

Subapplicant information

Name of federal agency **FEMA**
 Type of submission **Application**

CITY OF GASTONIA TOWN HALL

181 S SOUTH ST
 GASTONIA, NC 28052 United States

State	DUNS #	EIN #
NC	074497249	566000227

Subapplicant type **Local Government**
 Is the subapplicant subject to review by Executive Order 12372 Process? **No - Not selected**
 Is the subapplicant delinquent on any federal debt? **No**

Contact information

Subrecipient Authorized Representative (SAR)

Kyle Butler kyleb@tworiversutilities.com	Primary phone 7048666768 Work	Mailing address
Brian Potocki brianp@cityofgastonia.com	Primary phone	Mailing address

Point(s) of contact

Kyle Butler Water Sewer Engineer kyleb@tworiversutilities.com	Primary phone 7048666768 Work Fax	Additional phones 7048666823 Work	Mailing address 1300 N. Broad St Gastonia NC 28053
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Community

Please provide the following information. If the Congressional district number for your community does not display correctly, please contact your State NFIP coordinator.

Add Communities

Please find the community(ies) that will benefit from this mitigation activity by clicking on the Find communities button. If needed, modify the Congressional District number for each community by entering the updated number under the U.S. Congressional District column for that community. When finished, click the Continue button. NOTE: You should also notify your State NFIP coordinator so that the updated U.S. Congressional District number can be updated in the Community Information System (CIS) database.

Community name	County code	CID number	CRS community	CRS rating	U.S. Congressional District
GASTONIA, CITY OF	071	370100	Y	9	2,10

Please provide any additional comments below (optional).

This Project Scoping activity will benefit both the City of Gastonia and surrounding communities served by Two Rivers Utilities, including Cramerton, Bessemer City, High Shoals, Ranlo, Stanley, Kings Mountain, Belmont, Lowell and Clover, S.C. Two Rivers' service area includes 63,310 residents that are classified as Low and Moderate Income (LMI) per HUD guidelines. Two jurisdictions within Two Rivers' service area have a poverty rate over 20%: Kings Mountain has a poverty rate of 25.59%, and High Shoals has a poverty rate of 35.32%. A resilient wastewater system will benefit these communities and LMI residents. Additionally, in accordance with the Justice40 initiative, this project scoping activity will evaluate how disadvantaged communities will be impacted by power outages at lift stations, wastewater treatment facilities, and water booster pump stations owned by Two Rivers. As part of the project scoping activity, Two Rivers will conduct an asset vulnerability assessment which will include an evaluation of which lift stations, wastewater treatment facilities, and water booster pump stations are located within areas of elevated social vulnerability. A preliminary assessment using the Centers for Disease Control and Prevention's Social Vulnerability Index (SVI) demonstrates how Two Rivers can identify which assets to prioritize based on SVI indicators. SVI ranks the tracts on 15 social factors, including unemployment, minority status, and disability and further groups them into four related themes. The CDC SVI ranking variables for the four themes are for the Socioeconomic Status, Household Composition & Disability, Minority Status & Language, and Housing Type & Transportation. These indicators help support analysis on the relative vulnerability of a given census tract and helps identify communities that will need continued support to recover following an emergency or natural disaster. Utilizing SVI indicators, Gaston County census tract 319 appears especially vulnerable, with a poverty rate of 44.5%, a minority population of 77.2%, and a housing crowding percentage of 10.3%; see attached Poverty Percentage, Housing Crowding, and Minority Percentage maps for further details. Census tract 319 is located directly adjacent to Two Rivers' Farmer's Market pump station. A more detailed analysis will allow Two Rivers to make asset vulnerability prioritization decisions based on SVI indicators, allowing Two Rivers to understand where energy resilience can most effectively mitigate power loss in communities where continuity of water and sewage treatment functions is critical. Building SVI into Two Rivers' asset vulnerability assessment will improve community resilience in vulnerable areas by providing important post-disaster community services.

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
Attachment 3_Percent Minority City of Gastonia.pdf	11/18/2022	madeleine.lane@icf.com	Community Attachments	Map showing the percentage of the population that identifies as a minority for the City of Gastonia. In accordance with Justice 40 initiative, this project aims to serve disadvantaged populations.	
Attachment 1_Poverty Percentage City of Gastonia.pdf	11/18/2022	madeleine.lane@icf.com	Community Attachments	Map showing the percentage of the population that is in poverty for the city of Gastonia. Areas with higher poverty would be especially impacted by lack of critical wastewater functionality.	
Attachment 2_Housing Crowding City of Gastonia.pdf	11/18/2022	madeleine.lane@icf.com	Community Attachments	Map showing percent of population that experiences housing crowding by census tract for the city of Gastonia. Housing crowding creates an especially vulnerable situation in times of	

Filename	Date uploaded	Uploaded by	Label	Description	Action
				disaster when utility use is either lessened or inaccessible.	

Mitigation plan

Please provide your plan information below.

Is the entity that will benefit from the proposed activity covered by the current FEMA approved multi-hazard mitigation plan in compliance with 44 CFR Part 201? **Yes**

Please provide plan detail

Plan name	Plan type	Plan approval date
Cleveland Gaston Lincoln Regional Hazard Mitigation Plan 2020 Update	Local Multijurisdictional Multi-Hazard Mitigation Plan	03/23/2020

Proposed activity description
 The City of Gastonia through Two Rivers Utilities proposes to conduct a project scoping activity to examine the feasibility of implementing backup generators at lift stations, wastewater treatment facilities, and water booster pump stations that serve as community lifelines throughout the Two Rivers' wastewater service area. This project scoping activity directly aligns with the attached 2020 Cleveland Gaston Lincoln Regional Hazard Mitigation Plan. In section 9, Mitigation Action Plan, Action P-2, Gaston County prioritizes providing generator connections to vital facilities.

Please provide any additional comments below (optional).

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
Attachment 4 - Cleveland Gaston Lincoln Regional Hazard Mitigation Plan.pdf	11/18/2022	madeleine.lane@icf.com	Mitigation Plan Attachments	Pages from Cleveland Gaston Lincoln Regional Hazard Mitigation Plan. In section 9, Mitigation Action Plan, Action P-2, Gaston County prioritizes providing generator connections to vital facilities.	

Scope of work

The project Scope of Work (SOW) identifies the eligible activity, describes what will be accomplished and explains how the mitigation activity will be implemented. The mitigation activity must be described in sufficient detail to verify the cost estimate. All activities for which funding is requested must be identified in the SOW prior to the close of the application period. FEMA has different requirements for project, planning and management cost SOWs.

Subapplication title (include type of activity and location)

City of Gastonia Project Scoping Activity – Water & Wastewater Energy Resilience

Activities

Primary activity type

Develop or conduct engineering, environmental, feasibility and/or benefit cost analyses

Secondary activity type (Optional)

Evaluate facilities to identify mitigation actions

Tertiary activity type (Optional)

Activities supporting development of applications

Geographic areas description

The lift stations, wastewater treatment facilities, and water booster pump stations within this project scoping activity are located within Two Rivers Utilities' service area. All of the lift stations are located within Gaston County. See attached WWTP and Water Booster Station map for all lift station, wastewater treatment facility, and water booster pump station locations.

Community lifelines

Primary community lifeline

Food, water, shelter

Primary sub-community lifeline

Water

Secondary community lifeline (optional)

Safety and security

Secondary sub-community lifeline

Community safety

Tertiary community lifeline (optional)

Health and medical

Tertiary sub-community lifeline

Medical care

Hazard sources

Primary hazard source

Flooding

Secondary hazard source (optional)

Infrastructure failure

Tertiary hazard source (optional)

Severe storm

How will the mitigation activity be implemented?

Two Rivers Utilities is owned and operated by the City of Gastonia who will provide overall project oversight. The project will be implemented utilizing sufficient technical and managerial staff/resources to track the scope, schedule, and budget. Staffing support will come from the City of Gastonia and contract support will be procured to support the development of the scope, design, Benefit Cost Analysis, and full grant applications for the next funding cycle. The initial tasks of this project scoping activity will include stakeholder engagement, asset vulnerability assessment and preliminary design. The District will build off the conceptual design plans and technical memorandum included in this grant application to perform the full design for this project and a benefit cost analysis (BCA) required to submit a full project application in a subsequent submission for HMA grant funding in a later fiscal year. The project will be implemented in the following tasks (See the scope of work response to the following question for more detail on each): 1. Design team contracting 2. Asset Review 3. Stakeholder Engagement 4. Risk and Vulnerability Assessment 5. Investigate Options 6. Prioritize projects 7. Develop FEMA BRIC Application for subsequent funding cycle. Project planning staff will maintain the electronic materials by QA/QC reviews when content is added. Before application submission, the application package will undergo a comprehensive QA/QC review to ensure that all required information gained throughout the planning process has been adopted appropriately.

What is the scope of work of the proposal? Will it result in a complete project application for future funding opportunities?

Functioning as the regional utility provider, Two Rivers Utilities, the City of Gastonia provides water and wastewater services to approximately 100,000 people, including residents of Gastonia, Cramerton, Bessemer City, High Shoals, Ranlo, Stanley, Kings Mountain, Belmont, Lowell and Clover, S.C. The Two Rivers Utilities Public Utilities Department manages and services more than 30,000 water and sewer connections and over 1,200 miles of water and sewer lines. Two Rivers' wastewater system includes 41 lift stations, at least 21 of which have been identified as having a mobile emergency generator. Two Rivers' water system includes 7 water booster pump stations and 3 wastewater treatment facilities: Crowders Creek, Long Creek, and Eagle Road. These sites are identified in the attached Wastewater Treatment Plant, Pump Station, and Water Booster Location Map. Power loss can have a devastating impact on water and wastewater infrastructure. If power fails at Two Rivers' pumping stations and treatment facilities, it will result in loss of

service. The City is required by NCDEQ to have backup power available at all times at the wastewater treatment plants. In December 2020, a generator failure occurred at Crowders Creek WWTP. Due to the failure, the City incurred \$33,862.12 in costs to rent a generator while the permanent unit was repaired. In order to mitigate power loss to this critical infrastructure, Two Rivers will undertake a Capability and Capacity Building project scoping activity. This project scoping activity will allow Two Rivers to evaluate the backup power needs of individual lift stations, wastewater treatment facilities, and water booster pump stations throughout Two Rivers' service area. The project scoping activity will initiate planning, evaluation, outreach, and design work to mitigate the risk of power loss at lift stations, wastewater treatment facilities, and water booster pump stations throughout Two Rivers Utilities' service area. The activities identified for this project are outlined as follows: 1. Design team contracting Contracting with a design engineer to perform the work. This includes development of the scope, design, Benefit Cost Analysis, and full grant applications for the next funding cycle in addition to other tasks described below. 2. Existing Asset Review Two Rivers will begin their evaluation process by inventorying existing generators at lift stations, wastewater treatment facilities, and water booster pump stations in Two Rivers Utilities' service area. Two Rivers has detailed information regarding all lift stations generators in a TRU Lift Station document, attached to this section. 3. Stakeholder engagement and planning The project scoping activity will implement a stakeholder engagement plan to identify and engage key personnel to better understand the risks and vulnerabilities at lift stations, wastewater treatment facilities, and water booster pump stations in Two Rivers Utilities' service area to power failure. 4. Risk and Vulnerability Assessment Two Rivers Utilities will establish risks and vulnerabilities of water and wastewater systems to power failure using appropriate datasets to perform exposure, risk and vulnerability analysis for identified lift stations, wastewater treatment facilities, and water booster pump stations. 5. Investigate hazard mitigation options to minimize power loss and prioritize proposed mitigation strategies Evaluate and prioritize mitigation solutions for lift stations, wastewater treatment facilities, and water booster pump stations in Two Rivers Utilities' service area that enhance resilience and reduce impacts from disaster. This also includes reviewing population demographics of the service areas to ensure that vulnerable populations are being served. 6. Prioritized project development Once risks and vulnerabilities are identified, Two Rivers Utilities will work with contractors to perform design and engineering tasks, including the development of a concept plan, review of necessary permits and environmental assessments, and review of further investigations required to provide information to support a complete mitigation application for the next funding cycle. 7. FEMA BRIC application development Develop FEMA BRIC project application for submittal to next funding cycle. Project planning staff will maintain the electronic materials by QA/QC reviews when content is added. Before application submission, the application package will undergo a comprehensive QA/QC review to ensure that all required information gained throughout the planning process has been adopted appropriately

Who will manage and complete the mitigation activity?

Two Rivers Utilities will manage this project scoping activity. Consultancy firms will be contracted to support the development of the scope, design, Benefit Cost Analysis, and full grant applications for the next funding cycle. The City of Gastonia will be including Sub-recipient Management Costs (SRMC) as part of this project application.

What are you doing to consider other risks in the project area?

The City of Gastonia currently maintains a "Lift Station Failures Contingency Plan" which is a procedural document to ensure an appropriate and timely response to an alarm or failure at a lift station. This document is attached.

Is there an estimate for when the mitigation activity will take place?

Assuming FEMA funding is awarded, the project will kick off in January 2024 and finish by April 2026. Please see the attached Schedule for more information.

What alternatives will be considered?

Several alternatives will be considered during this project scoping activity, including a "No Action" alternative. Gastonia is required by NCDEQ to have backup power available at all wastewater treatment plants at all times. The Crowders Creek WWTP has three generators, each of which is only capable of supplying power to a portion of the facility. As such, if any of the three generators fail, the accompanying portion of the facility has no backup power. In the event of a generator failure, the City's plan is to bring in a rental generator unit to provide backup power until the permanent unit is repaired.

Do activities being considered align with hazard mitigation plan?

This project scoping activity directly aligns with the 2020 Cleveland Gaston Lincoln Regional Hazard Mitigation Plan. In section 9, Mitigation Action Plan, Action P-2, Gaston County prioritizes providing generator connections to

vital facilities. In addition, this project aligns with FEMA's overall goal to fortify and enable continuous service of several community lifelines outlined below: Food, Water, and Shelter: The lift stations are critical facilities, preventing sewage backup and discharge into local waterways. The Project Scoping activity will assist Two River Utilities in identifying which lift stations, wastewater treatment facilities, and water booster pump stations are vulnerable to power outages. Health and Medical: There are over 13 critical medical facilities within Two Rivers' service area, as identified by the Cleveland Gaston Lincoln Regional Hazard Mitigation Plan. The Project Scoping activity will allow Two Rivers to understand the risks and vulnerabilities of lift stations, wastewater facilities, and water booster pump stations located near these community lifelines. Safety and Security: There are over 27 fire stations and 9 police stations served by Two Rivers Utilities' wastewater system. The Project Scoping activity will allow Two Rivers to understand the risks and vulnerabilities of lift stations, wastewater facilities, and water booster pump stations located near these community lifelines. Communications: The service area covers one Emergency Operations Center (EOC) in Gastonia. The Project Scoping activity will allow Two Rivers to understand the risks and vulnerabilities of lift stations, wastewater facilities, and water booster pump stations located near this community lifeline. Transportation: At least two lift stations with mobile generators are located next to multi-lane roadways, including East Hudson Boulevard, Gastonia and Market Street, Cramerton. The Project Scoping activity will allow Two Rivers to study the impact of a power outage at lift stations near well-trafficked thoroughways. Hazardous Materials: The lift stations and wastewater treatment facilities that will be studied within this Project Scoping activity prevent raw sewage from being discharged into local residences, businesses, and waterways. This Project Scoping activity will help Two Rivers determine which lift stations and wastewater facilities are most vulnerable. Although not specifically listed as lifelines, there are also 64 schools within the service area that could be considered critical facilities.

Additional comments (optional)

Due to the impacts of climate change, the Piedmont region of North Carolina is predicted to experience increased flooding risks, more frequent and severe precipitation events, and increased wildfire risk. According to the attached North Carolina Climate Science Report, Gastonia could see a more than 60% annual increase in the number of days with precipitation of 3 inches or greater by midcentury from a 1996-2015 baseline average. 2018 was the wettest year on record in the Piedmont region of North Carolina, receiving 63 inches of rainfall, 17 inches above average. Additionally, the North Carolina Climate Science Report states that it is likely that severe thunderstorms in the Piedmont will increase in frequency, and that heavy precipitation accompanying hurricanes that pass near or over North Carolina is very likely to increase. Precipitation and severe storms are likely to increase in the Piedmont region, threatening power loss at critical facilities. Since 2003, the number of power outages in the U.S. has doubled, in large part due to severe storms; between 2003 and 2012, North Carolina experienced more than 48 power outage incidents, the 7th most power outages in the nation. During the same period, Duke Energy and Dominion were the energy providers with the 2nd and 5th most customers impacted by power outages in the nation, respectively; over 15.3 million customers were impacted by outages. More recently, storms such as Hurricane Michael and Hurricane Florence have impacted over 1.5 million customers in North Carolina. There have been 37 incidents of power outages in North Carolina since 2015, 32 of which were caused by severe weather events. This data is cited in the attached Climate Central Blackout Report and corresponding EIA Electric Disturbance Data report for the NC region. Severe storms present a growing threat to essential energy infrastructure, including infrastructure that serves Two Rivers' wastewater system. It is crucial that this community lifeline remains operational, even when the grid is at risk from increasing hazards. **COMMUNITY ENGAGEMENT AND OUTREACH:** Two Rivers Utilities serves 100,000 people across 10 jurisdictions. All of Two Rivers' customers are stakeholders in this project and will be positively impacted by the Project Scoping activity. This project scoping activity directly aligns with the attached 2020 Cleveland Gaston Lincoln Regional Hazard Mitigation Plan. In section 9, Mitigation Action Plan, Action P-2, Gaston County prioritizes providing generator connections to vital facilities. Outreach informed the goals in this document. The City of Gastonia will explore how to engage surrounding jurisdictions in the project resulting from the scoping activity. Potential opportunities include outreach and discussions with local municipalities served by Two Rivers Utilities, as well as publicly available information regarding the project on the City of Gastonia's website.

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
Attachment 6_Lift Station Failure Contingency Plan.pdf	11/18/2022	madeleine.lane@icf.com	Scope of Work Attachments	The City of Gastonia currently maintains a "Lift Station Failures Contingency Plan" which is a procedural document to ensure an appropriate and timely response to an alarm or failure at a lift station. These contingencies highlight the need for resilient energy solutions.	
Attachment 7_WWTP Pump Station and Water Booster Location Map.pdf	11/18/2022	madeleine.lane@icf.com	Scope of Work Attachments	Map showing lift stations, wastewater treatment facilities, and water booster pump stations located within Two Rivers Utilities' service area.	
Attachment 10_EIA Electric Disturbance Data for NC Region.pdf	11/18/2022	madeleine.lane@icf.com	Scope of Work Attachments	Since 2003, the number of power outages in the U.S. has doubled, in large part due to severe storms; between 2003 and 2012, North Carolina experienced more than 48 power outage incidents, the 7th most power outages in the nation. This data is cited in the attached Climate Central Blackout Report and corresponding EIA Electric Disturbance Data report for the NC region.	
Attachment 8_North Carolina Climate Science Report.pdf	11/18/2022	madeleine.lane@icf.com	Scope of Work Attachments	Due to the impacts of climate change, the Piedmont region of North Carolina is predicted to experience increased flooding risks, more frequent and severe precipitation events, and increased wildfire risk. According to the attached North Carolina Climate Science Report, Gastonia could see a more than 60% annual increase in the number of days with precipitation of 3 inches or greater by midcentury from a 1996-2015 baseline average.	
Attachment 11_Physical Damage Documentation.pdf	11/18/2022	madeleine.lane@icf.com	Scope of Work Attachments	In December 2020, a generator failure occurred at Crowders Creek WWTP. Due to the failure, the City incurred \$33,862.12 in costs to rent a generator while the permanent unit was repaired.	
Implementation Measures_Gastonia Resilience.pdf	11/18/2022	madeleine.lane@icf.com	Scope of Work Attachments	<i>No description given.</i>	
Population Impacted_Gastonia Resilience.pdf	11/18/2022	madeleine.lane@icf.com	Scope of Work Attachments	<i>No description given.</i>	
Outreach Activities_Gastonia Resiliency.pdf	11/18/2022	madeleine.lane@icf.com	Scope of Work Attachments	<i>No description given.</i>	
Risk Reduction_Gastonia Resiliency.pdf	11/18/2022	madeleine.lane@icf.com	Scope of Work Attachments	<i>No description given.</i>	
Attachment 9_Climate Central Blackout Report.pdf	11/18/2022	madeleine.lane@icf.com	Scope of Work Attachments	Since 2003, the number of power outages in the U.S. has doubled, in large part due to severe storms; between 2003 and 2012, North Carolina experienced more than 48 power outage incidents, the 7th most power outages in the nation. This data is cited in the attached Climate Central	

Filename	Date uploaded	Uploaded by	Label	Description	Action
				Blackout Report and corresponding EIA Electric Disturbance Data report for the NC region.	
Attachment 5_Schedule.pdf	01/05/2023	madeleine.jane@icf.com	Scope of WorkAttachments	Project scope of work completion schedule.	

Schedule

Specify the work schedule for the mitigation activities.

Add tasks to the schedule

Please include all tasks necessary to implement this mitigation activity; include descriptions and estimated time frames.

<p>Task Name Design Team Contract</p>	<p>Start Month 1</p>	<p>Task Duration (in Months) 1 months</p>	<p>Task Description Contracting with a design engineer to perform the work. This includes development of the scope, design, Benefit Cost Analysis, and full grant applications for the next funding cycle described below.</p>
<p>Task Name Existing Asset Review</p>	<p>Start Month 2</p>	<p>Task Duration (in Months) 6 months</p>	<p>Task Description Two Rivers will begin their evaluation process by inventorying existing generators at lift stations, wastewater treatment facilities, and water booster pump stations in Two Rivers Utilities' service area. Two Rivers has detailed information regarding all lift stations generators attached to this application.</p>
<p>Task Name Stakeholder Engagement and Planning</p>	<p>Start Month 5</p>	<p>Task Duration (in Months) 4 months</p>	<p>Task Description The project scoping activity will implement a stakeholder engagement plan to identify and engage key personnel to better understand the risks and vulnerabilities at lift stations, wastewater treatment facilities, and water booster pump stations in Two Rivers Utilities' service area to power failure.</p>
<p>Task Name Risk and Vulnerability Assessment</p>	<p>Start Month 8</p>	<p>Task Duration (in Months) 2 months</p>	<p>Task Description Two Rivers Utilities will establish risks and vulnerabilities of water and wastewater systems to power failure using appropriate datasets to perform exposure, risk and vulnerability analysis for identified lift stations, wastewater treatment facilities, and water booster pump stations.</p>
<p>Task Name Investigate Options & Prioritize</p>	<p>Start Month 9</p>	<p>Task Duration (in Months) 4 months</p>	<p>Task Description Evaluate and prioritize mitigation solutions for lift stations, wastewater treatment facilities, and water booster pump stations in Two Rivers Utilities' service area that enhance resilience and reduce impacts from disaster. This also includes reviewing population demographics of the service areas to ensure that vulnerable populations are being served.</p>
<p>Task Name Prioritized Project Development</p>	<p>Start Month 11</p>	<p>Task Duration (in Months) 3 months</p>	<p>Task Description</p>

Once risks and vulnerabilities are identified, Two Rivers Utilities will work with contractors to perform design and engineering tasks, including the development of a concept plan, review of necessary permits and environmental assessments, and review of further investigations required to provide information to support a complete mitigation application for the next funding cycle.

Task Name FEMA BRIC application development	Start Month 12	Task Duration (in Months) 5 months
Task Description Develop FEMA BRIC project application for submittal to next funding cycle		

Task Name Grant Award Processing	Start Month 1	Task Duration (in Months) 2 months
Task Description Time for grant award to be processed by subgrantee.		

Estimate the total duration of your proposed activities (in months). **16**

Proposed project start and end dates

Start Date **2024-01-01**
End Date **2026-04-02**

Budget

Budget cost estimate and management cost (optional) should directly link to your scope of work and work schedule. You must add at least one item(s) greater than \$0 for your cost estimate. Once you have added item(s) for your cost estimate, you may then add the item(s) for management cost (optional). As necessary, please adjust your federal/non-federal cost shares and add the non-federal funding source(s) you are planning to use this project. Once you have completed this section, please click the Continue button at the bottom of this page to navigate to the next section.

Add budget cost types and item(s)

Click the Add cost type button below to add cost type cost estimate and then click the Add item(s) button to add the item(s) for the cost estimate. After adding items to your cost estimate, you may then select Add cost type button again to add management costs (optional) and applicable items.

Grand total: \$182,175.00

Budget type: Non construction

▶ Cost type: Cost estimate	\$173,500.00
▶ Cost type: Management cost	\$8,675.00

Program income (optional)

Cost share

Cost share or matching means the portion of project costs not paid by federal funds.

Proposed federal vs. non-federal funding shares

Hazard mitigation assistance (HMA) funds may be used to pay up to 75% federal share of the eligible activity costs. Building Resilient Infrastructure and Communities (BRIC) and small impoverished communities may be eligible for up to 90% federal share. Flood Mitigation Assistance (FMA) and severe repetitive loss (SRL) properties may be eligible for up to 100% federal share. Repetitive loss (RL) properties may be eligible for up to 90% federal share.

	% Percentage	* Dollar amount
Proposed federal share	76.19	138800.00

Is this an Economically Disadvantaged Rural Community? ⓘ This determines your federal/non-federal share ratio. No	Proposed non-federal share	23.81	43375.00
	Please provide justification for exceeding the allowable federal share here . Does Not Exceed - But Includes SRMC		

Non-federal funding sources here

That portion of the total costs of the program provided by the non-federal entity in the form of in-kind donations or cash match received from third parties or contributed by the agency. In-kind contributions must be provided and cash expended during the project period along with federal funds to satisfy the matching requirements.

Funding source	Funding amount	% Non-federal share by source
▶ Funding source: City of Gastonia Local Match	100.00%	\$43,375.00

Please provide any additional comments below (optional).

Please see the attached cost share letter indicating the City of Gastonia's assumption of responsibility for the proposed project scoping activity under the FEMA Building Resilient Infrastructure and Communities (BRIC) grant program. The letter delineates the City's 25% cost commitment.

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
2022-12-21 - MatchingFundsLetter - COG Scoping - Signed.pdf	01/06/2023	kyleb@tworiversutilities.com	Budget Attachments	Cost Commitment Letter	

Cost-effectiveness

How was cost-effectiveness determined for this project?

Not applicable
 Please explain why this project is not applicable.

Not applicable as this application is for a project scoping activity. A full BCA will be completed as part of the activity if awarded funding.

Please provide any additional comments below (optional).

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
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Evaluation

Is the applicant participating in the [Community Rating System \(CRS\)](#)? **Yes**

Select rating. **9**

Is the applicant a [Cooperating Technical Partner \(CTP\)](#)? **No**

Was this application generated from a previous FEMA HMA Advance Assistance or Project Scoping award or any other federal grant award, or the subapplicant is a **No**

past recipient of Building Resilient Infrastructure and Communities (BRIC) non-financial Direct Technical Assistance?

Has the applicant adopted building codes consistent with the [international codes](#)? **Yes**

Year of building code **2018**

Please provide the building code. **North Carolina Building Code 2018**

Have the applicant's building codes been assessed on the [Building Code Effectiveness Grading Schedule \(BCEGS\)](#)? **Yes**

Select rating. **3**

Describe involvement of partners to enhance the mitigation activity outcome. **Surrounding jurisdictions: Two Rivers Utilities is owned and operated by the City of Gastonia, but serves 9 other municipalities: Cramerton, Bessemer City, High Shoals, Ranlo, Stanley, Kings Mountain, Belmont, Lowell and Clover, S.C. Two Rivers serves residential wastewater customers in Gastonia, Cramerton, Bessemer City, High Shoals, Ranlo, Stanley and Clover, SC, along with portions of Belmont, Lowell, and Kings Mountain. Additionally, Two Rivers provides commercial wastewater services to Ranlo, Kings Mountain, Bessemer City, and Clover, SC. These cities will benefit from understanding which lift stations, wastewater treatment facilities, and water booster pump stations throughout Two Rivers' water and wastewater systems are vulnerable to power loss. Two Rivers' customers: Two Rivers Utilities serves 100,000 people across 10 jurisdictions. All of Two Rivers' customers are stakeholders in this project and will be positively impacted by the Project Scoping activity.**

Additional comments (optional) **The City of Gastonia is an approved inspection agency through the North Carolina Department of Insurance, State Fire Marshalls Office. All code officials are certified through the North Carolina Code Officials Qualification Board. The building standards are presented by the North Carolina Building Code Council and are ultimately approved by the North Carolina General Assembly for adoption by local jurisdictions. The most recent adopted codes for North Carolina are the 2018 NC Building Codes which includes: building (residential and commercial), plumbing, mechanical, energy, gas, rehab and fire codes; and a reference document for Accessibility Code (ANSI A117.1 2003 Version); 2017 National Electric Code. Gastonia recently implemented a new online new permitting system, CityView. The CityView Portal gives residents and contractors 24/7 convenience when applying for permits, making payments, viewing review status of applications and scheduling inspections. It has many functionalities with the customer in mind. The City has a BCEGS score, obtained in 2012, of 3. This score demonstrates that the City has effective building codes that are well enforced; staff education and certifications are at very high levels; staffing levels are exceptional based on workloads; and the City has adopted a model code within the last five years. The City received a BCEGS Score of 3 in 2021 (Attachment 13).**

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
Leveraging Partners_Gastonia Resiliency.pdf	11/18/2022	madeleine.lane@jcf.com	Evaluation Attachments	<i>No description given.</i>	
Attachment 13 BCEGS Score.pdf	11/18/2022	madeleine.lane@jcf.com	Evaluation Attachments	Email demonstrating 2021 Gastonia BCEGS score	
Future Conditions_Gastonia Resilience.pdf	11/18/2022	madeleine.lane@jcf.com	Evaluation Attachments	<i>No description given.</i>	

Comments & attachments

- ▶ **Community** **1 comment, 3 attachments**
- ▶ **Mitigation plan** **0 comment, 1 attachments**
- ▶ **Scope of work** **1 comment, 11 attachments**

▶ Budget	1 comment, 1 attachments
▶ Cost-effectiveness	0 comment, 0 attachments
▶ Evaluation	1 comment, 3 attachments

Assurances and certifications

[View burden statement](#)

SF-424B: Assurances - Non-Construction Programs

OMB Number: 4040-0007

Expiration Date: 02/28/2025

Certain of these assurances may not be applicable to your project or program. If you have any questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee- 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.
7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
8. Will comply, as applicable, with provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.
9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally-assisted construction subagreements.
10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).
12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).
14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.
15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. §§2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.

16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.
17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."
18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.
19. Will comply with the requirements of Section 106(g) of the Trafficking Victims Protection Act (TVPA) of 2000, as amended (22 U.S.C. 7104) which prohibits grant award recipients or a sub-recipient from (1) Engaging in severe forms of trafficking in persons during the period of time that the award is in effect (2) Procuring a commercial sex act during the period of time that the award is in effect or (3) Using forced labor in the performance of the award or subawards under the award.

Certifications regarding lobbying

OMB Number: 4040-0013

Expiration Date: 02/28/2025

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Statement for Loan Guarantees and Loan Insurance

The undersigned states, to the best of his or her knowledge and belief, that:

If any funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions. Submission of this statement is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required statement shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.