



Project S130: Application - Competitive - Black Bayou Stormwater Pump Replacement

Routing in Progress: Applicant Submission (Step 1 of 8)

Application Summary	
This form outlines all project details, including Scope of Work, all costs, and location worksheets.	
Title:	Competitive - Black Bayou Stormwater Pump Replacement
Total Project Cost (Phases A & B):	\$5,600,790.00
Eligible Amount:	\$670,180.00
NFIP Status:	Participating Community
Funding Sources:	Federal - \$5,000,000.00 State - \$0.00 Local - \$600,790.00
FEMA Obligation Data:	Federal Number - < no value > Date of Obligation Letter - < no value > CATEX Comments - < no value > Project POP Date - < no value >

Grant
4611 Hurricane Ida Hazard Mitigation Grant Program Declared: August 29, 2021 CFDA Number: 97.039

Applicant
City of West Monroe Ouachita Parish (Region 8 Region) UEI: TPKGRPA6GCE9 FIPS: 073-80955-00 State#: 310092185 FEIN #: 72-6001497 DUNS #: 802844514 Type: Municipality Physical/Mailing: 1111 North 19th Street West Monroe, LA, 71201

Workflow Summary	
Current Step:	1) Applicant Submission Description: Project Applications requiring Applicant action.
Recipients:	State Applicant Liaison, State Applicant Liaison (Contractors) (State Applicant Liaison), Full Access (Applicant), State Applicant Liaison Section Chief (Read-Only (Internal))
Last Returned:	Oct 3, 2023 at 8:37 AM by Christopher Olvey

Project
F # S #130 Competitive - Black Bayou Stormwater Pump Replacement LFR Minor Localized Flood Reduction Projects Project POP Deadline: August 29, 2025 Eligible: \$0.00 Federal: \$0.00 (100%)

Correction Required

Un-Expended Eligible:

\$670,180.00

Last Modified: Oct 11, 2023 at 4:07 PM by Robert George

Submission: Aug 14, 2023 at 11:43 PM by Robert George

Introduction

Summary Information

Grant:	4611 Hurricane Ida
Project Type:	Minor Localized Flood Reduction Projects
Congressional District of Project:	05
Was this project submitted in a previous disaster?	No
Title:	Competitive - Black Bayou Stormwater Pump Replacement <small>Used to help identify the project. Ex: "St Thomas Bridge Reinforcement".</small>
Application ID:	n/a
Community NFIP Status:	Participating Community
Application Type:	New

Planning Requirement

For all disasters declared after November 1, 2004, a community must have a FEMA approved Local Hazard Mitigation Plan in order to be eligible for HMGP.

Date of Plan Approval:	Nov 17, 2017
Title of Applicant/Community Local Hazard Mitigation Plan:	Ouachita Parish Hazard Mitigation Plan
Mitigation Plan reference:	Section 4, Page 28 <small>Identify the section and page in the FEMA approved Local Hazard Mitigation Plan where the project is included (For example: Section 2, Page 12).</small>

Plan Narrative:

Note: The Ouachita Parish Hazard Mitigation Plan is currently being updated by SDMI. A Letter of Extraordinary Circumstance has been issued by GOHSEP and is available upon request.

The project is consistent with Local Hazard Mitigation Goals and Objectives listed in the plan in the following ways:

- Protect Existing Properties
 - o Use the most effective approaches to protect buildings and infrastructure from damage by widening/improving existing drainage canal and increasing outfall discharge capacity. This project improves the reliability and capacity of the stormwater pumps that protect the city from flooding when the Ouachita River is elevated.
- Improve The Quality of Life in Ouachita Parish
 - o Promote the maintenance and improvement of public and private property. The proposed project will improve the capacity for flood protection within major residential and commercial areas of the city.
- Ensure That Public Funds are Used in the Most Efficient Manner
 - o This project further prioritizes mitigation actions to address vulnerabilities facing the greatest threat to life, health and property within the city.

Describe how project is consistent with the risk assessment, goals and actions in plan. Please include copy of page where project is included.

Is the community a member of good standing with the National Flood Insurance Program (NFIP)?

Yes

Date Established:

Dec 1, 1978

NFIP Number:

220138

Property Located in SFHA?

No

Is the community a member of the Community Rating System (CRS)?

No

Is the proposed project consistent with the priorities listed in your local Hazard Mitigation Plan?

Yes

Scope of Work

Project Description / Protection Provided

Description of the Problem:

Approximately 60% of the land mass within the City of West Monroe drains to the Black Bayou Canal. This channel meanders for 1.6 miles south of the city, to its discharge point at the Ouachita River. When the river is below 64.0 MSL, the stormwater discharges through three sets of floodgates. Once the river rises above that mark, the gates are closed and water is evacuated with stormwater pumps. Of the seven (7) pumps currently utilized, two (2) were installed in 1938, two (2) were installed in 1953, and three (3) were installed in 1993. The two sets of older pumps, being 85 and 70 years old respectively, are beyond their useful life. They require frequent maintenance and some parts are obsolete. One or more of the pumps frequently require repairs before or during storm events. The City's priority is to replace these four (4) pumps with modern, reliable models, and to increase their pumping capacity.

Describe the existing problem, location, source of the hazard, history, and extent of the damage. Upload newspaper articles, insurance documentation, etc. If this project is eligible for PA (406) mitigation activities, please describe the 406 activities and provide the PW number associated with the project and/or upload the PW.

Scope of Work: Description of the Solution & Mitigation Proposed:

This project first provides modern, reliable pumps and controls, thus greatly reducing concerns and costs associated with failing critical equipment. Additionally, it will provide increased pumping capacity. mitigation of stormwater flooding in the City of West Monroe, Louisiana. The method of mitigation is provided by the replacement of existing pumping systems with increased capacity. The existing pumps have a capacity of 55,000 GPM each and will be replaced with pumps having an increased capacity of 65,000 GPM each. This increased capacity of 18% will assist with the removal of stormwater in the low-lying elevations within the City. This capacity will provide protection and reduce damage up to and including the 500-year event. The 10-, 50-, and 100-year events were used in the Benefit Cost Analysis, attached.

How will the proposed project solve the existing problem(s) and provide the level(s) of protection required?

Description of the Proposed Project:

The work included under this project includes the following items: disconnect existing pumps and motors; remove existing pump shaft and impeller; remove and discard all disconnected material; disconnect all incoming electrical and remove the existing pump controllers; provide and install new pump shafts and impeller; provide and install new pump controllers; provide and install new 700 HP motors; connect all electrical source to new components; inspect and fortify existing force mains and structures; provide, install and connect new VFD drives; provide new check valves in all discharge piping; provide and install new vacuum/air- relief combination valve on each existing force main; site dressing; other miscellaneous items as required.

The total project also includes engineering design, inspection, and project management.

What is the work to be done? The scope of work must meet eligibility based on HMGP regulations and guidance. Explain how the proposed problem will be solved. (NOTE: The proposed project must be mitigation – not maintenance.) Does the proposed project solve a problem independently or constitute a functional part of a solution where there is assurance that the project as a whole will be completed (44 CFR 206.434(b) (4))? Does the proposed project address a problem that has been repetitive or that poses a significant risk to public health and safety if left unresolved (44 CFR 206.434(b) (5) (i))? See Model Scope of Work Language in HMGP Application Desk Reference.

Impacts to Project:

While this project is primarily intended to restore reliability in the pumping facilities by replacing old pumps, the design will account for future events in as much as possible. The analysis for this project has taken into account planned improvements to the Black Bayou Canal (HMGP 4263-DR-LA-0016), which will increase the flow to the pump station. It also considered future development and the increasing frequency of heavy rainfall across the contributing watershed. The new pumps are sized to maximize the existing suction and discharge piping, providing an 18% increase in pumping capacity.

Are other projects, zoning changes, etc. planned (especially in the same watershed if the flooding is being addressed) that may negatively or positively impact the proposed project? If there is a drainage project or downstream issues elsewhere, it may negate the flooding issue, eliminating the need for a flooding project.

Level of Protection

Hazards to be Mitigated:

Flood

Please identify the hazard(s) that the proposed project will mitigate. More than one hazard may be selected by holding the Ctrl button.

Project Worksheets

1 results

<input type="checkbox"/>	#	Project Worksheet Title	Amount	Project Worksheet Type	Status
<input type="checkbox"/>	1	Black Bayou Pumping Station	\$5,600,790.00	Minor Localized Flood Reduction Projects	Included

Costs

Worksheet Cost Type Summary

Classification	Quantity Sum	Unit Cost Avg.	Total Cost Sum
Architectural Engineering Fees	1.00	\$430,830.00	\$430,830.00
Construction and Project Improvement	40.00	\$100,423.08	\$4,787,000.00
Project Inspection Fees	1.00	\$143,610.00	\$143,610.00
Subrecipient Management Costs	1.00	\$239,350.00	\$239,350.00

Cost Line Items

Please specify any project costs that aren't worksheet or site-specific (since those costs will be specified in the individual worksheets).

In this section, provide the details of all costs of the project. As this information is used for the Benefit-Cost Analysis, reasonable cost estimates are essential. Be prepared to supply documentation to support cost estimates. List all items and costs in line item fashion.

- For Labor, include equipment costs -- please indicate all "soft" or in-kind matches.
- For Other Fees, include any other costs associated with the project.
- Do not include indirect costs in project management costs.

Phased Project:

Yes

If this project is to be done in 2 phases - 1 and 2.

Phase 1:

Classification	Description *	Qty	Unit	Price Pre-Award	Total
Project Worksheet Total (Phase 1)					\$670,180.00
Phase 1 Total					\$670,180.00

Phase 2:

Classification	Description *	Qty	Unit	Price Pre-Award	Total
Project Worksheet Total (Phase 2)					\$4,930,610.00
Phase 2 Total					\$4,930,610.00
Grand Total (Phases 1 & 2)					\$5,600,790.00

* Describe the item name and measurements, if applicable, in detail. For example: Lime Treatment (Type E), Cross Drain Pipe (24" RCP), Portland Cement Concrete Pavement (8" thick), Double Gate for Chain Link Fence (6 ft. height), Temporary Signs and Barricades, etc.

Strategic Funds Management Initiative

Does this project qualify for SFM?

Federal Allocation: \$0.00

Submitted to Date: \$0.00

Available Balance: \$0.00

For phased projects, please enter the funding sources for phase 1 only.

Funding Sources

Method: By Percent By Amount Funding Source / Other Agency

Estimated Federal Share: \$ 5,000,000.00 746.07%

The Federal allocated amount exceeds the available balance of \$0.00.

Estimated State Share (Including In-Kind Value): \$ 0%

Estimated Local Share (Including In-Kind Value): \$ 600,790.00 89.65%

Upload non-Federal share commitment letter(s)

Total Allocated (Phase 1 Costs): \$ 5,600,790.00 835.71%

Are you requesting pre-award costs?

No

Cost Effectiveness:

To account for the unreliable nature of the existing pumps due to their age, and based on historical occurrences, the pre-mitigation scenario assumed that two of the four old pumps were inoperable. The post-mitigation scenario includes four new 65,000-gpm pumps and the existing three 67,000-gpm pumps in operation.

The benefitting area is the same as in the Black Bayou Canal Improvements HMGP project, currently under review with FEMA (4263-DR-LA-0016). This project will enhance the effectiveness of that project by restoring reliability and increasing the pumping capacity at the Ouachita River outfall. The effectiveness of this project is not dependent on the implementation of the previous HMGP project.

Water surface elevations were developed with a HEC-RAS hydrologic model and entered into the Loss Avoidance Spreadsheet (attached) to compute damages for the 10-, 50-, and 100-year storms. Social benefits and loss of function of the sewerage system due to flooding were also considered in the BCA. This analysis yielded a total benefit of \$11,450,815 and a BCR of 1.82.

Provide a detailed description of the cost effectiveness indicating that there is a reasonable expectation that future damage or loss of life will be reduced or prevented.

Is this Application subject to review by the State under Executive Order 12372 Process?

- Application is subject to E.O. 12372 and has been submitted to State for review
- Application is subject to E.O. 12372, but has not yet been submitted to State for review
- Application is not subject to E.O. 12372

Is the Applicant delinquent on any Federal Debt?

No

Benefit Cost Ratio

Is Used:

Benefit/Cost Analysis IS applicable to this project

Total Project Benefit:

\$ 11,450,815.00

The total of savings realized by this project.

Benefit Cost Ratio:

1.82

This value is calculated based on Benefit/Cost. Please also attach a copy of the Benefit Cost Analysis and all supporting documentation.

Timeline

Project Milestones

Proposed Start Date: May 1, 2024

Proposed End Date: Oct 18, 2026

Total # of days for entire project: 900

Enter the anticipated date of completion for each milestone. Or, if not applicable, select N/A.

Milestones should be entered in 90 day increments. Not to exceed a total of 1095 days.

Task Type / Description	Days
Procurement Process	90
Procurement Process Complete (Engineer & Project Manager)	
Permitting	90
Environmental and Historic Preservation Review & Permitting	
Engineering / Design Phase	180
Design Phase (Plans & Specifications)	
Procurement Process	90
Bid/Award Construction Contract	
Construction	180
Assembly Period (Approve/Order Equipment and Materials)	
Construction	180
Construction	
Audit, Financial Summary, Closeout	90
Project Closeout	
Total Days:	900

Alternatives

List two feasible alternative projects to mitigate the hazards faced in the project area. One alternative is the "No Action Alternative" (section A). This application cannot be reviewed if this section is incomplete.

A. No Action Alternative

Impacts with No Action

If no action is taken, it is very likely that one or more of the four old pumps will fail during a storm event in the future, thus increasing the damage to structures within the City due to flooding. The pre-mitigation hydrologic model scenario assumed two pumps were offline, which resulted in damages of approximately \$14.5 million in the 50-year event and \$18.6 million in the 100-year event. If all pumps were to fail during these events, the damage would be even greater.

Discuss the impacts on the project area if no action is taken.

B. Other Feasible Alternative

Discuss a feasible alternative to the proposed project. This could be an entirely different mitigation method or a significant modification to the design of the current proposed project. Please include scope of work, engineering details (if applicable), estimated budget and the impacts of this alternative.

Other Feasible Project
Description and Scope of
Work:

Another alternative would be to construct a new lift station, with greater capacity. Without the limitations imposed by utilizing the existing buildings, piping and force mains, the new station could be sized to provide a significant increase in pumping capacity.

The cost of this alternative is estimated to be \$20 million.

Describe, in detail, the alternative project. Also, explain how the alternative project will solve the problem(s) / provide protection from the hazard(s).

Other Feasible Project
Location:

Attach a map or diagram showing the alternative site in relation to the proposed project site and photographs of alternative site.

Funding Sources

Round figures to the nearest dollar. The maximum FEMA share for HMGP projects is 75%. The other 25% can be made up of State and Local funds as well as in-kind services. HMGP funds may be packaged with other Federal funds, but those funds cannot be used as match. Federal funds which lose their Federal identity at the State level (such as CDBG, ARS, HOME,) may be used for the State or Local match.

	Amount	% of Total	Funding Source / Other Agency
Estimated FEMA Share	\$ 15,000,000.00	75 %	

Amount

% of Total

Funding Source / Other Agency

Estimated Non-Federal Share (Include In-Kind Value)

\$ 5,000,000.00

25 %

City, Global Match

Upload non-Federal share commitment letter(s).

Impacts of Other Feasible

Alternative Project:

A new, larger pumping station

Include comments on these issues: Environmental Justice; Endangered Species; Wetlands; Hydrology (Upstream and Downstream Impacts); Floodplain/ Floodway; Historic Issues; Hazardous Materials.

Reason for Rejecting Other

Feasible Alternative:

Cost

Documentation

The applicant **must** provide the following environmental documentation to FEMA before starting construction activity **or** jeopardize project funding.

The Following Types of Projects Do Not Require Environmental Documentation:

- Development of Mitigation Plans
- Inspection and monitoring activities
- Studies involving only staff time and funding
- Training activities using existing facilities

Other projects require certain environmental documentation depending upon the project type and its potential effects on the physical, biological and built environment. The various types of projects and their required environmental documentation are as follows:

- **Warning Systems, Shutters, and Communication Projects:**
 - Coordination from the **State Historic Preservation Officer (SHPO)** regarding cultural resources (archeological and historical)
 - A description of the project referencing structure/site addresses
 - A map of sufficient scale and detail that shows the project site and surrounding project area (Area of Potential Effects)
 - Several original photographs of the project site and adjacent area/structures
- **Acquisition/Demolition, Elevation and Individual Safe Room Projects Residential Sites:**
 - Coordination from the **State Historic Preservation Officer (SHPO)** regarding cultural resources (archeological and historical)
 - A description of the project referencing structure/site addresses
 - A map of sufficient scale and detail that shows the project site and surrounding project area (Area of Potential Effects)
 - Several original photographs of the project site and adjacent area/structures
- **Commercial/Industrial Sites:**
 - Coordination from the **State Environmental Protection Agency** (or equivalent) regarding hazardous waste and toxic materials
- **Acquisition/Relocation Projects (Residential Only) and Stormwater Management Projects:**
(Road/Bridge/Culvert Repair, Detention Ponds And Drainage)

- Coordination from the **State Environmental Protection Agency** (or equivalent) regarding hazardous waste and toxic materials
- Coordination from **State Historic Preservation Officer(SHPO)** regarding cultural resources (archeological and historical).
- Coordination from **State Environmental Protection Agency** (or equivalent) regarding required permits for erosion and sediment control, stormwater management, water and air quality.
- Coordination from **U.S. Army Corp of Engineers District** regarding Individual (404 Wetlands) Permit or approval under an existing Nationwide Permit.
- Coordination from **U.S. Fish and Wildlife Service** regarding Federal Threatened and Endangered Species.
- Coordination from **State Fish and Game Agency** regarding fish and wildlife.
- Coordination from **State Natural Heritage Agency** regarding State Threatened and Endangered Species.

Provide the following documentation to each agency listed above:

- A description of the project referencing structure/site addresses
- A map of sufficient scale and detail that shows the project site and surrounding project area (Area of Potential Effects)

Additional Documentation

- If the project involves five or more acres of land - provide a **National Pollutant Discharge Elimination System (NPDES)** permit from the U.S. Environmental Protection Agency.
- If the project is located outside of town/city limits - provide documentation from the **USDA National Resource Conservation Service** (Prime, Unique or other Important Farmlands).
- If the project is located in a coastal area - provide letters from the:
 - **State Coastal Management Agency** (Coastal Zone Management Act).
 - **U.S. Fish and Wildlife Service** (Coastal Barrier Resources Act and Coastal Barrier Improvement Act).
 - **U.S. Dept. of Commerce National Marine Fisheries Service** (Commercial fishing and breeding grounds).
- If the project will affect any low-income or minority groups in the project area - provide applicable **Environmental Justice information** (census, economics, housing and employment).

FEMA Can Provide Additional Environmental Technical Assistance. Your State Hazard Mitigation Officer Can Provide FEMA Environmental Points Of Contact.

Additional Documentation and/or Site Visits May Be Required For Final Environmental Review

Agreements

A. Maintenance Agreement

All applicants whose proposed project involves the retrofit or modification of existing public property or whose proposed project would result in the public ownership or management of property, structures, or facilities, must first sign and attach the following agreement prior to submitting their application to FEMA.

NOTE: those applicants whose project only involves the retrofitting, elevation, or other modification to private property where the ownership will remain private after project completion DO NOT have to complete this form.)

[Download Agreement Template](#)

B. Applicant Certifications

Each applicant whose proposed project involves elevation of one or more residential structures or relocation or acquisition and demolition of such structures must sign and attach the following certifications.

[Download Agreement Template](#)

Acknowledgement of Conditions

Acknowledgement of Conditions for Mitigation of Property in a Special Flood Hazard Area with FEMA Grant Funds.

I hereby certify (1) to the statements contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties.

Signed by Robert George IV on Oct 11, 2023