

# 3754 - Bottom Road Floodplain Restoration and Green Sink Project

## Application Details

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### Funding Opportunity:

3293-Virginia Community Flood Preparedness Fund - Project Grants - CY25 Round 6

**Funding Opportunity Due Date:** Dec 1, 2025 11:59 PM

**Program Area:** Virginia Community Flood Preparedness Fund

**Status:** Under Review

**Stage:** Final Application

**Initial Submit Date:** Dec 1, 2025 5:35 PM

**Initially Submitted By:** Bethany Whitfield

**Last Submit Date:**

**Last Submitted By:**

## Contact Information

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### Primary Contact Information

**Active User\*:** Yes

**Type:** External User

**Name\*:** Mrs. Bethany Middle Name Whitfield  
Salutation First Name Last Name

**Title:** Manager, Proposal Management Office

**Email\*:** bwhitfield@res.us

**Address\*:** 1408 Roseneath Rd  
Suite B

Richmond Virginia 23230  
City State/Province Postal Code/Zip

**Phone\*:** 989-709-8428 Ext.

Phone

###-###-####

**Fax:** ####-####-####

**Comments:**

## Organization Information

**Status\*:** Approved

**Name\*:** Tazewell County

**Organization Type\*:** Local Government

**Tax ID\*:** 54-6001649

**Unique Entity Identifier (UEI)\*:** K7EPDEL2B141

**Organization Website:**

**Address\*:** 197 Main Street

**City** Tazewell **State/Province** Virginia **Postal Code/Zip** 24651-

**Phone\*:** (276) 385-1208 Ext.  
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**Fax:** ####-####-#####

**Benefactor:**

**Vendor ID:**

**Comments:**

## VCFPF Applicant Information

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### *Project Description*

**Name of Local Government\*:** Tazewell County

Your locality's CID number can be found at the following link: [Community Status Book Report](#)

**NFIP/DCR Community** 510160

**Identification Number (CID)\*:**

If a state or federally recognized Indian tribe,

**Name of Tribe:**

**Authorized Individual\*:** Eric Young  
First Name Last Name

**Mailing Address\*:** 197 Main Street  
Address Line 1  
Address Line 2  
Tazewell Virginia 24651  
City State Zip Code

**Telephone Number\*:** 276-385-1208

**Cell Phone Number\*:** 276-385-1208

**Email\*:** eyoung@tazewellcounty.org

Is the contact person different than the authorized individual?

**Contact Person\*:** No

**Enter a description of the project for which you are applying to this funding opportunity**

**Project Description\*:**

Tazewell County's Bottom Road Flood Study (CFPF-24-04-61) identified chronic flooding from the Clinch River in the Doran Community along Bottom Road and Raven Road. The proposed Bottom Road Floodplain Restoration and Green Sink Project will restore 1,800 feet of stream, create a flood retention pond with automated controls, and enhance public safety, flood resilience, and habitat, aligning with the 2023 Flood Resilience Plan's mitigation goals.

**Low-income geographic area means any locality, or community within a locality, that has a median household income that is not greater than 80 percent of the local median household income, or any area in the Commonwealth designated as a qualified opportunity zone by the U.S. Secretary of the Treasury via his delegation of authority to the Internal Revenue Service. A project of any size within a low-income geographic area will be considered.**

Is the proposal in this application intended to benefit a low-income geographic area as defined above?

**Benefit a low-income geographic area\*:** Yes

Information regarding your census block(s) can be found at [census.gov](https://census.gov)

**Census Block(s) Where Project will Occur\*:** Census Tract 206

**Is Project Located in an NFIP Participating Community?\*:** Yes

**Is Project Located in a Special Flood Hazard Area?\*:** Yes

**Flood Zone(s) (if applicable):** Zone AE

**Flood Insurance Rate Map Number(s) (if applicable):** 51185C0303D and 51185C0304D

## Eligibility CFPF - Round 4 - Projects

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### ***Eligibility***

Is the applicant a local government (including counties, cities, towns, municipal corporations, authorities, districts, commissions, or political subdivisions created by the General Assembly or pursuant to the Constitution or laws of the Commonwealth, or any combination of these)?

**Local Government\*:** Yes

Yes - Eligible for consideration

No - Not eligible for consideration

Does the local government have an approved resilience plan and has provided a copy or link to the plan with this application?

**Resilience Plan\*:** Yes

Yes - Eligible for consideration under all categories

No - Eligible for consideration for studies, capacity building, and planning only

If the applicant is not a town, city, or county, are letters of support from all affected local governments included in this application?

**Letters of Support\*:** Yes  
Yes - Eligible for consideration  
No - Not eligible for consideration  
N/A - Not applicable

Has this or any portion of this project been included in any application or program previously funded by the Department?

**Previously Funded\*:** No  
Yes - Not eligible for consideration  
No - Eligible for consideration

Has the applicant provided evidence of an ability to provide the required matching funds?

**Evidence of Match Funds\*:** Yes  
Yes - Eligible for consideration  
No - Not eligible for consideration  
N/A - Match not required

## Scoring Criteria for Flood Prevention and Protection Projects - Round 4

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### ***Scoring***

#### **Category Scoring:**

Hold CTRL to select multiple options

#### **Project Category\*:**

Floodplain restoration, Restoration of floodplains to natural and beneficial function

**Is the project area socially vulnerable?** (based on ADAPT Virginia's Social Vulnerability Index Score)

#### **Social Vulnerability Scoring:**

Very High Social Vulnerability (More than 1.5)

High Social Vulnerability (1.0 to 1.5)

Moderate Social Vulnerability (0.0 to 1.0)

Low Social Vulnerability (-1.0 to 0.0)

Very Low Social Vulnerability (Less than -1.0)

**Socially Vulnerable\*:** Moderate Social Vulnerability

**Is the proposed project part of an effort to join or remedy the community's probation or suspension from the NFIP?**

**NFIP\*:** No

#### **Is the proposed project in a low-income geographic area as defined below?**

"Low-income geographic area" means any locality, or community within a locality, that has a median household income that is not greater than 80 percent of the local median household income, or any area in the Commonwealth designated as a qualified opportunity zone by the U.S. Secretary of the Treasury via his delegation of authority to the Internal Revenue Service. A project of any size within a low-income geographic area will be considered.

**Low-Income Geographic Area\*:** Yes

**Projects eligible for funding may also reduce nutrient and sediment pollution to local waters and the Chesapeake Bay and assist the Commonwealth in achieving local and/or Chesapeake Bay TMDLs. Does the proposed project include implementation of one or more best management practices with a nitrogen, phosphorus, or sediment reduction efficiency established by the Virginia Department of Environmental Quality or the Chesapeake Bay Program**

**Partnership in support of the Chesapeake Bay TMDL Phase III Watershed Implementation Plan?**

**Reduction of Nutrient and Sediment Pollution\*:** Yes

Does this project provide “community scale” benefits?

**Community Scale Benefits\*:** More than one census block

**Expected Lifespan of Project**

**Expected Lifespan of Project\*:** Over 20 Years

**Comments:**

## Scope of Work - Projects - Round 4

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### ***Scope of Work***

**Upload your Scope of Work**

Please refer to Part IV, Section B. of the grant manual for guidance on how to create your scope of work

**Scope of Work\*:** CID510160\_Tazewell County\_CFPF-6\_SOW\_Bottom Road.pdf

**Comments:**

### ***Budget Narrative***

**Budget Narrative Attachment\*:** CID510160\_CFPF Round 6\_Budget Narrative\_Bottom Road.pdf

**Comments:**

## Scope of Work Supporting Information - Projects

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### ***Supporting Information - Projects***

**Provide population data for the local government in which the project is taking place**

**Population\*:** 2270.00

**Provide information on the flood risk of the project area, including whether the project is in a mapped floodplain, what flood zone it is in, and when it was last mapped. If the property or area around it has been flooded before, share information on the dates of past flood events and the amount of damage sustained**

**Historic Flooding data and**

**Hydrologic Studies\*:**

CID510160\_CFPF Round 6\_Historic Flooding data and Hydrologic Studies\_Bottom Road.pdf

**Include studies, data, reports that demonstrate the proposed project minimizes flood vulnerabilities and does not create flooding or increased flooding (adverse impact) to other properties**

**No Adverse Impact\*:** CID510160\_CFPF Round 6\_No Adverse Impacts\_Bottom Road.pdf

**Include supporting documents demonstrating the local government's ability to provide its share of the project costs. This must include an estimate of the total project cost, a description of the source of the funds being used, evidence of the local government's ability to pay for the project in full or quarterly prior to reimbursement, and a signed pledge agreement from each contributing organization**

**Ability to Provide Share of**

**Cost\*:**

CID510160\_Tazewell County\_Letter of Authorization and Match for Bottom Road Green Sink Project.pdf

**A benefit-cost analysis must be submitted with the project application**

**Benefit-Cost Analysis\*:** CID510160\_CFPF Round 6\_Benefit Cost Analysis\_Bottom Road.pdf

If applicable, provide the Department with the current floodplain ordinance by link or attachment.

**Regulations:**

**Provide a list of repetitive loss and/or severe repetitive loss properties. Do not provide the addresses for the properties, but include an exact number of repetitive loss and/or severe repetitive loss structures within the project area**

**Repetitive Loss and/or Severe**

CID510160\_CFPF Round 6\_Rep Loss\_Bottom Road.docx

**Repetitive Loss Properties\*:**

**Describe the residential and commercial structures impacted by this project, including how they contribute to the community such as historic, economic, or social value. Provide an exact number of residential structures and commercial structures in the project area**

**Residential and/or Commercial****Structures\*:**

Overall 1,996 properties are located within the FEMA 1% Annual Chance (100-year) floodplain, the proposed Bottom Road Floodplain Restoration and Green Sink Project will reduce and potentially remove the 100-year floodplain from 299 properties if implemented. The proposed project will aim to complete design and permitting of the project to confirm the potential floodplain reductions on these 299 properties.

- Agricultural under development 20-99ac: 2
- Commercial/Industrial: 41
- Local government: 3
- Mineral land not under development: 2
- Religious: 8
- Residential: 236
- State government: 7
- Total: 299

The CPFP Round 6 grant funding will be utilized to further study and design and permit the proposed project for future implementation. The project will require acquisition or easements and properties in order to implement the project.

**If there are critical facilities/infrastructure within the project area, describe each facility****Critical Facilities/Infrastructure\*:**

Reoccurring flood events make the Bottom Road bridge impassable which is the only ingress/egress to the Doran neighborhood leaving over 200 properties without emergency access.

**Explain the local government's financial and staff resources. How many relevant staff members does the local government have? To what relevant software does the local government have access? What are the local government's capabilities?**

**Financial and Staff Resources\*:**

The ability of a local government to develop and implement flood risk reduction projects, policies, and programs is directly tied to its ability to direct staff time and resources for that purpose. As summarized below, County staff currently has limited capacity to implement flood risk reduction. There is a need for staff to implement flood risk reduction measures and for an official to conduct reviews and enforcement of the building code and flood damage prevention ordinance.

If the project proposed does not employ a nature-based or hybrid solution and the total project cost is greater than \$2 million, describe at least one alternative that could reasonably address the issue identified. Please also consider the No Action Option as a third alternative as part of the analysis. Explain these alternatives and the reason the proposed project was selected.

**Alternatives:**

**Identify and describe the goals and objectives of the project. Include a description of the expected results of the completed project and explain the expected benefits of the project. This may include financial benefits, increased awareness, decreased risk, etc.**

**Goals and Objectives\*:**

Tazewell County was awarded the Bottom Road Flood Study (CFPF-24-04-61) in 2024 and has nearly completed the work. The study evaluated multiple alternatives to reduce flooding in the Bottom Road and Raven Road area, identifying one floodplain restoration option capable of significantly lowering flood elevations. The County is now proposing to design and permit the Bottom Road Floodplain Restoration and Green Sink Project, which is estimated to reduce 100-year base flood elevations by 2 to 3 feet for properties along both roads. CFPF Round 6 funding will support further analysis, detailed design, and permitting for future implementation, and the project will require acquisition of property or easements.

A baseline 2D hydraulic model was developed for the Clinch River and contributing tributaries and calibrated to historic flooding to understand flood extents and infrastructure constraints. Several upstream properties were evaluated as potential green sink storage areas, but modeling showed they could not provide sufficient flood reduction. One alternative, however, demonstrated meaningful benefits by redirecting flows during storm events exceeding the 1-year return interval.

The proposed solution creates an overflow channel at Kirby Road, upstream of Bottom Road and Raven Road, to capture floodwaters and route them into a wooded property south of Bottom Road. This area will be restored with a series of capture ponds that temporarily store floodwater. Restoring the bypass area will create open water, emergent, and forested wetlands, offering biodiversity and water-quality benefits in addition to flood mitigation. The project's most critical outcome is reducing base flood elevations by 2 to 3 feet, which will protect homes, roads, and infrastructure and improve safe access for residents during flood events.

Based on conceptual modeling results, the County will advance the floodplain restoration and green sink design to obtain local, state, and federal permits. Community engagement will be undertaken to build support, and the County will work with property owners to secure necessary easements or acquisitions. Detailed construction plans and specifications will be developed with grant funds to create a shovel-ready project, and implementation funding will be pursued once detailed costs are established.

**Outline a plan of action laying out the scope and detail of how the proposed work will be accomplished with a timeline identifying expected completion dates. Determine milestones for the project that will be used to track progress.**

**Explain what deliverables can be expected at each milestone, and what the final project deliverables will be. Identify other project partners**

**Approach, Milestones, and**

**Deliverables\*:**

CID510160\_CFPF Round 6\_Approach Milestones and Deliverables\_Bottom Road.pdf

**Where applicable, briefly describe the relationship between this project and other past, current, or future resilience projects. If the applicant has received or applied for any other grants or loans, please identify those projects, and, if applicable, describe any problems that arose with meeting the obligations of the grant and how the obligations of this project will be met**

**Relationship to Other Projects\*:**

The Bottom Road Floodplain Restoration and Green Sink Project is being developed through the Tazewell County (CID#510160) Resiliency Plan funded by the 2022 CFPF Grant Award and the Bottom Road Flood Study (CFPF-24-04-61) funded by the 2024 CFPF Grant Award. Through the resiliency study, re-occurring flood issues were identified and documented through review of historical rainfall and flooding data, analysis of existing flood mapping and studies, and community engagement. The Bottom Road Flood Study developed detailed HEC-HMS and rain on grid hydrologic studies and 2-D HEC-RAS modeling utilizing historic rain and runoff events to calibrate the model with documented flood stage observations. Through communication with the County and Town of Richlands staff and board members, privately owned properties were identified and evaluated for flood storage options to reduce or delay the flood peaks that will result in reduction to base flood elevations and floodplain limits in the Doran Community along Bottom Road and Raven Road. Implementation of the Bottom Road Floodplain

Restoration and Green Sink Project will also add ecologic biodiversity and open water recreational benefits that could be planned as part of the community park and outdoor activity area. The implementation of the project will also provide significant water quality improvements through sediment capture and treatment within the restored open water and wetland cells.

**For ongoing projects or projects that will require future maintenance, such as infrastructure, flood warning and response systems, signs, websites, or flood risk applications, a maintenance, management, and monitoring plan for the projects must be provided**

**Maintenance Plan\*:** CID510160\_CFPF Round 6\_Maintenance Plan\_Bottom Road.pdf

**Describe how the project meets each of the applicable scoring criteria contained in Appendix B. Documentation can be incorporated into the Scope of Work Narrative**

**Criteria\*:**

1. Eligible Projects

The Bottom Road Floodplain Restoration and Green Sink Project is a nature-based, floodplain restoration project that includes:

- ? Creation of an overflow channel to divert floodwaters into a restored floodplain storage area.
- ? Construction of a series of capture ponds functioning as floodplain ?green sink? features.
- ? Restoration of open water, emergent, and forested wetland habitat, which directly aligns with wetland and floodplain restoration.
- ? Reduction of 100-year base flood elevations by 2-3 feet for Bottom Road and Raven Road properties through floodplain reconnection.

2. Social Vulnerability Index

The Bottom Road Floodplain Restoration and Green Sink Project is in a low-income geographic area with a moderate SVI score. This corresponds to the ?Moderate Social Vulnerability (0.0 to 1.0)? range.

3. Community Scale of Benefits

The project benefits:

- ? Two census-designated places (Raven and Doran).
- ? Residential neighborhoods (including mobile homes).
- ? Public roadway access, including the only ingress/egress route for many residents.
- ? Regional emergency and transportation connectivity.

4. Expected Lifespan of Project

Nature-based floodplain restoration and the construction of retention ponds generally provide benefits lasting well over 20 years when properly maintained. This project incorporates several long-term features that support such durability, including redesigned bridge and culvert structures, floodplain reconnection and the creation of wetland habitats that function effectively for decades, and hydrologic improvements informed by detailed 2D modeling to ensure long-term stability and performance.

5. Remedy for NFIP Probation or Suspension

The project does not remedy NFIP probation or suspension.

6. Low-Income Geographic Area

Tazewell County is a low-income area with social vulnerability concerns with flood risks posing disproportionate impacts. The project's mitigation directly improves safety and accessibility for these residents.

7. Chesapeake Bay TMDL BMP Implementation

The floodplain restoration will reduce sediment and nutrient runoff through dredging, vegetated buffers, and controlled stormwater release-qualifying as Chesapeake Bay TMDL Best Management Practices (BMPs).

# Budget

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## Budget Summary

### Grant Matching Requirement\*:

LOW INCOME - Projects that will result in nature-based solutions - Fund 95%/Match 5%

Is a match waiver being requested?

**Match Waiver Request**      No

Note: only low-income communities are eligible for a match waiver.

\*:

**I certify that my project is in a low-income geographic area:** Yes

**Total Project Amount (Request +**      \$720,199.00

**Match)\*:**      \*\*This amount should equal the sum of your request and match figures

**REQUIRED Match Percentage**      \$36,009.95  
**Amount:**

## BUDGET TOTALS

Before submitting your application be sure that you meet the match requirements for your project type.

### Match Percentage:

5.00%

Verify that your match percentage matches your required match percentage amount above.

**Total Requested Fund Amount:**      \$684,189.06

**Total Match Amount:**      \$36,009.95

**TOTAL:**      \$720,199.01

### Personnel

Description	Requested Fund Amount	Match Fund Amount	Match Source
Personnel hours were estimated to complete the proposed scope of work and personnel budget estimated	\$451,065.34	\$23,288.52	In kind
	<b>\$451,065.34</b>	<b>\$23,288.52</b>	

### Fringe Benefits

Description	Requested Fund Amount	Match Fund Amount	Match Source
Fringe benefits associated with the personnel hours were estimated to complete the proposed scope of	\$193,313.72	\$9,980.80	In kind
	<b>\$193,313.72</b>	<b>\$9,980.80</b>	

## Travel

Description	Requested Fund Amount	Match Amount	Match Source
Travel expenses were estimated based on mileage and lodging during the proposed scope of work phase.	\$15,100.00	\$2,740.63	In kind
	<b>\$15,100.00</b>	<b>\$2,740.63</b>	

## Equipment

Description	Requested Fund Amount	Match Amount	Match Source
Equipment needed for geotechnical, survey, and other field assessments were estimated based on the p	\$15,360.00	\$0.00	In kind
	<b>\$15,360.00</b>	<b>\$0.00</b>	

## Supplies

Description	Requested Fund Amount	Match Amount	Match Source
Supplies needed for geotechnical, survey, and other field assessments were estimated based on the pr	\$9,350.00	\$0.00	In kind
	<b>\$9,350.00</b>	<b>\$0.00</b>	

## Construction

Description	Requested Fund Amount	Match Amount	Match Source
	No Data for Table		

## Contracts

Description	Requested Fund Amount	Match Amount	Match Source
	No Data for Table		

## Maintenance Costs

Description	Requested Fund Amount	Match Amount	Match Source
	No Data for Table		

## PreAward and Startup Costs

Description	Requested Fund Amount	Match Amount	Match Source
	No Data for Table		

## Other Direct Costs

Description	Requested Fund Amount	Match Amount	Match Source
	No Data for Table		

## Long and Short Term Loan Budget - Projects - VCFPF

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### ***Budget Summary***

**Are you applying for a short term, long term, or no loan as part of your application?**

If you are not applying for a loan, select "not applying for loan" and leave all other fields on this screen blank

**Long or Short Term\*:** Not Applying for Loan

**Total Project Amount:** \$0.00

**Total Requested Fund Amount:** \$0.00

**TOTAL:** \$0.00

### ***Salaries***

Description	Requested Fund Amount
	No Data for Table

### ***Fringe Benefits***

Description	Requested Fund Amount
	No Data for Table

### ***Travel***

Description	Requested Fund Amount
	No Data for Table

### ***Equipment***

Description	Requested Fund Amount
	No Data for Table

### ***Supplies***

Description	Requested Fund Amount
	No Data for Table

### ***Construction***

Description	Requested Fund Amount
	No Data for Table

Description	Requested Fund Amount
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### ***Contracts***

Description	Requested Fund Amount
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No Data for Table

### ***Other Direct Costs***

Description	Requested Fund Amount
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No Data for Table

## Supporting Documentation

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### ***Supporting Documentation***

Named Attachment	Required Description	File Name	Type	Size	Up D
Detailed map of the project area(s) (Projects/Studies)	Concept map for the Bottom Road Floodplain Restoration and Green Sink Project	CID510160_111835_CFPF_Concept_Map_11x17_updated.pdf	pdf	990	12/01 KB 04:5
FIRMette of the project area(s) (Projects/Studies)	FIRMette for the Bottom Road Floodplain Restoration and Green Sink Project	CID510160_Bottom Road FIRM 51185C0303D and 51185C0304D.png	png	1	12/01 MB 04:5
Historic flood damage data and/or images (Projects/Studies)					
A link to or a copy of the current floodplain ordinance	Floodplain ordinance	CID510160_Tazewell County_CFPF-6_Ordinance.pdf	pdf	225	12/01 KB 04:5
Maintenance and management plan for project					

Named Attachment	Required Description	File Name	Type	Size	Up D
A link to or a copy of the current hazard mitigation plan	Hazard Mitigation Plan	CID510160_Tazewell County_CFPF-6_HMP.pdf	pdf	13 MB	12/04:55
A link to or a copy of the current comprehensive plan					
Social vulnerability index score(s) for the project area					
Authorization to request funding from the Fund from governing body or chief executive of the local government	Authorization Letter	CID510160_Tazewell County_Letter of Authorization and Match for Bottom Road Green Sink Project.pdf	pdf	79 KB	12/04:55
Signed pledge agreement from each contributing organization					
Maintenance Plan					
Benefit Cost Analysis					
Other Relevant Attachments					

*Benefit-cost analysis must be submitted with project applications over \$2,000,000. in lieu of using the FEMA benefit-cost analysis tool, applicants may submit a narrative to describe in detail the cost benefits and value. The narrative must explicitly indicate the risk reduction benefits of a flood mitigation project and compares those benefits to its cost-effectiveness.*

### ***Letters of Support***

Description	File Name	Type	Size	Upload Date
Letter of Support for the Bottom Road Floodplain Restoration and Green Sink Project	CID510160_Tazewell County_CFPF-6_Support Letter from County for Bottom Road Project.pdf	pdf	79 KB	12/01/2025 04:56 PM

## **Resilience Plan**

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### ***Resilience Plan***

<b>Description</b>	<b>File Name</b>	<b>Type</b>	<b>Size</b>	<b>Upload Date</b>
Tazewell County Resilience Plan	CID510160_Tazewell County_CFFP-6_ResiliencePlan.pdf	pdf	4 MB	12/01/2025 05:09 PM