

# 2684 - Study - Stormwater Captial Improvement Plan Update

## Application Details

**Funding Opportunity:** 2337-Virginia Community Flood Preparedness Fund - Study Grants - CY24 Round 5  
**Funding Opportunity Due Date:** Jan 24, 2025 11:59 PM  
**Program Area:** Virginia Community Flood Preparedness Fund  
**Status:** Under Review  
**Stage:** Final Application

**Initial Submit Date:** Jan 24, 2025 12:00 PM  
**Initially Submitted By:** Jennifer Allen-Key  
**Last Submit Date:**  
**Last Submitted By:**

## Contact Information

### Primary Contact Information

**Active User\*:** Yes  
**Type:** External User  
**Name\*:** Ms. Jennifer Allen-Key  
Salutation First Name Middle Name Last Name  
**Title:** Stormwater Program Manager  
**Email\*:** [allen-keyjl@ci.waynesboro.va.us](mailto:allen-keyjl@ci.waynesboro.va.us)  
**Address\*:** 941 Fir Street

Waynesboro Virginia 22980  
City State/Province Postal Code/Zip

**Phone\*:** 540-241-2354 Ext.   
Phone  
### ### ####  
**Fax:** ### ### ####

**Comments:**

### Organization Information

**Status\*:** Approved  
**Name\*:** City of Waynesboro  
**Organization Type\*:** City Government  
**Tax ID\*:** 54-6001673  
**Unique Entity Identifier (UEI)\*:** TUM2AUHHALP2  
**Organization Website:**

**Address\*:** 503 W Main St  
Suite 203  
Waynesboro Virginia 22980-  
City State/Province Postal Code/Zip

**Phone\*:** 540-942-6555 Ext.  
### ### #####

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

**Benefactor:**

**Vendor ID:**

**Comments:**

## VCFPF Applicant Information

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### *Project Description*

**Name of Local Government\*:** City of Waynesboro  
Your locality's CID number can be found at the following link: [Community Status Book Report](#)

**NFIP/DCR Community Identification Number (CID)\*:** 515532

If a state or federally recognized Indian tribe,

**Name of Tribe:**

**Authorized Individual\*:** Michael Hamp  
First Name Last Name

**Mailing Address\*:** 503 W Main St.  
Address Line 1  
Suite 210  
Address Line 2  
Waynesboro Virginia 22980  
City State Zip Code

**Telephone Number\*:** 540-942-6600

**Cell Phone Number\*:** 540-942-6600

**Email\*:** [hampmg@ci.waynesboro.va.us](mailto:hampmg@ci.waynesboro.va.us)

Is the contact person different than the authorized individual?

**Contact Person\*:** Yes

**Contact:** Jennifer Allen-Key  
First Name Last Name  
941 Fir St  
Address Line 1  
Address Line 2  
Waynesboro Virginia 22980  
City State Zip Code

**Telephone Number:** 540-942-6626

**Cell Phone Number:** 540-241-2354

**Email Address:** [allen-keyjl@ci.waynesboro.va.us](mailto:allen-keyjl@ci.waynesboro.va.us)

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

**Project Description\*:**

The City of Waynesboro is seeking funding to update the City Stormwater CIP, which is actively used to address the City's localized and regional flooding issues and will complement the Regional Resilience Plan. This update study will include site-specific project review, conceptual design

layout, and estimated project costs (design and construction) for projects not yet implemented from the 2006 Stormwater CIP and other locations within the City that have been identified with flooding issues.

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://www.census.gov)

**Census Block(s) Where Project will Occur\*:** (Citywide). Includes Census Tracts 31, 32, 33, 34, 35

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

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

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

**Flood Insurance Rate Map Number(s) (if applicable):**

5105C0531D, 51015C5032D, 51015C0551D, 51015C0529D, 51015C0533D, 51015C0534D, 51015C0553D, 5101C0537D

## Eligibility - Round 4

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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

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

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

## Scope of Work - Studies - 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\*:** [CID515532\\_WaynesboroCity\\_CFPF-5\\_Study\\_ScopeofWork.pdf](#)

**Comments:**

Appendix A also attached.

**Budget Narrative**

**Budget Narrative Attachment\*:** [C8\\_Budget Narrative.pdf](#)

Comments:

## Scoring Criteria for Studies - Round 4

### Scoring

Revising floodplain ordinances to maintain compliance with the NFP or to incorporate higher standards that may reduce the risk of flood damage. This must include establishing processes for implementing the ordinance, including but not limited to, permitting, record retention, violations, and variances. This may include revising a floodplain ordinance when the community is getting new Flood Insurance Rate Maps (FIRMs), updating a floodplain ordinance to include floodplain setbacks or freeboard, or correcting issues identified in a Corrective Action Plan.

**Revising Floodplain Ordinances\*:** No  
Select

Creating tools or applications to identify, aggregate, or display information on flood risk or creating a crowd-sourced mapping platform that gathers data points about real-time flooding. This could include a locally or regionally based web-based mapping product that allows local residents to better understand their flood risk.

**Mapping Platform\*:** No  
Select

Conducting hydrologic and hydraulic studies of floodplains. Applicants who create new maps must apply for a Letter of Map Revision or a Physical Map Revision through the Federal Emergency Management Agency (FEMA).

**Hydrologic and Hydraulic Studies\*:** No  
Select

Studies and Data Collection of Statewide and Regional Significance. Funding of studies of statewide and regional significance and proposals will be considered for the following types of studies:

Updating precipitation data and IDF information (rain intensity, duration, frequency estimates) including such data at a sub-state or regional scale on a periodic basis.

**Updating Precipitation Data and IDF Information\*:** No  
Select

Regional relative sea level rise projections for use in determining future impacts.

**Projections\*:** No  
Select

Vulnerability analysis either statewide or regionally to state transportation, water supply, water treatment, impounding structures, or other significant and vital infrastructure from flooding.

**Vulnerability Analysis\*:** No  
Select

Flash flood studies and modeling in riverine regions of the state.

**Flash Flood Studies\*:** No  
Select

Statewide or regional stream gauge monitoring to include expansion of existing gauge networks.

**Stream Gauge Monitoring\*:** No  
Select

New or updated delineations of areas of recurrent flooding, stormwater flooding, and storm surge vulnerability in coastal areas that include projections for future conditions based on sea level rise, more intense rainfall events, or other relevant flood risk factors.

**Delineations of Areas of Recurrent Flooding\*:** No  
Select

Regional flood studies in riverine communities that may include watershed-scale evaluation, updated estimates of rainfall intensity, or other information.

**Regional Flood Studies\*:** No  
Select

Regional Hydrologic and Hydraulic Studies of Floodplains

**Regional Hydrologic and Hydraulic Studies of Floodplains\*:** No  
Select

Studies of potential land use strategies that could be implemented by a local government to reduce or mitigate damage from coastal or riverine flooding.

**Potential Land Use Strategies\*:** No  
Select

Pluvial Studies

**Pluvial Studies\*:** No  
Select

Other proposals that will significantly improve protection from flooding on a statewide or regional basis.

**Other Proposals\*:** Yes  
Select

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 (0.0 to 1.0)

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

**NFIP\*:** Yes

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** No

**Pollution\*:**

**Comments:**

## Scope of Work Supporting Information - Studies

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### ***Scope of Work Supporting Information***

Is the proposed study a new study or updates on a prior study?

**New or Updated Study\*:** Updates on a Prior Study

Describe the relationship of the study to the local government's needs for flood prevention and protection, equity, community improvement, identification of nature-based solutions or other priorities contained in this manual

#### **Relationship of Study to Priorities Contained in this Manual\*:**

Grant funding for the City's Stormwater CIP update will have community scale benefits for the City's residents. This study is necessary to equitably identify and rank stormwater projects within the City that will enhance flood prevention/protection from recurrent storms and, when possible, integrate water quality improvements. Waynesboro has been actively monitoring and recording recurrent flood issues and complaints under its authority since the 2006 CIP update. With this information, the City has identified new projects for detailed study and implementation.

As a low-income geographic area, the City struggles to fund the many needs of its aging infrastructure. For cost savings, the City utilizes its maintenance crew to implement many of the projects from the CIP. While slow, steady progress has been made implementing projects, it has been almost 20 years since the last CIP update. The City recognizes the need to update remaining project design concepts to reflect current regulatory climate. In addition, there are newly identified areas of flooding where the City needs to develop improvement projects due more frequent high intensity storms. Grant funding will facilitate the over-due update to the CIP.

Grant funding for this project will allow the City to hire an engineering consultant with appropriate technical capability and with certified floodplain manager(s) on staff. The stormwater CIP update will allow for a fresh look at flooding areas while incorporating current regulatory considerations and with a focus of utilizing nature-based solutions, when appropriate. Opportunities to incorporate water quality improvement considerations will be explored. Further, update of this plan will both strengthen and better inform the Regional Resilience Plan initiative by CSPDC, which is being submitted as a separate grant application in the CFPF Round 5 cycle.

While FEMA floodplain mapping and a local floodplain ordinance exist for Waynesboro, these tools primarily identify impacts from large storm events. The identification of more frequently occurring flood hazards is not always addressed by riverine hydraulic studies, particularly for more frequent high intensity storm events. As storm intensities increase and climate change further exacerbates flood hazards, it is imperative that the

City develop forward-thinking strategies to protect public health and safety and base decision-making tools for future improvements on best available science and data.

Describe the qualifications of the individuals or organizations charged with conducting the study or the elements of any request for proposal that define those qualifications

**Qualifications of Individuals Conducting Study\*:**

A qualified professional engineering consultant with CFM certified staff will be hired to conduct the work. Please refer to Appendix B for the scope and fee provided by the Consultant. The City will execute the task order agreement upon notification of grant award.

Describe the expected use of the study results in the context of the local resilience plan or, in the case of regional plans, how the study improves any regional approach

**Expected use of Study Results\*:**

With projects focused on improving flooding conditions within the City and building resilience, the CIP update will provide a project-based approach to address flooding conditions particularly for recurrent storm events. The CIP plan includes considerations for all parts of the City experiencing reported flooding concerns regardless of socioeconomics or race. Projects developed within the CIP update will be prioritized based on those projects providing the greatest impact to the community with considerations such as life safety, critical infrastructure, property damage and nature-based solutions. Project evaluations will be based on the best available science and incorporate climate change considerations. The CIP plan will be developed in support and cooperation with the upcoming Regional Resilience Plan by the Central Shenandoah PDC. Project ranking from the study will highlight needs for improvement in vulnerable flooding locations within the community.

If applicable, describe how the study may improve Virginia's flood protection and prevention abilities in a statewide context (type N/A if not applicable)

**Statewide Improvements\*:**

The CIP update includes coordination with the local Planning District Commission as a Regional Resilience Plan is planned in the near future. Development of the Stormwater CIP update will both strengthen and better inform the Regional Resilience Plan initiative by CSPDC, which is being submitted as a separate grant application in the CFPF Round 5 cycle. As such, this project will provide a regional impact for improving flooding conditions.

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

**Repetitive Loss and/or Severe Repetitive Loss Properties\*:** [CID515532\\_WaynesboroCity\\_CFPF-5\\_At\\_Risk\\_Structures.pdf](#)

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 these structures in the project area

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

(N/A - Citywide): The anticipated benefactors of this study include residents, businesses, and the motoring public of the City of Waynesboro. This plan will highlight areas where critical upgrades better assist emergency response operations, provide ecological uplift, and allow for improved resilience to threats from natural or human hazards. Proactive mitigation efforts identified through a stormwater CIP study will help the City safeguard roads and public infrastructure, private property, and local historical and environmental assets. Further, use of a project ranking system will allow for a strategic approach to address critical projects in order of priority, thereby facilitating communication efforts with stakeholders across the City.

If there are critical facilities/infrastructure within the project area, describe each facility

**Critical Facilities/Infrastructure\*:**

The City of Waynesboro has over 1,000 at-risk structures that exist in a mapped 1% or 0.2% annual chance flood zone, several of which are critical facilities within the FEMA 100-year floodplain.

## Budget

### Budget Summary

**Grant Matching Requirement\*:** LOW INCOME - Flood Prevention and Protection Studies - Fund 90%/Match 10%

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 + Match)\*:** \$191,289.00

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

REQUIRED Match Percentage Amount: \$19,128.90

## BUDGET TOTALS

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

Match Percentage: 10.00%  
Verify that your match percentage matches your required match percentage amount above.

Total Requested Fund Amount: \$172,160.00

Total Match Amount: \$19,129.00

TOTAL: \$191,289.00

### Personnel

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

### Fringe Benefits

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

### Travel

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

### Equipment

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

### Supplies

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

### Construction

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

### Contracts

Description	Requested Fund Amount	Match Amount	Match Source
Contracted Consultant Fee	\$172,160.00	\$19,129.00	City of Waynesboro Funds
	\$172,160.00	\$19,129.00	

### Pre-Award and Startup Costs

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

**Other Direct Costs**

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

## Supporting Documentation

**Supporting Documentation**

Named Attachment	Required	Description	File Name	Type	Size	Upload Date
Detailed map of the project area(s) (Projects/Studies)		Location Map, City Boundary, Opportunity Zone Map	<a href="#">C1_LocationMap_Final.pdf</a>	pdf	11 MB	12/13/2024 12:18 AM
FIRMe of the project area(s) (Projects/Studies)		Citywide NFHL Viewer, FIRM Panels	<a href="#">C2_CityFIRMs.pdf</a>	pdf	16 MB	12/13/2024 12:21 AM
Historic flood damage data and/or images (Projects/Studies)		Flood Documentation	<a href="#">C3_Historic_Flood_Damage.pdf</a>	pdf	4 MB	12/13/2024 12:23 AM
A link to or a copy of the current floodplain ordinance		Floodplain Ordinance	<a href="#">C4_FDPL_ordinance_sections.pdf</a>	pdf	452 KB	12/13/2024 12:23 AM
Maintenance and management plan for project						
A link to or a copy of the current hazard mitigation plan		Regional Hazard Mitigation Plan	<a href="#">C9_Link to Shenandoah_HMP.pdf</a>	pdf	115 KB	12/13/2024 12:25 AM
A link to or a copy of the current comprehensive plan		Link to current comprehensive plan	<a href="#">C5_Link to CoW_CompPlan.pdf</a>	pdf	309 KB	12/18/2024 02:18 PM
Social vulnerability index score(s) for the project area		Social Vulnerability Index Scoring	<a href="#">C6_SVI.pdf</a>	pdf	344 KB	12/18/2024 02:19 PM
Authorization to request funding from the Fund from governing body or chief executive of the local government		City Manager Authorization	<a href="#">C10_City Manager Authorizing Letter.pdf</a>	pdf	28 KB	12/13/2024 12:43 PM
Signed pledge agreement from each contributing organization						
Maintenance Plan						
<i>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.</i>						
Benefit Cost Analysis						
Other Relevant Attachments		Consultant Scope - Budget and Narrative - TimmonsGroup	<a href="#">C11_CoW_2024_Task Order CIP Plan Scope.pdf</a>	pdf	213 KB	12/18/2024 02:10 PM

**Letters of Support**

Description	File Name	Type	Size	Upload Date
Letter of Support - Emergency Management and EMS	<a href="#">C7_Support Letter PWDCR .pdf</a>	pdf	365 KB	12/18/2024 02:21 PM

# COMMUNITY FLOOD PREPAREDNESS FUND STUDIES GRANT APPLICATION



**CITY OF WAYNESBORO, VA**

COMMUNITY ID #515532

SUBMITTED JANUARY 24, 2025



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### Appendices (Per VA DCR CFPF Grant Manual, Appendix C)

C1.    City Maps	
C2.    FEMA NFHL Map – City of Waynesboro, VA	
C3.    City Flood Records	
C4.    City Floodplain Ordinance	
C5.    2018 City Comprehensive Plan	
C6.    Social Vulnerability Scoring	
C7.    Letter of Support	
C8.    CFPF Budget Narrative	
C9.    Supporting Documentation – Regional Hazard Mitigation Plan	
C10.   Authorization to Request Funding	
C11.   Detailed Budget Narrative – Consultant Scope & Fee	

# CFPF Grant Application: Studies

## 1.0. Scope of Work Narrative

### 1.1 Need for Assistance

#### *Problem*

The City of Waynesboro, Virginia is subject to both riverine flooding and flooding issues caused by more frequent high intensity storms that are exacerbated by inadequate and antiquated storm infrastructure. Flood-related events have been well documented, both by media outlets and city residents. Flood documentation examples are provided in **Appendix C3**.

Founded as a town in 1801, the area now recognized as the City of Waynesboro initially experienced a development boom after the arrival of the railroad in 1881 and a surge in industrial development in the 1920's. As such, much of the storm drainage system was constructed before current design standards were in place. The combination of antiquated storm infrastructure and the effects of climate change with increasing storm intensities continue to strain existing conveyance systems. Local residents and emergency operations face challenges arising from localized urban flooding. In response to these issues, the City is committed to ongoing efforts to mitigate recurring flooding.

Since 1999, the City of Waynesboro has maintained a Stormwater Capital Improvement Program (CIP) to address the City's localized and regional flooding issues through project identification, assessment and planning. The City uses the prioritized list of projects in the Stormwater CIP as a guide for project implementation. The Stormwater CIP was last updated in 2006. While slow, steady progress has been made implementing projects, it has been almost 20 years since the last CIP update.

The City recognizes the need to update remaining project design concepts from the 2006 CIP to reflect the current regulatory climate, incorporate nature-based solutions, and explore water quality opportunities. In addition, there are newly identified areas of flooding where the City needs to develop improvement projects due to more frequent high intensity storms. Grant funding will facilitate the over-due update to the City's Stormwater CIP. Grant funding for this project will allow the City to hire an engineering consultant with appropriate technical capability and with certified floodplain manager(s) on staff. The planned Stormwater CIP update will include re-evaluation of the remaining projects (not implemented) from the 2006 Stormwater CIP in addition to evaluation of other flooding areas in the city not previously included in the Stormwater CIP. The Stormwater CIP Plan update will include desktop review of available data, field visits to each identified location, regulatory considerations including water quality improvement opportunities, conceptual design layout, and estimated design and construction costs for each location. A major outcome of the Stormwater CIP update is that the City will have a prioritized list of projects to implement, reflecting current regulatory considerations to improve flooding conditions within the City.

Further, the CIP update will also be in support of the upcoming Central Shenandoah Planning District Commission (CSPDC) Resilience Plan. The CSPDC is currently seeking grant funding to assist in the development of a new CSPDC Regional Resilience Plan, which includes the City of Waynesboro. The Regional Resilience Plan will meet the requirements for a Resilience Plan established for the Round 5 CFPF grant project manual. The updated Stormwater CIP Plan for

the City of Waynesboro will directly support the Regional Resilience Plan by providing a project-based approach within the City of Waynesboro with a focus on flood control and resilience. The City of Waynesboro will work in partnership with the CSPDC during the development of the Regional Resilience Plan. The City is seeking assistance from the Community Flood Preparedness Fund to assist with the City of Waynesboro CIP Plan Update and coordination efforts with the CSPDC Regional Resilience Plan with this application.

While FEMA floodplain mapping and a local floodplain ordinance exists for Waynesboro, these tools primarily identify impacts from large storm events. The identification of more frequently occurring flood hazards is not always addressed by riverine hydraulic studies, particularly for more frequent high intensity storm events. As storm intensities increase and climate change further exacerbates flood hazards, it is imperative that the City develop forward-thinking strategies to protect public health and safety and base decision-making tools for future improvements on best available science and data.

### *Contributing Factors*

The City is a low-income geographic area, as defined in the CFPF Grant Manual, as an area where the median household income (\$52,519) is less than 80% of the state median household income (\$71,944 in VA), according to 2022 US Census Data.<sup>1</sup> Further, the eastern portion of the City is designated as a Qualified Opportunity Zone, as presented in the attached map (**Appendix C1**).

The City of Waynesboro is located in the Shenandoah Valley on the banks of the South River. According to the Central Shenandoah Hazard Mitigation Plan, the City and other localities within the area face significant risk of riverine flooding and dam failures, and high risk of severe winter weather (and flooding from associated snowmelt). The City of Waynesboro has over 1,000 at-risk structures that exist in a mapped 1% or 0.2% annual chance flood zone, several of which are critical facilities within the FEMA 100-year floodplain.<sup>2</sup>

### *Why A Study is Needed*

As a low-income geographic area, the City struggles to fund the many needs of its aging infrastructure. Since the last Stormwater CIP update in 2006, the City has made slow, steady progress in implementing prioritized projects from the CIP to improve flooding conditions in the city. It has been nearly 20 years since the last Stormwater CIP update and the regulatory climate and initiatives of the City have changed over this time period. While many of the projects included in the 2006 update have been implemented, there are several that have not yet been implemented. In addition, there are other areas in the city where flooding issues are reported, but improvement project concepts have not yet been developed.

Grant funding for this project will allow the City to hire an engineering consultant with appropriate technical capability and with certified floodplain manager(s) on staff. A grant award to update the City's Stormwater Capital Improvements Plan (CIP) will allow the City to re-evaluate any projects from the current 2006 that have not yet been implemented and provide for the evaluation of areas in the city where flooding improvement projects have not yet been identified and prioritized. The stormwater CIP update will allow for a fresh look at these areas

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<sup>1</sup> [https://data.census.gov/profile/Waynesboro\\_city,\\_Virginia?g=050XX00US51820](https://data.census.gov/profile/Waynesboro_city,_Virginia?g=050XX00US51820)

<sup>2</sup> Central Shenandoah Hazard Mitigation Plan 2020 Update. Figure IV-4 and Table IV-9.

[https://www.cspdc.org/wp-content/uploads/2024/04/CSHMP\\_2020\\_Final\\_Locality\\_Resolutions.rw\\_.pdf](https://www.cspdc.org/wp-content/uploads/2024/04/CSHMP_2020_Final_Locality_Resolutions.rw_.pdf)

the City of Waynesboro will directly support the Regional Resilience Plan by providing a project-based approach within the City of Waynesboro with a focus on flood control and resilience. The City of Waynesboro will work in partnership with the CSPDC during the development of the Regional Resilience Plan. The City is seeking assistance from the Community Flood Preparedness Fund to assist with the City of Waynesboro CIP Plan Update and coordination efforts with the CSPDC Regional Resilience Plan with this application.

While FEMA floodplain mapping and a local floodplain ordinance exist for Waynesboro, these tools primarily identify impacts from large storm events. The identification of more frequently occurring flood hazards is not always addressed by riverine hydraulic studies, particularly for more frequent high intensity storm events. As storm intensities increase and climate change further exacerbates flood hazards, it is imperative that the City develop forward-thinking strategies to protect public health and safety and base decision-making tools for future improvements on best available science and data.

### *Contributing Factors*

The City is a low-income geographic area, as defined in the CFPF Grant Manual, as an area where the median household income (\$52,519) is less than 80% of the state median household income (\$71,944 in VA), according to 2022 US Census Data.<sup>1</sup> Further, the eastern portion of the City is designated as a Qualified Opportunity Zone, as presented in the attached map (**Appendix C1**).

The City of Waynesboro is located in the Shenandoah Valley on the banks of the South River. According to the Central Shenandoah Hazard Mitigation Plan, the City and other localities within the area face significant risk of riverine flooding and dam failures, and high risk of severe winter weather (and flooding from associated snowmelt). The City of Waynesboro has over 1,000 at-risk structures that exist in a mapped 1% or 0.2% annual chance flood zone, several of which are critical facilities within the FEMA 100-year floodplain.<sup>2</sup>

### *Why A Study is Needed*

As a low-income geographic area, the City struggles to fund the many needs of its aging infrastructure. Since the last Stormwater CIP update in 2006, the City has made slow, steady progress in implementing prioritized projects from the CIP to improve flooding conditions in the city. It has been nearly 20 years since the last Stormwater CIP update and the regulatory climate and initiatives of the City have changed over this time period. While many of the projects included in the 2006 update have been implemented, there are several that have not yet been implemented. In addition, there are other areas in the city where flooding issues are reported, but improvement project concepts have not yet been developed.

Grant funding for this project will allow the City to hire an engineering consultant with appropriate technical capability and with certified floodplain manager(s) on staff. A grant award to update the City's Stormwater Capital Improvements Plan (CIP) will allow the City to re-evaluate any projects from the current 2006 that have not yet been implemented and provide for the evaluation of areas in the city where flooding improvement projects have not yet been identified and prioritized. The stormwater CIP update will allow for a fresh look at these areas

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<sup>1</sup> [https://data.census.gov/profile/Waynesboro\\_city,\\_Virginia?g=050XX00US51820](https://data.census.gov/profile/Waynesboro_city,_Virginia?g=050XX00US51820)

<sup>2</sup> Central Shenandoah Hazard Mitigation Plan 2020 Update. Figure IV-4 and Table IV-9.

[https://www.cspdc.org/wp-content/uploads/2024/04/CSHMP\\_2020\\_Final\\_Locality\\_Resolutions.rw\\_.pdf](https://www.cspdc.org/wp-content/uploads/2024/04/CSHMP_2020_Final_Locality_Resolutions.rw_.pdf)

while incorporating current regulatory considerations and with a focus of utilizing nature-based solutions, when appropriate. Further, development of this plan will both strengthen and better inform the Regional Resilience Plan initiative by CSPDC, which is being submitted as a separate grant application in the CFPF Round 5 cycle.

While FEMA floodplain mapping and a local floodplain ordinance exist for Waynesboro, these tools primarily identify impacts from large storm events. The identification of acute flood hazards is not always addressed by riverine hydraulic studies, particularly for lower and more frequent storm events. This is especially the case in developed areas with traditional grey infrastructure. As storm intensities increase and climate change further exacerbates flood hazards, it is imperative that the City develop forward-thinking strategies to protect public health and safety and base decision-making tools for future improvements on best available science and data. This study is essential to providing the City information necessary to equitably identify, rank, and mitigate localized flooding issues.

#### *Benefits of a Citywide Stormwater CIP Update*

Grant funding for the City's Stormwater CIP update will have community scale benefits for the City's residents. The Stormwater CIP update will also provide a regional benefit as it will support the planned Regional Resilience Plan currently by the CSPDC. The Stormwater CIP update will provide the City with the framework necessary to prioritize projects for implementation and decrease the risk to public safety through flood risk reduction and protect property. The purpose of the Stormwater CIP plan update is to evaluate known areas of flooding concerns and develop planning level information to facilitate implementation of projects over time. The Stormwater CIP update will allow an engineering consultant to field evaluate each identified flooding location and identify a schematic design concept, planning costs and prioritization matrix that reflects current regulatory requirements and incorporate nature-based solutions, when possible. The City's current project prioritization matrix gives highest priority to projects that have the potential to improve the risk of life and property damage and those projects that provide flooding benefits for the greatest number of properties.

The anticipated benefactors of this study include residents, businesses, and the traveling public of the City of Waynesboro. This plan will highlight areas where critical upgrades better assist emergency response operations, provide ecological uplift, and allow for improved resilience to threats from natural or human hazards. Proactive mitigation efforts identified through a stormwater CIP study will help the City safeguard roads and public infrastructure, private property, and local historical and environmental assets. Further, use of a project ranking system will allow for a strategic approach to address critical projects in order of priority, thereby facilitating communication efforts with stakeholders across the City.

### **1.2 Goals and Objectives**

The goal of the Stormwater CIP Update study is to establish a framework for the implementation of projects within the city to improve flooding conditions and to reference strategies of the future Regional Resilience Plan initiative by CSPDC. The Stormwater CIP update will include evaluation/re-evaluation of specific areas of known flooding within the city with a perspective of current regulatory criteria and nature-based solutions, where possible. The objectives of the Stormwater CIP update are to develop schematic designs, planning-level cost estimates, and project prioritization to enable the city to proactively plan for the implementation of the projects

in the future. Success of the proposed study will be measured by the clear outcome of a tangible, updated Stormwater CIP study, including a prioritized list of stormwater projects. Electronic versions of the document will be submitted in accordance with the City's grant agreement. The goals and objectives of this study are achievable within the 3-year grant period.

### 1.3 Work Plan

With technical assistance provided by an engineering consultant, the City will complete all requested grant activities within the 36-month window allowable for this cycle of CFPF grant funds. The City of Waynesboro, Department of Public Works, will be responsible for overseeing and implementing grant activities.

The following timeline outlines more specifically the City's intended activity schedule:

- January 24, 2025– CFPF Round 5 Applications due.
- March 3, 2025– Award announcements anticipated by VA DCR.
- April 28, 2025– Contracts in place, NTP for CIP Study Consultant.
- May 29, 2025– CIP Study Consultant contracted.
- December 8, 2025– Stormwater CIP Study presented to Council
- January 12, 2026– CIP Study approved by DCR and finalized
- March 2, 2026– Anticipated end of Project (10 months after award)
- April 2, 2026 – No later than 30 days after each activity is complete, all digital copies of completed work submitted to [cfpf@dcr.virginia.gov](mailto:cfpf@dcr.virginia.gov)
- July 1, 2026 – No later than 90 days after project completion, final reimbursement request is due to DCR

### 1.4 Evaluation

The indicators of success of this project will be measured by the development of an updated Stormwater CIP study report and integration of flood improvement strategies, including nature-based solution and water quality improvement considerations, and initiatives from the upcoming Regional Resilience Plan by the CSPDC into the updated Stormwater CIP. The development of a prioritized list of projects with planning-level schematic design and cost estimates for each evaluated project will be a primary indicator of success of the project. During the duration of the Stormwater CIP Plan update, there will be regular coordination meetings with City staff and with the CSPDC. The purpose of the meetings will be to ensure the project is progressing according to schedule and that stakeholder input (city staff and CSPDC) is appropriately incorporated into the Stormwater CIP update. Success of these outreach efforts will be measured by attendance at the meetings and stakeholder involvement.

No delays are anticipated in the project schedule. The project will, to some extent, rely on the progress of the Regional Resilience Plan initiative by the CSPDC. Delays encountered based on the schedule of the Regional Resilience Plan will improve the outcome of the Stormwater CIP update study as it will allow for the Stormwater CIP plan to be progressed in support of the Regional Resilience Plan.

## 2.0. Study Application Criteria

The following are the objectives of the scope of work for this project, as outlined in the CFPF Grant Manual:

1. *Study Type*

The City of Waynesboro is requesting funds to complete a study to identify and prioritize projects for inclusion in the stormwater CIP update. Project ranking will take into consideration emergency response operations, opportunities for water quality improvement, and nature-based solutions where applicable. Ranking will also incorporate findings of the regional Central Shenandoah Resilience Plan that is being submitted as a separate application within this grant cycle. The project will have local and regional significance in improving flood conditions.

2. *Local Need for Study*

As noted in section 1.1, this study is necessary to equitably identify and rank stormwater capital improvements projects within the City of Waynesboro that will enhance flood prevention and protection. The project will address flooding associated with recurrent, high intensity storm events and consider climate change.

3. *Qualifications of Entity Charged with Conducting the Study*

A qualified professional engineering consultant with certified CFM staff will be hired to conduct the work. Please refer to **Appendix C11** for the scope and fee provided by the Consultant. The City will execute the task order agreement upon notification of grant award.

4. *Expected Use of Study*

Development of this Study will project a prioritized project-based approach to facilitate planning needs associated with stormwater CIP project design and construction in the City of Waynesboro. It will also be developed in support of the planned Regional Resilience Plan by the CSPDC. Project ranking from the study will highlight needs for improvement in vulnerable flooding locations within the community and provide local and regional significance to improving flood conditions.

## 3.0. Budget Narrative

Per the CFPF Grant Manual, the following is a budget narrative created for this project.

- Estimated total project cost (refer to **Appendices C8** and **C11** for breakdown of fees).

Task	Project Budget
Stormwater CIP Study (Consultant)	\$191,289
<b>Total</b>	<b>\$191,289</b>

- Amount of funds requested from the Fund: \$172,160. Local Share of Project: \$19,129. Please refer to the table above for a breakdown of how the total project amount will be allocated.
- Amount of cash funds available: The City respectfully requests 90% funding of this project and pledges to match 10% of the costs, per the letter signed by the City Manager.
- Please refer to the letter in **Appendix C10** for the City's authorization to request for funding.

**APPENDIX A:  
APPLICATION FORM**

# Appendix A: Application Form for Grant and Loan Requests for All Categories

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Virginia Department of Conservation and Recreation  
Virginia Community Flood Preparedness Fund Grant Program

Name of Local Government: City of Waynesboro, VA

Category Being Applied for (check one):

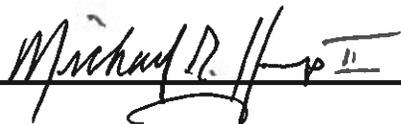
Capacity Building/Planning

Project

Study

NFIP/DCR Community Identification Number (CID) 515532

Name of Authorized Official and Title: Michael G. Hamp II, City Manager

Signature of Authorized Official: 

Mailing Address (1): 503 W Main St

Mailing Address (2): Suite 210

City: Waynesboro State: VA Zip: 22980

Telephone Number: (540) 942-6600 Cell Phone Number: ( )

Email Address: hampmg@ci.waynesboro.va.us

Contact and Title (If different from authorized official): Jennifer Allen-Key,  
Stormwater Program Manager

Mailing Address (1): 941 Fir St

Mailing Address (2): \_\_\_\_\_

City: Waynesboro State: VA Zip: 22980

Telephone Number: (540) 942-6624 Cell Phone Number: (    ) \_\_\_\_\_

Email Address: allen-keyjl@ci.waynesboro.va.us

Is the proposal in this application intended to benefit a low-income geographic area as defined in the Part 1 Definitions? Yes  No

**Categories (select applicable activities that will be included in the project and used for scoring criterion):**

~~Capacity Building and Planning Grants~~

- Floodplain Staff Capacity.
- Resilience Plan Development
  - Revisions to existing resilience plans and integration of comprehensive and hazard mitigation plans.
  - Resource assessments, planning, strategies, and development.
    - Policy management and/or development.
    - Stakeholder engagement and strategies.
- Other: \_\_\_\_\_

**Study Grants (Check All that Apply)**

- Revising other land use ordinances to incorporate flood protection and mitigation goals, standards, and practices.

- Conducting hydrologic and hydraulic (H&H) studies of floodplains. *Changes to the base flood, as demonstrated by the H&H must be submitted to FEMA within 6 months of the data becoming available.*
- Studies and Data Collection of Statewide and Regional Significance.
- Revisions to existing resilience plans and modifications to existing comprehensive and hazard.
- Other relevant flood prevention and protection project or study.
- Pluvial studies.
- Studies to aid in updating floodplain ordinances to maintain compliance with the NFIP, or to incorporate higher standards that may reduce the risk of flood damage. This must include establishing processes for implementing the ordinance, including but not limited to, permitting, record retention, violations, and variances. This may include revising a floodplain ordinance when the community is getting new Flood Insurance Rate Maps (FIRMs), updating a floodplain ordinance to include floodplain setbacks, freeboard, or other higher standards, RiskMAP public noticing requirements, or correcting issues identified in a Corrective Action Plan.

**Project Grants and Loans (Check All that Apply – Hybrid Solutions will include items from both the “Nature-Based” and “Other” categories)**

**Nature-based solutions**

- Acquisition of property (or interests therein) and/or structures for purposes of allowing floodwater inundation, strategic retreat of existing land uses from areas vulnerable to flooding; the conservation or enhancement of natural flood resilience resources; or acquisition of structures, provided the acquired property will be protected in perpetuity from further development, and where the flood mitigation benefits will be achieved as a part of the same project as the property acquisition.
- Wetland restoration.
- Floodplain restoration.
- Construction of swales and settling ponds.

- Living shorelines and vegetated buffers.
- Permanent conservation of undeveloped lands identified as having flood resilience value by *Conserve Virginia* Floodplain and Flooding Resilience layer or a similar data driven analytic tool, or the acquisition of developed land for future conservation.
- Dam removal.
- Stream bank restoration or stabilization.
- Restoration of floodplains to natural and beneficial function.

#### Other Projects

- Developing flood warning and response systems, which may include gauge installation, to notify residents of potential emergency flooding events.
- Dam restoration.
- Beneficial reuse of dredge materials for flood mitigation purposes
- Removal or relocation of structures from flood-prone areas where the land will not be returned to open space.
- Structural floodwalls, levees, berms, flood gates, structural conveyances.
- Storm water system upgrades.
- Medium and large-scale Low Impact Development (LID) in urban areas.
- Acquisition of property (or interests therein) and/or structures for purposes of allowing floodwater inundation, strategic retreat of existing land uses from areas vulnerable to flooding; the conservation or enhancement of natural flood resilience resources; or acquisition of structures, provided the acquired property will be protected in perpetuity from further development, and where the flood mitigation benefits will not be achieved as a part of the same project as the property acquisition.
- Other project identified in a DCR-approved Resilience Plan.

Location of Project or Activity (Include Maps): City of Waynesboro, City-wide

NFIP Community Identification Number (CID#): 515532

Is Project Located in an NFIP Participating Community?  Yes  No

Is Project Located in a Special Flood Hazard Area?  Yes  No N/A - Citywide Study

Flood Zone(s) (If Applicable): AE, X

Flood Insurance Rate Map Number(s) (If Applicable): 5105C0531D, 51015C5032D, 51015C0551D, 51015C0529D, 51015C0533D, 51015C0534D, 51015C0553D, 5101C0537D, 5101C0541F, 51015C0542D, 51015C0561D

Total Cost of Project: \$191,289

Total Amount Requested \$172,160

Amount Requested as Grant \$172,160

Amount Requested as Project Loan (Long-Term, not including short-term loans for up-front costs)  
N/A

RVRF Loan Amount Requested as Project Match (Not including short-term loans for up-front costs)  
N/A

Amount Requested as Short-Term loan for Up-Front Costs (not to exceed 20% of amount requested as Grant) N/A

For projects, planning, capacity building, and studies in low-income geographic areas: Are you requesting that match be waived?  Yes  No

***For informational purposes only:*** Supplemental information for loan requests may include but are not limited to the following. This information will be collected AFTER a CFPF award is made, prior to the signing of a grant agreement.

- General Obligation
- Lease, Revenue
- Special Fund Revenue
- Moral obligation from other government entity)
- Desired loan term
- Since the date of your latest financial statements, any new debt
- Pending or potential litigation by or against the applicant
- Five years of current audited financial statements (FY18-22) or refer to website if posted
- Capital Improvement Plan
- Financial Policies
- List of the ten largest employers in the jurisdiction.
- List of the ten largest taxpayers in the jurisdiction

***All loan requests are subject to credit review and approval by Virginia Resources Authority.***

## Appendix B: Budget Narrative Template

<p>Applicant  Name: Community Flood  Preparedness Fund &amp;  Resilient Virginia  Revolving Loan Fund  Detailed Budget Narrative  Period of Performance: <u>2025</u> through <u>2028</u>  Submission Date: <u>January 24, 2025</u></p>									
Grand Total State Funding Request									\$ 172,160
Grand Total Local Share of Project									\$ 19,129
Federal Funding (if applicable)									\$
Project Grand Total									\$ 191,289
Locality Cost Match									% 10
Breakout By Cost Type	Personnel	Fringe	Travel	Equipment	Supplies	Contracts	Indirect Costs	Other Costs	Total
Federal Share (if applicable)									
Local Share						\$19,129			\$19,129
State Share – CFPF Grant						\$172,160			\$172,160
State Share – RVRF Match Loan									
Pre-Award/Startup									
Maintenance									
Total	\$	\$	\$	\$	\$	\$191,289	\$	\$	\$ 191,289

City is designated as a Qualified Opportunity Zone, as presented in the attached map (**Appendix C1**).

The City of Waynesboro is located in the Shenandoah Valley on the banks of the South River. According to the Central Shenandoah Hazard Mitigation Plan, the City and other localities within the area face significant risk of riverine flooding and dam failures, and high risk of severe winter weather (and flooding from associated snowmelt). **The City of Waynesboro has over 1,000 at-risk structures that exist in a mapped 1% or 0.2% annual chance flood zone, several of which are critical facilities within the FEMA 100-year floodplain.<sup>2</sup>**

#### *Why A Study is Needed*

Since the last Stormwater CIP update in 2006, the City has made annual progress in implementing prioritized projects from the CIP to improve flooding conditions in the city. While many of the projects included in the 2006 update have been implemented, there are other areas in the city where flooding improvement projects have not yet been developed. Waynesboro has been actively monitoring and recording recurrent flood issues and complaints under its authority since the 2006 CIP update. Technology and data collection methods have advanced considerably, allowing for increased data sharing between residents and city staff. With this information, the City wishes to identify new projects for detailed study and implementation.

Development of an updated citywide Stormwater Capital Improvements Plan (CIP) will allow the City to have an engineering consultant review and re-evaluate any projects from the current 2006 that have not yet been implemented and evaluate the areas in the city where flooding improvement projects have not yet been identified and prioritized. The stormwater CIP update will allow for a fresh look at these areas while incorporating current regulatory considerations and with a focus of utilizing nature-based solutions, when appropriate. Further, development of this plan will both strengthen and better inform the Regional Resilience Plan initiative by CSPDC, which is being submitted as a separate grant application in the CFPF Round 5 cycle.

Waynesboro has been actively monitoring and recording recurrent flood issues and complaints under its authority since the 2006 CIP update. Technology and data collection methods have advanced considerably, allowing for increased data sharing between residents and city staff. With this information, the City wishes to identify new projects for detailed study and implementation. While FEMA floodplain mapping and a local floodplain ordinance exist for Waynesboro, these tools primarily identify impacts from large storm events. The identification of acute flood hazards is not always addressed by riverine hydraulic studies, particularly for lower and more frequent storm events. This is especially the case in developed areas with traditional grey infrastructure. As storm intensities increase and climate change further exacerbates flood hazards, it is imperative that the City develop forward-thinking strategies to protect public health and safety and base decision-making tools for future improvements on best available science and data. This study is essential to providing the City information necessary to equitably identify, rank, and mitigate localized flooding issues.

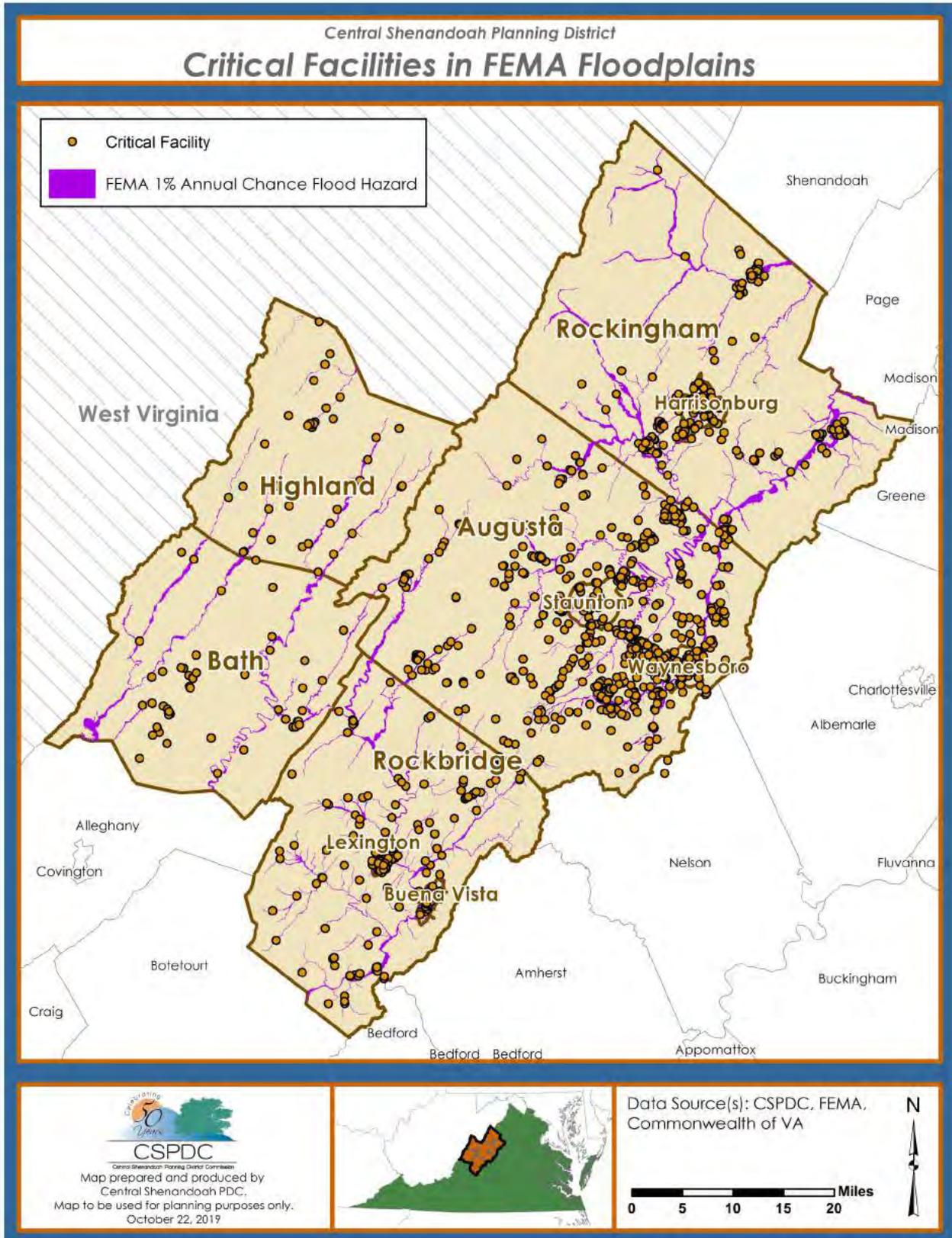
#### *Benefits of a Citywide Stormwater CIP Update*

The Stormwater CIP update will decrease the risk to public safety through flood risk reduction and protect property. The purpose of the Stormwater CIP plan update is to evaluate known

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<sup>2</sup>Central Shenandoah Hazard Mitigation Plan 2020 Update. Figure IV-4 and Table IV-9.  
[https://www.cspdc.org/wp-content/uploads/2024/04/CSHMP\\_2020\\_Final\\_Locality\\_Resolutions.rw\\_.pdf](https://www.cspdc.org/wp-content/uploads/2024/04/CSHMP_2020_Final_Locality_Resolutions.rw_.pdf)

Figure IV-4: Critical Facilities in FEMA Floodplains



**Table IV-9: Structures at Risk Due to Flooding from the CSPDC Flood Mitigation Plan**

Community	Structures at Risk	Total Structures	% of Structures at Risk	% of Structures not at Risk
Augusta County	2,851	69,338	4.11%	95.89%
Bath County	238	3,628	6.56%	93.44%
Highland County	85	2,106	4.04%	95.96%
Rockbridge County	1,183	12,195	9.70%	90.30%
Rockingham County	6,383	88,855	7.18%	92.82%
City of Buena Vista	815	2,920	27.91%	72.09%
City of Harrisonburg	1,034	20,494	5.05%	94.95%
City of Lexington	36	2,298	1.57%	98.43%
City of Staunton	668	14,698	4.54%	95.46%
City of Waynesboro	1,048	13,512	7.76%	92.24%
Town of Bridgewater	206	3,223	6.39%	93.61%
Town of Broadway	114	2,625	4.34%	95.66%
Town of Craigsville	240	890	26.97%	73.03%
Town of Dayton	114	1,347	8.46%	91.54%
Town of Elkton	283	2,510	11.27%	88.73%
Town of Glasgow	197	553	35.62%	64.38%
Town of Goshen	61	228	26.75%	73.25%
Town of Grottoes	620	2,325	26.67%	73.33%
Town of Monterey	19	180	10.56%	89.44%
Town of Mt. Crawford	29	453	6.40%	93.60%
Town of Timberville	63	1,891	3.33%	96.67%
<b>Total</b>	<b>16,288</b>	<b>246,267</b>	<b>6.61%</b>	<b>93.39%</b>



## MICHAEL G. HAMP II, CITY MANAGER

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[hampmg@ci.waynesboro.va.us](mailto:hampmg@ci.waynesboro.va.us)

503 West Main Street, Suite 210

Waynesboro, VA 22980

(540) 942-6600

(540) 942-6671 FAX

October 24, 2024

### Community Flood Preparedness Fund Review Committee:

The City of Waynesboro appreciates the opportunity to submit a grant application for the Community Flood Preparedness Fund. The grant funds will allow us to perform a study to assess flood-prone areas in Waynesboro and to review the Stormwater Capital Improvement Plan (CIP) project list.

The original CIP project list was developed in 1999 with an update in 2006. Each project was ranked, provided a water quantity solution, and a cost estimate. The funds will allow a review to incorporate water quality elements for a more holistic approach, provide the supporting calculations, and update the cost estimates. Additionally, there have been projects identified since 1999 that will be included in the study.

I support this application and confirm the City will provide a 10% match to perform the flood preparedness study.

A handwritten signature in black ink, appearing to read "Michael G. Hamp II". The signature is written in a cursive, flowing style.

Michael G. Hamp II  
City Manager  
City of Waynesboro

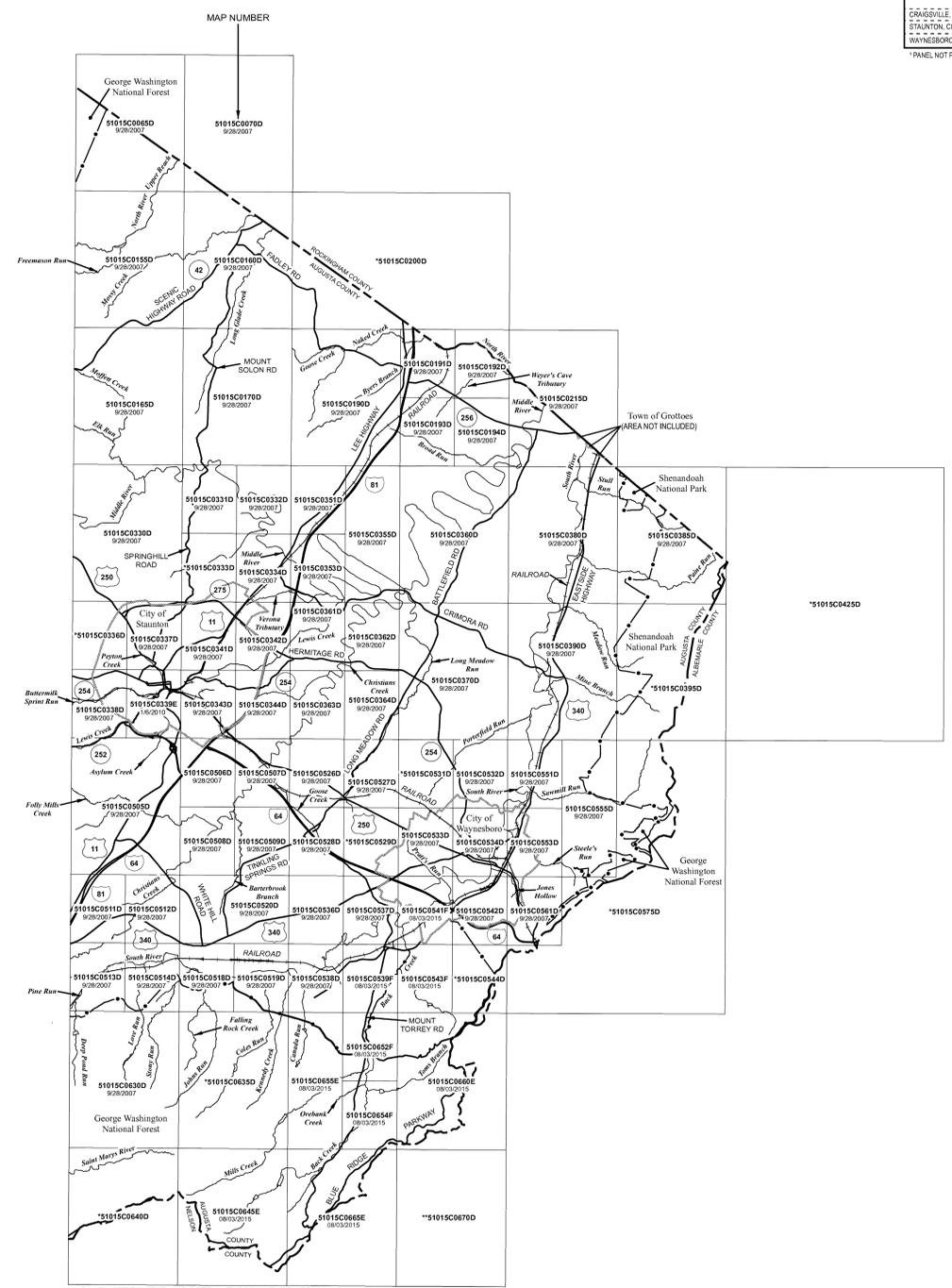


LINK TO NFHL VIEWER: <https://msc.fema.gov/nfhl>

0.4mi  
-78.892 38.039 Degrees

LISTING OF COMMUNITIES						
COMMUNITY NAME	COMMUNITY NUMBER	LOCATED ON PANELS	INITIAL ID DATE	INITIAL NFIP MAP DATE	INITIAL FIRM DATE	MOST RECENT FIRM PANEL DATE
AUGUSTA COUNTY (UNINCORPORATED AREAS)	510013	251, 50, 65, 70, 100*, 125, 130, 135, 140, 145, 155, 160, 165, 170, 180, 190, 192, 193, 194, 200, 215, 250, 260, 270, 275, 300, 305, 310, 315, 320, 325, 331, 332, 333, 334, 335, 337, 338, 339, 341, 342, 343, 344, 351, 353, 355, 360, 361, 362, 363, 364, 370, 385, 395, 396, 397, 425, 430, 433, 434, 435, 440, 445, 451, 453, 455, 460, 465, 470, 485, 493, 494, 495, 500, 505, 506, 507, 508, 509, 511, 512, 513, 514, 516, 519, 520, 526, 527, 528, 529, 531, 532, 533, 534, 535, 537, 538, 539, 541, 542, 543, 544, 551, 553, 555, 561, 570, 600, 610, 625, 630, 635, 640, 645, 652, 654, 655, 660, 665	August 11, 1978	August 11, 1978	May 17, 1990	August 3, 2015
CRAIGSVILLE TOWN OF	510014	431, 434, 437, 439		May 21, 1974	May 21, 1974	September 20, 2007
STAUNTON CITY OF	510105	230, 233, 234, 236, 237, 238, 239, 341, 342, 343, 344, 346		June 14, 1974	June 14, 1974	December 1, 1979
WAYNESBORO CITY OF	510302	529, 531, 532, 533, 534, 537, 541, 542, 551, 553, 561		June 17, 1970	June 17, 1970	August 3, 2015

\* PANEL NOT PRINTED



\* PANEL NOT PRINTED - NO SPECIAL FLOOD HAZARD AREAS  
 \*\* PANEL NOT PRINTED - AREA OUTSIDE COUNTY BOUNDARY

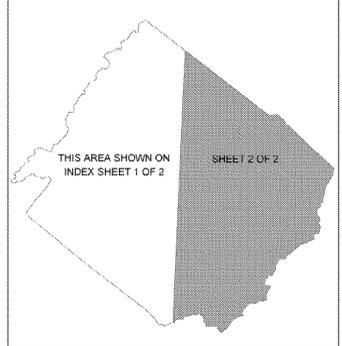
**NOTE TO USER**

Future revisions to this FIRM Index will only be issued to communities that are located on FIRM panels being revised. This FIRM Index therefore remains valid for FIRM panels dated August 3, 2015 or earlier. Please refer to the "MOST RECENT FIRM PANEL DATE" column in the Listing of Communities table to determine the most recent FIRM index date for each community.

**MAP DATES**

This FIRM Index displays the map date for each FIRM panel at the time that this Index was printed. Because this Index may not be distributed to unaffected communities in subsequent revisions, users may determine the current map date for each FIRM panel by visiting the FEMA Map Service Center (MSC) website at <http://msc.fema.gov> or by calling the FEMA Map Information eXchange at 1-877-336-2627. Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Map Service Center at the number listed above.

**AUGUSTA COUNTY, VA INDEX LOCATOR DIAGRAM**



**MAP REPOSITORIES**

(Maps available for reference only, not for distribution.)

- AUGUSTA COUNTY (UNINCORPORATED AREAS):**  
 Augusta County  
 Community Development Office  
 18 Government Center Lane  
 Verona, VA 24482
- STAUNTON CITY OF:**  
 City Hall  
 116 West Beverley Street  
 Staunton, VA 24401
- WAYNESBORO CITY OF:**  
 City Hall  
 Charles Yancey Municipal Building  
 503 West Main Street  
 Waynesboro, VA 22960
- CRAIGSVILLE TOWN OF:**  
 Craigsville Town Office  
 122 East 1st Street  
 Craigsville, VA 24430



**MAP INDEX**

**FIRM FLOOD INSURANCE RATE MAP**  
**AUGUSTA COUNTY, VIRGINIA**  
**AND INCORPORATED AREAS**  
(SEE LISTING OF COMMUNITIES TABLE)

**MAP INDEX**  
**SHEET 2 OF 2**

**PANELS PRINTED:** 65, 70, 155, 160, 165, 170, 180, 191, 192, 193, 194, 215, 330, 331, 332, 334, 337, 338, 339, 341, 342, 343, 344, 351, 353, 355, 360, 361, 362, 363, 364, 370, 380, 385, 390, 505, 506, 507, 508, 509, 511, 512, 513, 514, 516, 519, 520, 526, 527, 528, 529, 532, 533, 534, 536, 537, 538, 539, 541, 542, 543, 551, 553, 555, 561, 630, 645, 652, 654, 655, 660, 665  
(SEE SHEET 1 FOR ADDITIONAL PANELS PRINTED)

**MAP NUMBER**  
51015CIND2D

**MAP REVISED**  
AUGUST 3, 2015

Federal Emergency Management Agency



**NOTE TO USER**

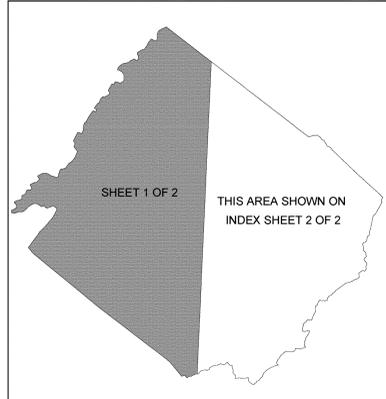
Future revisions to this FIRM Index will only be issued to communities that are located on FIRM panels being revised. This FIRM Index therefore remains valid for FIRM panels dated September 28, 2007 or earlier. Please refer to the "MOST RECENT FIRM PANEL DATE" column in the Listing of Communities table to determine the most recent FIRM index date for each community.

**MAP DATES**

This FIRM Index displays the map date for each FIRM panel at the time this Index was printed. Because this Index may not be distributed to unaffected communities in subsequent revisions, users may determine the current map date for each FIRM panel by visiting the FEMA Map Service Center website at <http://mac.fema.gov> or by calling the Map Service Center at 1-800-358-9616.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Map Service Center at the number listed above.

**AUGUSTA COUNTY, VA  
INDEX LOCATOR DIAGRAM**



See Sheet 2 of 2 for  
LISTING OF COMMUNITIES and  
MAP REPOSITORIES



**MAP INDEX**

**FIRM  
FLOOD INSURANCE RATE MAP  
AUGUSTA COUNTY,  
VIRGINIA  
AND INCORPORATED AREAS**  
(SEE LISTING OF COMMUNITIES TABLE)

**MAP INDEX**  
SHEET 1 OF 2

PANELS PRINTED: 50, 125, 130, 135,  
140, 145, 260, 270, 275, 300, 305, 310, 315,  
320, 430, 434, 435, 445, 453, 455, 460, 465,  
470, 485, 493, 494, 500, 600, 610, 625

(SEE SHEET 2 FOR ADDITIONAL PANELS  
PRINTED)

NATIONAL FLOOD INSURANCE PROGRAM

**MAP NUMBER  
5101SCIND1A**

**EFFECTIVE DATE  
SEPTEMBER 28, 2007**

Federal Emergency Management Agency

\* PANEL NOT PRINTED - NO SPECIAL FLOOD HAZARD AREAS

**NOTES TO USERS**

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

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Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) Zone 17. **Horizontal datum** was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov/> or contact the National Geodetic Survey at the following address:

Spatial Reference System Division  
National Geodetic Survey, NOAA  
Silver Spring Metro Center  
1315 East-West Highway  
Silver Spring, Maryland 20910  
(301) 713-3191

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at <http://www.ngs.noaa.gov/>.

**BASE MAP SOURCE:** Base map files were obtained in digital spatial data format from the U.S. Geological Survey (USGS), the Augusta County Department of Community Development, and the City of Waynesboro Office of City Attorney & Planning. Road and stream centerlines, along with political boundaries, were provided by the Augusta County Department of Community Development. Political boundaries and road attributes for the City of Waynesboro were provided by the City of Waynesboro Office of City Attorney & Planning. Adjustments were made to specific base map features to align them to 1998 Digital Orthophoto Quarter-Quads (1"=1000') from the USGS.

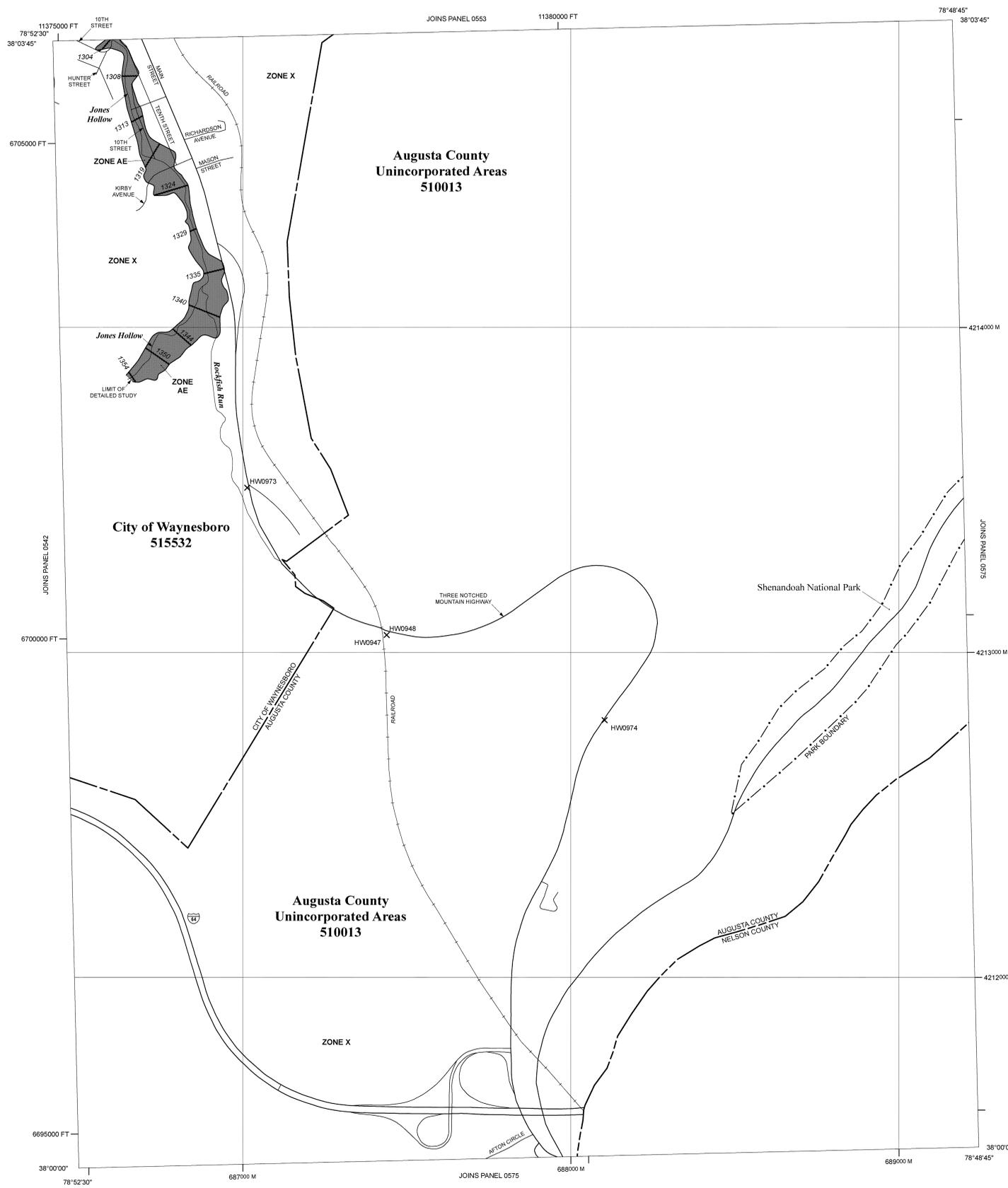
Based on the above mentioned digital orthophotographs, this map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles may reflect stream channel distances that differ from what is shown on the map. Also, the road to floodplain relationships for unreviewed streams may differ from what is shown on previous maps.

**Corporate limits** shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at <http://msc.fema.gov/>.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA website at <http://www.fema.gov/business/fip/>.



**LEGEND**

**SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD**

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

- ZONE A** No Base Flood Elevations determined.
- ZONE AE** Base Flood Elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE AR** Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE A99** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

**FLOODWAY AREAS IN ZONE AE**

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

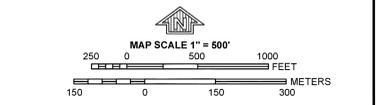
- OTHER FLOOD AREAS**
  - ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
- OTHER AREAS**
  - ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.
  - ZONE D** Areas in which flood hazards are undetermined, but possible.
- COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**
- OTHERWISE PROTECTED AREAS (OPAs)**

- CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.
  - 1% annual chance floodplain boundary
  - 0.2% annual chance floodplain boundary
  - Floodway boundary
  - Zone D boundary
  - CBRS and OPA boundary
  - Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, Flood depths or flood velocities.
  - 513 Base Flood Elevation line and value; elevation in feet\*
  - (EL 987) Base Flood Elevation value where uniform within zone; elevation in feet.

- \* Referenced to the North American Vertical Datum of 1988
- (A) Cross section line
- (B) Transverse line
- Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
- 4276000 M 1000-meter Universal Transverse Mercator grid values, zone 17
- 600000 FT 5000-foot grid ticks; Virginia State Plane coordinate system (FIPSCONE 4901), Lambert Conformal Conic projection
- DX5510 x Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M 1.5 River Mile

MAP REPOSITORY  
Refer to listing of Map Repositories on Map Index  
EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP  
September 28, 2007  
EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.  
To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.



PANEL 0561D

**FIRM**  
FLOOD INSURANCE RATE MAP  
AUGUSTA COUNTY,  
VIRGINIA  
AND INCORPORATED AREAS

PANEL 561 OF 670  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

COMMUNITY	NUMBER	PANEL	SUFFIX
AUGUSTA COUNTY	510013	0561	D
WAYNESBORO, CITY OF	515532	0561	D

Notice to User: The Map Number shown below should be used when placing map orders. The Community Number shown above should be used on insurance applications for the subject community.

**MAP NUMBER**  
51015C0561D  
**EFFECTIVE DATE**  
SEPTEMBER 28, 2007  
Federal Emergency Management Agency

**NOTES TO USERS**

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Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) Zone 17. **Horizontal datum** was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

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(301) 713-3191

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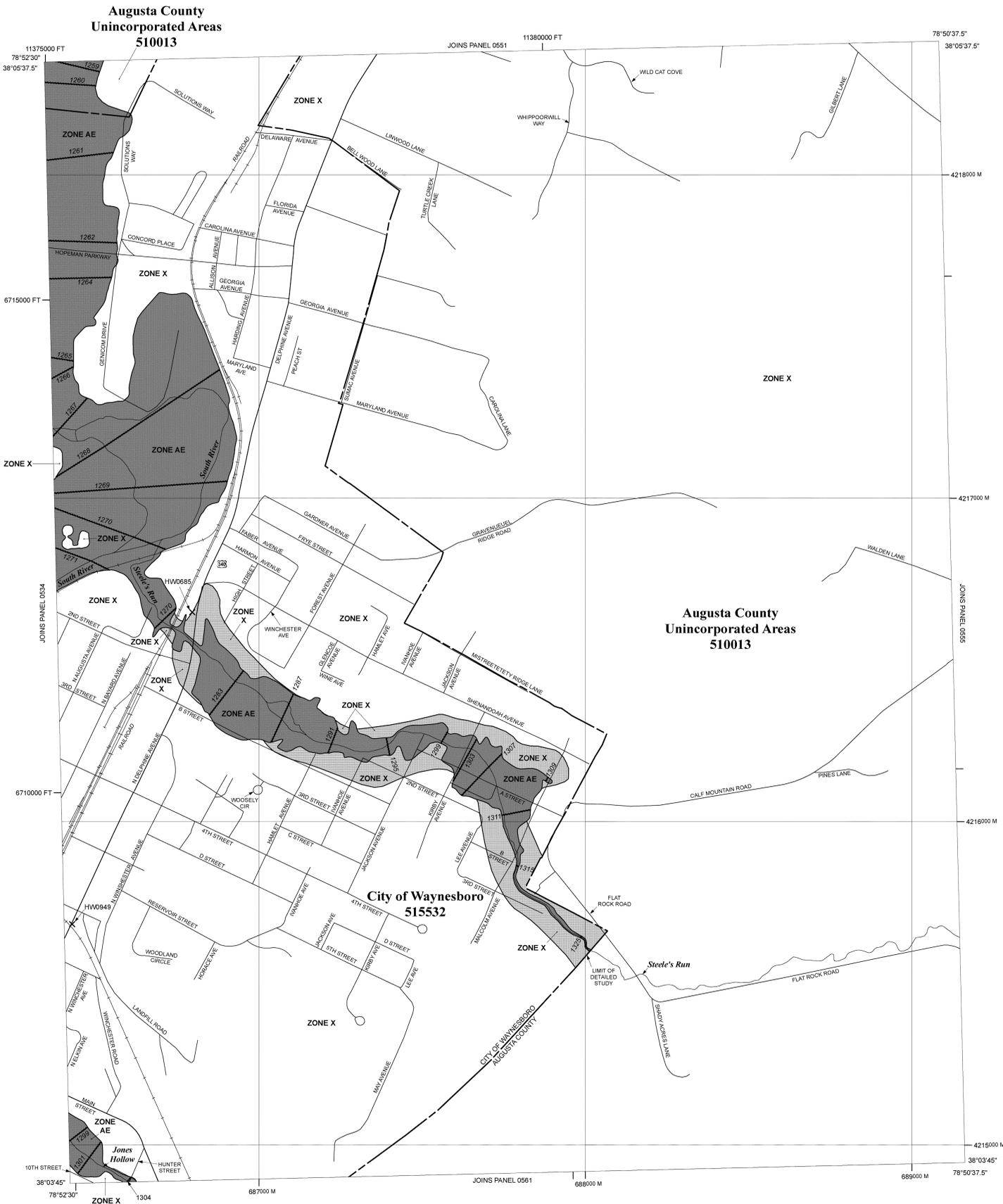
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**LEGEND**

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The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of special flood hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

**ZONE A** No Base Flood Elevations determined.

**ZONE AE** Base Flood Elevations determined.

**ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

**ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

**ZONE AR** Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently deteriorated. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

**ZONE A99** Area to be protected from 1% annual chance flood by a Federal Flood protection system under construction; no Base Flood Elevations determined.

**ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

**ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

**FLOODWAY AREAS IN ZONE AE**

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

**OTHER FLOOD AREAS**

**ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

**OTHER AREAS**

**ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.

**ZONE D** Areas in which flood hazards are undetermined, but possible.

**COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**

**OTHERWISE PROTECTED AREAS (OPAs)**

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

1% annual chance floodplain boundary  
0.2% annual chance floodplain boundary  
Floodway boundary  
Zone D boundary  
Zone D boundary  
CBRS and OPA boundary  
Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.  
Base Flood Elevation line and value; elevation in feet\*  
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(EL. 987)

\* Referenced to the North American Vertical Datum of 1988

— Cross section line  
— Transect line  
Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)  
4276000 M  
600000 FT  
DX5510 x  
M1.5

MAP SCALE 1" = 600'  
250 0 500 1000 FEET  
150 0 150 300 METERS

**NATIONAL FLOOD INSURANCE PROGRAM**

PANEL 0553D

**FIRM FLOOD INSURANCE RATE MAP**

**AUGUSTA COUNTY, VIRGINIA AND INCORPORATED AREAS**

PANEL 553 OF 670  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
AUGUSTA COUNTY	510013	0553	D
WAYNESBORO CITY OF	515532	0553	D

Notes to User: The Map Number shown above should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

**MAP NUMBER 51015C0553D**

**EFFECTIVE DATE SEPTEMBER 28, 2007**

Federal Emergency Management Agency

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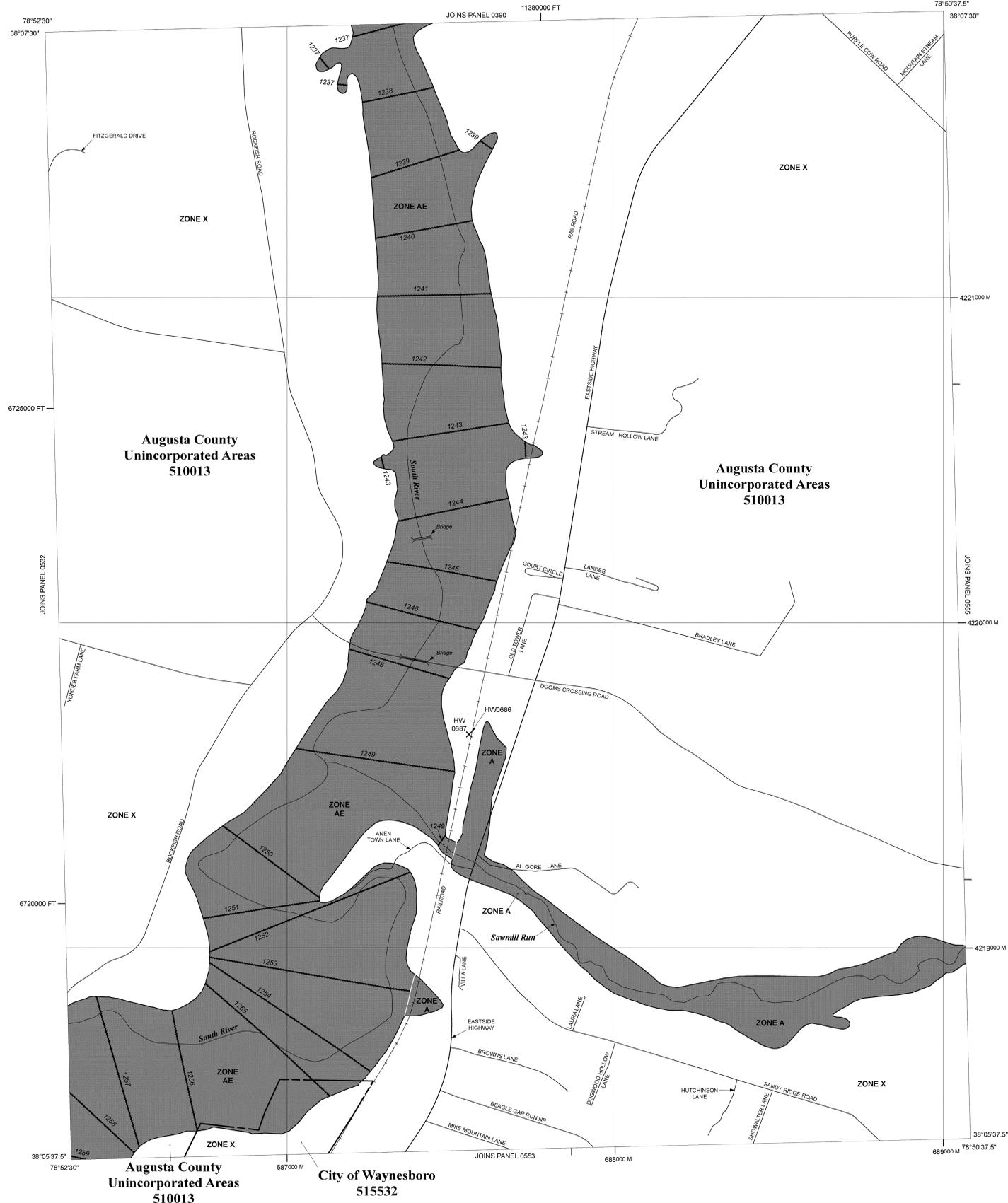
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**LEGEND**

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- ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

**FLOODWAY AREAS IN ZONE AE**  
The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

**OTHER FLOOD AREAS**  
**ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

**OTHER AREAS**  
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**ZONE D** Areas in which flood hazards are undetermined, but possible.

**COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**  
**OTHERWISE PROTECTED AREAS (OPAs)**

- CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.
- 1% annual chance floodplain boundary
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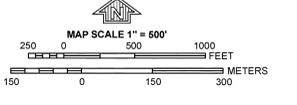
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- Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 River Mile

**MAP REPOSITORY**  
Refer to listing of Map Repositories on Map Index

**EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP**  
September 28, 2007

**EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL**

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.  
To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6622.



**NATIONAL FLOOD INSURANCE PROGRAM**

PANEL 0551D

**FIRM FLOOD INSURANCE RATE MAP**

**AUGUSTA COUNTY, VIRGINIA AND INCORPORATED AREAS**

PANEL 551 OF 670  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:	COMMUNITY	NUMBER	PANEL	SUFFIX
	AUGUSTA COUNTY	510013	0551	D
	WAYNESBORO, CITY OF	515532	0551	D

Notes to User: The Map Number shown below should be used when placing map orders. The Community Number shown above should be used on insurance applications for the subject community.

**MAP NUMBER 51015C0551D**

**EFFECTIVE DATE SEPTEMBER 28, 2007**

Federal Emergency Management Agency

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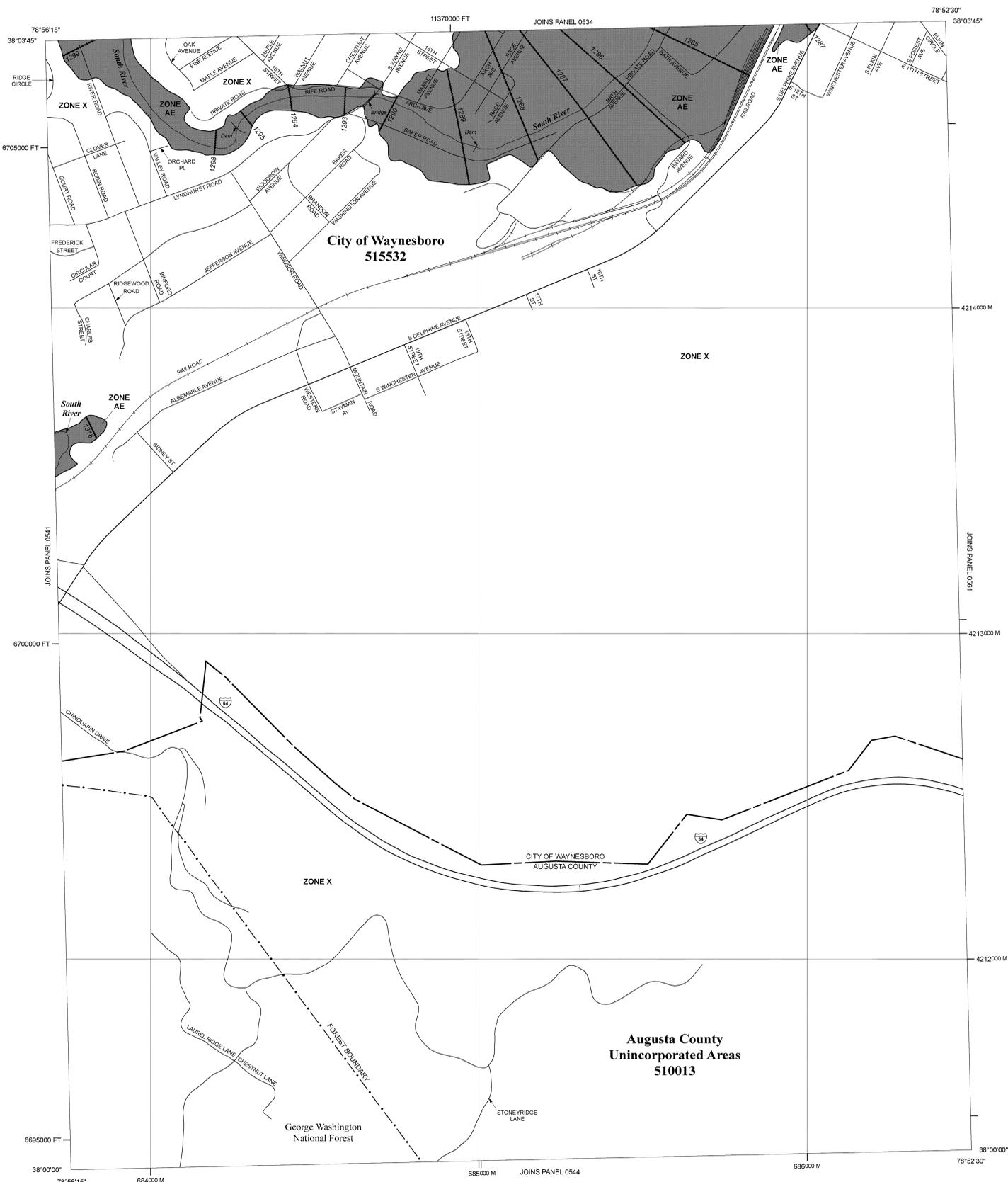
Based on the above mentioned digital orthophotographs, this map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles may reflect stream channel distances that differ from what is shown on the map. Also, the road to floodplain relationships for unreviewed streams may differ from what is shown on previous maps.

**Corporate limits** shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at <http://msc.fema.gov/>.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call 1-877-FEMA MAP (1-877-336-2627) or visit the FEMA website at <http://www.fema.gov/business/firm/>.



**LEGEND**

**SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD**

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equalled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

- ZONE A**  
No Base Flood Elevations determined.
- ZONE AE**  
Base Flood Elevations determined.
- ZONE AH**  
Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AO**  
Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE AR**  
Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE A99**  
Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE V**  
Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- ZONE VE**  
Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

**FLOODWAY AREAS IN ZONE AE**  
The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

**OTHER FLOOD AREAS**  
**ZONE X**  
Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

**OTHER AREAS**  
**ZONE X**  
Areas determined to be outside the 0.2% annual chance floodplain.  
**ZONE D**  
Areas in which flood hazards are undetermined, but possible.

**COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**  
**OTHERWISE PROTECTED AREAS (OPAs)**

- CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.
- 1% annual chance floodplain boundary
- 0.2% annual chance floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities
- Base Flood Elevation line and value; elevation in feet\*
- Base Flood Elevation value where uniform within zone; elevation in feet

\* Referenced to the North American Vertical Datum of 1988

- (A) Cross section line
- (B) Transect line
- 87°07'45", 32°22'30"  
Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
- 4276000 M  
1000-meter Universal Transverse Mercator grid values, zone 17
- 600000 FT  
5000-foot grid ticks; Virginia State Plane coordinate system (FIPSZONE 4501), Lambert Conformal Conic projection
- DX5510 x  
Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5  
River mile

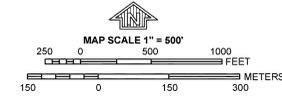
MAP REPOSITORY  
Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP  
September 28, 2007

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.



**NATIONAL FLOOD INSURANCE PROGRAM**

PANEL 0542D

**FIRM FLOOD INSURANCE RATE MAP**

**AUGUSTA COUNTY, VIRGINIA AND INCORPORATED AREAS**

PANEL 542 OF 670  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
AUGUSTA COUNTY	510013	0542	D
WAYNESBORO, CITY OF	515532	0542	D

Notice to User: The Map Number shown below should be used when placing map orders. The Community Number shown above should be used on insurance applications for the subject community.

**MAP NUMBER 51015C0542D**

**EFFECTIVE DATE SEPTEMBER 28, 2007**

Federal Emergency Management Agency

**NOTES TO USERS**

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

**Coastal Base Flood Elevations** shown on this map apply only landward of 0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations tables in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations tables should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 17N. The **horizontal datum** was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

NGS Information Services  
NOAA, NINGS12  
National Geodetic Survey  
SSM/C-3 #92022  
1315 East-West Highway  
Silver Spring, Maryland 20910-3282  
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at <http://www.ngs.noaa.gov>.

**Base map** information shown on this FIRM was provided by the Commonwealth of Virginia through the Virginia Base Mapping Program (VBMP). The orthophotos were flown in 2011 at a scale of 1"=200'.

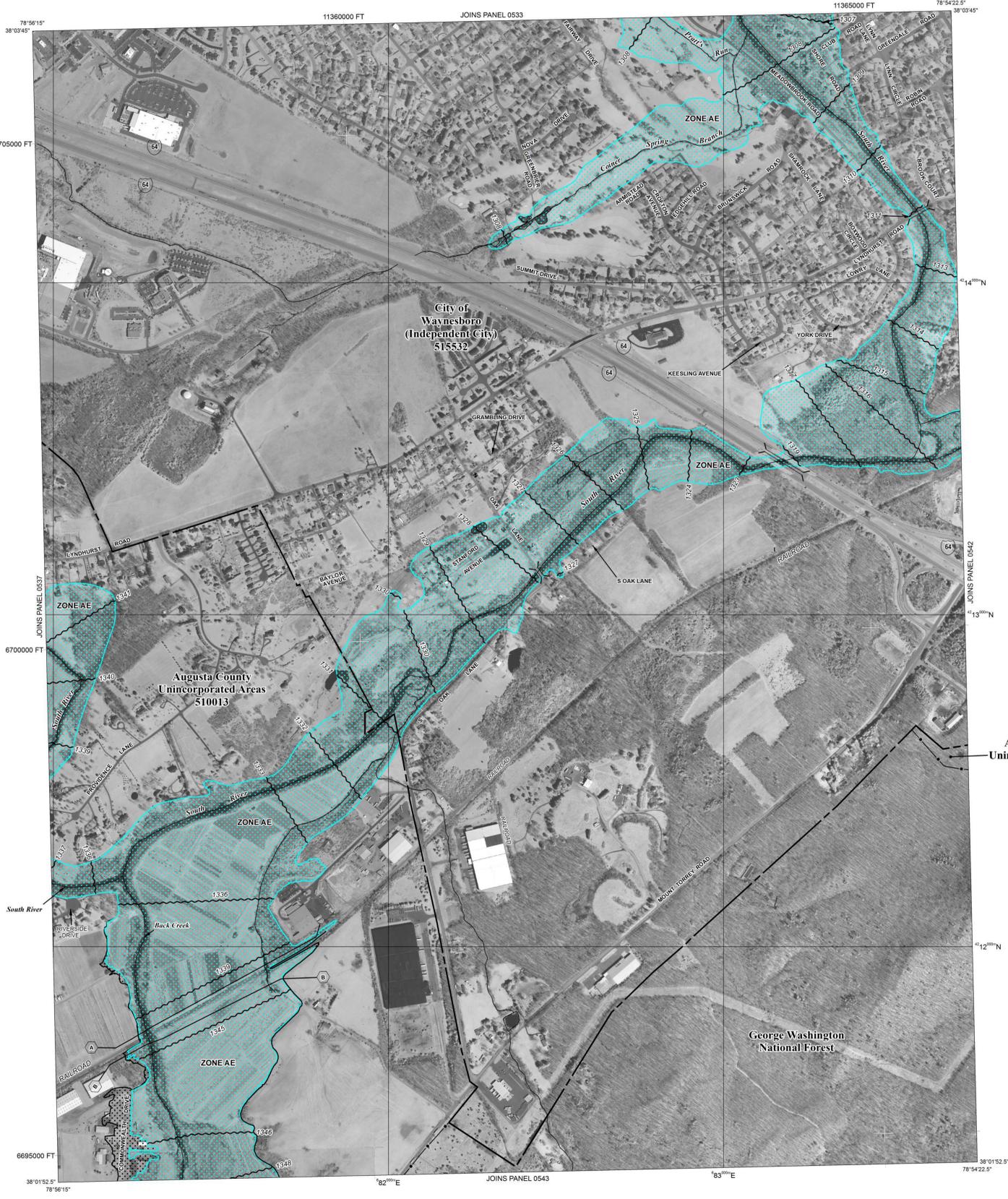
Based on the above mentioned digital orthophotographs, this map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map. Also, the road to floodplain relationships for unvisited streams may differ from what is shown on previous maps.

**Corporate limits** shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at <http://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map**, how to order products or the National Flood Insurance Program in general, please call the FEMA Map Information eXchange (FMIX) at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA website at <http://www.fema.gov/business/info>.



**LEGEND**

**SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD**  
The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

- ZONE A** No Base Flood Elevations determined.
- ZONE AE** Base Flood Elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alkali fan flooding, velocities also determined.
- ZONE AR** Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decommissioned. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE A99** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

**FLOODWAY AREAS IN ZONE AE**  
The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

**OTHER FLOOD AREAS**  
**ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

**OTHER AREAS**  
Areas determined to be outside the 0.2% annual chance floodplain. Areas in which flood hazards are undetermined, but possible.

**COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**  
**OTHERWISE PROTECTED AREAS (OPAs)**

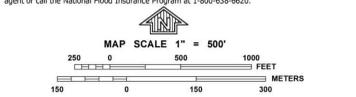
- CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.
- 1% annual chance floodplain boundary
- 0.2% annual chance floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- Limit of Moderate Wave Action
- Base Flood Elevation line and value; elevation in feet\* (EL 987)
- Base Flood Elevation value when uniform within zone; elevation in feet\*

\* Referenced to the North American Vertical Datum of 1988  
 (A) Cross section line  
 (B) Culvert, Flume, Penstock or Aqueduct  
 (C) Road or Railroad Bridge  
 (D) Footbridge  
 87°07'45", 32°22'30"  
 \*76°N  
 600000 FT  
 DXS510 x  
 M1.5  
 River Mile

**MAP REPOSITORY**  
Refer to listing of Map Repositories on Map Index  
**EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP**  
September 26, 2007

**EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL**  
 July 18, 2011 - To Change Special Flood Hazard Areas; To Change Zone Designations  
 August 3, 2015 - To Change Base Flood Elevations; To Change Special Flood Hazard Areas; and to update base map.

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.  
 To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.



**NATIONAL FLOOD INSURANCE PROGRAM**

**PANEL 0541F**

**FIRM**  
**FLOOD INSURANCE RATE MAP**

**AUGUSTA COUNTY, VIRGINIA AND INCORPORATED AREAS**

**PANEL 541 OF 670**  
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

**CONTAINS:**

COMMUNITY	NUMBER	PANEL	SUFFIX
AUGUSTA COUNTY	510013	0541	F
WAYNESBORO, CITY OF	515532	0541	F

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

**MAP NUMBER**  
51015C0541F

**MAP REVISED**  
AUGUST 3, 2015

Federal Emergency Management Agency

**NOTES TO USERS**

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) Zone 17. **Horizontal datum** was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

Spatial Reference System Division  
National Geodetic Survey, NOAA  
Silver Spring Metro Center  
1315 East-West Highway  
Silver Spring, Maryland 20910  
(301) 713-3191

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at <http://www.ngs.noaa.gov>.

**BASE MAP SOURCE:** Base map files were obtained in digital spatial data format from the U.S. Geological Survey (USGS), the Augusta County Department of Community Development, and the City of Waynesboro Office of City Attorney & Planning. Road and stream centerlines, along with political boundaries, were provided by the Augusta County Department of Community Development. Political boundaries and road attributes for the City of Waynesboro were provided by the City of Waynesboro Office of City Attorney & Planning. Adjustments were made to specific base map features to align them to 1998 Digital Orthophoto Quarter-Quads (1"=1000') from the USGS.

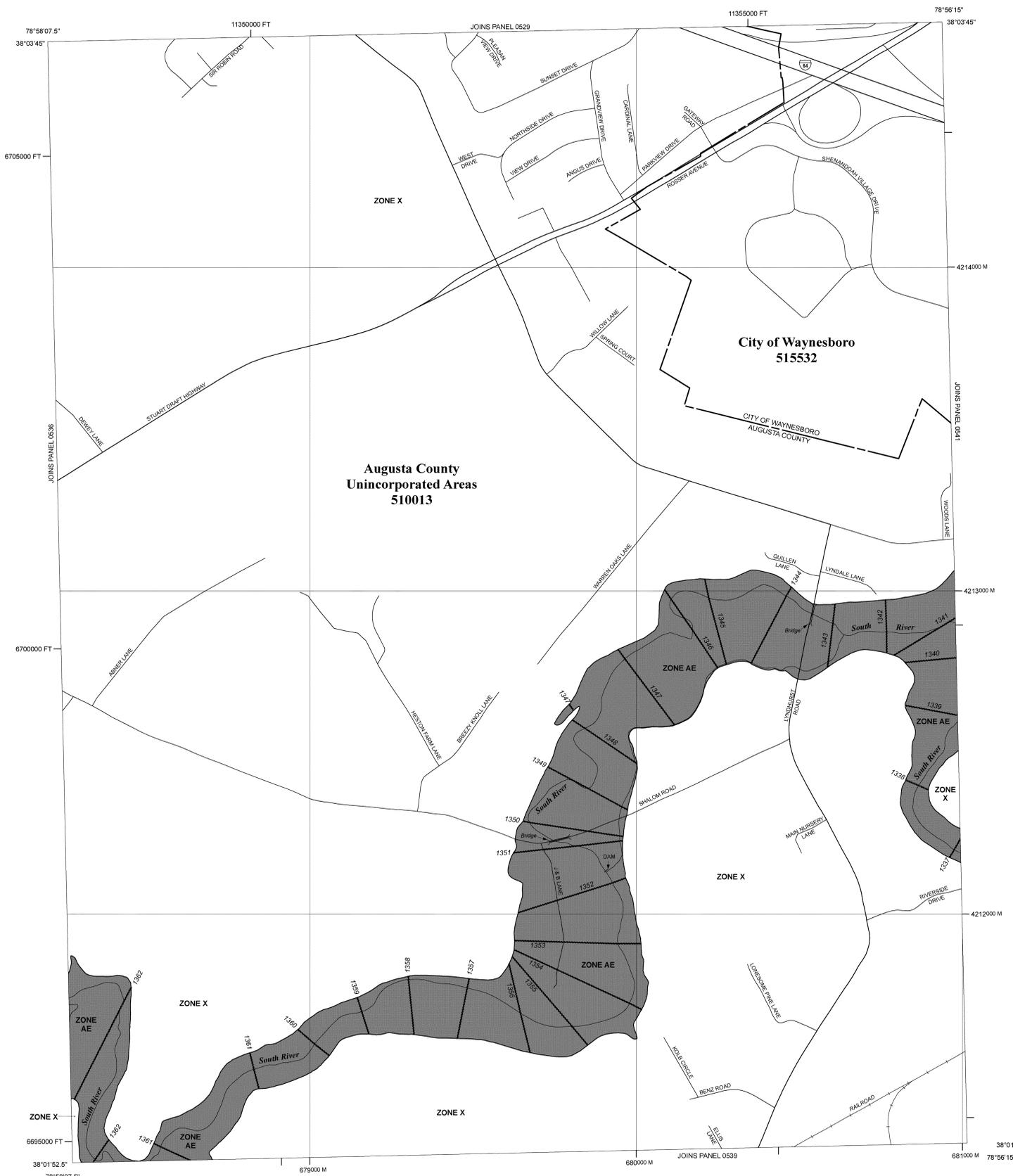
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**Corporate limits** shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

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If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA website at <http://www.fema.gov/business/rfp>.



**LEGEND**

**SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD**

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

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- ZONE AR** Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE A99** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE V** Coastal Flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- ZONE VE** Coastal Flood zone with velocity hazard (wave action); Base Flood Elevations determined.

**FLOODWAY AREAS IN ZONE AE**  
The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

**OTHER FLOOD AREAS**  
**ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

**OTHER AREAS**  
**ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.  
**ZONE D** Areas in which flood hazards are undetermined, but possible.

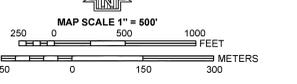
**COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**  
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- CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.
- 1% annual chance floodplain boundary
- 0.2% annual chance floodplain boundary
- Floodway boundary
- Zone D boundary
- Zone A and OPA boundary
- Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- Base Flood Elevation line and value; elevation in feet\*
- Base Flood Elevation value where uniform within zone; elevation in feet

- \* Referenced to the North American Vertical Datum of 1988
- (A) Cross section line
- (B) Transect line
- 87°07'45", 32°22'30" Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
- 4276000 M 1000-meter Universal Transverse Mercator grid values, zone 17
- 600000 FT 5000-foot grid ticks; Virginia State Plane coordinate system (FIPS ZONE 4501), Lambert Conformal Conic projection
- DX5510 x Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 River Mile

**MAP REPOSITORY**  
Refer to listing of Map Repositories on Map Index  
**EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP**  
September 28, 2007  
**EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL**

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.  
To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.



**NATIONAL FLOOD INSURANCE PROGRAM**

**PANEL 0537D**

**FIRM FLOOD INSURANCE RATE MAP**  
**AUGUSTA COUNTY, VIRGINIA**  
**AND INCORPORATED AREAS**

**PANEL 537 OF 670**  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

**CONTAINS:**

COMMUNITY	NUMBER	PANEL	SUFFIX
AUGUSTA COUNTY	510013	0537	D
WAYNESBORO, CITY OF	515532	0537	D

Notice to User: The Map Number shown below should be used when ordering map products. The Community Number shown above should be used on insurance applications for the subject community.

**MAP NUMBER 51015C0537D**  
**EFFECTIVE DATE SEPTEMBER 28, 2007**  
Federal Emergency Management Agency

**NOTES TO USERS**

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **floodways** have been determined, users are encouraged to consult the **Flood Profiles and Floodway Data** and/or **Summary of Stillwater Elevations** tables contained within the **Flood Insurance Study (FIS)** report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) Zone 17. **Horizontal datum** was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

Spatial Reference System Division  
National Geodetic Survey, NOAA  
Silver Spring Metro Center  
1315 East-West Highway  
Silver Spring, Maryland 20910  
(301) 713-3191

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at <http://www.ngs.noaa.gov>.

**BASE MAP SOURCE:** Base map files were obtained in digital spatial data format from the U.S. Geological Survey (USGS), the Augusta County Department of Community Development, and the City of Waynesboro Office of City Attorney & Planning. Road and stream centerlines, along with political boundaries, were provided by the Augusta County Department of Community Development. Political boundaries and road attributes for the City of Waynesboro were provided by the City of Waynesboro Office of City Attorney & Planning. Adjustments were made to specific base map features to align them to 1998 Digital Orthophoto Quarter-Quads (1"=1000') from the USGS.

Based on the above mentioned digital orthophotographs, this map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles may reflect stream channel changes that differ from what is shown on the map. Also, the road to floodplain relationships for unreviewed streams may differ from what is shown on previous maps.

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Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at <http://msc.fema.gov>.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA website at <http://www.fema.gov/business/firm>.



**Augusta County  
Unincorporated Areas  
510013**

**LEGEND**

- SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD**
- The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.
- ZONE A** No Base Flood Elevations determined.
  - ZONE AE** Base Flood Elevations determined.
  - ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
  - ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
  - ZONE AR** Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
  - ZONE A99** Area to be protected from 1% annual chance flood by a Federal Flood protection system under construction; no Base Flood Elevations determined.
  - ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
  - ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.
- FLOODWAY AREAS IN ZONE AE**
- The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.
- OTHER FLOOD AREAS**
  - ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
- OTHER AREAS**
- ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.
  - ZONE D** Areas in which flood hazards are undetermined, but possible.
- COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**
- OTHERWISE PROTECTED AREAS (OPAs)**
- CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.
- 1% annual chance floodplain boundary
  - 0.2% annual chance floodplain boundary
  - Floodway boundary
  - Zone D boundary
  - CBRS and OPA boundary
  - Boundary defining Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
  - Base Flood Elevation line and value; elevation in feet\*
  - Base Flood Elevation value where uniform within zone; elevation in feet
- \* Referenced to the North American Vertical Datum of 1988
- Transverse line
  - Traverse line
- Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
- 4276000 M  
600000 FT
- 5000-foot grid ticks; Virginia State Plane coordinate system (GCSZONE 4501), Lambert Conformal Conic projection
- Bench mark (see explanation in Notes to Users section of this FIRM panel)
- DX5510 x  
M1.5  
River Mile
- MAP REPOSITORY  
Refer to listing of Map Repositories on Map Index
- EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP  
September 28, 2007
- EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
- For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.  
To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.
- MAP SCALE 1" = 600'**
- 250 0 500 1000  
FEET
- 150 0 150 300  
METERS

**NATIONAL FLOOD INSURANCE PROGRAM**

PANEL 0534D

**FIRM  
FLOOD INSURANCE RATE MAP  
AUGUSTA COUNTY,  
VIRGINIA  
AND INCORPORATED AREAS**

PANEL 534 OF 670  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
AUGUSTA COUNTY	510013	0534	D
WAYNESBORO, CITY OF	515552	0534	D

Notice to User: The Map Number shown below should be used when selecting map products. The Community Number shown above should be used on insurance applications for the subject community.

**MAP NUMBER  
51015C0534D**

**EFFECTIVE DATE  
SEPTEMBER 28, 2007**

Federal Emergency Management Agency

**NOTES TO USERS**

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Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) Zone 17. **Horizontal datum** was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

Spatial Reference System Division  
National Geodetic Survey, NOAA  
Silver Spring Metro Center  
1315 East-West Highway  
Silver Spring, Maryland 20910  
(301) 713-3191

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at <http://www.ngs.noaa.gov>.

**BASE MAP SOURCE:** Base map files were obtained in digital spatial data format from the U.S. Geological Survey (USGS), the Augusta County Department of Community Development, and the City of Waynesboro Office of City Attorney & Planning. Road and stream centerlines, along with political boundaries, were provided by the Augusta County Department of Community Development. Political boundaries and road attributes for the City of Waynesboro were provided by the City of Waynesboro Office of City Attorney & Planning. Adjustments were made to specific base map features to align them to 1998 Digital Orthophoto Quarter-Quads (1"=1000') from the USGS.

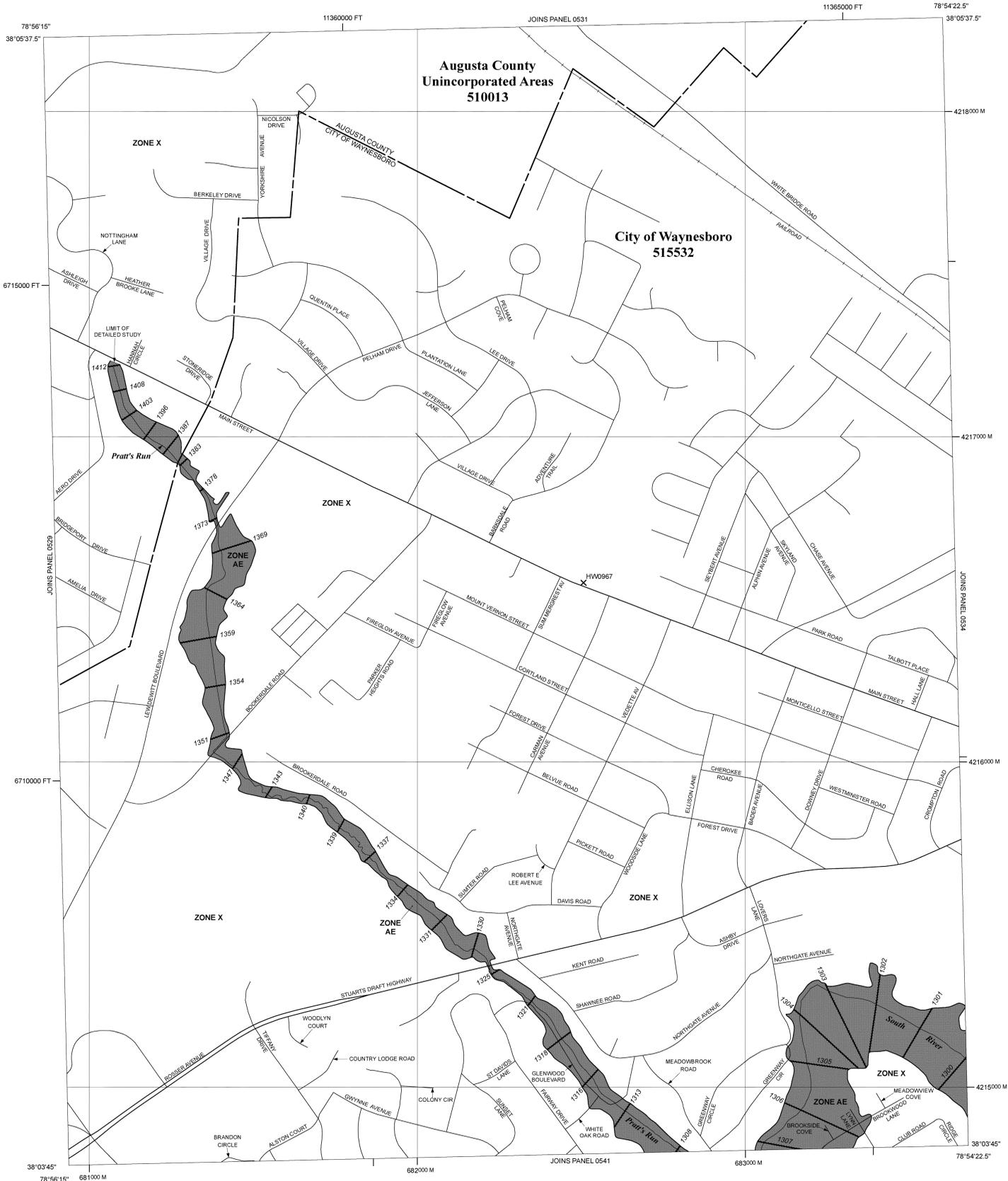
Based on the above mentioned digital orthophotographs, this map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles may reflect stream channel distances that differ from what is shown on the map. Also, the road to floodplain relationships for unreviewed streams may differ from what is shown on previous maps.

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**LEGEND**

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- ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

**FLOODWAY AREAS IN ZONE AE**  
The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

**OTHER FLOOD AREAS**  
**ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

**OTHER AREAS**  
**ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.  
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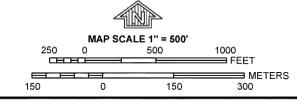
**COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**  
**OTHERWISE PROTECTED AREAS (OPAs)**

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- 1% annual chance floodplain boundary
- 0.2% annual chance floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- Base Flood Elevation line and value; elevation in feet\*
- Base Flood Elevation value where uniform within zone; elevation in feet

- \* Referenced to the North American Vertical Datum of 1988
- (A) Cross section line
- (B) Transverse line
- 87°07'45", 32°22'30" Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
- 4276000 M 1000-meter Universal Transverse Mercator grid values, zone 17
- 600000 FT 5000-foot grid ticks; Virginia State Plane coordinate system (FIPS ZONE 4501), Lambert Conformal Conic projection
- DX5510 x Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 River Mile

**MAP REPOSITORY**  
Refer to listing of Map Repositories on Map Index  
**EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP**  
September 28, 2007  
**EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL**

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PANEL 0533D

**FIRM**  
**FLOOD INSURANCE RATE MAP**  
**AUGUSTA COUNTY,**  
**VIRGINIA**  
**AND INCORPORATED AREAS**

PANEL 533 OF 670  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

COMMUNITY	NUMBER	PANEL	SUFFIX
AUGUSTA COUNTY	510013	0533	D
WAYNESBORO, CITY OF	515532	0533	D

**MAP NUMBER**  
51015C0533D  
**EFFECTIVE DATE**  
SEPTEMBER 28, 2007  
 Federal Emergency Management Agency

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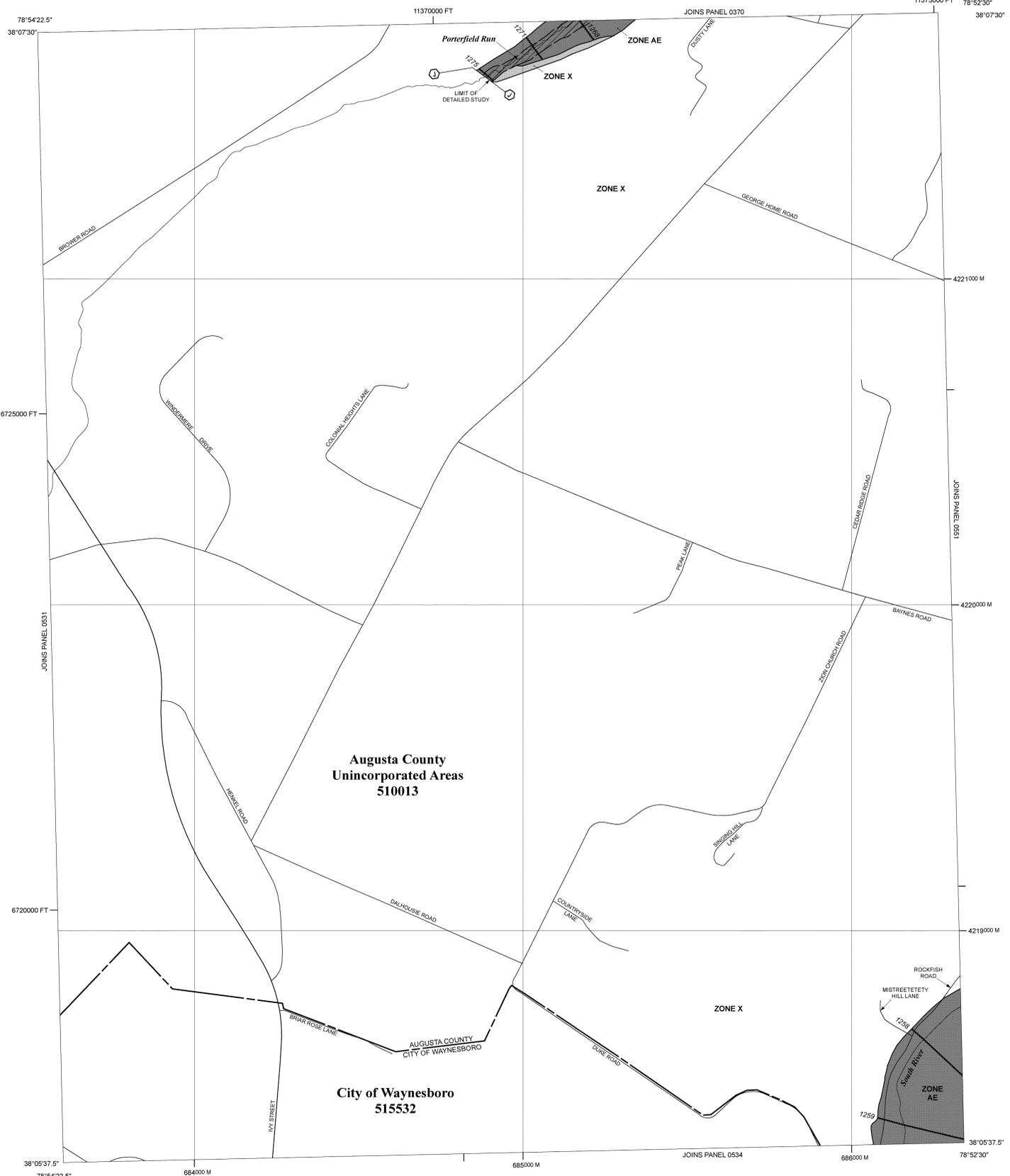
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**LEGEND**

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No Base Flood Elevations determined.

- ZONE AE** Base Flood Elevations determined.
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- ZONE AP9** Area to be protected from 1% annual chance flood by a Federal Flood protection system under construction; no Base Flood Elevations determined.
- ZONE V** Coastal Flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- ZONE VE** Coastal Flood zone with velocity hazard (wave action); Base Flood Elevations determined.

**FLOODWAY AREAS IN ZONE AE**  
The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

**OTHER FLOOD AREAS**  
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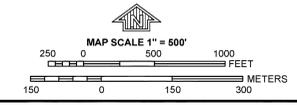
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  - Base Flood Elevation line and value; elevation in feet\*
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- 87°07'45", 32°22'30" Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
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**MAP REPOSITORY**  
Refer to listing of Map Repositories on Map Index  
**EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP**  
September 28, 2007  
**EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL**

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**NATIONAL FLOOD INSURANCE PROGRAM**

**PANEL 0532D**

**FIRM FLOOD INSURANCE RATE MAP**

**AUGUSTA COUNTY, VIRGINIA AND INCORPORATED AREAS**

**PANEL 532 OF 670**  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

**CONTAINS:**

COMMUNITY	NUMBER	PANEL	SUFFIX
AUGUSTA COUNTY	510013	0532	D
WAYNESBORO, CITY OF	515532	0532	D

Notice to User: The Map Number shown below should be used when placing map orders. The Community Number shown above should be used on insurance applications for the subject community.

**MAP NUMBER**  
51015C0532D

**EFFECTIVE DATE**  
SEPTEMBER 28, 2007

Federal Emergency Management Agency



November 25, 2024

Ms. Jennifer Allen-Key  
City of Waynesboro  
Department of Public Works  
941 Fir Street  
Waynesboro, Virginia 22980

Re: 2025 Stormwater Capital Improvements Plan Study

Dear Ms. Allen-Key;

Last updated in February 2006, the City’s Stormwater CIP addresses the City’s localized and regional flooding issues through a project identification, assessment and planning. The City has implemented many of the prioritized projects identified in the 2006 Stormwater CIP. Additional areas of localized flooding have emerged over the years. It is also noted that the City is currently working collaboratively with the Central Shenandoah Planning District Commission (CSPDC) for the development of a regional Resilience Plan that is focused on flood control and resiliency.

The City of Waynesboro has requested a proposal for engineering services related to update the City’s Stormwater Capital Improvements Plan (CIP). The development of the Stormwater CIP Study will be a collaborative effort with the CSPDC and city departments to ensure the Study is representative of City-wide initiatives and regional goals for flood resiliency. The City has identified fourteen sites (14) for evaluation of stormwater improvement strategies as part of the Capital Improvement Plan update. The outcome of the CIP update will be a report with prioritized ranking of the projects including conceptual design schematics, costs, and regulatory considerations.

The following is a detailed scope proposed to study updates to the Stormwater CIP:

**Task 1: Desktop Review ..... \$16,065**

For the 14 identified sites, a desktop review will be performed. We anticipate the desktop review to include the following documents and any others the City requests:

- Cityworks data, Internal Work Orders
- Code of ordinances
- 2018 Comprehensive Plan
- Existing City GIS Data and best available topographic data
- TMDL Action Plan



- Regional Hazard Mitigation Plan
- FEMA, CRS, floodplain management documentation, as applicable
- Other Regional Documents

**Task 2: Site Visits ..... \$21,100**

Perform site visits for each of the 14 locations to review site conditions to gather field data. The site visit will gather data on feasibility considerations for potential water quality and quantity control improvements. The field assessment will also include evaluation of regulatory considerations (floodplain compliance, environmental resources, etc).

**Task 3: Conceptual Schematic Design ..... \$59,220**

Timmons Group will process and consolidate data on historical flooding complaints, observed issues and field considerations for each site. Each site will be analyzed for strategies to implement water quality improvement in support of meeting the City’s TMDL Action Plan requirements. A schematic design for identified improvements will be developed to improve flooding conditions. The developed schematic will serve as the initial estimate of a possible design option to improve flooding conditions.

Conceptual hydrologic and hydraulic (H&H) calculations will be developed for each site to support schematic design(s). The calculations will include resiliency considerations.

**Task 4: Project Cost Development ..... \$18,830**

Timmons Group will develop conceptual project costs for identified projects and will provide a recommendation for annual inflation of costs over time. The project costs developed will include any studies and alternatives analysis recommended to determine the best engineering solution to improve flooding conditions.

**Task 5: Project Prioritization ..... \$7,560**

Timmons Group will work collaboratively with City of Waynesboro staff to evaluate the project prioritization matrix used in the 2006 Stormwater CIP. Recommendations will be made for additional prioritization criteria that reflects current City priorities, including the following:

- Critical Infrastructure Improvements and EMS Accessibility
- Climate change/Resiliency considerations
- Site specific, nature-based solutions with a focus on resiliency
- Potential to incorporate urban BMP retrofits and installations for water quality.



**Task 6: Reporting ..... \$55,030**

A written narrative will be provided to document the study supporting the CIP plan update. Project one-sheets will be developed for each identified site, similar in nature to the 2006 City CIP project list. The project one-sheets will provide schematic layout for proposed improvements and identify key planning considerations and limitations for each site. Projects will be ranked in accordance with the City’s prioritization matrix developed in Task 7.

A draft CIP Study will be submitted for electronic dissemination to City staff for review and comment. Timmons Group will revise the CIP Update in consideration of the City’s comments and finalize the document. One comment/response period is included in this scope. Digital deliverables will be provided to the City.

**Task 7: City Meetings ..... \$12,745**

Up to four (4) meetings will be attended. At least two virtual and two in-person meetings with City staff will be included to review findings and seek input from the City. One of these meetings may include a meeting with the Central Shenandoah Planning District for coordination with the regional resilience plan.

**Reimbursable Expenses ..... \$739**

**Proposed Fee**

Timmons Group proposes to provide the services outlined above based on a fixed fee basis. An estimate of the hourly breakdown for each activity is attached.

Task 1: Desktop Review .....	\$16,065
Task 2: Site Visits .....	\$21,100
Task 3: Conceptual Schematic Design .....	\$59,220
Task 4: Project Cost Development .....	\$18,830
Task 5: Project Prioritization .....	\$7,560
Task 6: Reporting .....	\$55,030
Task 7: City Meetings .....	\$12,745
Reimbursable Expenses .....	\$739

**Total: ..... \$191,289**

**Exclusions:**

- Subsurface utility location is not included with this scope of work



## TIMMONS GROUP

YOUR VISION ACHIEVED THROUGH OURS.

- A comprehensive watershed model is not included with the scope of this work. Conceptual design calculations are meant for planning level purposes only. Detailed calculations are recommended at the design phase to fully evaluate the designed improvements and potentially impacts downstream.
- Field survey is not included with this scope.
- Construction drawings are not included with this scope of work.
- Environmental delineations are not included with this scope of work.
- One comment period on the report is included with the project scope.

**APPENDIX C3:  
CITY FLOOD RECORDS**

[https://dailyprogress.com/archives/floods-impacted-waynesboros-businesses-and-neighborhoods-1928-1969/article\\_a6a777f4-7145-53b9-918c-a68a3a852ad7.html](https://dailyprogress.com/archives/floods-impacted-waynesboros-businesses-and-neighborhoods-1928-1969/article_a6a777f4-7145-53b9-918c-a68a3a852ad7.html)

## Floods impacted Waynesboro's businesses and neighborhoods (1928-1969)

K.W. Stanley / News Virginian

Jan 15, 2008

**B**etween 1928 and 1969, Waynesboro experienced floods every four years on average.

Before 1969, Waynesboro's most severe floods occurred in 1942 and in 1955. The South River crested on Oct. 15, 1942 (14.7 feet), and on August 18, 1955 (14.0 feet), each with a flow of 13,500 cubic feet per second. The 1942 flood occurred after 72 hours of heavy rains. The 1955 flood occurred after 10.38 inches of rain fell between August 8 and 17, 1955. The holding capacity of mountain and valley soils had been exhausted.

Storms that impact the Blue Ridge mountains produce many of Waynesboro's floods. For example, an inch of rain in the Big Run watershed north of Waynesboro, an 11-square mile area, drains 200 million gallons, which flows into the Shenandoah Valley.

Record floods occurred on Sept. 19, 1928 (11.02 feet); Oct. 17, 1932 (10.98 feet); Dec. 1, 1936 (13.90 feet); April 26, 1937 (10.88 feet); Aug. 16, 1940 (13.31 feet). Others included the Hurricane Camille flood of Aug. 20, 1969 (15.2 feet with a flow of 17,400 cubic feet a second); a 1972 flood of 13 feet with a flow of 14,400 cubic feet a second; a 1985 flood with a flow of 17,500 cubic feet a second; and a 1996 flood with the highest of 13 river readings.

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Town floods in 1870, 1877 and 1897 reached six feet in some areas. The 1897 flood washed two wood buildings off their foundations and across North Wayne Avenue. One was reported to be a former Masonic building.

Hurricane Camille made landfall on the Gulf Coast on August 17, 1969, then moved across Mississippi, Tennessee and West Virginia. Rain began to fall on the Blue Ridge, in Sherando and Waynesboro about 9:30 p.m. on August 19, 1969. The DuPont Weather Station recorded rainfall of 2.64 inches. Larger amounts fell in the watershed south of the city with flood waters reaching Waynesboro by 5:30 a.m. on August 20, 1969, and cresting by 7 a.m. Back Creek flooded in Sherando and families were evacuated from homes surrounded by flood waters by Waynesboro and Staunton rescue squads. Half of Va. 664 in Sherando washed away. Larger floods were reported in Cold Springs near Greenville, Vesuvius, Buena Vista and Glasgow. An earth slide occurred on Afton Mountain at the site of I-64 construction, which blocked Route 250. Waynesboro was unaware for a day of the tragedy and deaths which were occurring across the mountain in Nelson County.

Club Court between Ridgeview Park and the Waynesboro Country Club flooded. A lake developed around 50 area homes and along Meadowbrook Road. John O. Baugher was rescued from the roof of his island home near a curve in the South River adjacent to Lovers Lane. Ridgeview Park was flooded and water covered the ball fields and tennis courts.

Two industries were forced to curtail operations, including Crompton-Shenandoah and the Virginia Metalcasters Foundry.

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Two hundred people were rescued by the Waynesboro First Aid Crew, 125 in Club Court, but lives were not lost. Grace Lutheran and First Presbyterian operated relief centers. The Red Cross assisted relief efforts.

Damages reached a half million dollars for 250 city homes and a million dollars for Waynesboro businesses. These businesses included Leggett's, Corner Hardware, Freed Company, Paul Freed, Driver Sales, McClung, Mahanes Florist, A&N, Hyman's, Daylight Laundry, J. J. Newberry's, Super X Drugs, Kroger, Virginia Metal Crafters, Wayne Lanes, Virginia National Bank and others. Local teens helped homeowners and downtown retailers with cleanup. Malcolm Pickus of Arnolds said, "I don't know what we would have done without them."

K.W. Stanley is a Waynesboro resident, historian and TNV correspondent. Contact him at [\*\*knstanle@yahoo.com\*\*](mailto:knstanle@yahoo.com).

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[https://newsvirginian.com/news/local-storms-cause-flooding-in-the-valley/article\\_494e5dd1-8fd7-5989-b9ee-2df0d8373419.html](https://newsvirginian.com/news/local-storms-cause-flooding-in-the-valley/article_494e5dd1-8fd7-5989-b9ee-2df0d8373419.html)

# Local storms cause flooding in the Valley

**Brian Carlton and Bob Stuart**

Sep 29, 2015



A look at the area across the street from Waynesboro High

Brian Carlton

Brian Carlton and Bob Stuart

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**W**AYNESBORO-The River City earned its name Tuesday, with rain showers causing flash flooding in some parts of the area. Waynesboro, Staunton and most of Augusta County are all under a flash flood watch until noon Wednesday,

thanks to a storm system coming through.

As of 4:30 p.m. Tuesday afternoon, Waynesboro had received 2.9 inches of rain and the South River had risen to 4.4 feet.

Waynesboro Emergency Management Director Gary Critzer said that city staff would be monitoring the river throughout the night.

“It’s jumped up about a foot in an hour,” Critzer said of the river. “We’ll be keeping an eye on that, but right now, there’s no forecast for it to overflow. We just need the rain to slow down enough so the storm sewers can catch up.”

A flash flood watch means that weather conditions make it likely for creeks and streams to overflow, as well as low-lying parts of the area. According to the National Weather Service, more rain could be on the way. The forecast calls for between 1 to 2 inches of rain from midnight to noon on Wednesday, with a 100 percent chance of showers until late Wednesday afternoon.

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Currently however, it’s not expected to be heavy enough for the South River to overflow its banks. That doesn’t mean residents shouldn’t use caution, officials say.

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“If people are out driving, they need to pay attention for standing water,” Critzer said. “Just go slow out there and be aware. In some parts, the water could get high.”

By late afternoon, Staunton officials said New Hope Road between Commerce Road and Statler Boulevard was closed due to flooding. Portions of Goose Creek Road in Fishersville near the hospital also were closed, due to heavy rains. By 4:30 p.m., a number of secondary roads were closed in Waynesboro and other areas had standing water.

As for what caused it, Jerry Stenger, director of the state climatology office at the University of Virginia, described Tuesday's weather as complex.

Stenger said a cold front pushing through the area was contributing to Tuesday's rainfall. He said a low pressure system overnight could bring significantly more rainfall in the overnight period in Waynesboro and Augusta County. Unfortunately, Stenger said, just because the flash flood watch might be lifted, that doesn't mean the problem is over.

While the rain might stop for a period on Wednesday, Stenger said a tropical storm off the Atlantic Coast could bring even more rain by the weekend.

"Tropical Storm Joaquin could bring even more rain Friday through Sunday," he said.

Tropical Depression Eleven turned into Tropical Storm Joaquin Monday night, after forming late Sunday.

It's expected to move closer to North Carolina and Virginia over the next few days. At this point however, National Weather Service officials said they were unclear how much of an impact that storm would have. The latest forecast however advised residents in Waynesboro and the surrounding area to be careful for more flooding possibilities, later this week.

"There will be potential for repeated thunderstorm activity over the same areas, which further increases the risk of flooding," the forecast read. This website utilizes technologies such as cookies to enable essential site functionality, as well as for analytics, personalization, and targeted advertising. [Privacy Policy](#).

Freeze Warning Is In Effect

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# Heavy rain leaves parts of Waynesboro flooded Friday



(WHSV)

By Janson Silvers

Published: May. 5, 2017 at 5:18 PM EDT



Rain, rain and more rain.

This was the case for many parts of the Shenandoah Valley on Friday, May 5, but in Waynesboro, the end result was much more than a few puddles.

On the south side of Waynesboro, near the YMCA, several picnic tables were underwater, and some geese were taking advantage.

On the north side of town, along Hopeman Parkway, there was even more flooding, which got pretty close to E&E Machine Shop.

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However, it's nothing they haven't seen before.

"No, if it happens, we get out of here. One year, it did happen, it's marked on the wall over here. We had 19 inches of water here in the parking lot," said Buddy Craig, who works at E&E Machine Shop.

"So at least it's not that intense?" asked WHSV's Janson Silvers.

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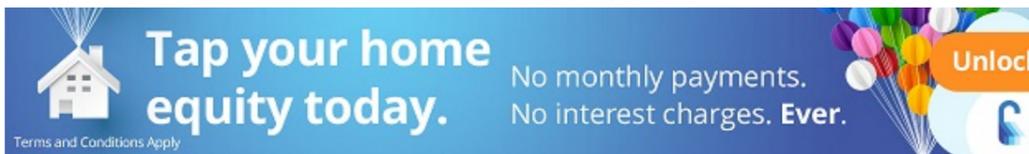
While Friday's flooding had an intense look to it, luckily for most of us, this flooding was very localized.

Now, places that are downstream should continue to monitor water levels throughout the day.

Waynesboro wasn't the only local area to experience flooding — Some folks in Elkton and other places reported significant flooding as well, and the South River rose out of its banks all throughout Augusta County, including at a crossing in Crimora.

WHSV's viewers sent in photos throughout the day of flooding in these areas, and you can scroll through those below.

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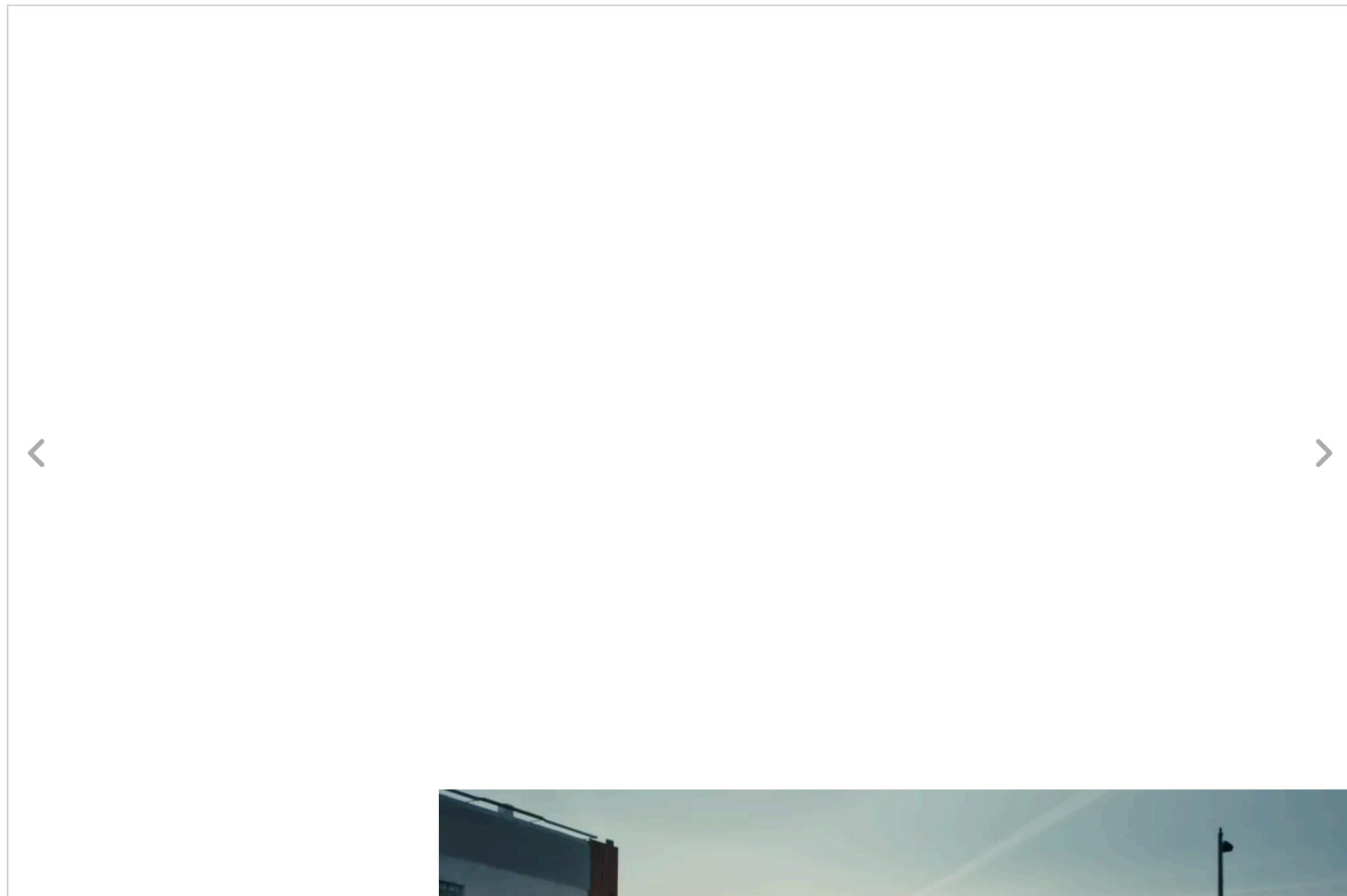


Ridgeview park in Waynesboro.

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0 of 0 ◀ ▶



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# Waynesboro City Hall closed after rainfall brings flooding



Waynesboro, Ga. (WRDW)

By Staff

Published: Oct. 13, 2022 at 8:33 AM EDT



WAYNESBORO, Ga. (WRDW/WAGT) - Waynesboro City Hall is closed Thursday due to flooding, according to the city.

The city posted a notice of the closure late Wednesday on its Facebook page.

The flooding occurred as heavy thunderstorms moved through the region Wednesday night.

Authorities reported that five to seven homes in the northern part of town were flooded with about 6 inches of water. Three to five vehicles were also reportedly flooded.

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Two people reportedly had to be rescued from a flooded vehicle, but no injuries were reported.

[MORE | 'He wanted money. I wanted my life': Clerk shares nightmare encounter with murder suspect](#)

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[Home](#) > [Waynesboro: 'Some Damage, But Not Catastrophic,' As Helene Passes Through](#)

LOCAL NEWS

# Waynesboro: 'Some damage, but not catastrophic,' as Helene passes through



**Chris Graham**

Published date: September 28, 2024 | 2:18 pm



The unexpected deluge of rain from the remnants of **Hurricane Helene** that fell on the area on Friday forced the **South River** out of its banks in **Waynesboro** for the first time since 2018.

Good news: by and large, the city was able to escape the widespread damage that had been seen from previous flood events.

“Water-wise, I know the people that got water wouldn’t agree with this, but water-wise, we did fairly well. We did have



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The South River ended up cresting in Waynesboro at 12.4 feet, which is nearly three feet above flood stage.

The worst flood on record in Waynesboro dates back to 1985, when the river got to 15.3 feet, and caused more than \$3 million in damages in 1985 dollars, about \$8.8 million in current-day dollars, with more than 160 homes, 11 industrial sites and 52 businesses impacted.

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## Stay on top of things

- Sign up for text, email emergency alerts from the **City of Waynesboro**: [click here](#).

The inventory by Critzer for what we saw yesterday includes water in some basements on **Club Court** and to a business on **East Main Street**, and a bridge on **South Oak Lane** was that overswept by floodwaters.

Aside from that, and the closure of several streets during the storm because of water, the bigger issue was actually damage from the tropical winds that blew in with Helene, with gusts up to 28 mph in the early-evening hours, and sustained winds in the 13+ mph range for a six-hour period at the height of the storm.

Some of the issues with road closures had to do with falling trees, and a falling tree caused substantial damage to a home on **Elkins Circle**, whose residents had to be evacuated, and there was also one report of an injury to a city resident from a falling tree.



Photo: Rachel Christine

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## Virginia power outage map

- [Click here](#) for the latest update.

The biggest thing Critzer is having to deal with today is power.

“We’ve got a lot of trees down. we’ve got a lot of lines compromised. and we’re being told that there’s a

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At this writing, at 2 p.m. Saturday, **Dominion Energy** is reporting that 3,091 of the city's 11,883 electricity customers are without power.

In neighboring **Augusta County**, which experienced flooding primarily in the Sherando area, which is located south of **Waynesboro**, a total of 1,454 **Dominion Energy** and

**Shenandoah Valley Electric Cooperative** customers were out of power as of 2 p.m. Saturday.

Critzer said it is expected that power will be restored to those customers between 9 p.m. Saturday and 2 a.m. Sunday morning.



Photo: Carson Fife

## More photos

- *AFP* has more photos of the flood and wind damage on [Facebook](#).

One other issue that the city is dealing with has to do with the water pump station on **Shenandoah Village Drive**, which was damaged by floodwaters Friday evening.

The city is asking residents in the western half of the city – including the **Pelham, Hopeman Parkway, Club Court** and **Country Club** areas – to conserve water until the tank can be restored.



Photo: Jeff Fife

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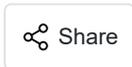
The one bit of bad news that we need to leave you with is, there's more rain in the forecast.

**AccuWeather Senior Meteorologist Thomas Kines** told *AFP* in an email Saturday that rain from what is left of Helene will return later Sunday and continue Sunday night into Monday, with a potential for another 1-3 inches of rain in the forecast.

The [National Water Prediction Service](#) is currently forecasting the South River to get back to the 7.5-foot mark during the day on Monday, and that's with rain on the low end of what AccuWeather is saying is possible.

"Looking at what currently is forecast, I think that's manageable," Critzer said.

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Tags

ACCUWEATHER WAYNESBORO WEATHER



**Chris Graham**



Chris Graham, the king of "[fringe media](#)," is the founder and editor of *Augusta Free Press*. A 1994 alum of the University of Virginia, Chris is the author and co-author of seven books, including [Poverty of Imagination](#), a memoir published in 2019, and [Team of Destiny: Inside Virginia Basketball's Run to the 2019 National Championship](#), and [The Worst Wrestling Pay-Per-View Ever](#), published in 2018. For his commentaries on news, sports and politics, go to his [YouTube page](#), or subscribe to his [Street Knowledge podcast](#). Email Chris at [chris@augustafreepress.com](mailto:chris@augustafreepress.com).

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## LOCAL NEWS

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CHRIS GRAHAM OCTOBER 15, 2024

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CHRIS GRAHAM OCTOBER 14, 2024

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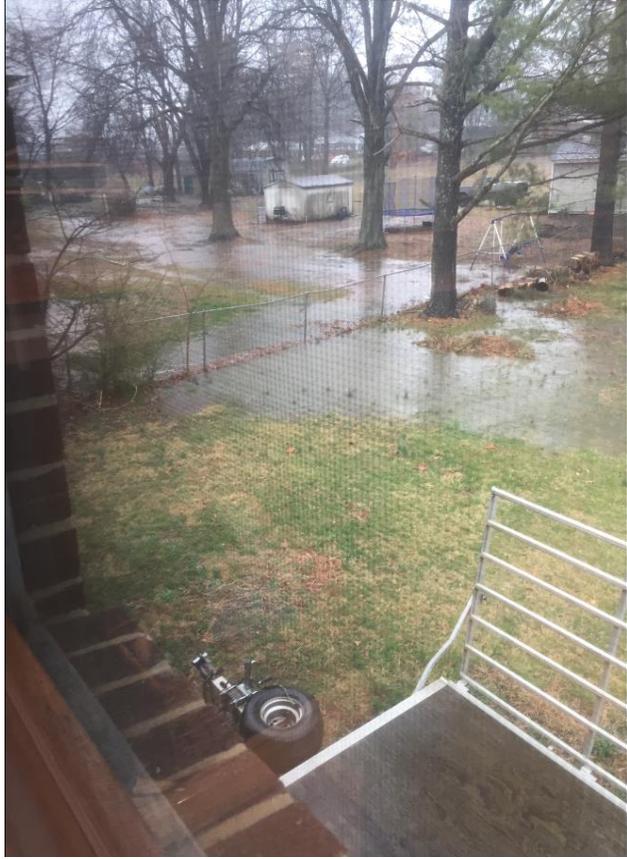
Flood Photos Submitted by City Residents  
Source: City of Waynesboro











## Sec. 98-3.3.5. - Floodplain overlay (-FO).

- A. *Purposes.* The purposes of this section, comprising the City's -FO district regulations, are to prevent the loss of life and property, the creation of health and safety hazards, the disruption of commerce and governmental services, the extraordinary and unnecessary expenditure of public funds for flood protection and relief, and the impairment of the tax base by:
1. Regulating uses, activities, and development which, alone or in combination with other existing or future uses, activities, and development, will cause unacceptable increases in flood elevations, velocities and frequencies;
  2. Restricting or prohibiting certain uses, activities and development from locating within districts subject to flooding;
  3. Requiring all those uses, activities, and developments that do occur in floodprone districts to be protected and/or floodproofed against flooding and flood damage;
  4. Ensuring that dwellings and their inhabitants are protected from hazards associated with flooding; and
  5. Protecting individuals from buying land and structures which are unsuited for intended purposes because of flood hazards.
- B. *Scope.*
1. These provisions shall apply to all privately- and publicly-owned lands within the jurisdiction of the City and identified as being floodprone.
  2. The degree of flood protection sought by the provisions of this section is considered reasonable for regulatory purposes and is based on acceptable engineering methods of study. Larger floods may occur on rare occasions. Flood elevations may be increased by manmade or natural causes, such as ice jams and bridge openings restricted by debris. This section does not imply that districts outside the -FO district, or that land uses permitted within such district, will be free from flooding or flood damage.
  3. This section shall not create liability on the part of the City or any officer or employee thereof for any flood damages that result from reliance on this section or any administrative decision lawfully made thereunder.
  4. This section supersedes any ordinance currently in effect in floodprone districts. However, any underlying ordinance shall remain in full force and effect to the extent that its provisions are more restrictive than this section.
  5. Any and all improvements, analyses, studies and/or investigations required by this section shall be performed at the sole cost of the applicant and/or land owner.

C.

*Delineation of District.* The boundaries of the -FO district, described below, are established as shown on the Flood Insurance Rate Map which is declared to be a part of this ordinance and which shall be kept on file in the office of the Zoning Administrator. The effective date of the Flood Insurance Rate Map and Flood Insurance Study is September 28, 2007 and as periodically revised and/or amended by FEMA.

1. The Floodway zone is delineated, for purposes of this ordinance, using the criterion that certain areas within the floodplain must be capable of carrying the waters of the 100-year flood without increasing the water surface elevation of that flood more than one foot at any point. The areas included in this zone are specifically defined in the City of Waynesboro Flood Insurance Study.
2. The special floodplain district shall be those areas identified as an AE zone on the maps accompanying the Flood Insurance Study for which 100-year flood elevations have been provided.
3. The approximated floodplain district shall be those areas identified as an A or A99 zone on the maps accompanying the Flood Insurance Study. In these zones, no detailed flood profiles or elevations are provided, but the 100-year floodplain boundary has been approximated. For these areas, the 100-year flood elevations and floodway information from federal, state, and other acceptable sources shall be used, when available. Where the specific 100-year flood elevation cannot be determined for this area using other sources of data, such as the U.S. Army Corps of Engineers Flood Plain Information Reports, U.S. Geological Survey Flood-prone Quadrangles, etc., then the applicant for the proposed use, development and/or activity shall determine this elevation in accordance with hydrologic and hydraulic engineering techniques. Hydrologic and hydraulic analyses shall be undertaken only by professional engineers or others of demonstrated qualifications, who shall certify that the technical methods used correctly reflect currently-accepted technical concepts. Studies, analyses, computations, etc., shall be submitted in sufficient detail to allow a thorough review by the governing body.
4. The shallow flooding district shall be those areas identified as zone AO or AH on the maps accompanying the Flood Insurance Study.
5. Where no floodway has been determined, the Floodplain Administrator may require that the applicant for the proposed use, development and/or activity shall determine the floodway in accordance with hydrologic and hydraulic engineering techniques. Hydrologic and hydraulic analyses shall be undertaken only by qualified engineers or others of demonstrated qualifications, who shall certify the technical methods used to reflect currently accepted technical concepts. Studies, analyses, computations, etc., shall be submitted in sufficient detail to allow a thorough review by the City.

D. *Physical Changes Affecting Flood Conditions.*

- 1.

In the event that the base flood elevations increase or decrease resulting from physical changes affecting flood or flooding conditions, as soon as practicable, but not later than six months after the date such information becomes available, the Floodplain Administrator shall notify the Federal Insurance Administrator of the changes by submitting technical or scientific data. Such a submission is necessary so that upon confirmation of those physical changes affecting flooding conditions, risk premium rates and flood plain management requirements will be based upon current data.

2. The flood carrying capacity within an altered or relocated portion of any watercourse shall be maintained.

E. *Floodplain Development Permits.* A floodplain development permit is required for all development in the -FO district pursuant to the requirements of Sec. 98-7.12.

F. *Prohibited and Allowable Development.*

1. *General.*

(a) No land shall be developed and no structure shall be located, relocated, constructed, reconstructed, enlarged or structurally altered in the -FO district except in full compliance with the terms and provisions of this section and any other applicable ordinances and regulations which apply to uses within the jurisdiction of this section.

(b) In all areas covered by this section, which shall include all property lying in the -FO district and zoned in any of the zoning classifications under this Chapter, no uses, activities or development shall be permitted except in compliance with the following restrictions and such other reasonable safeguards and regulations as the Floodplain Administrator may impose for the promotion and maintenance of the general welfare, health and commerce of the inhabitants of the city, and in accordance with good zoning practices; and, in addition, no such development shall be permitted in such areas except upon written approval of compliance by the Floodplain Administrator in accordance with the restrictions, safeguards and regulations described in this section, which shall be given precedence over any other provision of this Chapter which may appear in conflict with this section.

2. *Prohibited Uses.* The following uses shall be prohibited in the -FO district:

(a) Solid waste, trash hauling, landfills, dumps, junkyards, storage tanks, hazardous materials storage, outdoor storage of vehicles and/or materials;

(b) The filling of jurisdictional wetlands;

(c) Damming or relocation of any watercourse that will result in any downstream increase in flood levels during the base flood; and

(d) The construction or storage of any object subject to flotation or movement during flooding.

3.

*Permitted Uses.* In the -FO district the following uses and activities are permitted, provided that they are in compliance with the provisions of the underlying district and provided that they do not require structures, fill or storage of materials and equipment:

- (a) Agricultural uses, such as general farming, pasture, grazing, outdoor plant nurseries, horticulture, truck farming, forestry, sod farming, and wild crop harvesting.
  - (b) Public and private recreational uses and activities, such as parks, day camps, picnic grounds, golf courses, boat launching and swimming areas, horseback riding and hiking trails, wildlife and nature preserves, game farms, fish hatcheries, athletic playing fields, and fishing areas.
  - (c) Accessory residential uses, such as yard areas, gardens, play areas, and pervious loading areas.
  - (d) Accessory industrial and commercial uses, such as yard areas, pervious parking and loading areas, airport landing strips, etc.
4. *Fill.* In any development where filling has been completed in order to make a building lot, the developer shall seek and have approved a letter of Federal insurance rate map amendment through the Federal Emergency Management Agency.
5. *Approval Conditions.* No zoning approval or occupancy permit shall be issued under this section for any allowable development in the -FO district except on the following conditions:
- (a) All new construction and substantial improvement of structures shall have the lowest floor, including basement, elevated at least one foot above the design flood elevation; or be designed, together with attendant utility and sanitary facilities, so that below the design flood elevation the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.
  - (b) No recreational vehicles may be placed on sites except for non-residential use and then shall either be on the site for fewer than 180 consecutive days, or be fully licensed and ready for highway use. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect-type utilities and security devices, and has no permanently attached additions.
  - (c) Electrical control panels in permitted structures shall be mounted above the design flood elevation.
  - (d) All new or replacement water facilities shall be designed to minimize or eliminate infiltration of floodwaters into the system and be located and constructed to minimize or eliminate flood damages.
  - (e)

All new or replacement sanitary sewer facilities and private package sewage treatment plants, including all pumping stations and collector systems, shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into the floodwaters. In addition, they shall be located and constructed to minimize or eliminate flood damage and impairment.

- (f) New development shall be reviewed to assure that it will be reasonably safe from flooding, and submittals shall include base flood elevation data. If proposed new development is in the -FO district, proposals shall be reviewed to assure:
  - (1) They are consistent with the need to minimize flood damage;
  - (2) Public utilities and facilities, such as sewer, gas, electrical, and water systems are located and constructed to minimize or eliminate flood damage;
  - (3) Adequate drainage is provided to reduce exposure to potential flood hazards; and
  - (4) New lots that may be prone to flood hazard are not created.
- (g) No new construction, substantial improvements, or other development (including, but not limited to, fill) shall be permitted within zone AE (base flood elevation as determined and specified on map) on the community's FIRM (flood insurance rate map), unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.
- (h) Within any floodway area, no encroachments, including, but not limited to, fill, new construction, substantial improvements or other development shall be permitted unless the applicant demonstrates, through hydrologic and hydraulic analyses, and in accordance with standard engineering practice, that the proposed encroachment would result in any increase in the 100-year flood elevation.
- (i) Where floodproofing is utilized for a particular structure in accordance with this section a qualified engineer or architect shall certify that the floodproofing methods are adequate to withstand the flood depths, pressures, velocities, impact, and uplift forces and other factors associated with the base flood, and a record of such certificates indicating the specific elevation in relation to mean sea level, to which such structures are floodproofed, shall be maintained by the Building Official.
- (j) Industrialized buildings/modular structures that are placed or substantially improved on sites shall be elevated on a permanent foundation such that the lowest floor of the structure is elevated to or above the design flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.
- (k)

Permitted structures shall be constructed and placed on the building site so as to minimize obstruction to the flow of flooding waters. Permitted structures shall not be constructed in the floodway.

- (l) Permitted structures shall be anchored to prevent flotation, collapse and lateral movement which may result in damage or restriction of the flow of floodwaters.
- (m) The developer shall demonstrate to the City that through appropriate methods as approved or otherwise mandated by the Floodplain Administrator that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained.
- (n) All storm drainage facilities shall be designed to convey the flow of surface waters without damage to persons or property. The systems shall ensure drainage away from buildings and onsite waste disposal sites. The City may require a primarily underground system to accommodate frequent floods and a secondary surface system to accommodate larger, less frequent floods. Drainage plans shall be consistent with local and regional drainage plans. The facilities shall be designed to prevent the discharge of excess runoff onto adjacent properties.
- (o) All utilities, such as gas lines, electrical and telephone systems being placed in floodprone areas should be located, elevated, where possible, and constructed to minimize the chance of impairment during a flooding occurrence.
- (p) Streets and sidewalks should be designed to minimize their potential for increasing and aggravating the levels of flood flow. Drainage openings shall be required to sufficiently discharge flood flows without unduly increasing flood elevations.
- (q) Such development shall be undertaken only in strict compliance with the provisions of this section and with all other applicable state and local codes and ordinances, such as the Building Code and Appendix G, Flood Resistant Construction, as amended or as henceforth may be amended at any future time. Prior to the issuance of any building permit, the City shall require all applications to include compliance with all applicable State and Federal laws, codes and regulations. Under no circumstances shall any use, activity and/or development adversely affect the capacity of the channels or floodway of any watercourse, drainage ditch, or any other drainage facility or system.
- (r) Foundation vents shall have a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one foot above finished grade. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
- (s) Manufactured homes that are placed or substantially improved within zone AE on the community's FIRM on sites (i) outside of a manufactured home park or subdivision, (ii) in a new manufactured home park or subdivision, (iii) in an expansion to an existing

manufactured home park or subdivision, or (iv) in an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood, shall be elevated so that:

- (1) The lowest floor of the manufactured home is elevated no lower than the design flood elevation; or the manufactured home chassis is supported by reinforced piers or other foundation elements of at least an equivalent strength, of no less than 36 inches in height above the grade; and

The manufactured home must be securely anchored to the adequately anchored foundation system to resist flotation, collapse and lateral movement.

(Ord. No. 2012-31, 6-8-12)

Sec. 98-3.3.6. - General standards.

The following provisions shall apply to all development in the -FO district:

- A. New construction and substantial improvements shall be according to the VA USBC, and anchored to prevent flotation, collapse or lateral movement of the structure.
- B. Manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable state anchoring requirements for resisting wind forces.
- C. New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
- D. New construction or substantial improvements shall be constructed by methods and practices that minimize flood damage.
- E. Electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities, including duct work, shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
- F. New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
- G. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.
- H. On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.

Sec. 98-3.3.7. - Specific standards.

In all special flood hazard areas where base flood elevations have been provided in the Flood Insurance Study or generated according Sec. 98-3.3.7.G, the following provisions shall apply:

- A. *Residential Construction.* New construction or substantial improvement of any residential structure (including manufactured homes) shall have the lowest floor, including basement, elevated to or above the base flood elevation (recommend > one-foot freeboard).
- B. *Non-Residential Construction.* New construction or substantial improvement of any commercial, industrial, or non-residential building (or manufactured home) shall have the lowest floor, including basement, elevated to or above the base flood elevation (recommend > one-foot freeboard). Buildings located in all A1-30, AE, and AH zones may be flood-proofed in lieu of being elevated provided that all areas of the building components below the elevation corresponding to the BFE plus one foot are water tight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certification, including the specific elevation (in relation to mean sea level) to which such structures are floodproofed, shall be maintained by the Zoning Administrator as required by Sec. 98-6.7.2.D.
- C. *Elevated Buildings.* Fully enclosed areas, of new construction or substantially improved structures, which are below the regulatory flood protection elevation shall:
  1. Not be designed or used for human habitation, but shall only be used for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment (standard exterior door), or entry to the living area (stairway or elevator).
  2. Be constructed entirely of flood resistant materials below the regulatory flood protection elevation;
  3. Include, in zones A, AO, AE, and A1-30, measures to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exit of floodwaters. To meet this requirement, the openings must either be certified by a professional engineer or architect or meet the following minimum design criteria:
    - (a) Provide a minimum of two openings on different sides of each enclosed area subject to flooding.
    - (b) The total net area of all openings must be at least one square inch for each square foot of enclosed area subject to flooding.
    - (c) If a building has more than one enclosed area, each area must have openings to allow floodwaters to automatically enter and exit.

- (d) The bottom of all required openings shall be no higher than one foot above the adjacent grade.
  - (e) Openings may be equipped with screens, louvers, or other opening coverings or devices, provided they permit the automatic flow of floodwaters in both directions.
4. Foundation enclosures made of flexible skirting are not considered enclosures for regulatory purposes, and, therefore, do not require openings. Masonry or wood underpinning, regardless of structural status, is considered an enclosure and requires openings as outlined above.
- D. *Standards for Manufactured Homes, Mobile Homes and Recreational Vehicles.*
- 1. All manufactured homes or mobile homes placed, or substantially improved, on individual lots or parcels, in expansions to existing manufactured or mobile home parks or subdivisions, in a new manufactured or mobile home park or subdivision or in an existing manufactured or mobile home park or subdivision on which a manufactured home has incurred substantial damage as the result of a flood, must meet all the requirements for new construction, including the elevation and anchoring requirements in Sec. 98-3.3.6.A and B, and Sec. 98-3.3.7.A.
  - 2. All recreational vehicles placed on sites must either:
    - (a) Be on the site for fewer than 180 consecutive days;
    - (b) Be fully licensed and ready for highway use (a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices and has no permanently attached additions); or,
    - (c) Meet all the requirements for manufactured or mobile homes in Sec. 98-4.2.7 and this subsection D.
- E. *Standards for the Floodway District.* The following provisions shall apply within the Floodway District:
- 1. *Encroachments.* Encroachments, including fill, new construction, substantial improvements and other developments are prohibited unless certification such as hydrologic and hydraulic analyses (with supporting technical data) is provided demonstrating that encroachments shall not result in any increase in flood levels during occurrence of the base flood. Hydrologic and hydraulic analyses shall be undertaken only by professional engineers or others of demonstrated qualifications, who shall certify that the technical methods used correctly reflect currently-accepted technical concepts. Studies, analyses, computations, etc., shall be submitted in sufficient detail to allow a thorough review by the Floodplain Administrator. Development activities which increase the water surface elevation of the base flood may be

allowed, provided that the {developer or applicant} first applies—with the City of Waynesboro's endorsement—for a conditional Flood Insurance Rate Map and floodway revision, and receives the approval of the Federal Emergency Management Agency.

2. If Sec. 98-3.3.7.E.1 is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Sec. 98-3.3.5.
3. The placement of manufactured or mobile homes is prohibited, except in an existing manufactured or mobile homes park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring, elevation, and encroachment standards are met.

F. *Standards for the Special Floodplain District.* The following provisions shall apply within the special floodplain district:

1. Until a regulatory floodway is designated, no new construction, substantial improvements, or other development (including fill) shall be permitted within the areas of special flood hazard, designated as zones A1-30 and AE on the Flood Insurance Rate Map, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the City of Waynesboro.
2. Development activities in zones A1-30, AE, and AH, on the City of Waynesboro's Flood Insurance Rate Map which increase the water surface elevation of the base flood by more than one foot may be allowed, provided that the {developer or applicant} first applies—with the City of Waynesboro's endorsement—for a conditional Flood Insurance Rate Map revision, and receives the approval of the Federal Emergency Management Agency.

G. *Standards for Approximated Floodplain.* The following provisions shall apply with the Approximate Floodplain District:

1. The approximated floodplain district shall be that floodplain area for which no detailed flood profiles or elevations are provided, but where a 100-year floodplain boundary has been approximated. Such areas are shown as zone A on the maps accompanying the Flood Insurance Study. For these areas, the 100-year flood elevations and floodway information from federal, state, and other acceptable sources shall be used, when available. Where the specific 100-year flood elevation cannot be determined for this area using other sources of data, such as the U. S. Army Corps of Engineers Floodplain Information Reports, U. S. Geological Survey Flood-Prone Quadrangles, etc., then the applicant for the proposed use, development and/or activity shall determine this elevation. For development proposed in the approximate floodplain the applicant must use technical methods that correctly reflect

currently accepted technical concepts, such as point on boundary, high water marks, or hydrologic and hydraulic analyses. Studies, analyses, computations, etc., shall be submitted in sufficient detail to allow a thorough review by the Floodplain Administrator.

2. The Floodplain Administrator reserves the right to require hydrologic and hydraulic analyses for any development.
3. When such base flood elevation data is utilized, the lowest floor shall be elevated to or above the base flood elevation (recommend > one-foot freeboard). During the permitting process, the Floodplain Administrator shall obtain:
  - (a) the elevation of the lowest floor (including the basement) of all new and substantially improved structures; and,
  - (b) the elevation (in relation to mean sea level) to which the structure has been flood-proofed if the structure has been flood-proofed in accordance with the requirements of this article.

H. *Standards for the Shallow Flooding District.* The following provisions shall apply within the shallow flooding district:

1. All new construction and substantial improvements of residential structures shall have the lowest floor, including basement, elevated to or above the flood depth specified on the Flood Insurance Rate Map, above the highest adjacent grade at least as high as the depth number specified in feet on the FIRM. If no flood depth number is specified, the lowest floor, including basement, shall be elevated no less than two feet (recommend: one-foot freeboard) above the highest adjacent grade. When a freeboard is included in the height of a structure, the flood insurance premiums will be significantly cheaper.
2. All new construction and substantial improvements of non-residential structures shall:
  - (a) Have the lowest floor, including basement, elevated to or above the flood depth specified on the Flood Insurance Rate Map, above the highest adjacent grade at least as high as the depth number specified in feet on the FIRM. If no flood depth number is specified, the lowest floor, including basement, shall be elevated at least two feet (recommend one-foot freeboard above the flood depth level) above the highest adjacent grade; or
  - (b) Be completely flood-proofed to the specified flood level if the structure has been flood-proofed in accordance with the requirements of this article, so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.
3. Adequate drainage paths around structures on slopes shall be provided to guide floodwaters around and away from proposed structures.

I. *Standards for Subdivision Proposals.*

1. All subdivision proposals shall be consistent with the need to minimize flood damage;
  2. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;
  3. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards, and
  4. Base flood elevation data shall be provided for subdivision proposals and other proposed development proposals (including manufactured home parks and subdivisions) that exceed 50 lots or five acres, whichever is the lesser.
- J. *Construction on Land Lying Partially within District.* Nothing in this section shall prohibit any use or construction on a parcel of land lying partly in the -FO district and partly outside such -FO district, if such use or construction is confined to the portion of such parcel of land lying outside the -FO district and is otherwise in accordance with this section and other relevant sections of this Chapter. The Building Official may issue a building permit for such use or construction outside the -FO district on the written representation of the applicant satisfactory to the Building Official that the use or construction will in fact be outside the -FO district.
- K. *Existing Buildings and Structures in Floodplain Areas.* A building or structure which lawfully existed before the enactment of these provisions, but which is not in conformity with the provisions of this section, may be continued subject to the condition that substantial damage to or improvement of any building or structure shall require the entire structure to be brought into full compliance with the provisions of this section.
- L. *Other Applicable Provisions of This Chapter.* In addition to the provisions of this section relating to the -FO district, all other provisions of this Chapter are applicable except as herein otherwise modified.
- M. *Administrative Appeal.* An appeal from any decision by the Floodplain Administrator shall be made within 30 days of the final decision in accordance with Sec. 98-7.15, Administrative appeal.

Sec. 98-6.7. - Floodplain administrator.

Sec. 98-6.7.1. - Designation.

The Zoning Administrator, as designated in Sec. 98-6.6, shall serve as the Floodplain Administrator and shall administer certain provisions of this Chapter as may be required below.

Sec. 98-6.7.2. - Powers and duties.

The Floodplain Administrator shall perform the following duties:

- A. Interpretation and enforcement of the floodplain regulations of this Chapter.

- B. Ensure that the applicant has obtained and provided any and all required Federal, State and local permits for all development in the regulatory floodplain, before the issuance of a zoning permit.
- C. Notify applicants and maintain a record of the notification of hazard and insurances costs required by Sec. 98-7.14.9.C.
- D. Maintain an elevation certificate and flood-proofing certificate file to certify the elevation of the lowest floor (including basement), of all buildings constructed in the regulatory floodplain.
- E. Maintain a record of all floodplain regulation variance actions approved by the Board of Zoning Appeals, including justification for the issuance of said variances.
  - 1. Submit to the FEMA the data required for proposed revisions to the base flood elevation of a regulatory floodplain study or a relocation of a regulatory floodway boundary, before the issuance of a zoning permit. Additionally, the Floodplain Administrator also shall submit reports as required for the National Flood Insurance Program. Any variances that are approved shall be noted in the annual or biennial report submitted to the Federal Insurance Administrator.
  - 2. Notify adjacent upstream and downstream communities, in writing 30 days prior to the issuance of any permit for the alteration or relocation of a channel or linear water body in the regulatory floodplain.

Sec. 98-7.12. - Floodplain development permit.

Sec. 98-7.12.1. - Applicability.

All uses, activities, and development occurring within any floodplain district, including placement of manufactured or mobile homes, shall be undertaken only upon the issuance of a zoning permit. Such development shall be undertaken only in strict compliance with the provisions of this Chapter and with all other applicable codes and ordinances, as amended, such as the Virginia Uniform Statewide Building Code (VA USBC) and the City of Waynesboro Subdivision Regulations. Prior to the issuance of any such permit, the Floodplain Administrator shall require all applications to include compliance with all applicable state and federal laws and shall review all sites to assure they are reasonably safe from flooding. Under no circumstances shall any use, activity, and/or development adversely affect the capacity of the channels or floodways of any watercourse, drainage ditch, or any other drainage facility or system.



Sec. 98-7.12.2. - Application requirements.

- A. An application for a floodplain development permit shall be submitted in accordance with Sec. 98-7.2.3, Application requirements.
- B. At a minimum, such application shall include the following information:
  1. The elevation of the Base Flood at the site;
  2. The elevation of the lowest floor (including basement);
  3. For structures to be flood-proofed (non-residential only), the elevation to which the structure will be flood-proofed; and
  4. Topographic information showing existing and proposed ground elevations.
  5. A typical valley cross-section as necessary to adequately show the channel of the stream, elevation of land areas adjoining each side of the channel, cross-sectional areas to be occupied by the proposed development, floodway limits, limits of the floodplain.
  6. A profile showing the slope of the bottom of the channel or flow line of the stream.
  7. A summary report, prepared by a qualified engineer or others of demonstrated qualifications, evaluating the proposed project in relation to flood elevations and velocities, the seriousness of flood damage to the use, and other pertinent technical matters.
  8. Additional information as may be required by the Floodplain Administrator, including, but not limited to, a determination of the floodway.

Sec. 98-7.12.3. - Action by zoning administrator.

- A. The Zoning Administrator shall review and evaluate the application for consistency with the provisions of this Chapter, the official Zoning District Map and any other relevant information;
- B. Following completion of the technical review period, the Zoning Administrator shall render an opinion.

Sec. 98-7.12.4. - Approval criteria.

Floodplain development permits shall be based on the applicable requirements of the Sec. 98-3.3.5, -FO district.

Sec. 98-7.12.5. - Administrative appeal.

An appeal from any decision by the Floodplain Administrator shall be made within 30 days of the final decision in accordance with Sec. 98-7.15, Administrative appeal.

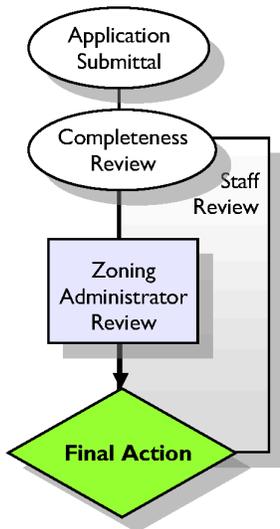
Sec. 98-7.13. - Written interpretation.

Sec. 98-7.13.1. - Applicability.

When uncertainty exists, the Zoning Administrator, after consultation with other involved City staff and the City Attorney, shall be authorized to make all interpretations concerning the provisions of this Chapter.

Sec. 98-7.13.2. - Application requirements.

An application for a written interpretation shall be submitted in accordance with Sec. 98-7.2.3, Application requirements.



Sec. 98-7.13.3. - Action by zoning administrator.

- A. The Zoning Administrator shall review and evaluate the application for consistency with the provisions of this Chapter, the official Zoning District Map and any other relevant information.
- B. Following completion of the technical review period, the Zoning Administrator shall render an opinion.
- C. The interpretation shall be provided to the applicant in writing.

Sec. 98-7.13.4. - Approval criteria.

Written interpretations shall be based on the text of the ordinance and prior interpretations of the same or similar provisions.

Sec. 98-7.13.5. - Official record.

The Zoning Administrator shall maintain an official record of all interpretations. The record of interpretations shall be available for public inspection during normal business hours.

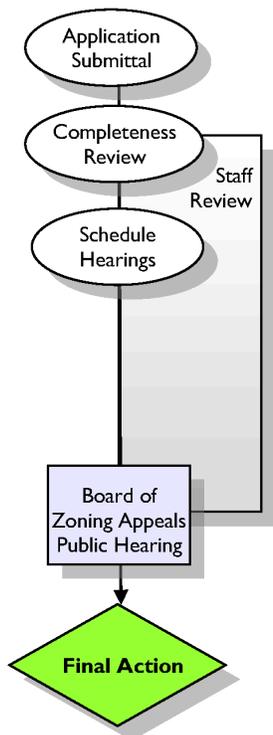
Sec. 98-7.13.6. - Administrative appeal.

An appeal from any decision by the Zoning Administrator shall be made within 30 days of the final decision in accordance with Sec. 98-7.15, Administrative appeal.

Sec. 98-7.14. - Variance.

Sec. 98-7.14.1. - Applicability.

- A. The Board of Zoning Appeals may authorize, upon appeal or original application, such variance from the terms of this Chapter as will not be contrary to the public interest, when, owing to special conditions, a literal enforcement of the provisions will result in unnecessary hardship; provided that the spirit of this Chapter shall be observed and substantial justice done.
- B. When a property owner can show that his property was acquired in good faith and where:
  1. By reason of the exceptional narrowness, shallowness, size or shape of a specific piece of property at the time of the effective date of the ordinance from which this Chapter is derived;  
or



2. By reason of exceptional topographic conditions or other extraordinary situation or condition of such piece of property, or of the use or development of property immediately adjacent thereto, the strict application of the terms of this Chapter would effectively prohibit or unreasonably restrict the use of the property; or where the Board is satisfied, upon the evidence heard by it, that the granting of such variance will alleviate a clearly demonstrable hardship approaching confiscation, as distinguished from a special privilege or convenience sought by the applicant.

C. All variances shall be in harmony with the intended spirit and purpose of this Chapter.

Sec. 98-7.14.2. - Initiation of variance.

An owner of land within the City, or such owner's duly authorized agent or representative, may application the Board of Zoning Appeals for a variance. (See Sec. 98-7.2.3.C for more information)

Sec. 98-7.14.3. - Application requirements.

An application for a variance shall be submitted in accordance with Sec. 98-7.2.3, Application requirements.

Sec. 98-7.14.4. - Notice and public hearings.

The Board of Zoning Appeals shall hold all required public hearings and give notice in accordance with Sec. 98-7.2.5, Notice and public hearings.

Sec. 98-7.14.5. - Action by zoning administrator.

The Zoning Administrator shall provide the Board of Zoning Appeals with copies of the application and all relevant materials pertaining to the application.

Sec. 98-7.14.6. - Action by board of zoning appeals.

The Board of Zoning Appeals may approve the application, deny the application, or continue the application. Each decision shall be accompanied by findings of fact that specifies the reason(s) for the decision.

Sec. 98-7.14.7. - Burden of proof.

The applicant seeking the variance shall have the burden of presenting evidence sufficient to allow the Board of Zoning Appeals to reach the conclusions set forth below as well as the burden of persuasion on those issues.

Sec. 98-7.14.8. - Required findings.

Variances shall be authorized by the Board of Zoning Appeals where the Board makes a positive finding on each of the following:

- A. That the strict application of this Chapter would produce undue hardship;
- B. That such hardship is not shared generally by other properties in the same zoning district and the same vicinity;
- C. That the authorization of such variance will not be of substantial detriment to adjacent property and that the character of the district will not be changed by the granting of the variance; and
- D. That the condition or situation of the property concerned or the intended use of the property is not of so general or recurring a nature as to make reasonably practicable the formulation of a general regulation to be adopted as an amendment to this Chapter.

Sec. 98-7.14.9. - Supplemental floodplain variance regulations.

- A. *General.* While the granting of variances generally is limited to a lot size less than one-half acre, deviations from that limitation may occur. However, as the lot size increases beyond one-half acre, the technical justification required for issuing a variance increases. Variances may be issued by the Board of Zoning Appeals for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, in conformance with the provisions of this section.
- B.

*Referral.* The Board of Zoning Appeals may refer any variance application and accompanying documentation to any engineer or other qualified person or agency for technical assistance in evaluating the proposed project in relation to flood heights and velocities, and the adequacy of the plans for flood protection and other related matters.

C. *Notifications and Acknowledgments.*

1. Upon receipt of an application for any variance affecting floodplain lands or affecting any floodplain regulation of this Chapter, the Floodplain Administrator shall notify the applicant in writing that construction below the 100-year flood elevation:
  - (a) Will result in increased premium rates for flood insurance; and
  - (b) Increases risks to life and property.
2. The applicant shall be required to acknowledge in writing that they assume all risks and liabilities connected with such activities. A copy of the notification and the applicant's acknowledgment shall be maintained by the Zoning Administrator.
3. Annual reporting of such notification is required by Sec. 98-6.7.2.E.

D. *Criteria for Approval.* Floodplain property variances may only be approved after the Board of Zoning Appeals has determined that all of the following criteria are met:

1. There is a showing of good and sufficient cause;
2. Failure to grant the variance would result in exceptional hardship to the applicant;
3. The granting of such variance will not result in:
  - (a) Unacceptable or prohibited increases in flood heights;
  - (b) Additional threats to public safety; or
  - (c) Extraordinary public expense.
4. The granting of such variance will not:
  - (a) Create nuisances;
  - (b) Cause fraud or victimization of the public; or
  - (c) Conflict with local laws or ordinances.
5. The variance will:
  - (a) Be the minimum required to provide relief; and
  - (b) Not cause any increase in the 100-year flood elevation;
6. For new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that the criteria of this section are met;
7. The structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

E.

*Additional Factors for Consideration.* The Board of Zoning Appeals shall consider the following additional factors with respect to floodplain property variances:

1. The danger to life and property due to increased flood heights or velocities caused by encroachments.
  2. The danger that materials may be swept on to other lands or downstream to the injury of others.
  3. The proposed water supply and sanitation systems and the ability of these systems to prevent disease, contamination, and unsanitary conditions.
  4. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owners;
  5. The importance of the services provided by the proposed facility to the community;
  6. The requirements of the facility for a waterfront location;
  7. The availability of alternative locations not subject to flooding for the proposed use;
  8. The compatibility of the proposed use with existing development and development anticipated in the foreseeable future;
  9. The relationship of the proposed use to the Comprehensive Plan and floodplain management program for the area;
  10. The safety of access by ordinary and emergency vehicles to the property in time of flood;
  11. The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters expected at the site;
  12. The repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure; and
  13. Other relevant factors.
- F. *Optional Referral.* The Board of Zoning Appeals may refer any floodplain variance application and accompanying documentation pertaining to such request to any engineer or other qualified person or agency for technical assistance in evaluating the proposed project in relation to flood heights and velocities, and the adequacy of the plans for flood protection and other related matters.
- G. *Supplemental Findings of Fact.* In addition to any other findings of fact required for all variances (see also Sec. 98-7.14.8), in deciding on variances affecting floodplain property or any floodplain regulations, findings of fact shall be made by the Board of Zoning Appeals on each of the following matters based on the evidence presented.
- 1.

That the granting of a variance would not result in increased flood heights, additional threats to public safety or extraordinary public expense, nor create nuisances, cause fraud or victimization of the public, nor conflict with existing local laws or ordinances and that all buildings will be protected by methods that minimize flood damage during the base flood event;

2. That the development activity cannot be located outside the floodplain;
3. That the development activity is not in a regulatory floodway; and
4. That the proposed development will not:
  - (a) Cause any increase in the 100-year flood elevation.
  - (b) Create a danger that materials may be swept on-to other lands or downstream to the injury of others.
  - (c) Affect the water supply and sanitation systems and the ability of these systems to prevent disease, contamination, and unsanitary conditions.
5. That the variance is the minimum necessary, considering the flood hazard, to afford relief.

Sec. 98-7.14.10. - Conditions of approval.

- A. In authorizing a variance, the Board of Zoning Appeals may impose such conditions regarding the location, character and other features of the proposed structure or use as it may deem necessary in the public interest, and may require a guarantee or bond to insure that the conditions imposed are being and will continue to be complied with.
- B. All conditions attached to a variance are enforceable in the same manner as any requirements of this Chapter.

Sec. 98-7.14.11. - Actions after approval.

All actions of the Board of Zoning Appeals shall be placed in the written minutes of the public hearing, along with the reason(s) for the action, and reported to the applicant, in writing, by the Zoning Administrator, within ten days of such action. Approved variances shall be recorded in the public records of the City.

Sec. 98-7.14.12. - Limitations.

- A. A variance may be granted only to modify the height, area, size, common area, or distance separation requirements of this Chapter, or to construct on substandard lots as defined in this Chapter.
- B. No variance of use shall be granted that has the practical effect of rezoning property to a higher density or intensity of use than the district in which the property is located.
- C.

No variance shall be granted for any proposed use, development, or activity within the -FO district that will cause any increase in the 100-year flood elevation.

Sec. 98-7.14.13. - Revocation.

Violation of the conditions of approval, as specified in the final approval, will be deemed a violation of this Chapter. At a public hearing, upon proof of deliberate disregard and violation of such conditions, the Board of Zoning Appeals may revoke the variance.

Sec. 98-7.14.14. - Reconsideration.

The Board of Zoning Appeals shall not consider an application for a variance within one year following the date of final decision by the Board on a prior application if such application seeks substantially the same variance sought in the previous application for the same parcel of land.

Sec. 98-7.14.15. - Appeal to court.

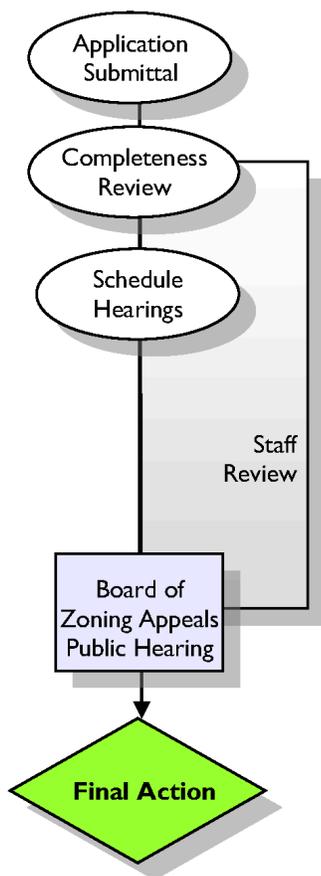
Appeals of final decisions of the Board of Zoning Appeals shall be to the Circuit Court in accordance with the provisions of Sec. 98-7.16, Appeals to Court.

Sec. 98-7.15. - Administrative appeal.

Sec. 98-7.15.1. - Applicability.

The Board of Zoning Appeals, in appropriate cases and subject to appropriate conditions and safeguards as described in this section, shall have the following powers:

- A. To hear and decide appeals where it is alleged there is error in any order, requirement, decision or determination in the enforcement of this Chapter; and
- B. To hear and make interpretations of the Zoning District Map where there is any uncertainty as to the location of a district boundary; the Board may interpret the map in such a way as to carry out the intent and purpose of this Chapter for the particular section or district in question.



Sec. 98-7.15.2. - Notice of appeal requirements.

- A. Any person aggrieved or by the final decision of any officer, department, board or bureau of the City affected by any decision of the Zoning Administrator or from any order, requirement, decision or determination made by any other administrative officer in the administration or enforcement of this Chapter may file a notice of appeal to the Board of Zoning Appeals. An Administrative appeal shall be filed within 30 days of receipt of the final decision.
- B. A notice of appeal for Administrative appeal shall be submitted in accordance with Sec. 98-7.2.3 Application requirements. Such notice shall specify the grounds for the appeal with the Zoning Administrator.

Sec. 98-7.15.3. - Notice and public hearings.

The Board of Zoning Appeals shall hold all required public hearings and give notice in accordance with Sec. 98-7.2.5, Notice and public hearings.

Sec. 98-7.15.4. - Action by zoning administrator.

The Zoning Administrator shall transmit to the Board of Zoning Appeals all the papers constituting the record upon which the action appealed from was taken.

Sec. 98-7.15.5. - Action by board of zoning appeals.

The Board of Zoning Appeals may reverse or affirm, wholly or partly, or may modify the order, requirement, decision, or determination appealed and may make any order, requirement, decision or determination that in its opinion ought to be made in the case before it.

- A. A motion to reverse, affirm or modify the order, requirement, decision, or determination appealed shall include, insofar as practicable, a statement of the specific reasons or findings of fact that support the motion.
- B. If a motion to reverse or modify is not made, or fails to receive the concurring vote of three members of the Board, the appeal shall be denied.

Sec. 98-7.15.6. - Limitation on district boundary interpretations.

In making district boundary interpretations, the Board of Zoning Appeals shall not have the power to change substantially the locations of district boundaries as established by ordinance.

Sec. 98-7.15.7. - Effect of appeal.

An appeal to the Board of Zoning Appeals stays all proceedings in furtherance of the action appealed unless the Zoning Administrator certifies to the Board of Zoning Appeals after the notice of appeal shall have been filed with him/her that by reason of facts stated in the certificate, a stay would, in his/her opinion, cause imminent peril to life or property. In such case, proceedings shall not be stayed otherwise than by a restraining order which may be granted by the Board of Zoning Appeals or by a court of record on application or notice to the Zoning Administrator and on due cause shown.

Sec. 98-7.15.8. - Findings of fact.

Every decision of the Board of Zoning Appeals shall be accompanied by written findings of fact specifying the reason for the decision. These findings shall be filed in the office of the Board within ten days after the date of the final decision.

Sec. 98-7.15.9. - Appeal to court.

Appeals of final decisions of the Board of Zoning Appeals shall be to the Circuit Court in accordance with the provisions of Sec. 98-7.16, Appeals to court.

Sec. 98-7.16. - Appeal to court.

An appeal of any action, decision, ruling, judgment or order of the City Council or Board of Zoning Appeals made under this Chapter may be taken by any person or persons, jointly or severally aggrieved, or

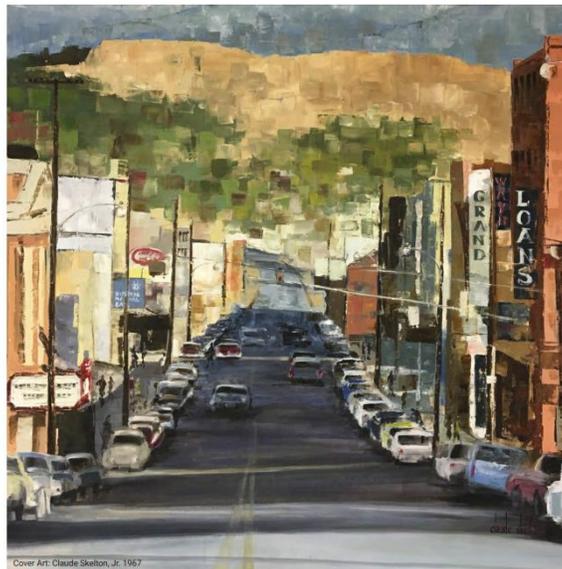
any taxpayer or any officer, department, board or bureau of the City to the Circuit Court.

Link to City of Waynesboro, VA 2018 Comprehensive Plan

Prepared by czb, LLC:

<https://www.waynesboro.va.us/261/Comprehensive-Plan>

The screenshot shows the City of Waynesboro website. At the top left is the Waynesboro Virginia logo. To the right are social media icons for Facebook, Twitter, and YouTube, and a search bar. Below the logo is a navigation menu with links for Government, Services, Doing Business, Explore Waynesboro, and How to... A left sidebar contains a list of menu items: City Code / Zoning Ordinance, Planning Commission, Comprehensive Plan, Neighborhood Plans, Development Reviews, GIS, Projects, and Community Development Block Grant. The main content area is titled "Comprehensive Plan" and includes a breadcrumb trail: Home > Government > Departments > Planning Department > Comprehensive Plan. The text under "The Plan" states that the City Council adopted a new Comprehensive Plan on March 26, 2018, and provides a link to download it. It describes the plan as the city's official document for long-term development, covering goals, objectives, and strategies for land use, environmental protection, and transportation. A second paragraph explains that the plan is a statement of citizen expectations and serves as the basis for new initiatives. A final paragraph notes that the plan must be reviewed every five years. On the right side of the page, there are sections for "Contact Us" (with address, phone, and fax), "Hours" (Monday-Friday, 8:00 A.M. - 5:00 P.M.), "Staff Directory", and "Quick Links" (including a link to the Land Use Map). A "View All" button is located at the bottom right of the page.



Cover Art: Claude Skelton, Jr. 1967

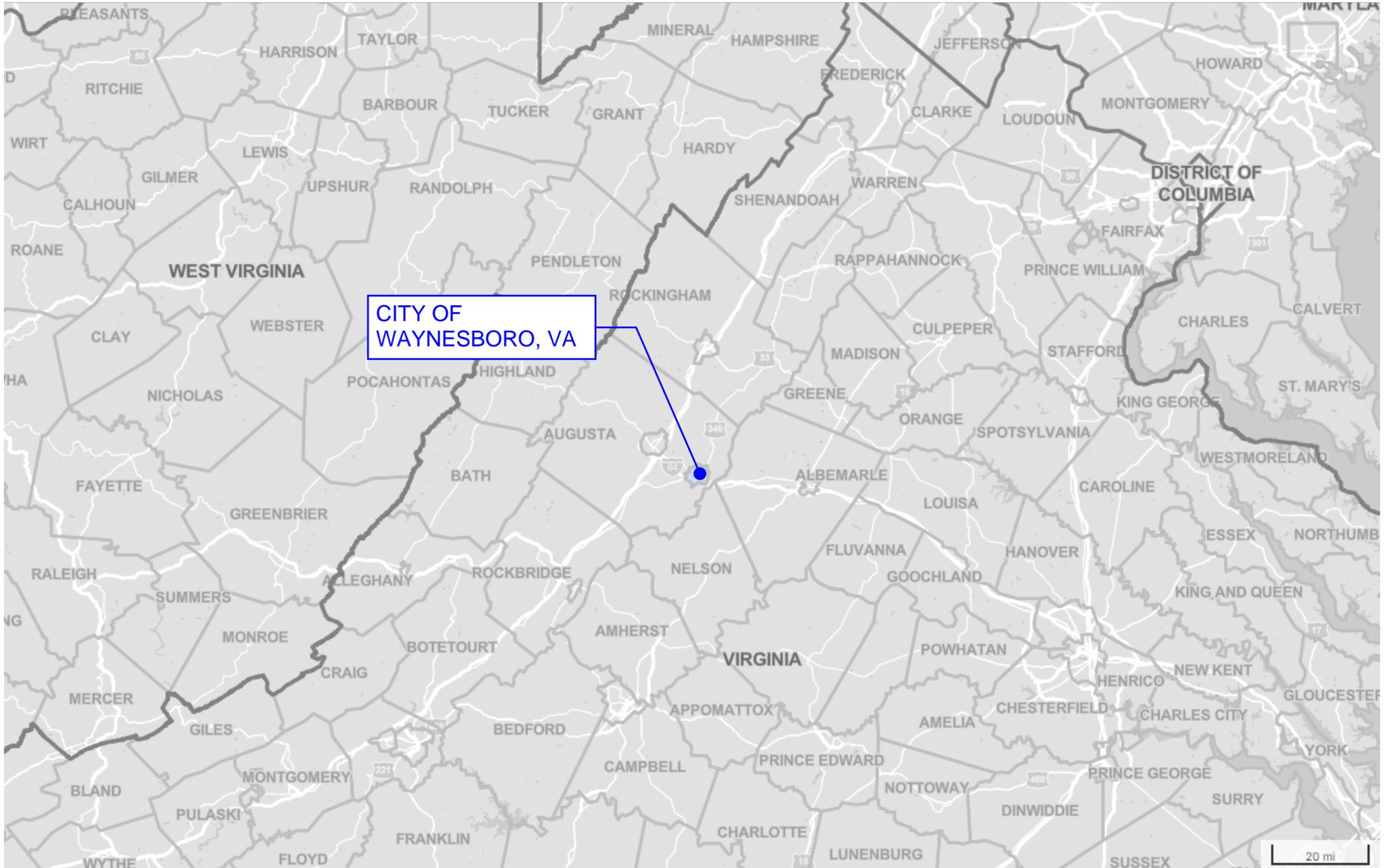


City of Waynesboro, VA  
2018 Comprehensive Plan



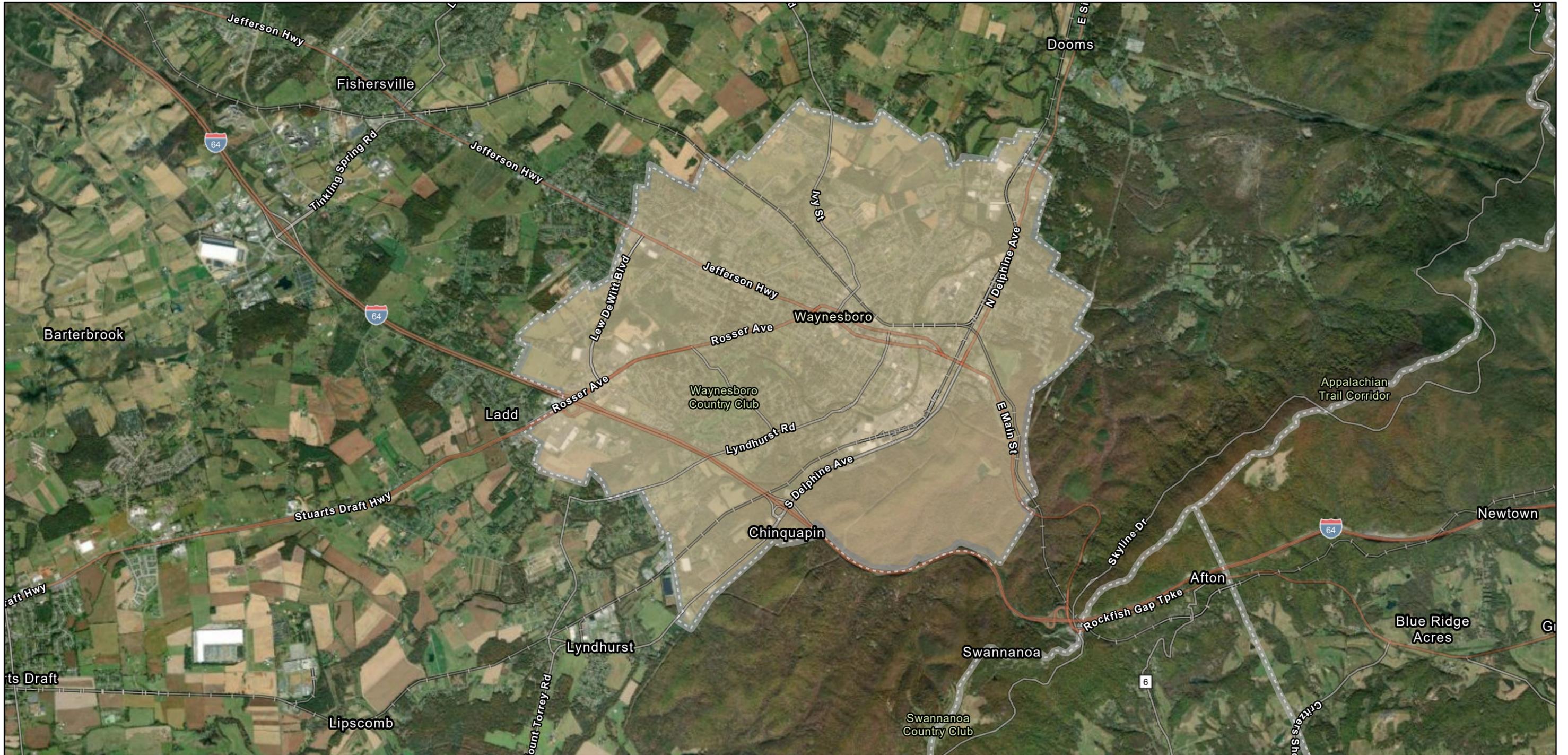
PREPARED BY czb, LLC

# WAYNESBORO, VA



SOURCE: US CENSUS BUREAU

# City of Waynesboro Administrative Boundary



12/9/2024

Virginia Cities and Counties - Clipped

-  County
-  City

World Imagery

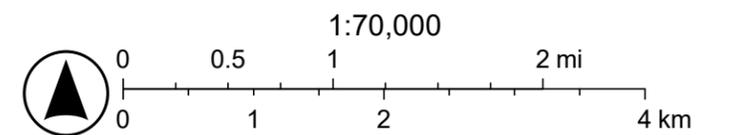
Low Resolution 15m Imagery

High Resolution 60cm Imagery

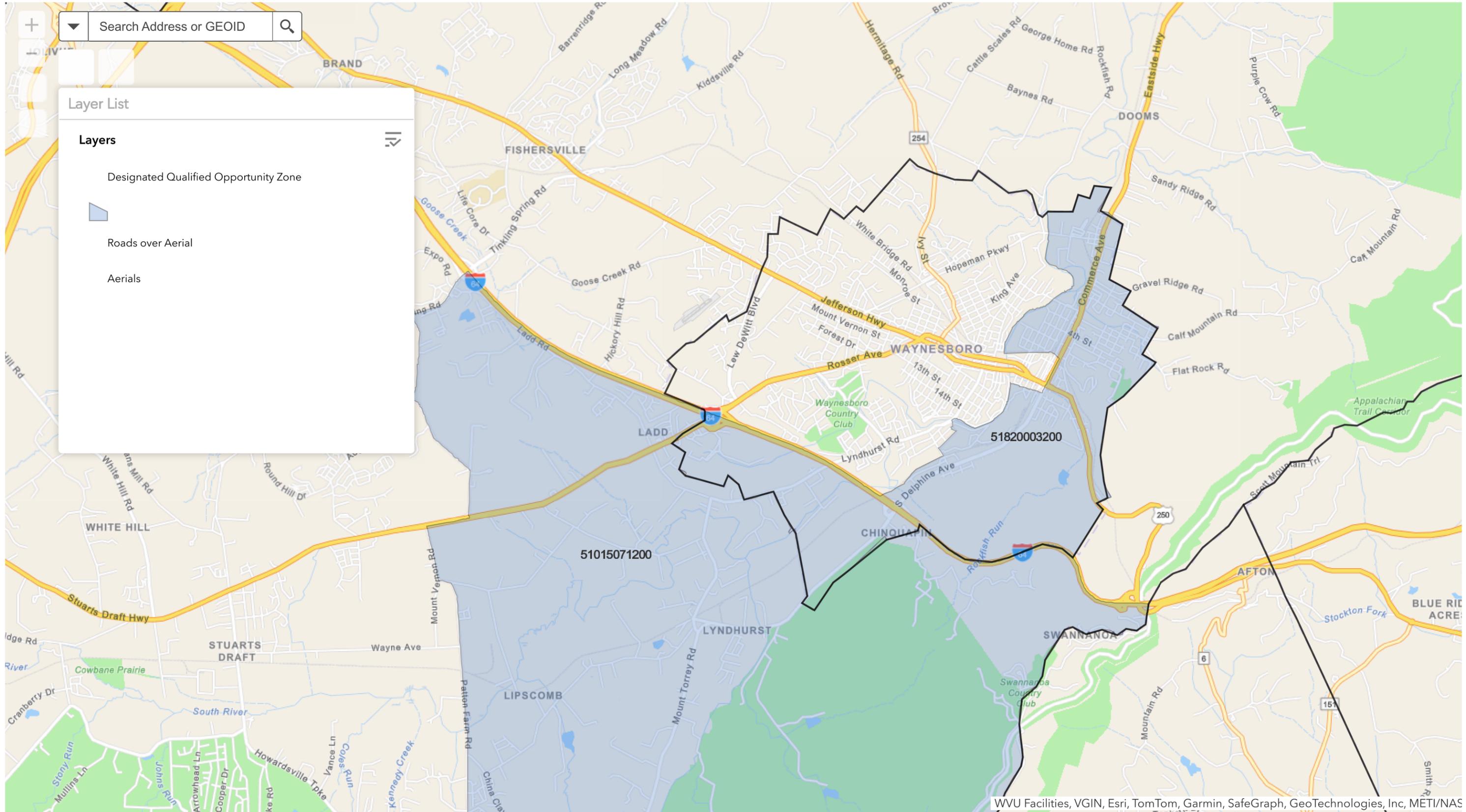
High Resolution 30cm Imagery

Citations

19m Resolution Metadata



WVU Facilities, VGIN, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS, Earthstar Geographics



Link to 2020 Central Shenandoah Hazard Mitigation Plan

Prepared by The Central Shenandoah Planning District Commission:

[https://www.cspdc.org/wp-content/uploads/2024/04/CSHMP\\_2020\\_Final\\_Locality\\_Resolutions.rw\\_.pdf](https://www.cspdc.org/wp-content/uploads/2024/04/CSHMP_2020_Final_Locality_Resolutions.rw_.pdf)



## Central Shenandoah Hazard Mitigation Plan 2020 Update

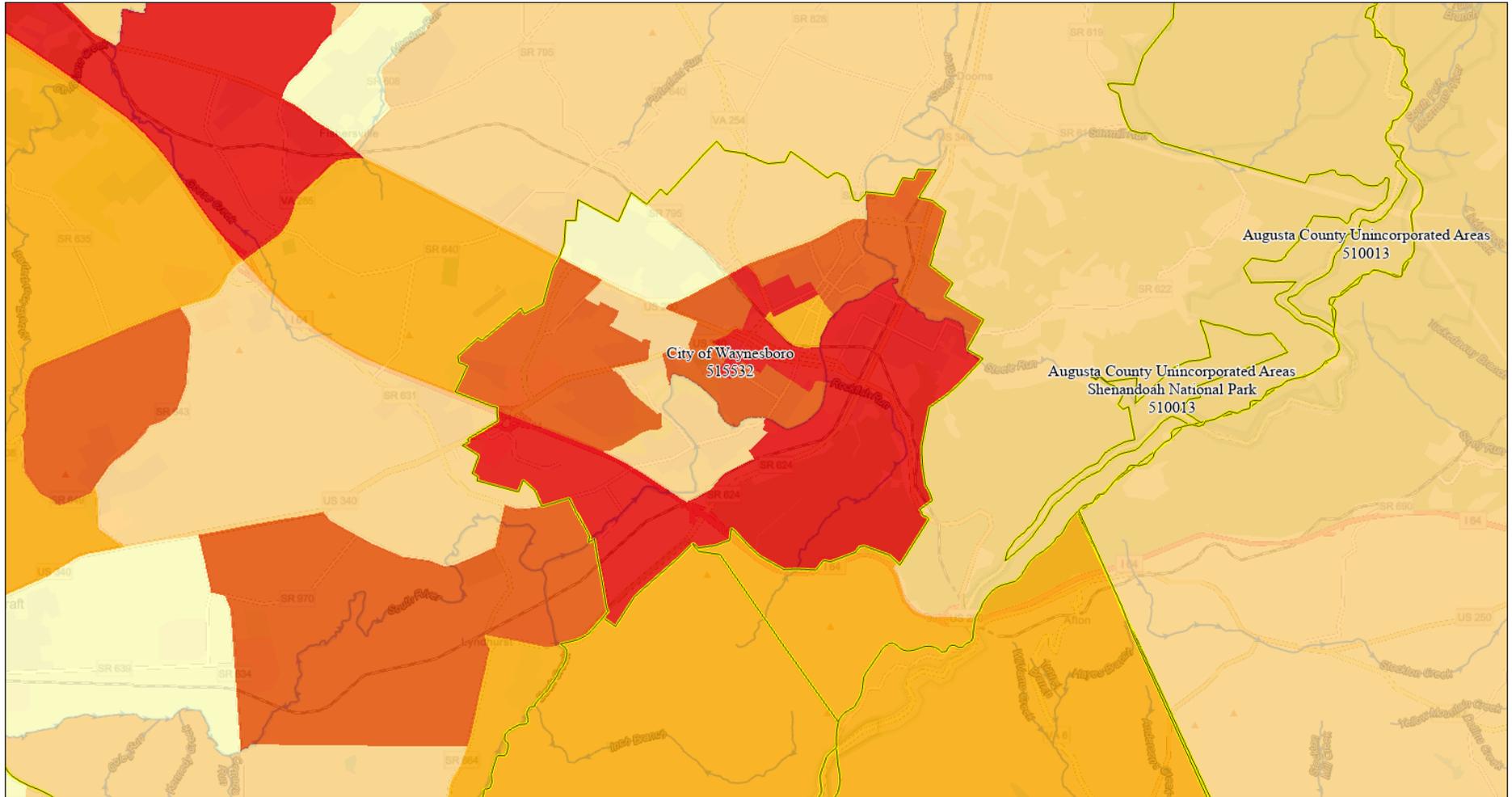


*"Reducing the impact of disasters on citizens  
of the Central Shenandoah Region  
through planning, preparedness,  
mitigation, and education."*

Prepared by the:  
Central Shenandoah  
Planning District Commission

**APPENDIX C6:  
SOCIAL VULNERABILITY SCORING**

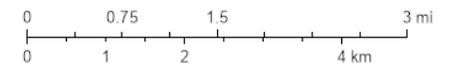
# VFRIS Exporter



10/14/2024, 9:52:02 AM

- Political Jurisdictions
- Low Social Vulnerability
- Very High Social Vulnerability
- Social Vulnerability Block Groups 2020
- Moderate Social Vulnerability
- NHDFlowline\_Named
- Very Low Social Vulnerability
- High Social Vulnerability

1:74,935



Map data © OpenStreetMap contributors, Microsoft, Facebook, Inc. and its affiliates, Esri Community Maps contributors, Map layer by Esri, Virginia Geographic Information Network (VGIN)

**Table 1. City of Waynesboro: Social Vulnerability Index Score by Census Tract**

<b>Census Tract</b>	<b>Census Block</b>	<b>Index Classification</b>	<b>Index Score</b>
31	BG 1	Very High	1.89
32	BG 1	Very High	2.12
32	BG 2	Very High	2.08
32	BG 3	Very High	1.73
32	BG 4	High	1.16
33	BG 1	Moderate	0.36
33	BG 2	Very High	2.57
33	BG 3	High	1.33
33	BG 4	Low	-0.27
34	BG 1	Very Low	-1.33
34	BG 2	High	1.05
34	BG 3	High	1.12
34	BG 4	High	1.19
35	BG 1	Low	-0.31
35	BG 2	Low	-0.59
35	BG 3	High	1.09
35	BG 4	High	1.27
<b>Average</b>			<b>0.97</b>



**DEPARTMENT OF EMERGENCY MANAGEMENT AND EMS  
OFFICE OF THE DIRECTOR**

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**250 S. Wayne Ave. Suite 301  
Waynesboro, Va. 22980  
Phone: (540) 942-6698 Fax: (540) 942-6521  
critzergp@ci.waynesboro.va.us**

October 24, 2024

Community Flood Preparedness Fund Review Committee:

We understand and support the Public Works Department's application for the Department of Conservation and Recreation's Community Flood Preparedness Fund (CFPF) grant to perform a study to address flooding and stormwater issues in Waynesboro.

The study will perform an assessment of flood-prone areas in Waynesboro and a review of the Stormwater Capital Improvement Plan (CIP) project list. Although CIP projects have been completed throughout the City, accessibility of Emergency Services to residents during flood conditions remains an issue in low lying areas. The funding of the study will assist in the development of projects to alleviate flooding in these areas.

Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "G. Critzer", written over a white background.

Gary P. Critzer, NRP

Director

Department of Emergency Management and EMS

/gpc