

# Project S5: Application - Oklahoma City Water Utilities Trust: Overholser Dam Structural Stabilization Improvements

Routing in Progress: Application Development (Step 1 of 7)



<div>Application Summary</div> <div>Application for Grant Funding</div> <div><div>Extended Description:</div><div>This form outlines all project details, including Scope of Work, Cost Estimate,Schedule and project specific worksheets (where applicable).</div></div> <div><div>Title:</div><div>Oklahoma City Water Utilities Trust: Overholser Dam Structural Stabilization Improvements</div></div> <div><div>Total Project Cost:</div><div>\$0.00</div></div> <div><div>Total Awarded Amount:</div><div>\$0.00</div></div> <div><div>Funding Sources:</div><div>Federal - \$0.00 State - \$0.00 Local - \$0.00</div></div> <div><div>FEMA Obligation Data:</div><div>Federal Number - &lt; no value &gt; Date of Obligation Letter - &lt; no value &gt; CATEX Comments - &lt; no value &gt; Project POP Date - &lt; no value &gt;</div></div> <div><div>Related Links:</div><div><a href="#">View Notice of Intent (NOI)</a>, <a href="#">View Project</a></div></div> <div><div>Is Phased Project?</div><div>No</div></div>	<div>Grant</div> <div><div>2024-BRIC EMT-2024-BR-XXX</div><div>Building Resilient Infrastructure &amp; Communities Declared: August 1, 2024 CFDA Number: 970470000</div></div>
	<div>Applicant</div> <div><div>Oklahoma City Water Utilities Trust</div><div>Oklahoma County UEI: L8NDGFG9HNNH8 FIPS: 109-0360C-00 FEIN #: 73-6096261 Vendor # (Applicant): 0000076926 DUNS #: 0 Type: Other Physical/Mailing: 420 W MAIN ST STE 500 OKLAHOMA CITY, OK, 73102</div></div>
	<div>Project</div> <div><div>F # S #5</div><div>Oklahoma City Water Utilities Trust: Overholser Dam Structural Stabilization Improvements BRIC Project BRIC Resilient Infrastructure Project Project POP Deadline: September 10, 2027 Eligible: \$0.00</div></div>
<div>Workflow Summary</div> <div><div>Current Step:</div><div>1) Application Development Description: Development and completion of application for HMGP grant funds for a HMGP Project</div></div>	

Extended Description: Application Development  
and Submission

Federal: \$0.00 (75%)  
Un-Expended Eligible:  
\$56,500,000.00

**Submission:** Jan 21, 2025 at 4:04 PM by  
Michael D'Arcy

# Introduction

## Summary Information

Grant:	2024-BRIC EMT-2024-BR-XXX
Project Type:	BRIC Resilient Infrastructure Project
Title:	<div>Oklahoma City Water Utilities Trust: Overholser Dam Structural Stabilization Improvements</div> <div>Used to help identify the Project. Ex: "Jurisdiction - Project Name".</div>

Primary Contact:	<div>Vanessa Aguilar - Deputy Director of Financial Services</div> <div><a href="#">Edit</a></div> <div>Email Address: vanessa.aguilar@okc.gov</div> <div>Phone: 405-297-2825</div>
Alternate Contact:	<div>Select One</div>
Authorized Contact:	<div>Select One</div>

## 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:	<div>Dec 31, 2022</div>
Title of Applicant/Community Local Hazard Mitigation Plan:	<div></div>
Mitigation Plan reference:	<div></div> <div>Identify the section and page in the FEMA approved Local Hazard Mitigation Plan where the project is included (For example: Section 2, Page 12).</div>

Plan Narrative:

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

Community Information

Is the community a National Flood Insurance Program (NFIP) participant?

Yes

Applicant Value: No

NFIP Established Date:

Applicant Value:

NFIP Number:

405378B

Applicant Value:

Community ID Number:

Applicant Value:

Legislative House District:

Applicant Value:

Legislative Senate District:

[Click here to look up your Legislative Senate District](#)

Applicant Value:

US Congressional District:

Applicant Value:

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

Choose One

Applicant Value:

# History of Hazards

## Past Damages

In this section, describe all past damages from hazardous events (include name of storms if applicable) in the project area. Include Presidentially declared disasters as well as events that did not result in a Presidential declaration.

- For assistance, reference the NOAA's National Climatic Data Center here:  
<http://www.ncdc.noaa.gov/stormevents/>
- Do not list country-wide or community-wide damages.
- Damages described must be site specific.
- Include information for as many past incidents as possible.
- Attach any supporting documents, i.e. proofs of loss, PW's, force account logs.
- Direct costs should include damages to structures and infrastructure in the project area as a result of the hazard.
- Indirect costs should include the cost to the local government to respond to victims of the hazard in the project area, any interruption to local businesses, and losses of public services.
- For Acquisitions and Elevations, provide an overview in this section and specific damages to each property in the Individual Property Worksheets.

Use the below table to describe past events (by date) that resulted in damage; describe damages, including direct and indirect damages and costs.

Date	Duration (days)	Loss	Description
<input type="text"/>	<input type="text"/>	\$ <input type="text"/>	<input type="text"/>

Additional Comments:

Provide any additional details regarding past events.

Population Affected:

	Count
Residential Properties	<input type="text"/>
Businesses / Commercial Properties	<input type="text"/>
Public Properties	<input type="text"/>
School / Hospitals / House of Worship	<input type="text"/>
Total	0

Provide the number of each type of structure listed above in the project area. Include all structures in the project area.

Hazards to Mitigate:

List the type of hazards the proposed project will mitigate (i.e. Wind, Seismic, Flood, Fire).

Level of Protection:

Fill in the level of protection the proposed project will provide. List data in Flood Levels (10, 25, 50, 100... mph winds) or Mercalli Scale Earthquake (1-12). For example: 23 Structures protected against the 100-year (1%) flood.

Useful Life of the Project:

years

Number of years proposed project will provide protection against the hazard(s) above.

# Scope of Work

Description of the Problem:

Overholser Dam is a 1,200-foot concrete spillway that spans the North Canadian River and impounds Overholser Reservoir. The most recent dam inspection revealed Overholser Dam is in poor condition per the condition assessment definition utilized by the Oklahoma Water Resources Board (OWRB). The dam requires extensive rehabilitation to prevent potential failures and bring the structure into compliance with OWRB requirements and FEMA guidelines. A dam breach with total loss of reservoir is a potential risk due to its current conditions. New breach analysis and LifeSim model indicates potential loss of life on the order of 90 people in the event of a sunny day or PMF breach. In the event of a dam breach during a heavy rain event the resulting flood would not only impact the neighborhoods surrounding the dam but ultimately impact historically impoverished areas through the heart of Oklahoma City as well as other communities downstream. (See Figure 1. in attachment) In addition to life loss, other consequences include disruption of public utilities, emergency services, loss of public and private property and extensive environmental and ecological consequences due to downstream release of lake sediment.

Describe the specific problem the proposed project is intended to alleviate.

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

Describe the proposed scope of work to accomplish this project.

Description of the Proposed Project:

Overholser Dam was constructed in 1919 by the Ambursen Construction Company of New York City for recreation and municipal water supply purposes. An extension to the dam was constructed in 1924, followed by several rehabilitation and repair projects. Overholser Dam is a 1,200-foot concrete spillway that spans the North Canadian River and impounds Overholser Reservoir. The dam is classified as an intermediate-sized, high hazard dam based on the OWRB hazard criteria and has a height of approximately 61 feet.

The Oklahoma City Water Utilities Trust engaged an engineering firm in 2021 to assess the dam's hydraulic adequacy and structural stability. The preliminary engineering study identified deficiencies which represent significant risk due to the downstream consequences that would result from a structural stability failure, a flood overtopping event, or structural gate failure. All could result in complete uncontrolled loss of reservoir, with the degree of consequences downstream varying depending on the failure mode and its progression.

The project will consist of the following work:

Stability Improvements, including:

a) Concrete In-Filling: Stability of the structure will be improved to regulatory requirements by adding concrete ballast inside the concrete structure in all slab and buttress sections of the spillway (including gatehouse section), except the central overflow spillway which has already been modified in similar fashion.

Hydraulic Improvements, including:

a) Tainter Gate Removal: All 23 inoperable Tainter gates will be removed from the dam.

b) Labyrinth Weirs: Reinforced concrete labyrinth weirs will be constructed in all 24 gate bays.

c) N. Morgan Road/S. Overholser Road Raise: The roadway west and north of the concrete spillway will be raised to provide the appropriate top of dam elevation to meet OWRB requirements.

Development of Nature Based Solutions within the watershed to support water quality improvements and heat island effect mitigation.

Describe, in detail, the proposed project. Also, explain how the proposed project will solve the problem(s) and provide the level(s) of protection described above. If any other projects are underway or proposed in

the project area, please describe. Also describe any planned, future development in the project area. Please include building code requirements for new development and substantial improvements in the community.

# Costs

## 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).

Phased Project:

No

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

Type	Description	Qty	Unit	Price	Pre-Award	Total
Application Total						\$0.00
Grand Total						\$0.00

## Strategic Funds Management Initiative

Does this project qualify for SFM?

No

## Funding Sources

Method:

☒ By Percent☐ By Amount

Funding Source / Other Agency

Estimated FEMA Share:

%\$0.00

Estimated State Share:

%\$0.00

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

%\$0.00

Total Allocated:

0

%\$0.00

Cost Effectiveness:

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.

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Benefit Cost Ratio

Is Used:

Benefit/Cost Analysis IS applicable to this project

Total Project Benefit:

\$

The total of savings realized by this project.

Benefit Cost Ratio:

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

Total # of weeks for entire project:

List the major milestones in this project.

Example 1: Demolition of 6 structures and removal of debris

Example 2: Design, Engineering and H & H Studies

Task Description	Days
Total Days	0

# 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

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:

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	\$ <div></div>	<div></div> %	
Estimated Other Agency Share	\$ <div></div>	<div></div> %	<div></div>
Non-Federal Share - Estimated Local Share (Include In-Kind Value)	\$ <div></div>	<div></div> %	<div></div>
Other Non-FEMA Federal Funds (Do Not Include In Total)	\$ <div></div>	<div></div> %	

Upload non-Federal share commitment letter(s).

Impacts of Other Feasible  
Alternative Project:

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:

## Acts & Executive Orders

### National Historic Preservation Act - Historic Buildings and Structures

1. Does your project affect or is it in close proximity to any buildings or structures 50 years or more in age?

Select One

2. To help FEMA evaluate the impact of the project, please indicate below any other information you are providing:

☐ Information gathered about potential historic properties in the project area, including any evidence indicating the age of the building or structure and presence of buildings or structures that are listed or eligible for listing on the National Register of Historic Places or within or near a National Register listed or eligible historic district. Sources for this information may include the State Historic Preservation Officer (SHPO/THPO), your local planning office, historic preservation organization, or historical society.

☐ Consideration of how the project design will minimize adverse effects on known or potential historic buildings or structures, and any alternatives considered or implemented to avoid or minimize effects on historic buildings or structures. Please address and note associated costs in your project budget.

☐ For acquisition/demolition projects affecting historic buildings or structures, any data regarding the consideration and feasibility of elevation, relocation, or floodproofing as alternatives to demolition.

☐ Attached materials or additional comments.

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### National Historic Preservation Act - Archaeological Resources

1. Does your project involve disturbance of ground?

Select One

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### Endangered Species Act and Fish and Wildlife Coordination Act

1. Are Federally listed threatened or endangered species or their critical habitat present in the area affected by the project?

Select One

2. Does your project remove or affect vegetation?

Select One

3. Is your project in, near (within 200 feet), or likely to affect any type of waterway or body of water?

Select One

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### **Clean Water Act, Rivers and Harbors Act, and Executive Order 11990 (Protection of Wetlands)**

Will the project involve dredging or disposal of dredged material, excavation, adding fill material or result in any modification to water bodies or wetlands designated as "waters of the U.S" as identified by the US Army Corps of Engineers or on the National Wetland Inventory?

Select One

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### **Executive Order 11988 (Floodplain Management)**

1. Does a Flood Insurance Rate Map (FIRM), Flood Hazard Boundary Map (FHBM), hydrologic study, or some other source indicate that the project is located in or will affect a 100 year floodplain, a 500 year floodplain if a critical facility, an identified regulatory floodway, or an area prone to flooding?

Select One

2. Does the project alter a watercourse, water flow patterns, or a drainage way, regardless of its floodplain designation?

Select One

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### **Farmland Protection Policy Act**

1. Will the project convert more than 5 acres of "prime or unique" farmland outside city limits to a non-agricultural use?

Select One

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### **RCRA and CERCLA (Hazardous and Toxic Materials)**

1. Is there a reason to suspect there are contaminants from a current or past use on the property associated with the proposed project?

Select One
2. Are there any studies, investigations, or enforcement actions related to any of the properties associated with the proposed project?

Select One
3. Do any project construction or operation activities involve the use of hazardous or toxic materials?

Select One
4. Do you know if any of the current or past land uses of the property affected by the proposed project or of the adjacent properties are associated with hazardous or toxic materials?

Select One
- 

**Executive Order 12898, Environmental Justice for Low Income and Minority Populations**

1. Are there low income or minority populations in the project's area of effect or adjacent to the project area?

Select One
- 

**Other Environmental/Historic Preservation Laws or Issues**

1. Are there other environmental/historic preservation requirements associated with this project that you are aware of?

Select One
2. Are there controversial issues associated with this project?

Select One
3. Have you conducted any public meeting or solicited public input or comments on your specific proposed mitigation project?

Select One
- 

**Summary and Cost of Potential Impacts**

1. Having answered the questions above, have you identified any aspects of your proposed project that have the potential to impact environmental resources or historic properties?

Select One

# 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](#)

