

SFY 2020 Flood Project Abridged Application

Due June 15, 2020 at 5:00 p.m.
Email to FIF@twdb.texas.gov

By submitting this Abridged Application, you understand and confirm that the information provided is true and correct to the best of your knowledge and further understand that the failure to submit a complete Abridged Application by the stated deadlines, or to respond in a timely manner to additional requests for information, may result in the withdrawal of the Abridged Application without review.

GENERAL INFORMATION

Entity Name		
Trinity River Authority		
Entity Type		
Conservation and Reclamation District		
Contact Who should TWDB contact with questions during the review of this submission?	Name	Kevin Ward
	Title	General Manager
	Phone	(817) 467-4343
	Email	wardk@trinityra.org

PROJECT INFORMATION

Project Name	Trinity River Mid-Basin Watershed Study Phase II		
Amount Requested from TWDB	\$877,500.00		
Financing from Federal Sources	\$0.00		
(if receiving federal funds, include the federal agency and program)	Not applicable		
Financing from Other Sources	\$292,500.00 from TRA funds		
Total Project Cost (Check here if requesting loan funds only <input type="checkbox"/>)	\$1,170,000.00		
Category Applied For			
<input checked="" type="checkbox"/> Category 1 Flood Protection Planning for Watersheds	<input type="checkbox"/> Category 2 Planning, Acquisition, and Design, Construction / Rehabilitation (All combinations)	<input type="checkbox"/> Category 3 Federal Award Matching Funds	<input type="checkbox"/> Category 4 Measures immediately effective in protecting life and property

MINIMUM STANDARDS

Only projects that satisfy all minimum standards will be included in the prioritization.	<input type="checkbox"/>	1. For applicable projects, the benefit-cost ratio of the proposed project is >1.0 or an explanation is provided. Not applicable
	<input type="checkbox"/>	2. For applicable projects, a proposed MOU and a project description was provided to all eligible political subdivisions and the list of political subdivisions that received this information is attached to the abridged application. Not applicable
	<input checked="" type="checkbox"/>	3. The applicant has acted cooperatively with other political subdivisions to address flood control needs in the area in which the eligible political subdivisions are located; and all eligible political subdivisions substantially affected by the proposed flood project have participated in the process of developing the proposed flood project.
	<input checked="" type="checkbox"/>	4. The funding request does not include redundant funding for activities already performed and/or funded through another source.
	<input checked="" type="checkbox"/>	5. a. The area to be served by the proposed project has floodplain ordinances in place and is currently enforcing floodplain management standards at least equivalent to National Flood Insurance Program (NFIP) minimum standards. OR
	<input type="checkbox"/>	5. b. Requesting funds to fulfill additional requirements for participation in the National Flood Insurance Program. Not applicable
	<input checked="" type="checkbox"/>	6. The proposed project was developed using the best and most recent available data.
	<input type="checkbox"/>	7. a. (Construction applicants only) Operations and maintenance costs associated with proposed facilities have been considered. Not applicable
	<input type="checkbox"/>	7. b. (Construction applicants only) Floodwater capture techniques have been considered. Not applicable

DESCRIPTION OF PROPOSED PROJECT

The Trinity River Mid-Basin area encompasses all or portions of Anderson, Freestone, Grimes, Houston, Leon, Madison, Polk, San Jacinto, Trinity and Walker Counties. While the area has experienced flooding over the last 40 years, the area has experienced multiple intense and prolonged floods since 2015. The flooding disrupts and damages agricultural activities and transportation.

The proposed Phase II Mid-Basin study will develop baseline hydraulic modeling for approximately 100 stream miles of the Main Stem of the Trinity River from Freestone County to the headwaters of Lake Livingston in Polk and San Jacinto counties. Up to three Trinity Tributaries spanning approximately 155 stream miles will be studied. The study will incorporate existing models and model development underway by local, state and federal partners in the area to produce a regional flood plan for this area of the Trinity River. Public engagement with stakeholders in the study area are critical to the success of this project.

The primary tasks include:

1. Project Management
Includes standard project management activities. Three public meetings and meetings with local, state and federal agencies are also included.
2. Base Map Data Collection
Collect existing information on soils, land use, stream centerlines, roads, county boundaries, floodplain/floodway boundaries, city limits, levees, USGS stream gauges, reservoirs, etc. and incorporate into a GIS base map. Collect available and relevant data from Interagency Flood Risk Management (InFRM) for the Trinity watershed, as well as FEMA Base Level Engineering (BLE) for Lower Trinity-Kickapoo and Lower Trinity-Tehuacana.
3. Terrain Development
Request available LIDAR terrain associated within the two BLE studies in the area. Reduce the terrain to cover the study area.
4. Field Survey
Perform field survey to confirm LIDAR data at specific locations in the river. Field surveys will be collected at up to 30 readily accessible stream crossings in the study area. Coordinate with local property owners to obtain access for field surveys. Approximately 10 Trinity River Main Stem crossings and 63 Trinity Tributaries will be surveyed in the project area. Field surveys will be collected approximately every 3 miles resulting in approximately 85 channel cross sections.
5. Hydrologic Analysis
Leverage completed hydrology developed by InFRM. Utilize storm calibration models and frequency storm modeling for input hydrographs into the unsteady HEC-RAS model to determine frequency water surface elevations for approximately 100 stream miles of Trinity River Main Stem and roughly 155 stream miles for the Trinity Tributaries.

6. Hydraulic Analysis

Develop a detailed unsteady HEC-RAS hydraulic model along the mainstem of the Trinity River Mid-Basin. Collect appropriate data from existing hydraulic models, LOMRs and reports in the area. Obtain gauge data and high water marks from stakeholders. Collect flood information from stakeholders. Leverage InFRM data to develop detailed hydraulic models for the study area. Calibrate the unsteady model with stream gauge data. Develop frequency storm event simulations to establish floodplain mapping and water surface elevation profiles for the main stem and selected subbasins.

7. Alternatives Formulation

Evaluate up to three flood mitigation alternatives focusing on hydraulic model alternatives for the Trinity River Main Stem and up to three flood mitigation alternatives for the Trinity River Tributaries. Structural and non-structural alternatives will be considered. Develop opinion of probable cost for each alternative.

8. Flood Damage Analysis Modeling

Perform flood damage analysis using an acceptable modeling platform. Create an economic database containing information on structures affected by flooding up to the 500-year event. Use existing depth damage curve information to determine anticipated damages for each alternative. Determine the benefits of each alternative.

9. Environmental Constraint Analysis

Perform desk top analysis of existing environmental databases to determine the location(s) of potential critical environmental features for each alternative.

10. Documentation

Prepare a draft report summarizing activities performed in this study. Address draft report comments and prepare final report.

INFORMATION FOR GRANT FUNDING

Provide information for the applicable level of grant funding:

Category 1:

Study area AMHI (weighted average based on population)-\$ 44,163

(Optional – attached a copy of federal disaster declaration – flood related within the last 60 months)

Attachment 1 shows a map of the study area with the AMHI information color coded. Attachment 2 provides a summary of the AMHI data and the grant percentage calculation anticipated that this application may be eligible to receive. Attachment 3 includes a summary table of the weighted population data. Please see Attachment 4 for the federal and state disaster declarations that impact the study area.

Categories 2, 3, and 4

- For consideration of being outside MSA: Project is entirely located outside of an MSA - Yes ___ or No ___
- Project area AMHI (weighted average based on population)-\$_____
- Project area Unemployment Rate (weighted average based on population)-_____%
- Project area Population Decline (if any) (based on sum of the population in the project areas)-_____%
- For consideration of being an Rural Applicant: All entities within the project benefit area are outside MSAs and have populations <10,000; or the applicant is a district or municipality with a service area of 10,000 or less in population; or located in a county in which no urban area exceeds 50,000 in population - Yes ___ or No ___
- For consideration of being a Green or Nature-Based project: Percentage of total project costs that are considered green or nature-based- _____% (attach the calculation)

Note: If requesting grant funds that rely on a calculation of the AMHI, Unemployment Rate, or Population Decline then attach the calculation of the weighted average amounts for the project area based on the applicable U.S. Census Bureau geographic areas such as County, Place (City), Census Tract, or Block Group using the ACS data sources described in the IUP.

PRIORITIZATION CRITERIA

<p>Rural Applicant</p> <p>All entities within the project benefit area are (a) outside MSAs and have populations <10,000; or (b) a district or municipality with a service area of 10,000 or less in population; or (c) a county in which no urban area exceeds 50,000 in population.</p>	<p style="text-align: center;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="text-align: center;"><i>(Please attach a list of all entities in the project benefit area and U.S. Census Bureau 2014-2018 American Community Survey (ACS) 5-year estimates data indicating the population of each area.)</i></p> <p style="text-align: center;">(c). Please see Attachment 3 for population by Census Tract.</p>
<p>Emergency Need Due to Recent or Imminent Failure or recent Flood-related Disaster Declarations.</p> <p>A need exists for flood hazard mitigation actions to address a clear and imminent threat to public health, safety, and welfare or property due to recent or imminent failure of existing flood infrastructure or flood-related federal or state disaster declarations within the most recent 36 months that would be significantly mitigated by the proposed project.</p>	<p style="text-align: center;"><input type="checkbox"/> Yes, due to a recent failure. <input type="checkbox"/> Yes, due to imminent failure. <input checked="" type="checkbox"/> Yes, recent flood-related disaster declaration for the proposed project area <input type="checkbox"/> No</p> <p style="text-align: center;">Please see Attachment 4.</p>
<p>Distributed Benefits</p> <p>Is the project expected to directly benefit or include the active participation of jurisdictions other than the applicant?</p>	<p style="text-align: center;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>

ADDITIONAL INFORMATION FOR THE FLOOD INFORMATION CLEARINGHOUSE COMMITTEE

Responses to questions 1 through 7, along with other information included in this abridged application, will be shared with the Flood Information Clearinghouse Committee (FLICC), a new cooperative effort between the TWDB, General Land Office, Texas Division of Emergency Management, and other state and federal agencies that administer flood mitigation financial assistance programs. After review by the FLICC, the applicant may be advised of other available source(s) of funding.

1. Type of Assistance Requested (Check all that apply):	<input type="checkbox"/> Low Interest Loan <input checked="" type="checkbox"/> Grant <input type="checkbox"/> Loan/Grant Combination <input type="checkbox"/> Local Match for Federal Funding
If requesting funds for the local cost share of a federally funded project, the name of the program:	Not applicable
2. County(ies) in which the project is located:	All or portions of Anderson, Freestone, Grimes, Houston, Leon, Madison, Polk, San Jacinto, Trinity and Walker Counties (Attachment 1)
3. (If applicable) Associated FEMA disaster name and number:	Texas Hurricane Harvey, DR-4332 (Attachment 4)
4. Does the applicant have an approved Mitigation Action Plan?	TRA does not have an approved Mitigation Action Plan for the proposed study area as that responsibility falls to the local jurisdictions. Grimes, Houston, Madison, Polk, Trinity and Walker Counties have approved Mitigation Action Plans.
5. Is the community to be served by the project in good standing with the National Flood Insurance Program?	To the best of TRA's knowledge, the communities within the study area are in good standing with the NFIP.
6. Will this project involve enlargement of a dam or levee beyond the original footprint of the structure that existed prior to a disaster event?	No, but the study may identify such improvements.
7. Will this project mitigate a repetitive or severe repetitive loss property?	The study will include any reported repetitive loss or severe loss properties provided by the local jurisdictions.

CERTIFICATION ON ENFORCING FLOODPLAIN MANAGEMENT STANDARDS

<p>Certification on enforcing floodplain management standards</p> <p>Exception: The only exception is an entity that is requesting FIF funding to fulfill additional requirements for participation in the National Flood Insurance Program. If this is the situation, check here: <input type="checkbox"/></p>	<p>I, <u>J. Kevin Ward</u> (Name), serving as <u>General Manager</u> (Title) hereby certify that <u>The Trinity River Authority of Texas</u> (Appropriate entity for area to be served by the project) is currently enforcing floodplain management standards at least equivalent to National Flood Insurance Program (NFIP) minimum standards, but it may exceed the NFIP minimum standard.</p> <p><u>J. Kevin Ward</u> Signature</p> <p><u>6/12/20</u> Date</p> <p>NOTE: TRA does not have enforcement capabilities. The local jurisdictions are responsible for enforcing their floodplain ordinances. Please see Attachment 6 for copies of the local floodplain ordinances.</p>
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ATTACHMENT CHECKLIST

<input checked="" type="checkbox"/>	<u>N/A</u>	<u>Attachment Description</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	List of entities receiving the proposed MOU and project description.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Benefit-Cost Ratio required information.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Documentation indicating the best/most recent data was used in the development of the proposed project. Referenced in Description of Proposed Project
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Documentation demonstrating the area to be served by the proposed project has floodplain ordinances in place and the appropriate entity has certified that it is currently enforcing floodplain management standards at least equivalent to National Flood Insurance Program (NFIP) minimum standards. (The only exception is an entity that is requesting FIF funding to fulfill the requirements for participation in the National Flood Insurance Program.) Attachment 6 includes ordinances from Buffalo, Crockett, Fairfield, Grimes County, Leon County, Madisonville, Palestine, Polk County and Walker County. The local jurisdictions have the authority to enforce their floodplain ordinances.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	If requesting grant funds that rely on a calculation of the AMHI, Unemployment Rate, or Population Decline then attach the calculation of the weighted average amounts for the project area based on the applicable U.S. Census Bureau geographic areas such as County, Place (City), Census Tract, or Block Group and the ACS data sources described in the IUP. Attachment 2
<input checked="" type="checkbox"/>	<input type="checkbox"/>	If requesting prioritization points for "Rural Applicant", a list of all entities in the project benefit area and U.S. Census Bureau 2014-2018 American Community Survey (ACS) 5-year estimates data indicating the population of each area. Attachment 2
<input type="checkbox"/>	<input checked="" type="checkbox"/>	(If applying for matching funds) Documentation of an existing federal award pending availability of local match.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	(If the project involves property acquisitions) Documentation supporting the determination that acquisitions are the best solution and the properties are a high risk.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	(Construction projects) Description of the anticipated funding source for operations and maintenance costs.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	(Construction projects) Map and description of area benefitting from the proposed project, including a list of all benefitting political subdivisions.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	(If applicable) Documentation of recent or imminent infrastructure failure causing an emergency need or a flood-related federal or state disaster declaration within the most recent 36 months that would be significantly mitigated by the proposed project. Attachment 4
<input checked="" type="checkbox"/>	<input type="checkbox"/>	List and explanation of geographies used to determine average SVI. Attachment 5
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Certification on enforcing floodplain management standards for all applicable areas Attachment 6

- Additional Information for the Flood Information Clearinghouse Committee

Attachment 7 includes the following exhibits:

- Exhibit 1: Basemap Data
- Exhibit 2: FEMA Flood Claims
- Exhibit 3: FEMA Flood Hazard Areas
- Exhibit 4: Land Use Data
- Exhibit 5: Topographical Data
- Exhibit 6: Flood Control Structures
- Exhibit 7: Historical Flood Data

Attachment 8 includes Letters of support from the following entities:

- Anderson County
- Houston County
- Leon County
- Madison County
- City of Madisonville
- City of Onalaska
- Polk County
- State Senator Schwertner

TRA understands that the following letters of support were submitted directly to the TWDB: City of Centerville, State Rep. James White, Cong. Kevin Brady, Cong. Bill Flores, State Rep. Trent Ashby, and State Rep. Ernest Bailes.

Attachment 9 includes Trinity River Authority Resolution R-1547 authorizing the General Manager to execute and submit Flood Infrastructure Fund abridged application for the proposed study.