) impacted (length): 13
Number of low water crossings: 2
Historical road closures: 2

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: 999999
## Study Details

**Type:** Project Planning  
**Description:** Study to develop a Benefit Cost Analysis needed for this project to become a FMP. Denver Harbor drainage system improvements.

<table>
<thead>
<tr>
<th>New Hydrologic or Hydraulic model?</th>
<th>NO</th>
<th>Emergency Need?</th>
<th>NO</th>
<th>Existing/Anticipated models in near term?</th>
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<tbody>
<tr>
<td>County</td>
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<td>Watershed HUC# (if known)</td>
<td>120401040606,120401040701</td>
<td>Drainage area (Square miles, est.)</td>
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## 100-Year Flood Risk Summary

<table>
<thead>
<tr>
<th>Population at risk</th>
<th>10,304</th>
<th># of structures</th>
<th>396</th>
<th>Critical facilities</th>
<th>1</th>
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</thead>
<tbody>
<tr>
<td>Flood risk type</td>
<td>Riverine?</td>
<td>Yes</td>
<td>Coastal?</td>
<td>No</td>
<td>Local?</td>
</tr>
<tr>
<td>Farm/Ranch land impacted (acres)</td>
<td>1</td>
<td>Roadway(s) impacted (length)</td>
<td>13</td>
<td>Historical road closures</td>
<td>2</td>
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<tr>
<td>Number of low water crossings</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
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</table>

## Estimated Cost and Funding Availability

<table>
<thead>
<tr>
<th>Total Cost</th>
<th>$30,000</th>
<th>Amount of Available Funding</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Funding source</td>
<td>999999</td>
<td></td>
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<td></td>
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</table>
Flood Management Evaluation (FME)

Title: Downtown Cleveland Drainage Line Installation

ID: 061000153

Sponsor: Cleveland (Municipality)

RFPG recommend?: Yes  Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Further study of proposed larger drainage lines in downtown Cleveland to reduce flooding.

New Hydrologic or Hydraulic model?: No

Emergency Need?: No

Existing/Anticipated models in near term?: No

County: Liberty, Montgomery, San Jacinto

Watershed HUC#: (if known) 120401030201, 120401030108, 120401030109, 120401030203, 120401030

Drainage area (Square miles, est.): 19

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 1,267

# of structures: 261

Critical facilities: 0

Flood risk type: Riverine? No  Coastal? No  Local? Yes  Playa? No  Other? No

Farm/Ranch land impacted (acres): 29

Roadway(s) impacted (length): 27

Number of low water crossings: 1

Historical road closures: 1

Estimated Cost and Funding Availability

Total Cost: $50,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999

Maps:
- FME Area
- Regional view of FME area
Flood Management Evaluation (FME)

**Title**: 100-WP01 Vince Bayou Watershed Planning Project Recommendation

**ID#**: 061000326

**Sponsor (name of entity, not person)**: Harris County Flood Control District

**RFPG recommend?** Yes  
**Reason for Recommendation**: Alignment with RFPG goals and TWDB guidance principles.

### Study Details

**Study type**: Project Planning  
**Study description**: Study to develop a BCR required for this project to become a FMP. Alt-6 Detention basin and channel widening near Strawberry road on left bank of Vince Bayou.

<table>
<thead>
<tr>
<th>New Hydrologic or Hydraulic model?</th>
<th>NO</th>
<th>Emergency Need?</th>
<th>NO</th>
<th>Existing/Anticipated models in near term?</th>
<th>YES</th>
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</thead>
</table>

**County**: Harris  
**Watershed HUC# (if known)**: 120401040703,120402040100

**Drainage area (Square miles, est.)**: 2  
**Goal(s)**: 06000001,06000011,06000012,06000015

## 100-Year Flood Risk Summary

<table>
<thead>
<tr>
<th>Population at risk</th>
<th>3,202</th>
<th># of structures</th>
<th>766</th>
<th>Critical facilities</th>
<th>5</th>
</tr>
</thead>
</table>

**Flood risk type**: Riverine? Yes  
**Coastal?** No  
**Local?** No  
**Playa?** No  
**Other?** No

**Farm/Ranch land impacted (acres)**: 0  
**Roadway(s) impacted (length)**: 8  
**Number of low water crossings**: 0  
**Historical road closures**: 0

### Estimated Cost and Funding Availability

**Total Cost**: $30,000  
**Amount of Available Funding**: 999999  
**Federal funding availability**: Yes

**Funding source**: Harris County, Harris County Flood Control District, City of Pasedena CIP

---

**Maps**:  
- FME Area  
- Regional view of FME area
Flood Management Evaluation (FME)

Title: Halls Bayou Drainage Project Bond C-26 & C-27

ID#: 061000354

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend?: Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Study to develop a Benefit Cost Analysis needed for this project to become a FMP. FIF application information unavailable.

New Hydrologic or Hydraulic model?: No

Emergency Need?: No

Existing/Anticipated models in near term?: Yes

County: Harris

Watershed HUC# (if known): 120401040605, 120401040601, 120401040302, 120401040604, 12040104010401040

Drainage area (Square miles, est.): 2

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 5,511

# of structures: 1,432

Critical facilities: 8

Flood risk type: Riverine? No

Coastal? No

Local? No

Playa? No

Other? Yes

Farm/Ranch land impacted (acres): 999,999

Roadway(s) impacted (length): 10

Number of low water crossings: 1

Historical road closures: 1

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: 99999

Federal funding availability: Yes

Funding source: Unknown
Flood Management Evaluation (FME)

Title: Halls Bayou - Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-23-00 and P118-23-02

ID: 061000397

Sponsor: Harris County Flood Control District

RFPG recommend: Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Study to develop a BCR required for this project to become a FMP. Would reduce flood risk for 300+ structures, size of floodplain by 200+ acres. Facilitates future drainage projects by more outfall depth.

New Hydrologic or Hydraulic model?: No

Emergency Need?: No

Existing/Anticipated models in near term?: Yes

County: Harris

Watershed HUC#: 120401040605, 120401040601, 120401040302, 120401040604, 12040104040

Drainage area (Square miles, est.): 2

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 5,511

# of structures: 1,432

Critical facilities: 8

Flood risk type: Riverine? Yes

Coastal? No

Local? Yes

Playa? No

Other? No

Farm/Ranch land impacted (acres): 999,999

Roadway(s) impacted (length): 10

Number of low water crossings: 1

Historical road closures: 1

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999

FME Area

Regional view of FME area
# Flood Management Evaluation (FME)

**Title:** City of Pasadena - Hurricane Harvey Drainage Mitigation Project 2

**ID:** 061000371

**Sponsor:** Pasadena (Municipality)

**RFPG recommend:** Yes

**Reason for Recommendation:** Alignment with RFPG goals and TWDB guidance principles.

## Study Details

**Study type:** Project Planning

**Study description:** Further study to develop & elevate project into a FMP. Previously submitted by the Flood Infrastructure Fund (FIF) but was not approved at the time. Projects included in this application will be updated to include BCA and Atlas 14 rainfall consideration.

<table>
<thead>
<tr>
<th>New Hydrologic or Hydraulic model?</th>
<th>NO</th>
<th>Emergency Need?</th>
<th>NO</th>
<th>Existing/Anticipated models in near term?</th>
<th>NO</th>
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<tbody>
<tr>
<td>County</td>
<td>Harris</td>
<td>Watershed HUC# (if known)</td>
<td>120401010501,120401030205,120401030402</td>
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<tr>
<td>Drainage area (Square miles, est.)</td>
<td>1,771</td>
<td>Goal(s)</td>
<td>06000001,06000011,06000012,06000015</td>
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</table>

## 100-Year Flood Risk Summary

<table>
<thead>
<tr>
<th>Population at risk</th>
<th>976,798</th>
<th># of structures</th>
<th>143,642</th>
<th>Critical facilities</th>
<th>2,332</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flood risk type:</td>
<td>Riverine? No</td>
<td>Coastal? No</td>
<td>Local? No</td>
<td>Playa? Other? Yes</td>
<td>No</td>
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<tr>
<td>Farm/Ranch land impacted (acres)</td>
<td>5,993</td>
<td>Roadway(s) impacted (length)</td>
<td>2,408</td>
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<tr>
<td>Number of low water crossings</td>
<td>89</td>
<td>Historical road closures</td>
<td>89</td>
<td></td>
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</table>

## Estimated Cost and Funding Availability

<table>
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<th>Total Cost</th>
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<th>Amount of Available Funding</th>
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<th>Federal funding availability</th>
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<tbody>
<tr>
<td>Funding source</td>
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</tr>
</tbody>
</table>
# Flood Management Evaluation (FME)

**Title**: City of Pasadena - Hurricane Harvey Drainage Mitigation Project 3

**ID#**: 061000372

**Sponsor (name of entity, not person)**: Pasadena (Municipality)

**RFPG recommend?**: Yes  
**Reason for Recommendation**: Alignment with RFPG goals and TWDB guidance principles.

## Study Details

**Study type**: Project Planning

**Study description**: Further study to develop & elevate project into a FMP. Previously submitted by the Flood Infrastructure Fund (FIF) but was not approved at the time. Projects included in this application will be updated to include BCA and Atlas 14 rainfall consideration.

**New Hydrologic or Hydraulic model?**: NO  
**Emergency Need?**: NO  
**Existing/Anticipated models in near term?**: NO

**County**: Harris  
**Watershed HUC# (if known)**: 120401010501, 120401030205, 120401030402

**Drainage area (Square miles, est.)**: 1,771  
**Goal(s)**: 06000001, 06000011, 06000012, 06000015

## 100-Year Flood Risk Summary

<table>
<thead>
<tr>
<th>Population at risk</th>
<th># of structures</th>
<th>Critical facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>976,798</td>
<td>143,642</td>
<td>2,332</td>
</tr>
</tbody>
</table>

**Flood risk type**: Riverine? No  
**Coastal?**: No  
**Local?**: No  
**Playa?**: No  
**Other?**: Yes

**Farm/Ranch land impacted (acres)**: 5,993

**Number of low water crossings**: 89

**Roadway(s) impacted (length)**: 2,408

**Historical road closures**: 89

## Estimated Cost and Funding Availability

**Total Cost**: $30,000  
**Amount of Available Funding**: 999,999

**Federal funding availability**: Yes

**Funding source**: Unknown

---

![FME Area](image1.png)  
![Regional view of FME area](image2.png)
## Flood Management Evaluation (FME)

**Title:** Middle Armand Bayou Protection Project

**ID:** 061000467

**Sponsor (name of entity, not person):** Pasadena (Municipality)

**RFPG recommend:** Yes

**Reason for Recommendation:** Alignment with RFPG goals and TWDB guidance principles.

### Study Details

<table>
<thead>
<tr>
<th>Study type</th>
<th>Other</th>
</tr>
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<tbody>
<tr>
<td>Study description</td>
<td>Further study to develop this project into a FMP. FIF application information unavailable.</td>
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</table>

<table>
<thead>
<tr>
<th>New Hydrologic or Hydraulic model?</th>
<th>No</th>
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<tbody>
<tr>
<td>Emergency Need?</td>
<td>No</td>
</tr>
<tr>
<td>Existing/Anticipated models in near term?</td>
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<table>
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<tr>
<th>County</th>
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<td>Watershed HUC# (if known)</td>
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<td>Drainage area (Square miles, est.)</td>
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<tr>
<td>Goal(s)</td>
<td>06000001, 06000011, 06000012, 06000015</td>
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### 100-Year Flood Risk Summary

<table>
<thead>
<tr>
<th>Population at risk</th>
<th>155,360</th>
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</thead>
<tbody>
<tr>
<td># of structures</td>
<td>33,653</td>
</tr>
<tr>
<td>Critical facilities</td>
<td>395</td>
</tr>
</tbody>
</table>

#### Flood risk type:
- Riverine: Yes
- Coastal: No
- Local: Yes
- Playa: No

#### Farm/Ranch land impacted (acres):
- 597

#### Number of low water crossings:
- 16

#### Roadway(s) impacted (length):
- 578

### Estimated Cost and Funding Availability

<table>
<thead>
<tr>
<th>Total Cost</th>
<th>$30,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of Available Funding</td>
<td>999999</td>
</tr>
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<td>Federal funding availability</td>
<td>Yes</td>
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</table>

| Funding source | 999999 |

---

**FME Area**

**Regional view of FME area**
# Flood Management Evaluation (FME)

**Title:** Flood Gates Evaluation at Walker County Annex #2

**ID:** 061000156

**Sponsor:** Walker (County)

**RFPG recommend:** Yes  
**Reason for Recommendation:** Alignment with RFPG goals and TWDB guidance principles.

## Study Details

**Study type:** Project Planning

**Study description:** Evaluation of proposed removable facility flood gates at Walker County Annex #2

**New Hydrologic or Hydraulic model?** NO  
**Emergency Need?** NO  
**Existing/Anticipated models in near term?** NO

**County:** Walker  
**Watershed HUC# (if known):** 120401010104, 120401010101, 120401010102, 120401010103, 120401010100

**Drainage area (Square miles, est.):** 798  
**Goal(s):** 060000001, 060000011, 060000012, 060000015

## 100-Year Flood Risk Summary

<table>
<thead>
<tr>
<th>Population at risk</th>
<th># of structures</th>
<th>Critical facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>657</td>
<td>505</td>
<td>1</td>
</tr>
</tbody>
</table>

**Flood risk type:**  
- Riverine? NO
- Coastal? NO
- Local? YES
- Playa? NO

**Farm/Ranch land impacted (acres):** 180  
**Roadway(s) impacted (length):** 25

**Number of low water crossings:** 2  
**Historical road closures:** 2

## Estimated Cost and Funding Availability

<table>
<thead>
<tr>
<th>Total Cost</th>
<th>Amount of Available Funding</th>
<th>Federal funding availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>$20,000</td>
<td>999999</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Funding source:** 999999

---

![FME Area](image1.png)  
**FME Area**

![Regional view of FME area](image2.png)  
**Regional view of FME area**
Flood Management Evaluation (FME)

Title: Warren Lake and Dam Retrofit

ID#: 061000320

Sponsor (name of entity, not person): Coastal Prairie Conservancy

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Further study of Retrofit dam to improve detention of flood & storm water runoff, new 137.3 ac wetlands complex added of storage capacity & conversion of fields to tallgrass prairies to add approximately 856 ac-ft of total storage during rainfall events.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: No

County: Harris
Watershed HUC# (if known): 120401020103
Drainage area (Square miles, est.): 2
Goal(s): 060000001, 060000011, 060000012, 060000015

100-Year Flood Risk Summary

Population at risk: 0
# of structures: 0
Critical facilities: 0

Flood risk type: Riverine: Yes
Coastal: No
Local: Yes
Playa: No
Other?: No

Farm/Ranch land impacted (acres): 183
Roadway(s) impacted (length): 999,999
Number of low water crossings: 999,999
Historical road closures: 999,999

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: Unknown

[Maps showing FME Area and Regional view of FME area]
## Flood Management Evaluation (FME)

**Title**: White Oak - SPT and E116 (E116-00-00) Improvements : PA01 thru PA-05

**ID#**: 061000389

**Sponsor (name of entity, not person)**: Harris County Flood Control District

**RFPG recommend?**: Yes  
**Reason for Recommendation**: Alignment with RFPG goals and TWDB guidance principles.

### Study Details

**Study type**: Project Planning

**Study description**: Study to develop a Benefit Cost Analysis needed for these projects to become a FMP. The "E116-00-00 Flood Reduction Feasibility Study" was completed in March 2022 and provides a decrease riverine and urban flood risk in the area.

<table>
<thead>
<tr>
<th>New Hydrologic or Hydraulic model?</th>
<th>NO</th>
<th>Emergency Need?</th>
<th>NO</th>
<th>Existing/Anticipated models in near term?</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>County</td>
<td>Harris</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watershed HUC# (if known)</td>
<td>120401040302,120401040304</td>
<td></td>
<td></td>
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<tr>
<td>Drainage area (Square miles, est.)</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goal(s)</td>
<td>060000001,06000011,06000012,06000015</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 100-Year Flood Risk Summary

<table>
<thead>
<tr>
<th>Population at risk</th>
<th>4,852</th>
</tr>
</thead>
<tbody>
<tr>
<td># of structures</td>
<td>1,174</td>
</tr>
<tr>
<td>Critical facilities</td>
<td>7</td>
</tr>
<tr>
<td>Flood risk type:</td>
<td>Riverine? YES</td>
</tr>
<tr>
<td>Farm/Ranch land impacted (acres)</td>
<td>5</td>
</tr>
<tr>
<td>Number of low water crossings</td>
<td>0</td>
</tr>
<tr>
<td>Roadway(s) impacted (length)</td>
<td>15</td>
</tr>
<tr>
<td>Historical road closures</td>
<td>0</td>
</tr>
</tbody>
</table>

### Estimated Cost and Funding Availability

| Total Cost | $30,000 |
| Amount of Available Funding | 999999 |
| Federal funding availability | Yes |
| Funding source | 999999 |
Flood Management Evaluation (FME)

Title: Houston Huntington Village Area Flood Mitigation

ID#: 061000419

Sponsor (name of entity, not person): Houston (Municipality)

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Further study to develop this project into a FMP. The project includes storm sewer improvements in the Huntington Village neighborhood to reduce structural flood loss.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes
County: Fort Bend, Harris
Watershed HUC# (if known): 120401040401
Drainage area (Square miles, est.): 96
Goal(s): 060000001, 060000011, 060000012, 060000015

100-Year Flood Risk Summary

Population at risk: 267,993
# of structures: 32,129
Critical facilities: 448
Flood risk type: Riverine? No, Coastal? No, Local? Yes, Playa? No, Other? No
Farm/Ranch land impacted (acres): 42
Roadway(s) impacted (length): 412
Number of low water crossings: 1
Historical road closures: 1

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: $9,999,999
Federal funding availability: Yes
Funding source: CDBG-MIT
Flood Management Evaluation (FME)

Title: Spring Shadows South

ID: 061000433

Sponsor (name of entity, not person): Houston (Municipality)

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Study to develop a Benefit Cost Analysis needed to elevate project to a FMP. FIF application information unavailable.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes
County: Harris
Watershed HUC# (if known): 120401040302, 120401040303
Drainage area (Square miles, est.): 6
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 4,553
# of structures: 1,006
Critical facilities: 6
Flood risk type: Riverine? No, Coastal? No, Local? Yes, Playa? No, Other? No
Farm/Ranch land impacted (acres): 999,999
Roadway(s) impacted (length): 12
Number of low water crossings: 0
Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: Unknown
Flood Management Evaluation (FME)

Title: City of Tomball Drainage Improvements

ID: 061000373

Sponsor (name of entity, not person): Tomball (Municipality)

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Study to the the drainage project for the City of Tomball is comprised of building storm sewer systems and channel conveyance to enable flood waters to be removed from portions of the city bounded by Holderrieth Road, SH 249, UPRR, and FM 2920.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: No
County: Harris, Montgomery
Watershed HUC# (if known): 120401020106, 120401020205, 120401020210, 120401020209
Drainage area (Square miles, est.): 13
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 607
# of structures: 47
Critical facilities: 0

Flood risk type: Riverine? No
Coastal? No
Local? Yes
Playa? No

Farm/Ranch land impacted (acres): 5
Roadway(s) impacted (length): 4
Number of low water crossings: 0
Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: CDBG-MIT
Flood Management Evaluation (FME)

Title: Missouri City Estates Drainage Improvements

ID#: 061000005

Sponsor (name of entity, not person): Stafford (Municipality)

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Further study of proposed flood risk reduction project that includes drainage improvements to Missouri City Estates.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes

County: Fort Bend, Harris
Watershed HUC# (if known): 120401040401
Drainage area (Square miles, est.): 0
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 999,999
# of structures: 999,999
Critical facilities: 999,999

Flood risk type:
- Riverine?: No
- Coastal?: No
- Local?: Yes
- Playa?: No
- Other?: No

Farm/Ranch land impacted (acres): 999,999
Roadway(s) impacted (length): 999,999
Number of low water crossings: 999,999
Historical road closures: 999,999

Estimated Cost and Funding Availability

Total Cost: $100,000
Amount of Available Funding: 999,999
Federal funding availability: Yes

Funding source: 999,999

---

**FME Area**

**Regional view of FME area**
Flood Management Evaluation (FME)

Title: Jamaica Cove Rd. Survey

ID: 061000145

Sponsor (name of entity, not person): Jamaica Beach (Municipality)

RFPG recommend: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Engineering assessment needed to determine if elevating the road would reduce future flooding impacts.

New Hydrologic or Hydraulic model? No

Emergency Need? No

Existing/Anticipated models in near term? No

County: Galveston

Watershed HUC# (if known): 120402040300

Drainage area (Square miles, est.): 1

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 395

# of structures: 1,276

Critical facilities: 4

Flood risk type: Riverine? No

Coastal? No

Local? Yes

Playa? No

Other? No

Farm/Ranch land impacted (acres): 3

Roadway(s) impacted (length): 14

Number of low water crossings: 999,999

Historical road closures: 999,999

Estimated Cost and Funding Availability

Total Cost: $140,000

Amount of Available Funding: $999,999

Federal funding availability: Yes

Funding source: $999,999
Title: Cedar Bayou Flood Risk Reduction Study - Property Acquisition in segment from SH 146 to Galveston Bay along Cedar Bayou (Q100-00-00)

ID#: 061000367

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Study to develop a Benefit Cost Analysis needed for this project to become a FMP. Property Acquisition in segment from SH 146 to Galveston Bay along Cedar Bayou.

New Hydrologic or Hydraulic model: No
Emergency Need: No
Existing/Anticipated models in near term: Yes

County: Chambers, Harris
Watershed HUC# (if known): 120401040706, 120402030106, 120402030200

Drainage area (Square miles, est.): 28
Goal(s): 060000001, 060000011, 060000012, 060000015

100-Year Flood Risk Summary

Population at risk: 1,046
# of structures: 230
Critical facilities: 7

Flood risk type: Riverine? No, Coastal? No, Local? Yes, Playa? No, Other? No

Farm/Ranch land impacted (acres): 47
Roadway(s) impacted (length): 8

Number of low water crossings: 0
Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: 999999
# Flood Management Evaluation (FME)

**Title:** Unincorporated Areas of Bacliff and San Leon Roadside Ditches & Driveway Culverts Improvements  

**ID #:** 061000436  

**Sponsor (name of entity, not person):** Galveston (County)  

**RFPG recommend?** Yes  

**Reason for Recommendation:** Alignment with RFPG goals and TWDB guidance principles.

## Study Details

**Study type:** Project Planning  

**Study description:** Further study of this unfunded CDBG-MIT project consists of various areas of roadside ditch and driveway culvert improvements in Bacliff and San Leon.

<table>
<thead>
<tr>
<th>New Hydrologic or Hydraulic model?</th>
<th>NO</th>
<th>Emergency Need?</th>
<th>NO</th>
<th>Existing/Anticipated models in near term?</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>County</strong></td>
<td>Galveston, Chambers</td>
<td><strong>Watershed HUC# (if known)</strong></td>
<td>120402040200</td>
<td><strong>Goal(s)</strong></td>
<td>06000001, 06000011, 06000012, 06000015</td>
</tr>
<tr>
<td><strong>Drainage area (Square miles, est.)</strong></td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## 100-Year Flood Risk Summary

<table>
<thead>
<tr>
<th>Population at risk</th>
<th>5,906</th>
<th><strong># of structures</strong></th>
<th>3,337</th>
<th><strong>Critical facilities</strong></th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flood risk type:</strong></td>
<td>Riverine?</td>
<td>No</td>
<td>Coastal?</td>
<td>No</td>
<td>Local?</td>
</tr>
<tr>
<td>Farm/Ranch land impacted (acres)</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Number of low water crossings</td>
<td>0</td>
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<td></td>
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</tr>
<tr>
<td>Roadway(s) impacted (length)</td>
<td>50</td>
<td></td>
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</tr>
<tr>
<td>Historical road closures</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Estimated Cost and Funding Availability

- **Total Cost:** $30,000  
- **Amount of Available Funding:** 999999  
- **Federal funding availability:** Yes  

**Funding source:** CDBG-MIT

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**Map Sections:**
- **FME Area**
- **Regional view of FME area**

---

**Legend:**
- Bacliff
- San Leon
- 646
- 41st St
- Dickinson Bay
- 96
- 59
- 249
- College Station
- Beaumont
- Sam Houston National Forest
- The Woodlands
- Victoria
- College Station
- Beaumont
- Sam Houston National Forest
- The Woodlands
- Victoria
## Flood Management Evaluation (FME)

**Title**: Valley - Stewarts Creek Watershed

**ID**: 061000455

**Sponsor (name of entity, not person)**: Conroe (Municipality)

**RFPG recommend?**: Yes  
**Reason for Recommendation**: Alignment with RFPG goals and TWDB guidance principles.

### Study Details

- **Study type**: Project Planning
- **Study description**: Develop a benefits cost analysis in support of this project identified in the City of Conroe Master Drainage Plan.

- **New Hydrologic or Hydraulic model?**: No
- **Emergency Need?**: No
- **Existing/Anticipated models in near term?**: Yes
- **County**: Montgomery
- **Watershed HUC# (if known)**: 120401010207, 120401010403, 120401010401, 120401010402, 120401010
- **Drainage area (Square miles, est.)**: 20
- **Goal(s)**: 06000001, 06000011, 06000012, 06000015

### 100-Year Flood Risk Summary

- **Population at risk**: 2,384
- **# of structures**: 374
- **Critical facilities**: 7
- **Flood risk type**: Riverine? Yes  
  Coastal? No  
  Local? Yes  
  Playa? No  
  Other? No
- **Farm/Ranch land impacted (acres)**: 7
- **Roadway(s) impacted (length)**: 10
- **Number of low water crossings**: 7  
  **Historical road closures**: 7

### Estimated Cost and Funding Availability

- **Total Cost**: $30,000
- **Amount of Available Funding**: $999,999
- **Federal funding availability**: Yes
- **Funding source**: $999,999
Flood Management Evaluation (FME)

Title: Huntington - Stewarts Creek Watershed

ID: 061000456

Sponsor (name of entity, not person): Conroe (Municipality)

RFPG recommend: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Develop a benefits cost analysis in support of this project identified in the City of Conroe Master Drainage Plan.

New Hydrologic or Hydraulic model? No
Emergency Need? No
Existing/Anticipated models in near term? Yes

County: Montgomery
Watershed HUC# (if known): 120401010207,1204010101403,120401010041,120401010402,12040101010

Drainage area (Square miles, est.): 20
Goal(s): 060000001,06000011,06000012,06000015

100-Year Flood Risk Summary

Population at risk: 2,384
# of structures: 374
Critical facilities: 7

Flood risk type: Riverine? Yes
Coastal? No
Local? Yes
Playa? No

Farm/Ranch land impacted (acres): 7
Roadway(s) impacted (length): 10

Number of low water crossings: 7
Historical road closures: 7

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: 999999

[Maps showing the study area and regional view]
Flood Management Evaluation (FME)

Title: Avenue M - Stewarts Creek Watershed

ID#: 061000457

Sponsor: Conroe (Municipality)

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Develop a benefits cost analysis in support of this project identified in the City of Conroe Master Drainage Plan.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes

County: Montgomery
Watershed HUC#: 120401010207, 120401010403, 120401010401, 120401010402, 120401010401

Drainage area (Square miles, est.): 20
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 2,384
# of structures: 374
Critical facilities: 7

Flood risk type: Riverine? Yes
Coastal? No
Local? Yes

Farm/Ranch land impacted (acres): 7
Roadway(s) impacted (length): 10

Number of low water crossings: 7
Historical road closures: 7

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

Title: South 3rd - Stewarts Creek Watershed

ID#: 061000458

Sponsor: Conroe (Municipality)

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Develop a benefits cost analysis in support of this project identified in the City of Conroe Master Drainage Plan.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes

County: Montgomery
Watershed HUC# (if known): 120401010207, 120401010403, 120401010401, 120401010402, 120401010

Drainage area (Square miles, est.): 20
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 2,384
# of structures: 374
Critical facilities: 7

Flood risk type: Riverine? Yes Coastal? No Local? Yes Playa? No Other? No
Farm/Ranch land impacted (acres): 7 Roadway(s) impacted (length): 10
Number of low water crossings: 7 Historical road closures: 7

Estimated Cost and Funding Availability

Total Cost: $30,000 Amount of Available Funding: 999999

Federal funding availability: Yes
Funding source: 999999
Flood Management Evaluation (FME)

Title: Greens Bayou - P142-00-00
ID#: 061000205
Sponsor: Harris County Flood Control District
RFPG recommend? Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Further study of Flood Risk Reduction need identified through the HCFCD 'Watershed Planning Tool' to determine channel modifications needed to restore/improve channel conveyance including Atlas 14 rainfall.

New Hydrologic or Hydraulic model? No
Emergency Need? No
Existing/Anticipated models in near term? Yes
County: Harris
Watershed HUC# (if known): 120401040603
Drainage area (Square miles, est.): 2
Goal(s): 06000001, 06000010, 06000015

100-Year Flood Risk Summary

Population at risk: 5,085
# of structures: 997
Critical facilities: 7
Flood risk type: Riverine? Yes
Coastal? No
Local? No
Playa? No
Farm/Ranch land impacted (acres): 1
Roadway(s) impacted (length): 23
Number of low water crossings: 0
Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $100,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: 999999

Maps: FME Area, Regional view of FME area
Flood Management Evaluation (FME)

**Title:** Addicks Reservoir - Right-Of-Way Acquisition, Design and Construction of a Stormwater Detention Basin on South Mayde Creek

**ID:** 061000312

**Sponsor:** Harris County Flood Control District

**RFPG recommend:** Yes

**Reason for Recommendation:** Alignment with RFPG goals and TWDB guidance principles.

### Study Details

**Study type:** Project Planning

**Study description:** Develop BCA to become a FMP. This project is part of the South Mayde Creek Plan that could reduce the risk of flooding for more than 70 homes and reduce the rainfall event by more than 340 acres in a pre-Atlas 1% rainfall event.

**New Hydrologic or Hydraulic model?** No

**Emergency Need?** No

**Existing/Anticipated models in near term?** Yes

**County:** Harris

**Watershed HUC# (if known):** 120401040102,120401040202,120401040104,120401040203,120401040104

**Drainage area (Square miles, est.):** 16

**Goal(s):** 06000001,06000011,06000012,06000015

### 100-Year Flood Risk Summary

- **Population at risk:** 3,061
- **# of structures:** 692
- **Critical facilities:** 12

**Flood risk type:** Riverine? Yes

**Coastal?** No

**Local?** Yes

**PlaYa?** No

**Other?** No

**Farm/Ranch land impacted (acres):** 27

**Roadway(s) impacted (length):** 12

**Number of low water crossings:** 0

**Historical road closures:** 0

### Estimated Cost and Funding Availability

- **Total Cost:** $30,000
- **Amount of Available Funding:** 999999
- **Federal funding availability:** Yes

**Funding source:** 999999
Flood Management Evaluation (FME)

Title: Addicks Reservoir - Design and Construction of Dinner Creek Stormwater Detention Basin

ID#: 061000313

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend?: Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Develop BCA to become a FMP. Project would provide additional stormwater detention in support of flood damage reduction and could reduce the risk of flooding for approximately 30 multi-family structures in Addicks Reservoir Watershed.

New Hydrologic or Hydraulic model?: No

Emergency Need?: No

Existing/Anticipated models in near term?: Yes

County: Harris

Watershed HUC# (if known): 120401040102, 120401040202, 120401040104, 120401040203, 120401040100

Drainage area (Square miles, est.): 16

Goal(s): 06000001, 06000015

100-Year Flood Risk Summary

Population at risk: 3,061

# of structures: 692

Critical facilities: 12

Flood risk type: Riverine? Yes

Coastal?: No

Local?: Yes

Playa?: No

Roadway(s) impacted (length): 12

Number of low water crossings: 0

Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: 999,999

Federal funding availability: Yes

Funding source: 999,999
Flood Management Evaluation (FME)

Title: Addicks Reservoir - Design and Construction of a Bridge Replacement for Greenhouse Road at South Mayde Creek

ID#: 061000441
Sponsor (name of entity, not person): Harris County Flood Control District
RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Develop BCA to become a FMP. This project is part of the South Mayde Creek Plan that could reduce the risk of flooding for more than 70 homes and reduce the rainfall event by more than 340 acres in a pre-Atlas 1% rainfall event.

New Hydrologic or Hydraulic model?: NO
Emergency Need?: NO
Existing/Anticipated models in near term?: YES
County: Harris
Watershed HUC# (if known): 120401040102, 120401040202, 120401040104, 120401040203, 120401040105
Drainage area (Square miles, est.): 16
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 3,061
# of structures: 692
Critical facilities: 12
Flood risk type: Riverine: Yes, Coastal: No, Local: No, Playa: No, Other: No
Farm/Ranch land impacted (acres): 27
Roadway(s) impacted (length): 12
Number of low water crossings: 0
Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: 999999
Flood Management Evaluation (FME)

Title: Houston Braeburn Glen Area Flood Mitigation

ID#: 061000384

Sponsor (name of entity, not person): Houston (Municipality)

RFPG recommend?: Yes  
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Further study of a proposed project that includes upsizing of the existing stormwater system with new pipes, inlets, and manholes. Lateral improvement will be completed on Mahoning Drive and Valley View Lane.

New Hydrologic or Hydraulic model?: No  
Emergency Need?: No  
Existing/Anticipated models in near term?: Yes

County: Fort Bend, Harris  
Watershed HUC# (if known): 120401040401

Drainage area (Square miles, est.): 96  
Goal(s): 060000001, 060000011, 060000012, 060000015

100-Year Flood Risk Summary

Population at risk: 267,993

# of structures: 32,129

Critical facilities: 448

Flood risk type: Riverine? No  
Coastal? No  
Local? Yes

Farm/Ranch land impacted (acres): 42

Number of low water crossings: 1

Roadway(s) impacted (length): 412

Historical road closures: 1

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: 999,999

Federal funding availability: Yes

Funding source: CDBG-MIT
Flood Management Evaluation (FME)

Title: Cedar Bayou Flood Risk Reduction Study - Channel improvements from US 90 to FM 1942

ID# 061000376

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend? Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Study to develop a Benefit Cost Analysis needed for this project to become a FMP. Cedar Bayou channel improvements from US 90 to FM 1942.

New Hydrologic or Hydraulic model? No

Emergency Need? No

Existing/Anticipated models in near term? Yes

County: Chambers, Harris, Liberty

Watershed HUC# (if known): 120401030205, 120401040705, 120401040706, 120401040704, 120402030

Drainage area (Square miles, est.): 47

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 345

# of structures: 228

Critical facilities: 0

Flood risk type: Riverine? Yes

Coastal? No

Local? Yes

Playa? No

Other? No

Farm/Ranch land impacted (acres): 892

Roadway(s) impacted (length): 12

Number of low water crossings: 0

Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

Title: Raise Road Surfaces in City of Plum Grove

ID: 061000102

Sponsor (name of entity, not person): Plum Grove (Municipality)

RFPG recommend?: Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Further evaluation of road surface elevation.

New Hydrologic or Hydraulic model?: No

Emergency Need?: No

Existing/Anticipated models in near term?: No

County: Liberty

Watershed HUC# (if known): 120401030402

Drainage area (Square miles, est.): 4

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 589

# of structures: 363

Critical facilities: 1

Flood risk type: Riverine? No

Coastal? No

Local? Yes

Playa? No

Other? No

Farm/Ranch land impacted (acres): 9

Roadway(s) impacted (length): 9

Number of low water crossings: 0

Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $35,000

Amount of Available Funding: $999,999

Federal funding availability: Yes

Funding source: $999,999
Flood Management Evaluation (FME)

Title: Carpenters Planning Study Cloverleaf Community Flood Risk Reduction Project (Phase 1 and 2)

ID#: 061000333

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Study to develop a BCR required for this project to become a FMP. Drainage system upgrade using combination of 9'x7' RCB spanning 3,000' and a 109 acre-feet detention facility providing drainage relief for this portion of the Cloverleaf Community.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes

County: Harris
Watershed HUC# (if known): 120401040702, 120401040606
 Drainage area (Square miles, est.): 1
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 0
# of structures: 0
Critical facilities: 0

Flood risk type: Riverine?: No
Coastal?: No
Local?: Yes
Playa?: No
Other?: No

Farm/Ranch land impacted (acres): 999,999
Roadway(s) impacted (length): 999,999
Number of low water crossings: 999,999
Historical road closures: 999,999

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: HCFCD
Title: Goose Creek O119-00-00-P001 (Alt 2A1)
ID#: 061000362
Sponsor (name of entity, not person): Harris County Flood Control District
RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details
Study type: Project Planning
Study description: Study to develop a Benefit Cost Analysis needed for this project to become a FMP. Construction of channel modifications and in-line stormwater detention along O119 to facilitate Harris County drainage improvements in Highland Mobile Estates.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes
County: Harris
Watershed HUC# (if known): 120401040705, 120402030104
Drainage area (Square miles, est.): 0
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary
Population at risk: 999,999
# of structures: 999,999
Critical facilities: 999,999
Flood risk type: Riverine? Yes
Coastal? No
Local? No
Playa? No
Farm/Ranch land impacted (acres): 999,999
Roadway(s) impacted (length): 999,999
Number of low water crossings: 999,999
Historical road closures: 999,999

Estimated Cost and Funding Availability
Total Cost: $30,000
Amount of Available Funding: 999,999
Federal funding availability: Yes
Funding source: 999,999

FME Area
Regional view of FME area
### Flood Management Evaluation (FME)

**Title**: Goose Creek D119-00-00-P001 (Alt 2A3)

**ID#**: 061000363

**Sponsor (name of entity, not person)**: Harris County Flood Control District

**RFPG recommend?** Yes

**Reason for Recommendation**: Alignment with RFPG goals and TWDB guidance principles.

#### Study Details

**Study type**: Project Planning

**Study description**: Study to develop a Benefit Cost Analysis needed for this project to become a FMP. Secondary option for the recommended alternative with less benefits and project cost.

**New Hydrologic or Hydraulic model?** No

**Emergency Need?** No

**Existing/Anticipated models in near term?** Yes

**County**: Harris

**Watershed HUC# (if known)**: 120401040705, 120402030104

**Drainage area (Square miles, est.)**: 0

**Goal(s)**: 06000001, 06000011, 06000012, 06000015

#### 100-Year Flood Risk Summary

<table>
<thead>
<tr>
<th>Population at risk</th>
<th>999,999</th>
<th># of structures</th>
<th>999,999</th>
<th>Critical facilities</th>
<th>999,999</th>
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<tbody>
<tr>
<td>Flood risk type</td>
<td>Riverine? Yes</td>
<td>Coastal? No</td>
<td>Local? No</td>
<td>Playa? No</td>
<td>Other? No</td>
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<td>Farm/Ranch land impacted (acres)</td>
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<td>Roadway(s) impacted (length)</td>
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<tr>
<td>Number of low water crossings</td>
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#### Estimated Cost and Funding Availability

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![FME Area](image1.png)

![Regional view of FME area](image2.png)
Flood Management Evaluation (FME)

Title: Halls Bayou - Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-08-00

ID#: 061000394

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Develop BCA to become a FMP. This project could reduce the risk of flooding for over 210 structures and could reduce the 1% rainfall event for over 170 acres as part of the Halls Ahead Bond Implementation Program.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes

County: Harris

Watershed HUC# (if known): 120401040605, 120401040601, 120401040302, 120401040604, 120401040

Drainage area (Square miles, est.): 7
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 64

# of structures: 39

Critical facilities: 2

Flood risk type: Riverine? Yes
Coastal? No
Local? Yes

Farm/Ranch land impacted (acres): 0
Roadway(s) impacted (length): 1

Number of low water crossings: 0

Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999

Maps showing the FME area and a regional view of the FME area.
Flood Management Evaluation (FME)

Title: Halls Bayou - Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-09-00

ID#: 061000395

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG Recommend: Yes  
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Develop BCA to become a FMP. Part of Halls Ahead Bond Implementation Program, could reduce flood risk for 80+ structures, size of the floodplain by 30+ acres & frequency & duration of flooding of up to half a mile of roadway in an Atlas 14 1% event.

New Hydrologic or Hydraulic model? No  
Emergency Need? No  
Existing/Anticipated models in near term? Yes  
County: Harris  
Watershed HUC# (if known): 120401040605,120401040601,120401040302,120401040604,12040104040600

Drainage area (Square miles, est.): 6  
Goal(s): 06000001,06000011,060000012,060000015

100-Year Flood Risk Summary

Population at risk: 446

# of structures: 260

Critical facilities: 3

Flood risk type: Riverine? Yes  
Coastal? No  
Local? Yes  
Playa? No  
Other? No

Farm/Ranch land impacted (acres): 0

Roadway(s) impacted (length): 4

Number of low water crossings: 0

Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999

[Map of FME Area]

[Regional view of FME area]
Flood Management Evaluation (FME)

Title: Houston Fifth Area Flood Mitigation

ID#: 051000417

Sponsor (name of entity, not person): Houston (Municipality)

RFGP recommend?: Yes
Reason for Recommendation: Alignment with RFGP goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Further study to develop this project into a FMP. This unfunded CDBG-MIT application involves installing various storm sewer infrastructure in the Fifth Ward within the City of Houston.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes

County: Harris
Watershed HUC# (if known): 120401040701

Drainage area (Square miles, est.): 41
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 34,532
# of structures: 6,262
Critical facilities: 112

Flood risk type: Riverine? No
Coastal? No
Local? Yes
Playa? No

Farm/Ranch land impacted (acres): 20
Roadway(s) impacted (length): 101

Number of low water crossings: 6
Historical road closures: 6

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: CDBG-MIT

[Map of Houston and surrounding areas]
Flood Management Evaluation (FME)

Title: Houston Port Area Flood Mitigation

ID#: 061000418

Sponsor (name of entity, not person): Houston (Municipality)

RFPG recommend?: Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Further study to develop this project into a FMP. The project includes storm sewer improvements on nearly every street in the Pleasantville neighborhood to improve conveyance capacity and construction of a detention basin.

New Hydrologic or Hydraulic model?: No

Emergency Need?: No

Existing/Anticipated models in near term?: Yes

County: Harris

Watershed HUC# (if known): 120401040701

Drainage area (Square miles, est.): 41

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 34,532

# of structures: 6,262

Critical facilities: 112

Flood risk type: Riverine? No

Coastal? No

Local? Yes

Playa? No

Other? No

Farm/Ranch land impacted (acres): 20

Roadway(s) impacted (length): 101

Number of low water crossings: 6

Historical road closures: 6

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: CDBG-MIT
Title: Flood Management Evaluation (FME)

ID#: 061000054

Sponsor: Pearl (Municipality)

RFPG Recommend? Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Further study including Atlas 14 rainfall incorporation and Benefit Cost Analysis of proposed channel modifications included in the City of Pearland master drainage plan.

New Hydrologic or Hydraulic model? No

Emergency Need? No

Existing/Anticipated models in near term? Yes

County: Brazoria

Watershed HUC# (if known): 120402040200, 120402040100

Drainage area (Square miles, est.): 6

Goal(s): 060000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 814

# of structures: 574

Critical facilities: 0

Flood risk type: Riverine: Yes, Coastal: No, Local: No, Playa: No, Other: No

Farm/Ranch land impacted (acres): 27

Roadway(s) impacted (length): 3

Number of low water crossings: 0

Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $260,000

Amount of Available Funding: $99,999

Federal funding availability: Yes

Funding source: $99,999

[Map of FME Area]

[Regional view of FME area]
**Flood Management Evaluation (FME)**

**Title**: Galveston Bay Watershed Plan - PA01 (N+6) Channel & Crossing Improvements

**ID**: 061000343

**Sponsor (name of entity, not person)**: Harris County Flood Control District

**RFPG recommend?**: Yes

**Reason for Recommendation**: Alignment with RFPG goals and TWDB guidance principles.

**Study Details**

<table>
<thead>
<tr>
<th>Study type</th>
<th>Project Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study description</td>
<td>Develop BCA to become FMP. Channel deepening from N Broadway St to N Utah St, convert open channel segment to closed conduit w/ 8’x5’ concrete boxes b/w N Utah St &amp; Main St, replace concrete pipe w/ dual 8’x5’ concrete box culvert outfall to F212.</td>
</tr>
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</table>

**New Hydrologic or Hydraulic model?** | NO |

**Emergency Need?** | NO |

**Existing/Anticipated models in near term?** | YES |

**County** | Harris |

**Watershed HUC# (if known)** | 120402040100 |

**Drainage area (Square miles, est.)** | 1 |

**Goal(s)** | 060000001, 06000011, 06000012, 06000015 |

**100-Year Flood Risk Summary**

<table>
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<tr>
<th>Population at risk</th>
<th>648</th>
</tr>
</thead>
<tbody>
<tr>
<td># of structures</td>
<td>259</td>
</tr>
<tr>
<td>Critical facilities</td>
<td>7</td>
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</tbody>
</table>

**Flood risk type**: Riverine? | YES |

**Coastal?** | NO |

**Local?** | NO |

**Playa?** | NO |

**Roadway(s) impacted (length)** | 5 |

**Number of low water crossings** | 0 |

**Number of low water crossings** | 0 |

**Estimated Cost and Funding Availability**

<table>
<thead>
<tr>
<th>Total Cost</th>
<th>$30,000</th>
</tr>
</thead>
</table>

| Amount of Available Funding | 999999 |

| Federal funding availability | Yes |

| Funding source | Harris County, City of La Porte |

---

**Regional view of FME area**

**Maps**: Morgans Point, La Porte, FME Area, Houston, Regional view of FME area.
Title: Willow Creek Watershed Plan - Immediate: Selective Clearing BNRR to Mouth

ID#: 061000338

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend?: Yes  Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Study to develop a BCR required for this project to become a FMP. Selective clearing from BNRR to mouth to increase riverine storm water conveyance, maintain tree canopy & veg. diversity, minimize impact on riparian & uplands habitats.

New Hydrologic or Hydraulic model?: No  Emergency Need?: No  Existing/Anticipated models in near term?: Yes

County: Harris  Watershed HUC# (if known): 120401020106, 120401020105, 120401020210

Drainage area (Square miles, est.): 11  Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 2,443  # of structures: 828  Critical facilities: 6

Flood risk type: Riverine? Yes  Coastal? No  Local? No  Playa? No  Other? No

Farm/Ranch land impacted (acres): 56  Roadway(s) impacted (length): 25

Number of low water crossings: 5  Historical road closures: 5

Estimated Cost and Funding Availability

Total Cost: $30,000  Amount of Available Funding: 999999  Federal funding availability: Yes

Funding source: 2018 Bond Fund
Flood Management Evaluation (FME)

Title: Willow Creek Watershed Plan - FM2920 Stormwater Detention Basin

ID#: 061000340

Sponsor: Harris County Flood Control District

RFPG recommend: Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Study to develop a Benefit Cost Analysis needed for this project to become a FMP. Proposed 826 acre-feet detention basin located near FM 2920 crossing of Willow Creek.

New Hydrologic or Hydraulic model? No

Emergency Need? No

Existing/Anticipated models in near term? Yes

County: Harris

Watershed HUC# (if known): 120401020106, 120401020105, 120401020210

Drainage area (Square miles, est.): 11

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 2,443

# of structures: 828

Critical facilities: 6

Flood risk type: Riverine? Yes

Coastal? No

Local? No

Playa? No Other? No

Farm/Ranch land impacted (acres): 56

Roadway(s) impacted (length): 25

Number of low water crossings: 5

Historical road closures: 5

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: Harris County
Flood Management Evaluation (FME)

Title: Willow Creek Watershed Plan- Kuykendahl Basin

ID#: 061000341

Sponsor: Harris County Flood Control District

RFPG recommend?: Yes  Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Study to develop a Benefit Cost Analysis needed for this project to become a FMP. Proposed 727 acre-feet detention basin located near Kuykendahl Road crossing of Willow Creek.

New Hydrologic or Hydraulic model?: No

Emergency Need?: No

Existing/Anticipated models in near term?: Yes

County: Harris

Watershed HUC# (if known): 120401020106, 120401020105, 120401020210

Drainage area (Square miles, est.): 11

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 2,443

# of structures: 828

Critical facilities: 6

Flood risk type: Riverine? Yes

Coastal?: No

Local?: No

Playa?: No

Other?: No

Farm/Ranch land impacted (acres): 56

Roadway(s) impacted (length): 25

Number of low water crossings: 5

Historical road closures: 5

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: Harris County
Flood Management Evaluation (FME)

Title: Willow Creek Watershed Plan - M121 Basin Stormwater Detention Basin

ID#: 06100342

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend?: Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Study to develop a Benefit Cost Analysis needed for this project to become a FMP. Proposed 1010 acre-feet detention basin located near M121 tributary

New Hydrologic or Hydraulic model?: No

Emergency Need?: No

Existing/Anticipated models in near term?: Yes

County: Harris

Watershed HUC# (if known): 120401020106, 120401020105, 120401020210

Drainage area (Square miles, est.): 11

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 2,443

# of structures: 828

Critical facilities: 6

Flood risk type: Riverine? Yes

Coastal? No

Local? No

Playa? No

Other? No

Farm/Ranch land impacted (acres): 56

Roadway(s) impacted (length): 25

Number of low water crossings: 5

Historical road closures: 5

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999
Title: Jackson Bayou Watershed Planning Project - Immediate: First Street Crossing Mitigation

ID#: 061000322

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Develop BCA to become a FMP. Priority ranking #1, 0.5 mile upstream along Jackson Bayou identified to fulfill mitigation efforts. Culvert upsizing recommended at First Street. Improvements produced need or 32.4 acre-feet of detention.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes

County: Harris
Watershed HUC# (if known): 120401040704

Drainage area (Square miles, est.): 1
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 598
# of structures: 111
Critical facilities: 8

Flood risk type: Riverine? Yes
Coastal? No
Local? Yes
Playa? No

Farm/Ranch land impacted (acres): 2

Number of low water crossings: 0
Roadway(s) impacted (length): 1
Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 99999
Federal funding availability: Yes

Funding source: Harris County Precinct 2, Harris County Engineering Department-Recovery and

[FME Area Map]

[Regional view of FME area Map]
Flood Management Evaluation (FME)

**Title:** Greens Bayou - Planning, Right-of-Way Acquisition, Design and Construction of Channel Conveyance Improvements along P138-01-01

**ID #:** 061000366

**Sponsor (name of entity, not person):** Harris County Flood Control District

**RFPG recommend?** Yes

**Reason for Recommendation:** Alignment with RFPG goals and TWDB guidance principles.

### Study Details

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<table>
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<td>County</td>
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<tr>
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<td>120401040604, 120401040603</td>
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<tr>
<td>Goal(s)</td>
<td>060000001, 060000011, 060000012, 060000015</td>
<td></td>
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</tbody>
</table>

### 100-Year Flood Risk Summary

<table>
<thead>
<tr>
<th>Population at risk</th>
<th>74</th>
</tr>
</thead>
<tbody>
<tr>
<td># of structures</td>
<td>7</td>
</tr>
<tr>
<td>Critical facilities</td>
<td>0</td>
</tr>
<tr>
<td>Flood risk type:</td>
<td>Riverine? Yes</td>
</tr>
<tr>
<td>Coastal? No</td>
<td></td>
</tr>
<tr>
<td>Local? Yes</td>
<td></td>
</tr>
<tr>
<td>Playa? No</td>
<td></td>
</tr>
<tr>
<td>Farm/Ranch land impacted (acres)</td>
<td>999,999</td>
</tr>
<tr>
<td>Roadway(s) impacted (length)</td>
<td>0</td>
</tr>
<tr>
<td>Number of low water crossings</td>
<td>0</td>
</tr>
<tr>
<td>Historical road closures</td>
<td>0</td>
</tr>
</tbody>
</table>

### Estimated Cost and Funding Availability

| Total Cost | $30,000 |
| Amount of Available Funding | 999999 |
| Federal funding availability | Yes |

**Funding source:** 999999
Flood Management Evaluation (FME)

Title: Elevation of Bridge Road in City of North Cleveland

ID#: 061000162
Sponsor (name of entity, not person): North Cleveland (Municipality)
RFPG recommend? Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Further study to elevate Bridge road.

New Hydrologic or Hydraulic model? No
Emergency Need? No
Existing/Anticipated models in near term? No
County: Liberty, Montgomery, San Jacinto
Watershed HUC# (if known): 120401030201, 120401030108, 120401030109, 120401030203, 120401030
Drainage area (Square miles, est.): 19
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 1,267
# of structures: 261
Critical facilities: 0
Flood risk type: Riverine? No, Coastal? No, Local? Yes, Playa? No, Other? No
Farm/Ranch land impacted (acres): 29
Roadway(s) impacted (length): 27
Number of low water crossings: 1
Historical road closures: 1

Estimated Cost and Funding Availability

Total Cost: $120,000
Amount of Available Funding: 999999
Funding source: 999999
Federal funding availability: Yes
Flood Management Evaluation (FME)

Title: Sims Bayou C116 Storm Sewer Improvement (C116-00-00-P001) From Mykawa Road to Telephone Road

ID#: 061000364

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend?: Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Study to develop a BCR required for this project to become a FMP. To increase the system C116 capacity, Alternative 1 adds capacity to the C116 system trunkline through an additional parallel trunkline, from Dixie Drive to Sims Bayou.

New Hydrologic or Hydraulic model?: No

Emergency Need?: No

Existing/Anticipated models in near term?: Yes

County: Harris

Watershed HUC# (if known): 120401040502

Drainage area (Square miles, est.): 1

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 0

# of structures: 0

Critical facilities: 0

Flood risk type: Riverine? No, Coastal? No, Local? Yes, Playa? No, Other? No

Farm/Ranch land impacted (acres): 999,999

Roadway(s) impacted (length): 999,999

Number of low water crossings: 999,999

Historical road closures: 999,999

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999

Mayfair

FME Area

Regional view of FME area
Flood Management Evaluation (FME)

Title: Cedar Bayou Flood Risk Reduction Study - Q128 Channel Improvements from US 90 to Q100 Confluence

ID# 051000374

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend? Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Study to develop a Benefit Cost Analysis needed for this project to become a FMP. Cedar Bayou channel improvements from US 90 to Confluence with Q100.

New Hydrologic or Hydraulic model? No
Emergency Need? No
Existing/Anticipated models in near term? Yes

County: Harris
Watershed HUC# (if known): 120401030205, 120401040705, 120401040706, 120401040704, 120402030

Drainage area (Square miles, est.): 5
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at Risk: 199
# of Structures: 142
Critical facilities: 0

Flood risk type: Riverine? Yes
Coastal? No
Local? Yes
Playa? No

Farm/Ranch land impacted (acres): 161
Roadway(s) impacted (length): 6

Number of low water crossings: 0
Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: $999999
Federal funding availability: Yes

Funding source: $999999
Flood Management Evaluation (FME)

Title Mustang Bayou Middle Segment

ID# 061000064

Sponsor (name of entity, not person) Pearland (Municipality)

RFPG recommend? Yes Reason for Recommendation Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type Project Planning
Study description Further study including Atlas 14 rainfall incorporation and Benefit Cost Analysis of proposed channel modifications included in the City of Pearland master drainage plan.

New Hydrologic or Hydraulic model? No Emergency Need? No Existing/Anticipated models in near term? Yes
County Brazoria, Fort Bend Watershed HUC# (if known) 120402040400
Drainage area (Square miles, est.) 5 Goal(s) 060000001, 060000011, 060000012, 060000015

100-Year Flood Risk Summary

Population at risk 2,051 # of structures 257 Critical facilities 1
Flood risk type: Riverine? Yes Coastal? No Local? No Playa? No Other? No
Farm/Ranch land impacted (acres) 39 Roadway(s) impacted (length) 6
Number of low water crossings 0 Historical road closures 0

Estimated Cost and Funding Availability

Total Cost $260,000 Amount of Available Funding 999999 Federal funding availability Yes
Funding source 999999
Flood Management Evaluation (FME)

Title: Cedar Bayou Flood Risk Reduction Study - Property Acquisition in segment from IH-10 to SH 146 along Cedar Bayou (Q100-00-00)

ID# 061000369

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend? Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Study to develop a Benefit Cost Analysis needed for this project to become a FMP. Property Acquisition in segment from IH-10 to SH 146 along Cedar Bayou.

New Hydrologic or Hydraulic model? No
Emergency Need? No
Existing/Anticipated models in near term? Yes

County: Chambers, Harris
Watershed HUC# (if known): 120401040706, 120402030105, 120402030106

Drainage area (Square miles, est.): 19
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 1,274
# of structures: 319
Critical facilities: 0

Flood risk type: Riverine? Yes
Coastal? No
Local? Yes
Playa? No
Other? No

Farm/Ranch land impacted (acres): 25
Roadway(s) impacted (length): 5
Number of low water crossings: 0
Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

Title: Greens Bayou, White Oak Bayou and Cypress Creek Areas Subdivision Drainage Mitigation Project

ID#: 061000439

Sponsor (name of entity, not person): Harris (County)

RFPG recommend?: Yes  Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: The mitigation solution for Cypress Creek Estates is to install storm sewer systems along West Shadow Lake, East Shadow Lake, North Shadow Lake and Winding Lane, to re-grade the roadside ditches, and to remove and replace of all driveways and culverts.

New Hydrologic or Hydraulic model?: No

Emergency Need?: No

Existing/Anticipated models in near term?: Yes

County: Harris, Waller

Watershed HUC# (if known): 120402040300, 120402040200, 120402040400, 120402040100

Drainage area (Square miles, est.): 543

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 267,186

# of structures: 33,860

Critical facilities: 562

Flood risk type: Riverine? No  Coastal? No  Local? Yes  Playa? No  Other? No

Farm/Ranch land impacted (acres): 1,842

Roadway(s) impacted (length): 601

Number of low water crossings: 32

Historical road closures: 32

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: CDBG-MIT

FME Area

Regional view of FME area
Flood Management Evaluation (FME)

Title: Carpenters Bayou (West Acres, Shadowglen & Old River Terrace Neighborhood)

ID#: 061000464

Sponsor (name of entity, not person): Harris (County)

RFPG recommend?: Yes  Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Further study to develop a BCA required to elevate project to FMP. The project is to reduce flooding in the Problem Area #5 identified by the Carpenters Bayou Watershed Planning Project Report, 2021.

New Hydrologic or Hydraulic model?: No  Emergency Need?: No  Existing/Anticipated models in near term?: Yes

County: Harris  Watershed HUC# (if known): 120401010502, 120401040605, 120401040703, 120401040705, 1204010407

Drainage area (Square miles, est.): 31  Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 4,689  # of structures: 812  Critical facilities: 24

Flood risk type:  Riverine?: Yes  Coastal?: No  Local?: Yes  Playa?: No  Other?: No

Farm/Ranch land impacted (acres): 96  Roadway(s) impacted (length): 19

Number of low water crossings: 2  Historical road closures: 2

Estimated Cost and Funding Availability

Total Cost: $30,000  Amount of Available Funding: 999999  Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

Title: North Alexander Drainage Improvements

ID#: 061000423

Sponsor (name of entity, not person): Baytown (Municipality)

RFPG recommend?: Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Further study to develop this project into a FMP. This CDBG-MIT application involves the installation and construction of various storm sewer and detention infrastructure.

New Hydrologic or Hydraulic model?: No

Emergency Need?: No

Existing/Anticipated models in near term?: No

County: Chambers, Harris

Watershed HUC# (if known): 120402030106

Drainage area (Square miles, est.): 48

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 2,324

# of structures: 550

Critical facilities: 7

Flood risk type: Riverine? No

Coastal? No

Local? Yes

Playa? No

Farm/Ranch land impacted (acres): 98

Roadway(s) impacted (length): 14

Number of low water crossings: 0

Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: CDBG-MIT

Map of the area showing Baytown and surrounding areas.
# Flood Management Evaluation (FME)

**Title**: Lilly - Alligator Creek Watershed

**ID**: 061000445

**Sponsor**: Conroe (Municipality)

**RFPG recommend?**: Yes

**Reason for Recommendation**: Alignment with RFPG goals and TWDB guidance principles.

## Study Details

**Study type**: Project Planning

**Study description**: Develop a benefits cost analysis in support of this project identified in the City of Conroe Master Drainage Plan.

<table>
<thead>
<tr>
<th>New Hydrologic or Hydraulic model?</th>
<th>No</th>
<th>Emergency Need?</th>
<th>No</th>
<th>Existing/Anticipated models in near term?</th>
<th>Yes</th>
</tr>
</thead>
</table>

**County**: Montgomery

**Watershed HUC# (if known)**: 120401010207, 120401010401

**Drainage area (Square miles, est.)**: 6

**Goal(s)**: 06000001, 06000011, 06000012, 06000015

## 100-Year Flood Risk Summary

- **Population at risk**: 3,099
- **# of structures**: 516
- **Critical facilities**: 2

<table>
<thead>
<tr>
<th>Flood type</th>
<th>Riverine?</th>
<th>No</th>
<th>Coastal?</th>
<th>No</th>
<th>Local?</th>
<th>Yes</th>
<th>Playa?</th>
<th>No</th>
<th>Other?</th>
<th>No</th>
</tr>
</thead>
</table>

| Farm/Ranch land impacted (acres) | 2 |
| Roadway(s) impacted (length) | 10 |
| Number of low water crossings | 9 |
| Historical road closures | 9 |

## Estimated Cost and Funding Availability

- **Total Cost**: $30,000
- **Amount of Available Funding**: 999999
- **Federal funding availability**: Yes

**Funding source**: 999999

---

![FME Area](image1)

![Regional view of FME area](image2)
Flood Management Evaluation (FME)

**Title**: East Fork North - Alligator Creek Watershed

**ID#**: 061000446

**Sponsor (name of entity, not person)**: Conroe (Municipality)

**RFPG recommend?**: Yes  
**Reason for Recommendation**: Alignment with RFPG goals and TWDB guidance principles.

**Study Details**

**Study type**: Project Planning

**Study description**: Develop a benefits cost analysis in support of this project identified in the City of Conroe Master Drainage Plan.

**New Hydrologic or Hydraulic model?**: No  
**Emergency Need?**: No  
**Existing/Anticipated models in near term?**: Yes

**County**: Montgomery  
**Watershed HUC# (if known)**: 120401010207, 120401010401

**Drainage area (Square miles, est.)**: 6  
**Goal(s)**: 06000001, 06000011, 06000012, 06000015

**100-Year Flood Risk Summary**

**Population at risk**: 3,099  
**# of structures**: 516  
**Critical facilities**: 2

**Flood risk type**: Riverine? No  
Coastal? No  
Local? Yes  
Playa? No  
Other? No

**Farm/Ranch land impacted (acres)**: 2  
**Roadway(s) impacted (length)**: 10

**Number of low water crossings**: 9  
**Historical road closures**: 9

**Estimated Cost and Funding Availability**

**Total Cost**: $30,000  
**Amount of Available Funding**: 999999  
**Federal funding availability**: Yes

**Funding source**: 999999
Flood Management Evaluation (FME)

Title: East Fork South - Alligator Creek Watershed

ID#: 061000447

Sponsor (name of entity, not person): Conroe (Municipality)

RFPG recommend?: Yes  Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Develop a benefits cost analysis in support of this project identified in the City of Conroe Master Drainage Plan.

New Hydrologic or Hydraulic model?: No

Emergency Need?: No

Existing/Anticipated models in near term?: Yes

County: Montgomery

Watershed HUC# (if known): 120401010207,120401010401

Drainage area (Square miles, est.): 6

Goal(s): 06000001,06000011,06000012,06000015

100-Year Flood Risk Summary

Population at risk: 3,099

# of structures: 516

Critical facilities: 2

Flood risk type: Riverine? No  Coastal? No  Local? Yes  Playa? No  Other? No

Farm/Ranch land impacted (acres): 2

Roadway(s) impacted (length): 10

Number of low water crossings: 9

Historical road closures: 9

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: $999,999

Federal funding availability: Yes

Funding source: 999,999
Flood Management Evaluation (FME)

Title: West Branch - Alligator Creek Watershed

ID#: 061000448

Sponsor (name of entity, not person): Conroe (Municipality)

RFPG recommend?: Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Develop a benefits cost analysis in support of this project identified in the City of Conroe Master Drainage Plan.

New Hydrologic or Hydraulic model?: No

Emergency Need?: No

Existing/Anticipated models in near term?: Yes

County: Montgomery

Watershed HUC# (if known): 120401010207, 120401010401

Drainage area (Square miles, est.): 6

Goal(s): 060000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 3,099

# of structures: 516

Critical facilities: 2

Flood risk type: Riverine? Yes

Coastal? No

Local? Yes

Playa? No

Farm/Ranch land impacted (acres): 2

Roadway(s) impacted (length): 10

Number of low water crossings: 9

Historical road closures: 9

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

Title: Oak Hollow - Alligator Creek Watershed
ID#: 061000449
Sponsor (name of entity, not person): Conroe (Municipality)
RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details
Study type: Project Planning
Study description: Develop a benefits cost analysis in support of this project identified in the City of Conroe Master Drainage Plan.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes
County: Montgomery
Watershed HUC# (if known): 120401010207,120401010401
Drainage area (Square miles, est.): 6
Goal(s): 06000001,06000011,06000012,06000015

100-Year Flood Risk Summary
Population at risk: 3,099
# of structures: 516
Critical facilities: 2
Flood risk type: Riverine? Yes, Coastal? No, Local? Yes, Playa? No, Other? No
Farm/Ranch land impacted (acres): 2
Roadway(s) impacted (length): 10
Number of low water crossings: 9
Historical road closures: 9

Estimated Cost and Funding Availability
Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: 999999

[Maps showing FME Area and Regional view of FME area]
Flood Management Evaluation (FME)

Title: Cable - Alligator Creek Watershed

ID#: 061000450

Sponsor: Conroe (Municipality)

RFPG recommend: Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Develop a benefits cost analysis in support of this project identified in the City of Conroe Master Drainage Plan.

New Hydrologic or Hydraulic model? No

Emergency Need? No

Existing/Anticipated models in near term? Yes

County: Montgomery

Watershed HUC# (if known): 120401010207, 120401010401

Drainage area (Square miles, est.): 6

Goal(s): 060000001, 060000011, 060000012, 060000015

100-Year Flood Risk Summary

Population at risk: 3,099

# of structures: 516

Critical facilities: 2

Flood risk type: Riverine? Yes

Coastal? No

Local? Yes

Playa? No

Farm/Ranch land impacted (acres): 2

Roadway(s) impacted (length): 10

Number of low water crossings: 9

Historical road closures: 9

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

Title: Baretta - Grand Lake Creek Watershed

ID#: 051000454

Sponsor (name of entity, not person): Conroe (Municipality)

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Develop a benefits cost analysis in support of this project identified in the City of Conroe Master Drainage Plan.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes

County: Montgomery
Watershed HUC#: (if known) 120401010401
Drainage area (Square miles, est.): 4
Goal(s): 06000010, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 283
# of structures: 102
Critical facilities: 0

Flood risk type: Riverine? Yes
Coastal? No
Local? Yes
Playa? No

Farm/Ranch land impacted (acres): 4
Roadway(s) impacted (length): 6
Number of low water crossings: 1
Historical road closures: 1

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: 999999

[Maps showing FME Area and Regional view of FME area]
Flood Management Evaluation (FME)

**Title:** Mustang Bayou Upper Segment

**ID #:** 061000066

**Sponsor (name of entity, not person):** Pearland (Municipality)

**RFPG Recommend?** Yes

**Reason for Recommendation:** Alignment with RFPG goals and TWDB guidance principles.

### Study Details

**Study Type:** Project Planning

**Study Description:** Further study including Atlas 14 rainfall incorporation and Benefit Cost Analysis of proposed channel modifications included in the City of Pearland master drainage plan.

**New Hydrologic or Hydraulic model?** No

**Emergency Need?** No

**Existing/Anticipated models in near term?** Yes

**County:** Fort Bend

**Watershed HUC# (if known):** 120402040400, 120402040100

**Drainage area (Square miles, est.):** 7

**Goal(s):** 060000001, 060000011, 060000012, 060000015

### 100-Year Flood Risk Summary

- **Population at risk:** 778
- **# of structures:** 415
- **Critical facilities:** 0

**Flood risk type:** Riverine? Yes, Coastal? No, Local? No, Playa? No

**Farm/Ranch land impacted (acres):** 20

**Roadway(s) impacted (length):** 4

**Number of low water crossings:** 3

**Historical road closures:** 3

### Estimated Cost and Funding Availability

- **Total Cost:** $280,000
- **Amount of Available Funding:** 999999
- **Federal funding availability:** Yes

**Funding source:** 999999
Flood Management Evaluation (FME)

**Title:** Galveston Bay - Right-of-Way Acquisition, Design and Construction of General Drainage Improvements Along F216-00-00

**ID #:** 061000348

**Sponsor:** Harris County Flood Control District

**RFPG recommend:** Yes  
**Reason for Recommendation:** Alignment with RFPG goals and TWDB guidance principles.

### Study Details

<table>
<thead>
<tr>
<th>Study type</th>
<th>Project Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study description</td>
<td>Study to develop a Benefit Cost Analysis needed for this project to become a FMP. The project could reduce the risk of flooding for more than 450 structures in an Atlas 14 1% rainfall event.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>New Hydrologic or Hydraulic model?</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Need?</td>
<td>No</td>
</tr>
<tr>
<td>Existing/Anticipated models in near term?</td>
<td>Yes</td>
</tr>
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<table>
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<th>Harris</th>
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</thead>
<tbody>
<tr>
<td>Watershed HUC# (if known)</td>
<td>120401040706, 120402040100</td>
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</tbody>
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| Drainage area (Square miles, est.) | 1 |
| Goal(s)                           | 060000001, 06000011, 06000012, 06000015 |

### 100-Year Flood Risk Summary

<table>
<thead>
<tr>
<th>Population at risk</th>
<th>604</th>
</tr>
</thead>
<tbody>
<tr>
<td># of structures</td>
<td>215</td>
</tr>
<tr>
<td>Critical facilities</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Flood risk type:</th>
<th>Riverine?</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coastal?</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Local?</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Playa?</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Other?</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

| Farm/Ranch land impacted (acres) | 0 |
| Roadway(s) impacted (length)     | 4 |
| Historical road closures         | 0 |

### Estimated Cost and Funding Availability

| Total Cost | $30,000 |
| Amount of Available Funding | 999999 |
| Federal funding availability | Yes |

| Funding source | 999999 |
Title: Carpenters (N100-00-00) Channel Improvements

ID #: 061000402

Sponsor (name of entity, not person): Harris (County)

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Study to develop a Cost Benefit Analysis and elevate the project to a FMP. Carpenters Bayou (N100-00-00) channel conveyance improvements.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes

County: Harris
Watershed HUC# (if known): 120401040702

Drainage area (Square miles, est.): 1
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 531
# of structures: 153

Flood risk type: Riverine? Yes
No Coastal? No
Local? Yes
Playa? No

Farm/Ranch land impacted (acres): 999,999
Roadway(s) impacted (length): 2
Number of low water crossings: 0
Historical road closures: 0

Critical facilities: 3

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: 999999
# Flood Management Evaluation (FME)

**Title:** Brays Bayou - Partnership Project with Fort Bend County on Right-of-Way Acquisition, Design, and Construction of General Drainage Improvements along

**ID:** 061000188

**Sponsor:** Harris County Flood Control District

**RFPG recommend?** Yes **Reason for Recommendation:** Alignment with RFPG goals and TWDB guidance principles.

## Study Details

**Study type:** Project Planning

**Study description:** Further study of channel improvements from partnership project to restore channel conveyance including Atlas 14 rainfalls.

<table>
<thead>
<tr>
<th>New Hydrologic or Hydraulic model?</th>
<th>Emergency Need?</th>
<th>Existing/Anticipated models in near term?</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>County</th>
<th>Watershed HUC# (if known)</th>
<th>Goal(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fort Bend, Harris</td>
<td>120401040103,120401040104,120401040303,120401040401</td>
<td>06000001,06000011,06000012,06000015</td>
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</table>

## 100-Year Flood Risk Summary

<table>
<thead>
<tr>
<th>Population at risk</th>
<th># of structures</th>
<th>Critical facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,703</td>
<td>328</td>
<td>1</td>
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<table>
<thead>
<tr>
<th>Flood risk type:</th>
<th>Riverine?</th>
<th>Coastal?</th>
<th>Local?</th>
<th>Playa?</th>
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<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<table>
<thead>
<tr>
<th>Farm/Ranch land impacted (acres)</th>
<th>Roadway(s) impacted (length)</th>
<th>Number of low water crossings</th>
<th>Historical road closures</th>
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<tbody>
<tr>
<td>218</td>
<td>20</td>
<td>0</td>
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</table>

## Estimated Cost and Funding Availability

<table>
<thead>
<tr>
<th>Total Cost</th>
<th>Amount of Available Funding</th>
<th>Federal funding availability</th>
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</thead>
<tbody>
<tr>
<td>$1,020,000</td>
<td>999999</td>
<td>Yes</td>
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**Funding source:** 999999
**Flood Management Evaluation (FME)**

**Title**: West Fork Chocolate Bayou  
**ID**: 061000052  
**Sponsor**: Pearland (Municipality)  
**RFPG recommend**: Yes  
**Reason for Recommendation**: Alignment with RFPG goals and TWDB guidance principles.

### Study Details

**Study type**: Project Planning  
**Study description**: Further study including Atlas 14 rainfall incorporation and Benefit Cost Analysis of proposed channel modifications included in the City of Pearland master drainage plan.

**New Hydrologic or Hydraulic model**: No  
**Emergency Need**: No  
**Existing/Anticipated models in near term**: Yes  
**County**: Brazoria, Fort Bend  
**Watershed HUC# (if known)**: 120402040400  
**Drainage area (Square miles, est.)**: 14  
**Goal(s)**: 06000001, 06000011, 06000012, 06000015

### 100-Year Flood Risk Summary

<table>
<thead>
<tr>
<th>Population at risk</th>
<th># of structures</th>
<th>Critical facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>442</td>
<td>295</td>
<td>0</td>
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<table>
<thead>
<tr>
<th>Flood risk type</th>
<th>Local?</th>
<th>Coastal?</th>
<th>Playa?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riverine</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Farm/Ranch land impacted (acres)</th>
<th>Roadway(s) impacted (length)</th>
<th>Historical road closures</th>
</tr>
</thead>
<tbody>
<tr>
<td>157</td>
<td>6</td>
<td>0</td>
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### Estimated Cost and Funding Availability

<table>
<thead>
<tr>
<th>Total Cost</th>
<th>Amount of Available Funding</th>
<th>Federal funding availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>$360,000</td>
<td>999999</td>
<td>Yes</td>
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**Funding source**: 999999

[Maps showing regional view and FME area.]
Flood Management Evaluation (FME)

Title: Armand Bayou - Design and Construction of the B509-03-00 and B509-04-00 Stormwater Detention Basins

ID: 061000319

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Study to develop a Benefit Cost Analysis needed for this project to become a FMP. Design and Construction of this stormwater detention basin could reduce the risk of flooding for over 400 structures in an Atlas 14 1% rainfall event.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes

County: Harris
Watershed HUC# (if known): 120402040100

Drainage area (Square miles, est.): 5
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 468
# of structures: 63
Critical facilities: 0

Flood risk type: Riverine? No
Coastal? No
Local? Yes
Playa? No
Other? No

Farm/Ranch land impacted (acres): 6
Roadway(s) impacted (length): 3
Number of low water crossings: 0
Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: 999999
Flood Management Evaluation (FME)

Title: Galveston Bay Watershed Plan - PAD4 (S+4) Crossing Improvements
ID#: 061000350
Sponsor (name of entity, not person): Harris County Flood Control District
RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details
Study type: Project Planning
Study description: Recommended alternative directly addresses need for improved channel conveyance by increasing the size of the crossings at El Jardin Dr and Youpon Dr. to 8'x5' box culverts.

New Hydrologic or Hydraulic model? No
Emergency Need? No
Existing/Anticipated models in near term? Yes
County: Chambers, Harris
Watershed HUC# (if known): 120402040100
Drainage area (Square miles, est.): 0
Goal(s): 060000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary
Population at risk: 391
# of structures: 190
Critical facilities: 0
Flood risk type: Riverine? Yes
Coastal? No
Local? Yes
Playa? No
Farm/Ranch land impacted (acres): 0
Roadway(s) impacted (length): 3
Number of low water crossings: 0
Historical road closures: 0

Estimated Cost and Funding Availability
Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: Harris County, City of Pasadena and City of Seabrook

Maps:
- FME Area
- Regional view of FME area
Flood Management Evaluation (FME)

Title: League City - Stormwater Drainage Improvement - Interurban & Newport ditch

ID# 061000097
Sponsor (name of entity, not person): League City (Municipality)
RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details
Study type: Project Planning
Study description: Further study of proposed slope paving (concrete lining) improvements.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: No
County: Galveston, Harris
Watershed HUC# (if known): 120402040200, 120402040100
Drainage area (Square miles, est.): 53
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary
Population at risk: 20,978
# of structures: 5,251
Critical facilities: 25
Flood risk type: Riverine? No
Coastal? No
Local? Yes
Playa? No
Farm/Ranch land impacted (acres): 1,308
Roadway(s) impacted (length): 105
Number of low water crossings: 2
Historical road closures: 2

Estimated Cost and Funding Availability
Total Cost: $50,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: 999999
Flood Management Evaluation (FME)

Title: Stormwater Drainage Improvement- Bradshaw Rd

ID: 0610000118

Sponsor (name of entity, not person): League City (Municipality)

RFPG recommend: Yes  Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Further study of proposed slope paving (concrete lining) improvements. Southwest from SH 3 to the north line of CCISD's Elem. School #25. Pending Funding.

New Hydrologic or Hydraulic model? No  Emergency Need? No  Existing/Anticipated models in near term? No

County: Galveston, Harris  Watershed HUC# (if known): 120402040200, 120402040100

Drainage area (Square miles, est.): 53  Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 20,978  # of structures: 5,251  Critical facilities: 25
Flood risk type: Riverine? No  Coastal? No  Local? Yes  Playa? No  Other? No
Farm/Ranch land impacted (acres): 1,308  Roadway(s) impacted (length): 105
Number of low water crossings: 2  Historical road closures: 2

Estimated Cost and Funding Availability

Total Cost: $50,000  Amount of Available Funding: 999999  Federal funding availability: Yes
Funding source: 999999

[Maps showing League City and its surrounding area, with annotations for FME Area and Regional view of FME area]
Flood Management Evaluation (FME)

Title: City of Bayou Vista - Drainage Improvement Program

ID#: 061000117

Sponsor (name of entity, not person): Bayou Vista (Municipality)

RFPG recommend?: Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Study to develop drainage improvement program to reduce standing water and runoff, and reduce minor flooding for residents located in District No. 12.

New Hydrologic or Hydraulic model?: NO

Emergency Need?: NO

Existing/Anticipated models in near term?: NO

County: Galveston

Watershed HUC# (if known): 1204202040200

Drainage area (Square miles, est.): 0

Goal(s): 060000001,06000011,06000012,06000015

100-Year Flood Risk Summary

Population at risk: 1,508

# of structures: 1,123

Critical facilities: 3

Flood risk type: Riverine? NO

Coastal? NO

Local? YES

Playa? NO

Farm/Ranch land impacted (acres): 999,999

Roadway(s) impacted (length): 7

Number of low water crossings: 999,999

Historical road closures: 999,999

Estimated Cost and Funding Availability

Total Cost: $100,000

Amount of Available Funding: 999,999

Federal funding availability: YES

Funding source: 999,999
Flood Management Evaluation (FME)

Title: Spring Gully Watershed Planning Project: Project Phase I

ID: 0610000345

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend?: Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Develop BCA to become FMP. 108 ac-ft of detention storage. Basin A w/ 95 ac-ft of storage, 10 ft depth, inlet & outlet structures consist of 2 culverts & weir. Basin B w/ 13 ac-ft of storage, 10.5 ft depth, inlet & outlet structures of culvert & weir.

New Hydrologic or Hydraulic model?: No

Emergency Need?: No

Existing/Anticipated models in near term?: Yes

County: Harris

Watershed HUC# (if known): 120401040705

Drainage area (Square miles, est.): 3

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 917

# of structures: 346

Critical facilities: 0

Flood risk type: Riverine?: Yes

Coastal?: No

Local?: Yes

Playa?: No

Other?: No

Farm/Ranch land impacted (acres): 999,999

Roadway(s) impacted (length): 2

Number of low water crossings: 0

Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: HCFCD

[Map of FME Area]

[Regional view of FME area]
Flood Management Evaluation (FME)

Title: Spring Gully Watershed Planning Project - Project Phase II

ID#: 061000346

Sponsor: Harris County Flood Control District

RFPG recommend?: Yes  Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Develop BCA to become a FMP. Independent of Phase I. Phase II includes addition of Stormwater Detention Basin C, with 80 acre-feet of detention storage w/ 9.5 ft depth & an inlet and outlet structure consisting of a culvert & a weir.

New Hydrologic or Hydraulic model?: No  Emergency Need?: No  Existing/Projected models in near term?: Yes

County: Harris  Watershed HUC# (if known): 120401040705

Drainage area (Square miles, est.): 3  Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 917  # of structures: 346  Critical facilities: 0

Flood risk type: Riverine? Yes  Coastal? No  Local? Yes  Playa? No  Other? No

Farm/Ranch land impacted (acres): 999,999  Roadway(s) impacted (length): 2

Number of low water crossings: 0  Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000  Amount of Available Funding: 999999  Federal funding availability: Yes

Funding source: Harris County
Flood Management Evaluation (FME)

Title: Spring Gully Watershed Planning Project - Project Phase III

ID#: 061000347

Sponsor: Harris County Flood Control District

RFPG recommend?: Yes  Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Complete after phase 2. Relief channel intended to outfall into Stormwater Detention Basin C from Phase 2. Consists of trapezoidal 850-foot channel with cross culvert sized at Prairie Street. Upstream of the culvert crossing, the bottom width is 8 ft.

New Hydrologic or Hydraulic model?: No  Emergency Need?: No  Existing/Anticipated models in near term?: Yes

County: Harris  Watershed HUC# (if known): 120401040705

Drainage area (Square miles, est.): 3  Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 917  # of structures: 346  Critical facilities: 0

Flood risk type: Riverine? Yes  Coastal? No  Local? Yes  Playa? No  Other? No

Farm/Ranch land impacted (acres): 999,999  Roadway(s) impacted (length): 2

Number of low water crossings: 0  Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000  Amount of Available Funding: $999,999  Federal funding availability: Yes

Funding source: Harris County

---

Map of FME Area and Regional view of FME area.
**Flood Management Evaluation (FME)**

**Title**: South Frazier - Grand Lake Creek Watershed

**ID**: 061000451

**Sponsor (name of entity, not person)**: Conroe (Municipality)

**RFPG recommend?** Yes

**Reason for Recommendation**: Alignment with RFPG goals and TWDB guidance principles.

### Study Details

**Study type**: Project Planning

**Study description**: Develop a benefits cost analysis in support of this project identified in the City of Conroe Master Drainage Plan.

**New Hydrologic or Hydraulic model?** No

**Emergency Need?** No

**Existing/Anticipated models in near term?** Yes

**County**: Montgomery

**Watershed HUC# (if known)**: 120401010207, 120401010401

**Drainage area (Square miles, est.)**: 4

**Goal(s)**: 06000001, 06000011, 06000012, 06000015

### 100-Year Flood Risk Summary

<table>
<thead>
<tr>
<th>Population at risk</th>
<th># of structures</th>
<th>Critical facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,873</td>
<td>365</td>
<td>6</td>
</tr>
</tbody>
</table>

**Flood risk type**: Riverine? Yes

**Coastal?** No

**Local?** Yes

**Playa?** No

**Farm/Ranch land impacted (acres)**: 3

**Roadway(s) impacted (length)**: 7

**Number of low water crossings**: 0

**Historical road closures**: 0

### Estimated Cost and Funding Availability

**Total Cost**: $30,000

**Amount of Available Funding**: 999999

**Federal funding availability**: Yes

**Funding source**: 999999
Flood Management Evaluation (FME)

Title: Rivershire East - Grand Lake Creek Watershed

ID#: 061000452

Sponsor (name of entity, not person): Conroe (Municipality)

RFPG recommend? Yes  Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Develop a benefits cost analysis in support of this project identified in the City of Conroe Master Drainage Plan.

New Hydrologic or Hydraulic model? No

Emergency Need? No

Existing/Anticipated models in near term? Yes

County: Montgomery

Watershed HUC# (if known): 120401010207, 120401010401

Drainage area (Square miles, est.): 4  Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 1,873

# of structures: 365

Critical facilities: 6

Flood risk type: Riverine? Yes  Coastal? No  Local? Yes

Farm/Ranch land impacted (acres): 3  Roadway(s) impacted (length): 7

Number of low water crossings: 0  Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: $999999  Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

Title: Toby - Little Caney Creek Watershed

ID#: 061000459

Sponsor (name of entity, not person): Conroe (Municipality)

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Develop a benefits cost analysis in support of this project identified in the City of Conroe Master Drainage Plan.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes

County: Montgomery
Watershed HUC# (if known): 120401010403, 120401010401, 120401010402

Drainage area (Square miles, est.): 9
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 571
# of structures: 271
Critical facilities: 0

Flood risk type: Riverine? Yes
Coastal? No
Local? Yes
Playa? No

Farm/Ranch land impacted (acres): 4
Roadway(s) impacted (length): 7

Number of low water crossings: 0
Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

Title: Southern Oak - Little Laney Creek

ID #: 061000460

Sponsor (name of entity, not person): Conroe (Municipality)

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Develop a benefits cost analysis in support of this project identified in the City of Conroe Master Drainage Plan.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes

County: Montgomery
Watershed HUC# (if known): 120401010403, 120401010401, 120401010402

Drainage area (Square miles, est.): 9
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 571
# of structures: 271
Critical facilities: 0

Flood risk type: Riverine? Yes, Coastal? No, Local? Yes, Playa? No, Other? No
Farm/Ranch land impacted (acres): 4
Roadway(s) impacted (length): 7
Number of low water crossings: 0
Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: 999999

Map of the FME Area and Regional view of the FME area.
Flood Management Evaluation (FME)

Title: Greens Bayou - P103-00-00

ID: 061000216

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Further study of Flood Risk Reduction need identified through the HCFCD 'Watershed Planning Tool' to determine channel modifications needed to restore/improve channel conveyance including Atlas 14 rainfall.

New Hydrologic or Hydraulic model?: No

Emergency Need?: No

Existing/Anticipated models in near term?: Yes

County: Harris

Watershed HUC# (if known): 120401040703, 120401040702, 120401040606

Drainage area (Square miles, est.): 6

Goal(s): 06000001, 06000010, 06000015

100-Year Flood Risk Summary

Population at risk: 1,750

# of structures: 391

Critical facilities: 5

Flood risk type: Riverine? Yes

Coastal? No

Local? No

Playa? No

Roadway(s) impacted (length): 7

Historical road closures: 0

Number of low water crossings: 0

Farm/Ranch land impacted (acres): 15

Estimated Cost and Funding Availability

Total Cost: $100,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999
# Flood Management Evaluation (FME)

**Title**: East Chocolate Bayou (E103-00-00)

**ID**: 061000053

**Sponsor**: Pearland (Municipality)

**RFPG recommend?**: Yes  
**Reason for Recommendation**: Alignment with RFPG goals and TWDB guidance principles.

## Study Details

**Study type**: Project Planning

**Study description**: Further study including Atlas 14 rainfall incorporation and Benefit Cost Analysis of proposed channel modifications included in the City of Pearland master drainage plan.

<table>
<thead>
<tr>
<th>New Hydrologic or Hydraulic model?</th>
<th>NO</th>
<th>Emergency Need?</th>
<th>NO</th>
<th>Existing/Anticipated models in near term?</th>
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<tbody>
<tr>
<td>County</td>
<td>Brazoria</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Drainage area (Square miles, est.)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
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<td></td>
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</tbody>
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## 100-Year Flood Risk Summary

<table>
<thead>
<tr>
<th>Population at risk</th>
<th>999,999</th>
</tr>
</thead>
<tbody>
<tr>
<td># of structures</td>
<td>999,999</td>
</tr>
<tr>
<td>Critical facilities</td>
<td>999,999</td>
</tr>
<tr>
<td>Flood risk type:</td>
<td>Riverine? YES</td>
</tr>
<tr>
<td>Coastal?</td>
<td>NO</td>
</tr>
<tr>
<td>Local?</td>
<td>NO</td>
</tr>
<tr>
<td>Playa?</td>
<td>NO</td>
</tr>
<tr>
<td>Other?</td>
<td>NO</td>
</tr>
<tr>
<td>Farm/Ranch land impacted (acres)</td>
<td>999,999</td>
</tr>
<tr>
<td>Roadway(s) impacted (length)</td>
<td>0</td>
</tr>
<tr>
<td>Number of low water crossings</td>
<td>999,999</td>
</tr>
<tr>
<td>Historical road closures</td>
<td>999,999</td>
</tr>
</tbody>
</table>

## Estimated Cost and Funding Availability

| Total Cost | $130,000 |
| Amount of Available Funding | 999999 |
| Federal funding availability | Yes |
| Funding source | 999999 |
Flood Management Evaluation (FME)

Title: Mary's Creek Lower Segment
ID#: 061000056
Sponsor (name of entity, not person): Pearland (Municipality)
RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details
Study type: Project Planning
Study description: Study to develop project into a FMP. Project will provide a 25-year LOS; Channel modifications from SH35 to downstream of Pearland Pkwy, and 1670 ac-ft mitigation.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes
County: Brazoria, Galveston
Watershed HUC# (if known): 120402040100
Drainage area (Square miles, est.): 1
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary
Population at risk: 554
# of structures: 75
Critical facilities: 1
Flood risk type: Riverine? Yes, Coastal? No, Local? No, Playa? No, Other? No
Farm/Ranch land impacted (acres): 0
Roadway(s) impacted (length): 3
Number of low water crossings: 1
Historical road closures: 1

Estimated Cost and Funding Availability
Total Cost: $160,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: 999999

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# Flood Management Evaluation (FME)

## Title
Hickory Slough Middle Segment

## ID
061000060

## Sponsor (name of entity, not person)
Pearland (Municipality)

## RFPG recommend?
Yes

### Reason for Recommendation
Alignment with RFPG goals and TWDB guidance principles.

## Study Details

### Study type
Project Planning

### Study description
Further study including Atlas 14 rainfall incorporation and Benefit Cost Analysis of proposed channel modifications included in the City of Pearland master drainage plan.

### New Hydrologic or Hydraulic model?
No

### Emergency Need?
No

### Existing/Anticipated models in near term?
Yes

### County
Brazoria

### Watershed HUC# (if known)
120402040100

### Drainage area (Square miles, est.)
2

### Goal(s)
06000001, 06000011, 06000012, 06000015

## 100-Year Flood Risk Summary

<table>
<thead>
<tr>
<th>Population at risk</th>
<th># of structures</th>
<th>Critical facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,596</td>
<td>353</td>
<td>0</td>
</tr>
</tbody>
</table>

### Flood risk type
- Riverine?: Yes
- Coastal?: No
- Local?: No
- Playa?: No

### Farm/Ranch land impacted (acres)
8

### Number of low water crossings
0

### Roadway(s) impacted (length)
4

### Historical road closures
0

## Estimated Cost and Funding Availability

<table>
<thead>
<tr>
<th>Total Cost</th>
<th>Amount of Available Funding</th>
<th>Federal funding availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>$180,000</td>
<td>999999</td>
<td>Yes</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Funding source</th>
</tr>
</thead>
<tbody>
<tr>
<td>999999</td>
</tr>
</tbody>
</table>
Flood Management Evaluation (FME)

Title: B106-WP01 & WP02 for Armand Bayou Watershed

ID#: 061000323

Sponsor (name of entity, not person): Harris (County)

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Study to develop a Benefit Cost Analysis needed for this project to become a FMP. Conveyance improvements for B106-00-00 channel, including detention/mitigation storage.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes

County: Harris
Watershed HUC# (if known): 120401040706,120402040100
Drainage area (Square miles, est.): 10
Goal(s): 06000001,06000011,06000012,06000015

100-Year Flood Risk Summary

Population at risk: 2,199
# of structures: 473
Critical facilities: 0

Flood risk type: Riverine? Yes
Coastal? No
Local? Yes
Playa? No

Farm/Ranch land impacted (acres): 21
Roadway(s) impacted (length): 7
Number of low water crossings: 0
Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

Title: City of Waller Master Drainage Plan

ID: 061000295

Sponsor: Waller (Municipality)

RFPG recommend: Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Watershed Planning

Study description: Study to develop Master Drainage Plan using future and existing land use and flood/storm water drainage needs including Atlas 14 rainfall.

New Hydrologic or Hydraulic model? Yes

Emergency Need? No

Existing/Anticipated models in near term? No

County: Harris, Waller

Watershed HUC# (if known): 120401020101, 120401020105, 120401020201

Drainage area (Square miles, est.): 4

Goal(s): 060000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 666

# of structures: 149

Critical facilities: 4

Flood risk type: Riverine? Yes

Coastal? No

Local? No

Playa? No

Other? No

Farm/Ranch land impacted (acres): 48

Roadway(s) impacted (length): 5

Number of low water crossings: 7

Historical road closures: 7

Estimated Cost and Funding Availability

Total Cost: $230,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999
**Flood Management Evaluation (FME)**

**Title:** Forest Estates - Live Oak Creek Watershed  
Artesian Forest 1 - Artesian Creek Watershed

**ID #:** 061000442  
**Sponsor (name of entity, not person):** Conroe (Municipality)

**RFPG recommend?** Yes  
**Reason for Recommendation:** Alignment with RFPG goals and TWDB guidance principles.

### Study Details

- **Study type:** Project Planning  
- **Study description:** Develop a benefits cost analysis in support of this project identified in the City of Conroe Master Drainage Plan.

<table>
<thead>
<tr>
<th>New Hydrologic or Hydraulic model?</th>
<th>NO</th>
<th>Emergency Need?</th>
<th>NO</th>
<th>Existing/Anticipated models in near term?</th>
<th>YES</th>
</tr>
</thead>
</table>

- **County:** Montgomery  
- **Watershed HUC# (if known):** 120401010207, 120401010401

**Drainage area (Square miles, est.):** 2  
**Goal(s):** 06000001, 06000011, 06000012, 06000015

### 100-Year Flood Risk Summary

<table>
<thead>
<tr>
<th>Population at risk</th>
<th>531</th>
<th># of structures</th>
<th>99</th>
<th>Critical facilities</th>
<th>0</th>
</tr>
</thead>
</table>
- **Flood risk type:** Riverine? NO  
- **Coastal?** NO  
- **Local?** YES  
- **Playa?** NO  
- **Other?** NO

- **Farm/Ranch land impacted (acres):** 1  
- **Roadway(s) impacted (length):** 2

- **Number of low water crossings:** 0  
- **Historical road closures:** 0

### Estimated Cost and Funding Availability

- **Total Cost:** $30,000  
- **Amount of Available Funding:** 999999  
- **Federal funding availability:** Yes

**Funding source:** 999999

---

**Maps:**
- **FME Area**
- **Regional view of FME area**
Flood Management Evaluation (FME)

Title: Artesian Forest 1 - Artesian Creek Watershed

ID: 061000443

Sponsor (name of entity, not person): Conroe (Municipality)

RFPG recommend: Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Develop a benefits cost analysis in support of this project identified in the City of Conroe Master Drainage Plan.

New Hydrologic or Hydraulic model? No

Emergency Need? No

Existing/Anticipated models in near term? Yes

County: Montgomery

Watershed HUC# (if known): 120401010207

Drainage area (Square miles, est.): 1

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 69

# of structures: 40

Critical facilities: 1

Flood risk type: Riverine? No, Coastal? No, Local? No, Playa? No, Other? Yes

Farm/Ranch land impacted (acres): 7

Roadway(s) impacted (length): 1

Number of low water crossings: 0

Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: $999,999

Federal funding availability: Yes

Funding source: $999,999
Flood Management Evaluation (FME)

Title: Artesian Forest East - Artesian Creek Watershed
ID#: 061000444
Sponsor (name of entity, not person): Conroe (Municipality)
RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details
Study type: Project Planning
Study description: Develop a benefits cost analysis in support of this project identified in the City of Conroe Master Drainage Plan.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes
County: Montgomery
Watershed HUC# (if known): 120401010207
Drainage area (Square miles, est.): 1
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary
Population at risk: 69
# of structures: 40
Critical facilities: 1
Flood risk type: Riverine? No
Coastal? No
Local? Yes
Playa? No
Farm/Ranch land impacted (acres): 7
Roadway(s) impacted (length): 1
Number of low water crossings: 0
Historical road closures: 0

Estimated Cost and Funding Availability
Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: 999999
Flood Management Evaluation (FME)

Title: Longmire and SH-105 - Live Oak Creek Watershed

ID: 061000462

Sponsor (name of entity, not person): Conroe (Municipality)

RFPG recommend? Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Develop a benefits cost analysis in support of this project identified in the City of Conroe Master Drainage Plan.

New Hydrologic or Hydraulic model? No
Emergency Need? No
Existing/Anticipated models in near term? Yes

County: Montgomery
Watershed HUC# (if known): 120401010207, 120401010401

Drainage area (Square miles, est.): 2
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 531
# of structures: 99
Critical facilities: 0

Flood risk type: Riverine? Yes
Coastal? No
Local? Yes
Playa? No

Farm/Ranch land impacted (acres): 1
Roadway(s) impacted (length): 2

Number of low water crossings: 0
Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: 999999

Maps: FME Area, Regional view of FME area
Flood Management Evaluation (FME)

Title: Hickory Slough (Upper Segment)
ID#: 061000057
Sponsor: Pearland (Municipality)
RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details
Study type: Project Planning
Study description: Further study including Atlas 14 rainfall incorporation and Benefit Cost Analysis of proposed channel modifications included in the City of Pearland master drainage plan.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes
County: Brazoria
Watershed HUC# (if known): 120402040100
Estimation Error (Factor): 5
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary
Population at risk: 1,269
\# of structures: 413
Critical facilities: 4
Flood risk type: Riverine: Yes, Coastal: No, Local: No, Playa: No, Other: No
Farm/Ranch land impacted (acres): 6
Roadway(s) impacted (length): 2
Number of low water crossings: 0
Historical road closures: 0

Estimated Cost and Funding Availability
Total Cost: $250,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: 999999

Maps: FME Area, Regional view of FME area
Flood Management Evaluation (FME)

Title: Mary's Creek Upper Segment

ID: 061000061

Sponsor: Pearland (Municipality)

RFPG recommend? Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Further study including Atlas 14 rainfall incorporation and Benefit Cost Analysis of proposed channel modifications included in the City of Pearland master drainage plan.

New Hydrologic or Hydraulic model? No
Emergency Need? No
Existing/Anticipated models in near term? Yes

County: Brazoria
Watershed HUC# (if known): 120402040100
Drainage area (Square miles, est.): 5
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 999,999
# of structures: 999,999
Critical facilities: 999,999
Flood type: Riverine? Yes
Coastal? No
Local? No
Playa? No
Farm/Ranch land impacted (acres): 999,999
Roadway(s) impacted (length): 999,999
Number of low water crossings: 999,999
Historical road closures: 999,999

Estimated Cost and Funding Availability

Total Cost: $250,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: 999999
Flood Management Evaluation (FME)

Title: Hickory Slough Lower Segment

ID#: 061000065

Sponsor (name of entity, not person): Pearland (Municipality)

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Further study including Atlas 14 rainfall incorporation and Benefit Cost Analysis of proposed channel modifications included in the City of Pearland master drainage plan.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes

County: Brazoria
Watershed HUC# (if known): 120402040100
Drainage area (Square miles, est.): 1
Goal(s): 060000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 1,648
# of structures: 424
Critical facilities: 0

Riverine?: Yes
Coastal?: No
Local?: No
Playa?: No
Farm/Ranch land impacted (acres): 5
Roadway(s) impacted (length): 6
Number of low water crossings: 0
Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $160,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

**Title:** Cowart Creek Segment 16

**ID #:** 061000070

**Sponsor:** Pearland (Municipality)

**RFPG recommend?** Yes

**Reason for Recommendation:** Alignment with RFPG goals and TWDB guidance principles.

**Study Details**

**Study type:** Project Planning

**Study description:** Further study including Atlas 14 rainfall incorporation and Benefit Cost Analysis of proposed channel modifications included in the City of Pearland master drainage plan.

**New Hydrologic or Hydraulic model?** No

**Emergency Need?** No

**Existing/Anticipated models in near term?** Yes

**County:** Brazoria

**Watershed HUC# (if known):** 120402040100

**Drainage area (Square miles, est.):** 2

**Goal(s):** 06000001, 06000011, 06000012, 06000015

**100-Year Flood Risk Summary**

<table>
<thead>
<tr>
<th>Population at risk</th>
<th># of structures</th>
<th>Critical facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>313</td>
<td>150</td>
<td>0</td>
</tr>
</tbody>
</table>

**Flood risk type:**

- Riverine? Yes
- Coastal? No
- Local? No
- Playa? No

**Farm/Ranch land impacted (acres):** 8

**Roadway(s) impacted (length):** 1

**Number of low water crossings:** 0

**Historical road closures:** 0

**Estimated Cost and Funding Availability**

- **Total Cost:** $190,000
- **Amount of Available Funding:** 999999
- **Federal funding availability:** Yes

**Funding source:** 999999

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**FME Area**

**Regional view of FME area**
Flood Management Evaluation (FME)

Title: White Oak Bayou - General Drainage Improvements along E105-00-00
ID#: 061000196
Sponsor (name of entity, not person): Houston (Municipality)
RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details
Study type: Project Planning
Study description: Further study of channel improvements from partnership project to restore channel conveyance including Atlas 14 rainfalls.
New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes
County: Harris
Watershed HUC# (if known): 120401040304
Drainage area (Square miles, est.): 1
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary
Population at risk: 431
# of structures: 160
Critical facilities:
Flood risk type: Riverine?: Yes
Coastal?: No
Local?: No
Playa?: No
Other?: No
Farm/Ranch land impacted (acres): 1
Roadway(s) impacted (length): 3
Number of low water crossings: 0
Historical road closures: 0

Estimated Cost and Funding Availability
Total Cost: $120,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: 999999
Flood Management Evaluation (FME)

Title: Galveston Bay - Right-of-Way Acquisition, Design and Construction of General Drainage Improvements Along F101-06-00

ID# 061000349

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend? Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Study to develop a Benefit Cost Analysis needed for this project to become a FMP. The project could reduce the risk of flooding for over 40 structures in an Atlas 14 1% rainfall event.

New Hydrologic or Hydraulic model? No
Emergency Need? No
Existing/Anticipated models in near term? Yes

County: Harris
Watershed HUC# (if known): 120401040706, 120402040100

Drainage area (Square miles, est.): 2
Goal(s): 060000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 999,999
# of structures: 999,999
Critical facilities: 999,999

Flood risk type:
Riverine? No
Coastal? No
Local? Yes
Playa? No
Other? No

Farm/Ranch land impacted (acres): 999,999
Roadway(s) impacted (length): 999,999
Number of low water crossings: 999,999
Historical road closures: 999,999

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999,999
Federal funding availability: Yes

Funding source: 999,999
Flood Management Evaluation (FME)

Title: Clear Creek - Rehabilitation of the A214-00-00 channel to Restore Channel Conveyance Capacity

ID#: 061000425
Sponsor (name of entity, not person): Harris County Flood Control District
RFPG recommend?: Yes Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Major maintenance to restore channel conveyance capacity.

New Hydrologic or Hydraulic model?: No Emergency Need?: No Existing/Anticipated models in near term?: Yes
County: Galveston, Harris
Watershed HUC# (if known): 120401040502, 120401040501, 120402040200, 120402040400, 120402040
Drainage area (Square miles, est.): 5 Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 1,319 # of structures: 424 Critical facilities: 0
Flood risk type: Riverine: Yes Coastal: No Local: Yes Playa: No Other: No
Farm/Ranch land impacted (acres): 3 Roadway(s) impacted (length): 9
Number of low water crossings: 0 Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000 Amount of Available Funding: 999999 Federal funding availability: Yes
Funding source: 999999
Flood Management Evaluation (FME)

Title: Cedar Bayou Flood Risk Reduction Study - Channel improvements upstream of FM 1960
ID#: 061000379
Sponsor: Harris County Flood Control District
RFPG recommend: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details
Study type: Project Planning
Study description: Study to develop a Benefit Cost Analysis needed for this project to become a FMP. Cedar Bayou channel improvements upstream of FM 1960.

New Hydrologic or Hydraulic model: No
Emergency Need: No
Existing/Anticipated models in near term: Yes
County: Harris, Liberty
Watershed HUC# (if known): 120401030205, 120401040705, 120401040706, 120401040704, 120402031
Drainage area (Square miles, est.): 23
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary
Population at risk: 147
# of structures: 75
Critical facilities: 0
Flood risk type: Riverine? Yes, Coastal? No, Local? Yes, Playa? No, Other? No
Farm/Ranch land impacted (acres): 463
Roadway(s) impacted (length): 5
Number of low water crossings: 0
Historical road closures: 0

Estimated Cost and Funding Availability
Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: 999999
Flood Management Evaluation (FME)

Title: City of Alvin Master Drainage Plan

ID: 061000039

Sponsor (name of entity, not person): Alvin (Municipality)

RFPG recommend: Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Watershed Planning

Study description: Comprehensive review of current drainage, studies and recommendations for future projects and studies to create a Master Drainage Plan for the City of Alvin.

New Hydrologic or Hydraulic model: Yes

Emergency Need: No

Existing/Anticipated models in near term: No

County: Brazoria, Galveston, Fort Bend

Watershed HUC# (if known): 120402040300, 120402040200, 120402040400, 120402040100

Drainage area (Square miles, est.): 25

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 21,569

# of structures: 3,445

Critical facilities: 18

Flood risk type: Riverine: No, Coastal: No, Local: Yes, Playa: No, Other: No

Farm/Ranch land impacted (acres): 262

Roadway(s) impacted (length): 57

Number of low water crossings: 0

Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $440,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999

---

Maps:

FME Area

Regional view of FME area
Flood Management Evaluation (FME)

Title: City of Manvel Flora St. Drainage Improvements

ID# 061000045

Sponsor (name of entity, not person): Manvel (Municipality)

RFPG recommend? Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Study of possible Flora Street drainage improvements: widen and reshape ditches, and upgrade culverts to restore adequate drainage to mitigate flooding in Manvel neighborhoods.

New Hydrologic or Hydraulic model? No
Emergency Need? No
Existing/Anticipated models in near term? No

County: Brazoria
Watershed HUC# (if known): 120402040200, 12040204040, 120402040100

Drainage area (Square miles, est.): 27
Goal(s): 060000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 8,190
# of structures: 1,250
Critical facilities: 8

Flood risk type: Riverine? No Coastal? No Local? Yes Playa? No Other? No

Farm/Ranch land impacted (acres): 179 Roadway(s) impacted (length): 43
Number of low water crossings: 0 Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $100,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: FEMA-HMGP, PDM, FMA, City, County, Drainage District

[Map of FME Area]
[Regional view of FME area]
Flood Management Evaluation (FME)

Title: West Fork Chocolate (Cold River Ranch Ditch)

ID: 061000051

Sponsor (name of entity, not person): Pearland (Municipality)

RFPG recommend? Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Further study of proposed channel modifications to Cold River Ranch Ditch included in the City of Pearland master drainage plan to include Atlas 14 rainfall.

New Hydrologic or Hydraulic model? No
Emergency Need? No
Existing/Anticipated models in near term? Yes

County: Brazoria
Watershed HUC# (if known): 120402040400

Drainage area (Square miles, est.): 2
Goal(s): 060000001, 060000011, 060000012, 060000015

100-Year Flood Risk Summary

Population at risk: 56
# of structures: 60
Critical facilities: 0

Flood risk type: Riverine? Yes
Coastal? No
Local? No
Playa? No

Farm/Ranch land impacted (acres): 0
Roadway(s) impacted (length): 1

Number of low water crossings: 999,999
Historical road closures: 999,999

Estimated Cost and Funding Availability

Total Cost: $180,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: 999999

[Map of FME Area]

[Regional view of FME area]
Flood Management Evaluation (FME)

Title: Cedar Bayou Flood Risk Reduction Study - Q130 Channel improvements from Crosby Eastgate Rd. to Q100 Confluence

ID#: 061000368

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend?: Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Study to develop a Benefit Cost Analysis needed for this project to become a FMP. Cedar Bayou Flood Risk Reduction Study - Q130 Channel improvements from Crosby Eastgate Rd. to Q100 Confluence.

New Hydrologic or Hydraulic model?: No

Emergency Need?: No

Existing/Anticipated models in near term?: Yes

County: Harris, Liberty

Watershed HUC# (if known): 120401030205, 120401040705, 120401040706, 120401040707, 120401040704, 1204020320

Drainage area (Square miles, est.): 4

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 241

# of structures: 174

Critical facilities: 0

Flood risk type: Riverine? Yes

Coastal? No

Local? No

Playa? No

Other? No

Farm/Ranch land impacted (acres): 141

Roadway(s) impacted (length): 3

Number of low water crossings: 0

Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

Title: Arcadian Gardens Subdivision Drainage Improvements

ID#: 061000317

Sponsor (name of entity, not person): Harris (County)

RFGP recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Study to develop a Cost Benefit Analysis and elevate the project to a FMP. To achieve this goal, the key features of improvements are to rehabilitate roadside swales, build new storm sewers and improve the outfall drainage conditions.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: No

County: Harris
Watershed HUC# (if known): 120401040704

Drainage area (Square miles, est.): 0
Goal(s): 0600000001, 060000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 5
# of structures: 5
Critical facilities: 0

Riverine?: No
Coastal?: No
Local?: Yes
Playa?: No

Flood risk type:

Farm/Ranch land impacted (acres): 999,999
Roadway(s) impacted (length): 0

Number of low water crossings: 999,999
Historical road closures: 999,999

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: 999999
Flood Management Evaluation (FME)

Title: Greens Bayou - P130-05-02

ID#: 061000204

Sponsor (name of entity, not person): Harris County Flood Control District

RFGP recommend?: Yes  Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Further study of Flood Risk Reduction needs identified through the HCFCD "Watershed Planning Tool" to determine channel modifications needed to restore/improve channel conveyance including Atlas 14 rainfall.

New Hydrologic or Hydraulic model?: No  Emergency Need?: No  Existing/Anticipated models in near term?: Yes

County: Harris  Watershed HUC# (if known): 120401040602

Drainage area (Square miles, est.): 0  Goal(s): 06000001, 06000010, 06000015

100-Year Flood Risk Summary

Population at risk: 130  # of structures: 94  Critical facilities: 0

Flood risk type: Riverine? Yes  Coastal? No  Local? No  Playa?: No  Other?: No

Farm/Ranch land impacted (acres): 999,999  Roadway(s) impacted (length): 1

Number of low water crossings: 999,999  Historical road closures: 999,999

Estimated Cost and Funding Availability

Total Cost: $100,000  Amount of Available Funding: 999999  Federal funding availability: Yes

Funding source: 999999
# Flood Management Evaluation (FME)

**Title**: Spring Creek Watershed Plan - Recommended Alternative for PA-02::J131-01-00

**Storm Sewer improvements & channel modification**

<table>
<thead>
<tr>
<th>ID#</th>
<th>061000337</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sponsor (name of entity, not person)</td>
<td>Harris County Flood Control District</td>
</tr>
<tr>
<td>RFPG recommend?</td>
<td>Yes</td>
</tr>
<tr>
<td>Reason for Recommendation</td>
<td>Alignment with RFPG goals and TWDB guidance principles.</td>
</tr>
</tbody>
</table>

## Study Details

<table>
<thead>
<tr>
<th>Study type</th>
<th>Project Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study description</td>
<td>Study to develop a BCR required for this project to become a FMP. Channel modifications along J131-01 &amp; storm sewer improvements under Zion Road, reduces sheetflow by providing positive drainage outfall for ~200 ac of land.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>New Hydrologic or Hydraulic model?</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Need?</td>
<td>NO</td>
</tr>
<tr>
<td>Existing/Anticipated models in near term?</td>
<td>YES</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>County</th>
<th>Harris</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watershed HUC# (if known)</td>
<td>120401020209</td>
</tr>
<tr>
<td>Drainage area (Square miles, est.)</td>
<td>0</td>
</tr>
<tr>
<td>Goal(s)</td>
<td>06000001, 06000011, 06000012, 06000015</td>
</tr>
</tbody>
</table>

## 100-Year Flood Risk Summary

<table>
<thead>
<tr>
<th>Population at risk</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td># of structures</td>
<td>6</td>
</tr>
<tr>
<td>Critical facilities</td>
<td>0</td>
</tr>
<tr>
<td>Flood risk type: Riverine?</td>
<td>Yes</td>
</tr>
<tr>
<td>Coastal?</td>
<td>NO</td>
</tr>
<tr>
<td>Local?</td>
<td>Yes</td>
</tr>
<tr>
<td>Playa?</td>
<td>No, Other?</td>
</tr>
<tr>
<td>Farm/Ranch land impacted (acres)</td>
<td>999,999</td>
</tr>
<tr>
<td>Roadway(s) impacted (length)</td>
<td>0</td>
</tr>
<tr>
<td>Number of low water crossings</td>
<td>1</td>
</tr>
<tr>
<td>Historical road closures</td>
<td>1</td>
</tr>
</tbody>
</table>

## Estimated Cost and Funding Availability

| Total Cost | $30,000 |
| Amount of Available Funding | 999999 |
| Federal funding availability | Yes |
| Funding source | Harris County, City of Tomball, Flood Control District and |

---

[Map of study area](image1.png)

[Regional view of FME area](image2.png)
Flood Management Evaluation (FME)

<table>
<thead>
<tr>
<th>Title</th>
<th>Barker - T103-00-00</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID#</td>
<td>061000218</td>
</tr>
<tr>
<td>Sponsor (name of entity, not person)</td>
<td>Harris County Flood Control District</td>
</tr>
<tr>
<td>RFPG recommend?</td>
<td>Yes</td>
</tr>
<tr>
<td>Reason for Recommendation</td>
<td>Alignment with RFPG goals and TWDB guidance principles.</td>
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**Study Details**

<table>
<thead>
<tr>
<th>Study type</th>
<th>Project Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study description</td>
<td>Further study of Flood Risk Reduction need identified through the HCFCD 'Watershed Planning Tool' to determine channel modifications needed to restore/improve channel conveyance including Atlas 14 rainfall.</td>
</tr>
<tr>
<td>New Hydrologic or Hydraulic model?</td>
<td>No</td>
</tr>
<tr>
<td>Emergency Need?</td>
<td>No</td>
</tr>
<tr>
<td>Existing/Anticipated models in near term?</td>
<td>Yes</td>
</tr>
<tr>
<td>County</td>
<td>Harris</td>
</tr>
<tr>
<td>Watershed HUC# (if known)</td>
<td>120401040102, 120401040104, 120401040203</td>
</tr>
<tr>
<td>Drainage area (Square miles, est.)</td>
<td>4</td>
</tr>
<tr>
<td>Goal(s)</td>
<td>06000001, 06000011, 06000012, 06000015</td>
</tr>
</tbody>
</table>

**100-Year Flood Risk Summary**

| Population at risk | 0 |
| # of structures | 0 |
| Critical facilities | 0 |
| Flood risk type: | Riverine? Yes, Coastal? No, Local? No, Playa? No, Other? No |
| Farm/Ranch land impacted (acres) | 1 |
| Number of low water crossings | 0 |
| Roadway(s) impacted (length) | 1 |
| Historical road closures | 0 |

**Estimated Cost and Funding Availability**

| Total Cost | $100,000 |
| Amount of Available Funding | 999999 |
| Federal funding availability | Yes |

| Funding source | 999999 |

---

![FME Area Map](image1)

![Regional view of FME area](image2)
Flood Management Evaluation (FME)

Title: City of Bunker Hill Drainage Projects
ID#: 061000016
Sponsor: Bunker Hill Village (Municipality)
RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details
Study type: Project Planning
Study description: Further study of proposed localized and regional flood risk reduction projects within the City of Bunker Hill.

New Hydrologic or Hydraulic model?: Yes
Emergency Need?: No
Existing/Anticipated models in near term?: No
County: Harris
Watershed HUC#: 120401040303
Drainage area (Square miles, est.): 1
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary
Population at risk: 0
# of structures: 0
Critical facilities: 0
Flood risk type: Riverine: No
Coastal: No
Local: Yes
Playa: No
Other: No
Farm/Ranch land impacted (acres): 999,999
Roadway(s) impacted (length): 999,999
Number of low water crossings: 999,999
Historical road closures: 999,999

Estimated Cost and Funding Availability
Total Cost: $100,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: 999999

FME Area

Regional view of FME area
Flood Management Evaluation (FME)

Title: Roman Forest Boulevard Bridge Elevation Project

ID#: 061000388

Sponsor (name of entity, not person): Montgomery (County)

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Further study of this project involves the study, design, elevation, and replacement of the Roman Forest Boulevard Bridge to mitigate the risks associated with storms and riverine flooding for the approximate 15,000 citizens.

New Hydrologic or Hydraulic model?: NO
Emergency Need?: NO
Existing/Anticipated models in near term?: NO

County: Montgomery

Watershed HUC# (if known): 120401030109, 120401030402

Drainage area (Square miles, est.): 2
Goal(s): 060000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 270
# of structures: 86
Critical facilities: 0

Flood risk type: Riverine? Yes
Coastal? No
Local? No
Playa? No

Farm/Ranch land impacted (acres): 999,999
Roadway(s) impacted (length): 3

Number of low water crossings: 0
Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: CDBG-MIT

[Maps and diagrams showing FME Area and Regional view of FME area]
Flood Management Evaluation (FME)

**Title:** Corp of Engineers study of the Galveston County Water Reservoir Dam and Levee system

**ID:** 061000137

**Sponsor (name of entity, not person):** Clear Lake Shores (Municipality)

**RFPG recommend:** Yes  
**Reason for Recommendation:** Alignment with RFPG goals and TWDB guidance principles.

### Study Details

**Study type:** Project Planning

**Study description:** Review findings of potential breach to dam/levee system and develop/implement mitigation actions as applicable.

### New Hydrologic or Hydraulic model?

**County:** Galveston, Harris  
**Watershed HUC# (if known):** 120402040100  
**Drainage area (Square miles, est.):** 1  
**Goal(s):** 06000001, 06000011, 06000012, 06000015

### 100-Year Flood Risk Summary

**Population at risk:** 3,407  
**# of structures:** 633  
**Critical facilities:** 4

**Flood risk type:** Riverine? No  
**Local?** Yes  
**Playa?** No  
**Other?** No

**Farm/Ranch land impacted (acres):** 999,999

**Number of low water crossings:** 0

**Roadway(s) impacted (length):** 0

### Estimated Cost and Funding Availability

**Total Cost:** $140,000  
**Amount of Available Funding:** 999999  
**Federal funding availability:** Yes

**Funding source:** 999999
# Flood Management Evaluation (FME)

**Title:** City of Hillcrest Village Drainage Improvements

**ID:** 061000049

**Sponsor (name of entity, not person):** Hillcrest Village (Municipality)

**RFPG recommend?** Yes  
**Reason for Recommendation:** Alignment with RFPG goals and TWDB guidance principles.

## Study Details

**Study type:** Project Planning

**Study description:** Further study and FMP development required to assess alternatives to restore drainage and mitigate flooding throughout the City of Hillcrest Village.

<table>
<thead>
<tr>
<th>New Hydrologic or Hydraulic model?</th>
<th>NO</th>
<th>Emergency Need?</th>
<th>NO</th>
<th>Existing/Anticipated models in near term?</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>County</td>
<td>Brazoria</td>
<td>Watershed HUC# (if known)</td>
<td>120402040400</td>
<td>Goal(s)</td>
<td>060000001,06000011,06000012,06000015</td>
</tr>
<tr>
<td>Drainage area (Square miles, est.)</td>
<td>0</td>
<td>Goal(s)</td>
<td>060000001,06000011,06000012,06000015</td>
<td></td>
<td></td>
</tr>
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</table>

## 100-Year Flood Risk Summary

<table>
<thead>
<tr>
<th>Population at risk</th>
<th>333</th>
<th># of structures</th>
<th>128</th>
<th>Critical facilities</th>
<th>1</th>
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<tbody>
<tr>
<td>Flood risk type:</td>
<td>Riverine? No</td>
<td>Coastal? No</td>
<td>Local? Yes</td>
<td>Playa? No</td>
<td>Other? No</td>
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<tr>
<td>Farm/Ranch land impacted (acres)</td>
<td>0</td>
<td>Roadway(s) impacted (length)</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of low water crossings</td>
<td>0</td>
<td>Historical road closures</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Estimated Cost and Funding Availability

| Total Cost | $130,000  | Amount of Available Funding | 999999  | Federal funding availability | Yes |
| Total Cost | $130,000  | Funding source | 999999  | Federal funding availability | Yes |
# Flood Management Evaluation (FME)

**Title**: West Chocolate Bayou (CR 383 Ditch)

**ID**: 05100050

**Sponsor**: Pearland (Municipality)

**RFPG recommend?**: Yes  
**Reason for Recommendation**: Alignment with RFPG goals and TWDB guidance principles.

## Study Details

**Study type**: Project Planning

**Study description**: Further study including Atlas 14 rainfall incorporation and Benefit Cost Analysis of proposed channel modifications included in the City of Pearland master drainage plan.

<table>
<thead>
<tr>
<th>New Hydrologic or Hydraulic model?</th>
<th>NO</th>
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<tbody>
<tr>
<td>Emergency Need?</td>
<td>NO</td>
</tr>
<tr>
<td>Existing/Anticipated models in near term?</td>
<td>YES</td>
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</table>

**County**: Brazoria, Fort Bend  
**Watershed HUC# (if known)**: 120402040400

**Drainage area (Square miles, est.)**: 3  
**Goal(s)**: 06000001, 06000011, 06000012, 06000015

## 100-Year Flood Risk Summary

<table>
<thead>
<tr>
<th>Population at risk</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td># of structures</td>
<td>0</td>
</tr>
<tr>
<td>Critical facilities</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Flood risk type</th>
<th>Riverine?</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coastal?</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Local?</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Playa?</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Other?</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Farm/Ranch land impacted (acres)</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roadway(s) impacted (length)</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of low water crossings</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historical road closures</td>
<td>0</td>
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## Estimated Cost and Funding Availability

<table>
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<tr>
<th>Total Cost</th>
<th>$220,000</th>
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<tbody>
<tr>
<td>Amount of Available Funding</td>
<td>999999</td>
</tr>
<tr>
<td>Federal funding availability</td>
<td>Yes</td>
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</table>

<table>
<thead>
<tr>
<th>Funding source</th>
<th>999999</th>
</tr>
</thead>
</table>
Title: Armand Bayou Watershed - Basin Expansion and Extension and H&H Study (Phases 1 + 2)

ID#: 061000321

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Study to develop a Benefit Cost Analysis needed for this project to become a FMP. Channel modifications along B115-00-00 requires expansion of B500-04-00 and new detention property.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: No

County: Harris
Watershed HUC# (if known): 120402040100

Drainage area (Square miles, est.): 1
Goal(s): 060000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 2,154
# of structures: 371
Critical facilities: 0

Flood risk type: Riverine? Yes
Coastal? No
Local? No
Playa? No
Other? No

Farm/Ranch land impacted (acres): 999,999
Roadway(s) impacted (length): 4
Number of low water crossings: 0
Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $30,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: HCFCD
Flood Management Evaluation (FME)

Title: Annalea/Whitehall Kings Park Drainage - Drainage Improvements Phase 2

ID#: 061000146

Sponsor (name of entity, not person): Friendswood (Municipality)

RFPG recommend?: Yes  Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Further study of proposed drainage improvements to Stafford Oaks.

New Hydrologic or Hydraulic model?: No

Emergency Need?: No

Existing/Anticipated models in near term?: No

County: Galveston, Harris

Watershed HUC# (if known): 120402040200, 120402040100

Drainage area (square miles, est.): 21

Goal(s): 060000001, 060000011, 060000012, 060000015

100-Year Flood Risk Summary

Population at risk: 5,467

# of structures: 1,680

Critical facilities: 2

Flood risk type: Riverine? No  Coastal? No  Local? Yes  Playa? No  Other? No

Farm/Ranch land impacted (acres): 18

Roadway(s) impacted (length): 38

Number of low water crossings: 5

Historical road closures: 5

Estimated Cost and Funding Availability

Total Cost: $50,000  Amount of Available Funding: 999999  Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

Title: Town of Woodloch Master Drainage Plan
ID#: 061000300
Sponsor (name of entity, not person): Woodloch (Municipality)
RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details
Study type: Watershed Planning
Study description: Study to develop Master Drainage Plan using future and existing land use and flood/storm water drainage needs including Atlas 14 rainfall.

New Hydrologic or Hydraulic model?: Yes
Emergency Need?: Yes
Existing/Anticipated models in near term?: No
County: Montgomery
Watershed HUC# (if known): 120401010402
Drainage area (Square miles, est.): 0
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary
Population at risk: 233
# of structures: 85
Critical facilities:
Flood risk type: Riverine? No, Coastal? No, Local? Yes, Playa? No, Other? No
Farm/Ranch land impacted (acres): 999,999
Roadway(s) impacted (length): 1
Number of low water crossings: 999,999
Historical road closures: 999,999

Estimated Cost and Funding Availability
Total Cost: $50,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: 999999

[Maps of the FME area and regional view of the FME area]
Flood Management Evaluation (FME)

Title: Buffalo Bayou - W130-00-00

ID: 061000220

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Further study of Flood Risk Reduction need identified through the HCFCD 'Watershed Planning Tool' to determine channel modifications needed to restore/improve channel conveyance including Atlas 14 rainfall.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes

County: Harris
Watershed HUC# (if known): 120401040305, 120401040303
Drainage area (Square miles, est.): 3
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 4,290
# of structures: 27

Flood risk type: Riverine? Yes
Coastal? No
Local? No
Playa? No

Farm/Ranch land impacted (acres): 0
Roadway(s) impacted (length): 1
Number of low water crossings: 0
Historical road closures: 0

Critical facilities: 0

Estimated Cost and Funding Availability

Total Cost: $100,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: 999999

FME Area

Regional view of FME area
Title: City of Friendswood - Comprehensive Flood Mitigation Plan

ID#: 061000091

Sponsor: Friendswood (Municipality)

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Watershed Planning
Study description: Study to update city floodplain maps and develop flood mitigation plan.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes

County: Galveston, Harris
Watershed HUC# (if known): 120402040200, 120402040100
Drainage area (Square miles, est.): 21
Goal(s): 060000001, 060000010, 060000015

100-Year Flood Risk Summary

<table>
<thead>
<tr>
<th>Population at risk</th>
<th>5,467</th>
<th># of structures</th>
<th>1,680</th>
<th>Critical facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flood risk type:</td>
<td>Riverine? No</td>
<td>Coastal? No</td>
<td>Local? Yes</td>
<td>Playa? No Other? No</td>
</tr>
<tr>
<td>Farm/Ranch land impacted (acres)</td>
<td>18</td>
<td>Roadway(s) impacted (length)</td>
<td>38</td>
<td></td>
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<tr>
<td>Number of low water crossings</td>
<td>5</td>
<td>Historical road closures</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

Estimated Cost and Funding Availability

| Total Cost | $140,000 |
| Amount of Available Funding | 999999 |
| Federal funding availability | Yes |

Funding source: 999999

Maps:
- Map of Friendswood area
- Regional view of Friendswood area

Diagram:
- Diagram of study area with labeled locations
Flood Management Evaluation (FME)

Title: Little Cypress Creek - L103-00-00

ID#: 061000203

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Further study of Flood Risk Reduction need identified through the HCFCD 'Watershed Planning Tool' to determine channel modifications needed to restore/improve channel conveyance including Atlas 14 rainfall.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes

County: Harris
Watershed HUC# (if known): 120401020104, 120401020106, 120401020105

Drainage area (Square miles, est.): 5
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 265
# of structures: 116
Critical facilities: 8

Flood risk type: Riverine? Yes  Coastal? No  Local? No  Playa? No  Other? No

Farm/Ranch land impacted (acres): 4
Roadway(s) impacted (length): 3
Number of low water crossings: 0
Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $100,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

Title: San Jacinto River - G103-33-04
ID#: 061000208
Sponsor: Harris County Flood Control District
RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details
Study type: Project Planning
Study description: Further study of Flood Risk Reduction need identified through the HCFCD 'Watershed Planning Tool' to determine channel modifications needed to restore/improve channel conveyance including Atlas 14 rainfall.

New Hydrologic or Hydraulic model? No
Emergency Need? No
Existing/anticipated models in near term? Yes
County: Harris
Watershed HUC# (if known): 120401010501
Drainage area (square miles, est.): 1
Goal(s): 06000001,06000011,06000012,06000015

100-Year Flood Risk Summary
Population at risk: 1,580
# of structures: 248
Critical facilities: 1
Flood risk type: Riverine? Yes
Coastal? No
Local? No
Playa? No
Farm/Ranch land impacted (acres): 999,999
Number of low water crossings: 0
Roadway(s) impacted (length): 4
Historical road closures: 0

Estimated Cost and Funding Availability
Total Cost: $100,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: 999999
Flood Management Evaluation (FME)

Title: Buffalo Bayou - W158-00-00
ID#: 051000219
Sponsor (name of entity, not person): Harris County Flood Control District
RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details
Study type: Project Planning
Study description: Further study of Flood Risk Reduction need identified through the HCFCD 'Watershed Planning Tool' to determine channel modifications needed to restore/improve channel conveyance including Atlas 14 rainfall.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes
County: Harris
Watershed HUC# (if known): 120401040303
Drainage area (Square miles, est.): 3
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary
Population at risk: 311
# of structures: 72
Critical facilities: 0
Flood risk type: Riverine?: Yes
Coastal?: No
Local?: No
Playa?: No
Roadway(s) impacted (length): 1
Historical road closures: 0
Farm/Ranch land impacted (acres): 1
Number of low water crossings: 0

Estimated Cost and Funding Availability
Total Cost: $100,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: 999999

[Map of FME Area and Regional view of FME area]
Flood Management Evaluation (FME)

Title: Buffalo Bayou - W163-00-00

ID#: 061000221

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Further study of Flood Risk Reduction need identified through the HCFCD 'Watershed Planning Tool' to determine channel modifications needed to restore/improve channel conveyance including Atlas 14 rainfall.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes

County: Harris
Watershed HUC# (if known): 120401040303
Drainage area (Square miles, est.): 1
Goal(s): 060000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 226
# of structures: 70
Critical facilities: 0

Flood risk type: Riverine? Yes
Coastal? No
Local? No
Playa? No
Other? No

Farm/Ranch land impacted (acres): 0
Roadway(s) impacted (length): 1
Historical road closures: 999,999

Number of low water crossings: 999,999

Estimated Cost and Funding Availability

Total Cost: $100,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

Title: City of El Lago Master Drainage Plan

ID#: 061000236

Sponsor (name of entity, not person): El Lago (Municipality)

RFPG recommend?: Yes  Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Watershed Planning

Study description: Study to develop Master Drainage Plan using future and existing land use and flood/storm water drainage needs including Atlas 14 rainfall.

New Hydrologic or Hydraulic model?: Yes

Emergency Need?: No

Existing/Anticipated models in near term?: No

County: Harris

Watershed HUC# (if known): 120402040100

Drainage area (Square miles, est.): 1

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 3,033

# of structures: 743

Critical facilities: 9

Flood type: Riverine? Yes  Coastal? Yes  Local? No  Playa? No  Other? No

Farm/Ranch land impacted (acres): 0

Roadway(s) impacted (length): 9

Number of low water crossings: 999,999

Historical road closures: 999,999

Estimated Cost and Funding Availability

Total Cost: $140,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

Title: City of Manvel Gates Loop Subdivision Drainage Improvement
ID#: 061000059
Sponsor (name of entity, not person): Manvel (Municipality)
RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details
Study type: Project Planning
Study description: Further study proposed Gates Loop subdivision drainage improvement.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: No
County: Brazoria
Watershed HUC# (if known): 120402040400
Drainage area (Square miles, est.): 0
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary
Population at risk: 999,999
# of structures: 999,999
Critical facilities: 999,999
Flood risk type: Riverine? No
Coastal? No
Local? Yes
Playa? No
Other? No
Farm/Ranch land impacted (acres): 999,999
Roadway(s) impacted (length): 999,999
Number of low water crossings: 999,999
Historical road closures: 999,999

Estimated Cost and Funding Availability
Total Cost: $100,000
Amount of Available Funding: 999999
Federal funding availability: Yes
Funding source: 999999
Flood Management Evaluation (FME)

Title: City of Hedwig Village Master Drainage Plan

ID#: 061000241

Sponsor (name of entity, not person): Hedwig Village (Municipality)

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Watershed Planning

Study description: Study to develop Master Drainage Plan using future and existing land use and flood/storm water drainage needs including Atlas 14 rainfall.

New Hydrologic or Hydraulic model?: Yes
Emergency Need?: Yes
Existing/Anticipated models in near term?: No

County: Harris
Watershed HUC# (if known): 1204010403

Drainage area (Square miles, est.): 1
Goal(s): 060000001,06000011,06000012,06000015

100-Year Flood Risk Summary

Population at risk: 0
# of structures: 0
Critical facilities: 0
Flood risk type: Riverine? No
Coastal? No
Local? Yes
Playa? No
Other? No

Farm/Ranch land impacted (acres): 999,999
Roadway(s) impacted (length): 999,999

Number of low water crossings: 999,999
Historical road closures: 999,999

Estimated Cost and Funding Availability

Total Cost: $150,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

Title: City of Hilshire Village Master Drainage Plan

ID# 061000243

Sponsor (name of entity, not person): Hilshire Village (Municipality)

RFPG recommend? Yes  Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

---

**Study Details**

Study type: Watershed Planning

Study description: Study to develop Master Drainage Plan using future and existing land use and flood/storm water drainage needs including Atlas 14 rainfall.

New Hydrologic or Hydraulic model? Yes  Emergency Need? Yes  Existing/Anticipated models in near term? No

County: Harris  Watershed HUC# (if known): 120401040303

Drainage area (Square miles, est.): 0  Goal(s): 06000001, 06000011, 06000012, 06000015

---

**100-Year Flood Risk Summary**

Population at risk: 3  # of structures: 1  Critical facilities: 0

Flood risk type: Riverine? No  Coastal? No  Local? Yes  Playa? No  Other? No

Farm/Ranch land impacted (acres): 999,999  Roadway(s) impacted (length): 0

Number of low water crossings: 0  Historical road closures: 0

---

**Estimated Cost and Funding Availability**

Total Cost: $110,000  Amount of Available Funding: 999999  Federal funding availability: Yes

Funding source: 999999

---

**Maps**

- Hilshire Village Map
- Regional view of FME area
Flood Management Evaluation (FME)

Title: Little Cypress Creek - L109-00-00

ID#: 061000201

Sponsor (name of entity, not person): Harris County Flood Control District

RFPG recommend?: Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Further study of Flood Risk Reduction need identified through the HCFCD 'Watershed Planning Tool' to determine channel modifications needed to restore/improve channel conveyance including Atlas 14 rainfall.

New Hydrologic or Hydraulic model?: No

Emergency Need?: No

Existing/Anticipated models in near term?: Yes

County: Harris

Watershed HUC# (if known): 120401020104, 120401020105, 120401020210

Drainage area (Square miles, est.): 6

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 520

# of structures: 178

Critical facilities: 0

Flood risk type: Riverine? Yes

Coastal? No

Local? No

Playa? No

Other? No

Farm/Ranch land impacted (acres): 13

Roadway(s) impacted (length): 2

Number of low water crossings: 0

Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $100,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

Title: Durant Street Storm Sewer and Pavement Improvements - Phase 1

ID #: 061000001

Sponsor (name of entity, not person): Alvin (Municipality)

RFPG recommend?: Yes  Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Further study of Durant Street Phase 1 to reduce flood risk with upgrades to storm sewer system, concrete curb, gutter, pavement, and sidewalk.

New Hydrologic or Hydraulic model?: NO

Emergency Need?: NO

Existing/Anticipated models in near term?: NO

County: Brazoria

Watershed HUC# (if known): 120402040400

Drainage area (Square miles, est.): 0

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 999,999

# of structures: 999,999

Critical facilities: 999,999

Flood risk type: Riverine?: No

Coastal?: No

Local?: Yes

Playa?: No

Other?: No

Farm/Ranch land impacted (acres): 999,999

Roadway(s) impacted (length): 999,999

Number of low water crossings: 999,999

Historical road closures: 999,999

Estimated Cost and Funding Availability

Total Cost: $120,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

Title: Durant Street Storm Sewer and Pavement Improvements - Phase 2

ID#: 061000002

Sponsor (name of entity, not person): Alvin (Municipality)

RFPG recommend?: Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Further study of Durant Street Phase 2 to reduce flood risk with upgrades to storm sewer system, concrete curb, gutter, pavement, and sidewalk.

New Hydrologic or Hydraulic model?: No

Emergency Need?: No

Existing/Anticipated models in near term?: No

County: Brazoria

Watershed HUC# (if known): 120402040400

Drainage area (Square miles, est.): 0

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 999,999

# of structures: 999,999

Critical facilities: 999,999

Flood risk type: Riverine? No

Coastal?: No

Local?: Yes

Playa?: No

Other?: No

Farm/Ranch land impacted (acres): 999,999

Roadway(s) impacted (length): 999,999

Number of low water crossings: 999,999

Historical road closures: 999,999

Estimated Cost and Funding Availability

Total Cost: $110,000

Amount of Available Funding: 999,999

Federal funding availability: Yes

Funding source: 999,999

Map: FME Area

Regional view of FME area
# Flood Management Evaluation (FME)

**Title**: City of Meadows Place Master Drainage Plan

**ID**: 061000261

**Sponsor**: Meadows Place (Municipality)

**RFPG recommend?**: Yes  
**Reason for Recommendation**: Alignment with RFPG goals and TWDB guidance principles.

## Study Details

**Study type**: Watershed Planning

**Study description**: Study to develop Master Drainage Plan using future and existing land use and flood/storm water drainage needs including Atlas 14 rainfall.

<table>
<thead>
<tr>
<th>New Hydrologic or Hydraulic model?</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Need?</td>
<td>Yes</td>
</tr>
<tr>
<td>Existing/Anticipated models in near term?</td>
<td>No</td>
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<table>
<thead>
<tr>
<th>County</th>
<th>Fort Bend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watershed HUC# (if known)</td>
<td>120401040401</td>
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<table>
<thead>
<tr>
<th>Drainage area (Square miles, est.)</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal(s)</td>
<td>060000001,06000011,06000012,06000015</td>
</tr>
</tbody>
</table>

## 100-Year Flood Risk Summary

<table>
<thead>
<tr>
<th>Population at risk</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td># of structures</td>
<td>0</td>
</tr>
<tr>
<td>Critical facilities</td>
<td>0</td>
</tr>
</tbody>
</table>

| Flood risk type: | Riverine? | No |
| Coas tal?       | No        |
| Local?          | Yes       |
| Playa?          | No        |

| Farm/Ranch land impacted (acres) | 999,999 |
| Roadway(s) impacted (length)    | 0 |

| Number of low water crossings | 999,999 |
| Historical road closures      | 999,999 |

## Estimated Cost and Funding Availability

| Total Cost | $150,000 |
| Amount of Available Funding | 999999 |
| Federal funding availability | Yes |

**Funding source**: 999999
Flood Management Evaluation (FME)

**Title:** Spanish Cove Subdivision Drainage Assessment

**ID #:** 061000029

**Sponsor (name of entity, not person):** Harris (County)

**RFPG recommend:** Yes  
**Reason for Recommendation:** Alignment with RFPG goals and TWDB guidance principles.

**Study Details**

**Study type:** Project Planning

**Study description:** Additional analysis needed to confirm no negative effects. It is expected the larger channel can safely convey the increase in flows, but this must be demonstrated during the project design phase.

<table>
<thead>
<tr>
<th>New Hydrologic or Hydraulic model?</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Need?</td>
<td>No</td>
</tr>
<tr>
<td>Existing/Anticipated models in near term?</td>
<td>Yes</td>
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</table>

**County:** Harris  
**Watershed HUC# (if known):** 120401010502, 120401040704

**Drainage area (Square miles, est.):** 1  
**Goal(s):** 060000001, 06000011, 06000012, 06000015

**100-Year Flood Risk Summary**

<table>
<thead>
<tr>
<th>Population at risk</th>
<th>999,999</th>
</tr>
</thead>
<tbody>
<tr>
<td># of structures</td>
<td>999,999</td>
</tr>
<tr>
<td>Critical facilities</td>
<td>999,999</td>
</tr>
</tbody>
</table>

**Flood risk type:**
- Riverine? Yes
- Coastal? No
- Local? Yes
- Playa? No

**Farm/Ranch land impacted (acres):** 999,999  
**Roadway(s) impacted (length):** 999,999

**Number of low water crossings:** 999,999  
**Historical road closures:** 999,999

**Estimated Cost and Funding Availability**

<table>
<thead>
<tr>
<th>Total Cost</th>
<th>$150,000</th>
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</thead>
<tbody>
<tr>
<td>Amount of Available Funding</td>
<td>999,999</td>
</tr>
<tr>
<td>Federal funding availability</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Funding source:** Unknown
# Flood Management Evaluation (FME)

**Title:** City of Shoreacres Master Drainage Plan

**ID:** 061000282

**Sponsor (name of entity, not person):** Shoreacres (Municipality)

**RFPG recommend?** Yes  
**Reason for Recommendation:** Alignment with RFPG goals and TWDB guidance principles.

## Study Details

**Study type:** Watershed Planning

**Study description:** Study to develop Master Drainage Plan using future and existing land use and flood/storm water drainage needs including Atlas 14 rainfall.

<table>
<thead>
<tr>
<th>New Hydrologic or Hydraulic model?</th>
<th>Yes</th>
<th>Emergency Need?</th>
<th>No</th>
<th>Existing/Anticipated models in near term?</th>
<th>No</th>
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</thead>
<tbody>
<tr>
<td>County</td>
<td>Chambers,Harris</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Watershed HUC# (if known)</td>
<td>120402040100</td>
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<td></td>
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<td></td>
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<tr>
<td>Drainage area (Square miles, est.)</td>
<td>1</td>
<td>Goal(s)</td>
<td>06000001,06000011,06000012,06000015</td>
<td></td>
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</table>

## 100-Year Flood Risk Summary

<table>
<thead>
<tr>
<th>Population at risk</th>
<th>2,456</th>
<th># of structures</th>
<th>801</th>
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<tbody>
<tr>
<td>Riverine?</td>
<td>Yes</td>
<td>Coastal?</td>
<td>Yes</td>
</tr>
<tr>
<td>Local?</td>
<td>No</td>
<td>Playa?</td>
<td>No</td>
</tr>
<tr>
<td>Farm/Ranch land impacted (acres)</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of low water crossings</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roadway(s) impacted (length)</td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Historical road closures</td>
<td>1</td>
<td></td>
<td></td>
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</table>

## Estimated Cost and Funding Availability

<table>
<thead>
<tr>
<th>Total Cost</th>
<th>$150,000</th>
<th>Amount of Available Funding</th>
<th>999999</th>
<th>Federal funding availability</th>
<th>Yes</th>
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</thead>
<tbody>
<tr>
<td>Funding source</td>
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</table>

[Map of FME Area]

[Regional view of FME area]
Flood Management Evaluation (FME)

Title: Preliminary Drainage & Infrastructure Improvements Happy Hide A Way Subdivision

ID#: 061000025

Sponsor (name of entity, not person): Harris (County)

RFPG recommend: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

**Study Details**

- **Study type**: Project Planning
- **Study description**: Additional analysis in the Jackson Bayou watershed, specifically along R102-00-00, is needed to determine the necessary improvements and provide a no impact solution.

**New Hydrologic or Hydraulic model?** No
**Emergency Need?** No
**Existing/Anticipated models in near term?** Yes

**County**: Harris
**Watershed HUC# (if known)**: 120401040704

**Drainage area (Square miles, est.)**: 0
**Goal(s)**: 06000001, 06000011, 06000012, 06000015

**100-Year Flood Risk Summary**

- Population at risk: 999,999
- Number of structures: 999,999
- Critical facilities: 999,999
- Flood risk type: Riverine: Yes, Coastal: No, Local: Yes, Playa: No, Other: No
- Farm/Ranch land impacted (acres): 999,999
- Roadway(s) impacted (length): 999,999
- Number of low water crossings: 999,999
- Historical road closures: 999,999

**Estimated Cost and Funding Availability**

- **Total Cost**: $110,000
- **Amount of Available Funding**: 999,999
- **Federal funding availability**: Yes
- **Funding source**: Unknown

---

![FME Area](image1)

![Regional view of FME area](image2)
Flood Management Evaluation (FME)

Title: Gum Gully Rd, W Stroker Rd, Wigwam Ln, and Related Infrastructure Drainage Improvements

ID#: 061000028

Sponsor: Harris (County)

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning

Study description: Further study as report recommendation (2019) indicates that regional drainage improvements to the streams must be studied and implemented before Harris County can obtain a benefit from roadway drainage improvements.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: Yes

County: Harris
Watershed HUC#: 120401040704

Drainage area (Square miles, est.): 1
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 6
# of structures: 3
Critical facilities: 0

Flood risk type: Riverine? Yes
Coastal? No
Local? Yes
Playa? No

Farm/Ranch land impacted (acres): 999,999
Roadway(s) impacted (length): 0

Number of low water crossings: 999,999
Historical road closures: 999,999

Estimated Cost and Funding Availability

Total Cost: $130,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: Harris County Bond Program 2018

---

Maps: FME Area and Regional view of FME area
Flood Management Evaluation (FME)

Title: City of Bayou Vista Canal Dredging Study

ID#: 061000158

Sponsor (name of entity, not person): Bayou Vista (Municipality)

RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Plan for Canal Dredging to reduce sediment deposited during storm events. Study to develop and implement canal dredging program.

New Hydrologic or Hydraulic model?: No
Emergency Need?: No
Existing/Anticipated models in near term?: No

County: Galveston
Watershed HUC# (if known): 120402040200

Drainage area (Square miles, est.): 0
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 1,502
# of structures: 1,122
Critical facilities: 3

Flood risk type: Riverine? No
Coastal? No
Local? Yes
Playa? No
Other? No

Farm/Ranch land impacted (acres): 999,999
Roadway(s) impacted (length): 8

Number of low water crossings: 999,999
Historical road closures: 999,999

Estimated Cost and Funding Availability

Total Cost: $130,000
Amount of Available Funding: 99999
Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

Title: City of Clear Lake Shores Master Drainage Plan

ID: 061000228

Sponsor (name of entity, not person): Clear Lake Shores (Municipality)

RFPG recommend? Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Watershed Planning
Study description: Study to develop Master Drainage Plan using future and existing land use and flood/storm water drainage needs including Atlas 14 rainfall

New Hydrologic or Hydraulic model? Yes
Emergency Need? Yes
Existing/Anticipated models in near term? No
County: Galveston, Harris
Watershed HUC# (if known): 120402040100
Drainage area (Square miles, est.): 1
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 3,407
# of structures: 633
Critical facilities: 4

Flood risk type: Riverine? No
Coastal? No
Local? Yes
Playa? No

Farm/Ranch land impacted (acres): 999,999
Roadway(s) impacted (length): 9

Number of low water crossings: 0
Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $140,000
Amount of Available Funding: 999999
Federal funding availability: Yes

Funding source: 999999
Flood Management Evaluation (FME)

Title: City of Hillcrest Master Drainage Plan

ID: 061000242

Sponsor: Hillcrest Village (Municipality)

RFPG recommend: Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Watershed Planning

Study description: Study to develop Master Drainage Plan using future and existing land use and flood/storm water drainage needs including Atlas 14 rainfall.

New Hydrologic or Hydraulic model? Yes

Emergency Need? Yes

Existing/Anticipated models in near term? No

County: Brazoria

Watershed HUC# (if known): 120402040400

Drainage area (Square miles, est.): 0

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 333

# of structures: 128

Critical facilities: 1

Flood risk type: Riverine? No

Coastal? No

Local? Yes

Playa? No

Other? No

Farm/Ranch land impacted (acres): 0

Roadway(s) impacted (length): 2

Number of low water crossings: 0

Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $130,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999
# Flood Management Evaluation (FME)

**City of Jamaica Beach Master Drainage Plan**

**ID:** 061000251

**Sponsor:** Jamaica Beach (Municipality)

**RFPG recommend:** Yes  
**Reason for Recommendation:** Alignment with RFPG goals and TWDB guidance principles.

## Study Details

**Study type:** Watershed Planning

**Study description:** Study to develop Master Drainage Plan using future and existing land use and flood/storm water drainage needs including Atlas 14 rainfall.

**New Hydrologic or Hydraulic model?** Yes  
**Emergency Need?** NO  
**Existing/Anticipated models in near term?** NO

**County:** Galveston  
**Watershed HUC# (if known):** 120402040300

**Drainage area (Square miles, est.):** 1  
**Goal(s):** 06000001, 06000011, 06000012, 06000015

## 100-Year Flood Risk Summary

<table>
<thead>
<tr>
<th>Population at risk</th>
<th># of structures</th>
<th>Critical facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>395</td>
<td>1,276</td>
<td>4</td>
</tr>
</tbody>
</table>

**Flood risk type:**  
- Riverine? Yes
- Coastal? Yes
- Local? No
- Playa? No  
**Other?** No

**Farm/Ranch land impacted (acres):** 3  
**Roadway(s) impacted (length):** 14

**Number of low water crossings:** 999,999  
**Historical road closures:** 999,999

## Estimated Cost and Funding Availability

<table>
<thead>
<tr>
<th>Total Cost</th>
<th>Amount of Available Funding</th>
<th>Federal funding availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>$140,000</td>
<td>999999</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Funding source:** 999999

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[Map of FME Area]  
[Regional view of FME area]
Flood Management Evaluation (FME)

Title: City of Bayou Vista Master Drainage Plan

ID#: 061000084
Sponsor (name of entity, not person): Bayou Vista (Municipality)
RFPG recommend?: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details
Study type: Watershed Planning
Study description: Study to develop Master Drainage Plan using future and existing land use and flood/storm water drainage needs including Atlas 14 rainfall.

New Hydrologic or Hydraulic model?: Yes
Emergency Need?: Yes
Existing/Anticipated models in near term?: No
County: Galveston
Watershed HUC#: (if known) 120402040200
Drainage area (Square miles, est.): 0
Goal(s): 06000001, 06000010, 06000015

100-Year Flood Risk Summary
Population at risk: 1,502
# of structures: 1,122
Critical facilities: 3
Flood risk type: Riverine? No
Coastal? No
Local? Yes
Playa? No
Other? No
Farm/Ranch land impacted (acres): 999,999
Roadway(s) impacted (length): 8
Number of low water crossings: 999,999
Historical road closures: 999,999

Estimated Cost and Funding Availability
Total Cost: $130,000
Amount of Available Funding: 999,999
Federal funding availability: Yes
Funding source: 999,999
Title: Southwood Forest Subdivision and Forgotten Forest Subdivision Evaluation

ID: 061000141

Sponsor: Walker (County)

RFPG recommend: Yes
Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Project Planning
Study description: Study to develop a community-wide drainage system in Southwood Forest Subdivision and Forgotten Forest Subdivision.

New Hydrologic or Hydraulic model: No
Emergency Need: No
Existing/Anticipated models in near term: No
County: Walker
Watershed HUC# (if known): 120401010202
Drainage area (Square miles, est.): 0
Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 5
# of structures: 13
Critical facilities: 0

Flood risk type: Riverine? No
Coastal? No
Local? Yes
Playa? No
Other? No

Farm/Ranch land impacted (acres): 999,999
Roadway(s) impacted (length): 999,999
Number of low water crossings: 999,999
Historical road closures: 999,999

Estimated Cost and Funding Availability

Total Cost: $110,000
Amount of Available Funding: 999,999
Federal funding availability: Yes
Funding source: 999,999
Flood Management Evaluation (FME)

Title: City of Southside Place Master Drainage Plan

ID #: 061000284

Sponsor (name of entity, not person): Southside Place (Municipality)

RFPG recommend: Yes

Reason for Recommendation: Alignment with RFPG goals and TWDB guidance principles.

Study Details

Study type: Watershed Planning

Study description: Study to develop Master Drainage Plan using future and existing land use and flood/storm water drainage needs including Atlas 14 rainfall.

New Hydrologic or Hydraulic model: Yes

Emergency Need: No

Existing/Anticipated models in near term: No

County: Harris

Watershed HUC# (if known): 120401040402

Drainage area (Square miles, est.): 0

Goal(s): 06000001, 06000011, 06000012, 06000015

100-Year Flood Risk Summary

Population at risk: 2,317

# of structures: 500

Critical facilities: 5

Flood risk type: Riverine? Yes

Coastal? No

Local? No

Playa? No

Roadway(s) impacted (length): 4

Number of low water crossings: 0

Historical road closures: 0

Estimated Cost and Funding Availability

Total Cost: $110,000

Amount of Available Funding: 999999

Federal funding availability: Yes

Funding source: 999999
Appendix 07

Revised DRAFT Prioritization

List of FMEs

Included as an Excel File

(Appendix07-RevisedDRAFTPrioritizationFMEList.xlsx)