TOWN COUNCIL REGULAR MEETING

TOWN OF CHASE CITY, VA

Monday, March 08, 2021 at 7:00 PM

319 North Main Street, Chase City, VA 23924

Phone: (434) 372-5136 | www.chasecity.org

ADA NOTICE

It is the intention of the Town of Chase City to comply in all aspects with the Americans with Disabilities Act (ADA). If you plan on attending a meeting to participate or to observe and need special assistance beyond what is routinely provided, the city will attempt to accommodate you in every reasonable manner. Please contact Town Hall by phone or email, at least four business days prior to the meeting to inform the City of your specific needs and to determine if accommodation is feasible.

AGENDA

Invocation

Call to Order

Citizen's Recognition

Consent Agenda

1. February 8, 2021 RCM
2. Joint Public Hearing Minutes 03-02-21
3. Budget Workshop Minutes 03-02-21
4. CCVFD Feb 2021 Report
5. February 2021 CCPD Report
6. Bills Paid in the Month of February 2021
7. Report to Council/Operating Budget February 2021
8. February 2021 Charge Offs

Old Business

9. Approve as second reading and adopt ordinance Article F - Vacant Building Registration; civil penalty Section 6-4-51 - Vacant Building Registration; civil penalty
10. Adopt the recommendation of the Planning Commission for rezoning application submitted by Lisa and Glen Gillispie

11. Set a Public Hearing for April 12, 2021 at 7 pm for Conditional Use Permit Application 21-01
12. Set a Joint Public Hearing date on April 12, 2021 for Application for rezoning 21-01

New Business

13. Adopt the attached Hazard Mitigation Plan in order to receive FEMA money
14. Approve as a first reading an addition to Section 6-2-52
15. New CCPD Positions (Titles Only)

Closed Session

16. Closed Session pursuant to Section 2.2-3711 (1) to discuss a personnel matter

Mayor/Council Comments

Town Manager's Oral Report

Adjournment

TOWN COUNCIL REGULAR MEETING

TOWN OF CHASE CITY, VA

Monday, February 08, 2021 at 7:00 PM

319 North Main Street, Chase City, VA 23924

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MINUTES

Invocation

Mayor Fahringer gave the invocation.

Call to Order

Mayor Fahringer called the meeting to order at 7:00 pm.

PRESENT
Mayor Alden Fahringer
Vice-Mayor James Bohannon
Council Member Brenda Hatcher
Council Member Pauline Keeton
Council Member BJ Mull
Council Member Marshall Whitaker
Council Member Michelle Wilson

Citizen's Recognition

Consent Agenda

Motion to approve consent agenda as presented made by Council Member Keeton, Seconded by Council Member Whitaker. Voting Yea: Vice-Mayor Bohannon, Council Member Hatcher, Council Member Keeton, Council Member Mull, Council Member Whitaker, Council Member Wilson

1. RCM 01/11/21
2. PW Report Jan 2021
3. CCVFD Jan 2021 Report
4. CCPD Jan 2021
5. Bills Paid in the Month of January 2021
6. Report to Council/Operating Budget January 2021
7. Jan 2021 Charge Offs

Old Business

8. Application for Rezoning 20-01 Lisa Gillispie

   Motion to schedule a public hearing on March 2, 2021 for the application for rezoning from Lisa and Glen Gillispie was made by Council Member Whitaker, Seconded by Council Member Mull. Voting Yea: Vice-Mayor Bohannon, Council

Member Hatcher, Council Member Keeton, Council Member Mull, Council Member Whitaker, Council Member Wilson

New Business

9. Approval for Treasurer to use contingency funds

   Motion to approve the Treasurer to use $4,078.00 of contingency funds to pay for a UV screen replacement and plugs for WWTP made by Council Member Whitaker, Seconded by Council Member Mull. Voting Yea: Vice-Mayor Bohannon, Council Member Hatcher, Council Member Keeton, Council Member Mull, Council Member Whitaker, Council Member Wilson

10. Appropriation of funds for Chase City Community Park.

    Motion to appropriate $15,000.00 from the IDA sale funds to the Chase City Community Park for repairs and upgrades made by Council Member Mull, Seconded by Vice-Mayor Bohannon. Voting Yea: Vice-Mayor Bohannon, Council Member Hatcher, Council Member Keeton, Council Member Mull, Council Member Whitaker, Council Member Wilson.

11. Vacant Building Registration and Civil Penalty

    Motion to approve as a first reading the addition of ordinance Article F Vacant Building Registration; civil penalty Sec 6-4-51 Vacant Building Registration; civil penalty made by Council Member Hatcher, Seconded by Vice-Mayor Bohannon. Voting Yea: Council Member Hatcher, Council Member Keeton, Council Member Mull, Council Member Whitaker, Council Member Wilson.

    In accordance with Section 15.2-1127 of the Code of Virginia as amended; owners of buildings that have been vacant for a continuous period of 12 months or more, and which meet the definition of derelict building, to register such buildings on an annual basis and may impose an annual registration fee not to exceed $100.00 to defray the cost of processing such registration. The registration of buildings shall be on forms designated by the locality and filed with the Town Office. Failure to register shall be a $200.00 civil penalty; however, failure to register in conservation and rehabilitation districts designated by the governing body, or in other areas designated as blighted, shall be punishable by a civil penalty not exceeding $400.00. Notice shall be mailed to the owner or owners, at the address which property tax notices are sent, at least 30 days prior to the assessment of the civil penalty.

12. Application for Re-zoning Paul Jackson 21-01

    Motion to send an application for rezoning submitted by Paul Jackson to the Planning Commission made by Council Member Whitaker, Seconded by Council Member Mull. Voting Yea: Vice-Mayor Bohannon, Council Member Hatcher, Council Member Keeton, Council Member Mull, Council Member Whitaker, Council Member Wilson.

    Motion to send Conditional Use Permit application submitted by MacCallum More Museum and Gardens to the Planning Commission made by Marshall Whitaker, Seconded by BJ Mull. Voting Yea: Vice-Mayor Bohannon, Council Member Hatcher,

Council Member Keeton, Council Member Mull, Council Member Whitaker, Council Member Wilson.

Motion to include a Tourism Plan in the Chase City Comprehensive Plan and to hold a planning session for the plan made by Council Member Whitaker, Seconded by Vice-Mayor Bohannon. Voting Yea: Vice-Mayor Bohannon, Council Member Hatcher, Council Member Keeton, Council Member Mull, Council Member Whitaker, Council Member Wilson.

Mayor/Council Comments

Mayor Fahringer stated that it is very enjoyable to be here with everyone and he is proud of how we can work together. He also said he sees a lot of positive things coming for the Town.

Council Member Bohannon thanked the Mayor. He said that during the recent weather the PD, FD, and PW worked well together and did a great job.

Council Member Mull asked if we still have grand openings for new businesses in Town. He said he believes that Council should attend openings to show support for new businesses. He understands that these openings may not have been possible during COVID.

Town Manager's Oral Report

Blighted Properties - Amoco gas station final notification in paper to remove blighted building can be demolished as early as 3 March 2021.

Contacts/ Meetings - IDA with guest speaker Mike Dotti from Brunswick IDA

Chamber of Commerce Executive Director and potential craft beer brewery operator

Planning Commission - B&B Labs for sewer work and WWTP actions

Streets - Snow removal

Water/Sewer - Survey work for storm water infiltration into sewer lines is ongoing.

WWTP - All tests are within normal limits. UV system screen replaced at cost of $2450. Treatment intensity increased from older settings.

Endly Street Project - Sewer stub outs and hookups for residences ongoing

Grants - Brownfield Grant Submitted, REL Historic grant finalized $150,000

Community Impact Market Analysis Grant award $22,500

REL Auditorium - Work to begin cleaning out rooms and disposing of derelict equipment and other items.

There being no further business the meeting was adjourned at 7:35 pm.

Adjournment

Alden Fahringer, Mayor

Tonya M. Duffer, Clerk of Council

JOINT PUBLIC HEARING

TOWN OF CHASE CITY, VA

Tuesday, March 02, 2021 at 5:15 PM

319 North Main Street, Chase City, VA 23924

Phone: (434) 372-5136 | www.chasecity.org

MINUTES

Call to Order

PRESENT
Town Manager Dusty Forbes
Mayor Alden Fahringer
Vice-Mayor James Bohannon
Council Member Marshall Whitaker
Council Member Brenda Hatcher
Council Member Pauline Keeton

ABSENT
Council Member BJ Mull
Council Member Michelle Wilson

Planning Commission

James Bohannan
Glen Wood
Charles Willis
Tonya Duffer

ABSENT
MJ Colgate

The Joint Public Hearing of the Chase City Town Council and the Chase City Planning Commission was called to order at 5:18 p.m. by Mayor Alden Fahringer.

Urgent Meeting Items

The meeting was recorded and posted to YouTube. The public was not able to attend in person due to current COVID regulations. The public had been instructed to submit any comments to the Town Clerk to be read aloud during the Public Hearing. No comments were submitted.

There being no public input the hearing was adjourned.

Adjournment

Hearing was adjourned at 5:20 p.m.

Alden Fahringer, Mayor

Tonya M. Duffer, Clerk of Council

SPECIAL BUDGET WORKSHOP

TOWN OF CHASE CITY, VA

Tuesday, March 02, 2021 at 11:00 AM

319 North Main Street, Chase City, VA 23924

Phone: (434) 372-5136 | www.chasecity.org

MINUTES

Call to Order

Urgent Meeting Items

Virginia Petersen, Treasurer, presented to Council the list of items requested by each committee for the upcoming budget.

Motion was made by Vice-Mayor Bohannon and Seconded by Council Member Whitaker to $35,293.from the sale of the IDA to purchase the following items:

Tax Program		$9,795.00
Oakwood Pump		$7,000.00
UV Bulbs	(12x159)	$1,908.00
UV Ballast	(2x795)	$1,590.00
Blower Units	(2x3500)	$7,000.00
Epoxy paint		$2,500.00
Repair Clamps		$4,000.00
Specialty Oil		$500.00
Calibration Meter		$500.00
Banding Clamps		$500.00

Adjournment

Meeting was adjourned at 2:05 p.m.

Alden Fahringer, Mayor

Tonya M. Duffer, Clerk of Council

CCVFD Monthly Report

21-Feb

	IN TOWN	
2/4/2021	Assist Rescue	136 Endly St
2/4/2021	Assist Rescue	136 Endly St
2/6/2021	Assist Rescue	136 Endly St
2/9/2021	Structure Fire	24 Grace St
2/10/2021	Vehicle Fire	121 E 2nd St
2/15/2021	CO Poisioning	927 W 2nd St
2/16/2021	Powerlines Down	844 N Main St
2/16/2021	Service Call	28883 HWY 49
2/28/2021	Structure Fire	531 Huston St
	Out of Town	
2/5/2021	MVA	21860 HWY 49
2/6/2021	MVA	Trottinridge Rd/HWY 92
2/7/2021	MVA	14000 HWY 47
2/7/2021	MVA	5919 HWY 92
2/8/2021	Structure Fire	121 Bowmans Ln (Clarksville)
2/12/2021	Tree Down	2045 Fort Mitchell Rd
2/16/2021	Fire Alarm	12022 Old Cox Rd (Buckhorn)
2/16/2021	Structure Fire	3006 Trottinridge Rd (Clarksville)
2/17/2021	Structure Fire	10392 HWY 47
2/17/2021	Structure Fire	5855 Phillis Rd (Boydton)
2/19/2021	MVA	21860 HWY 49
2/21/2021	MVA	HWY 92/Allgood Rd
2/22/2021	Structure Fire	249 Skipwith Rd (Boydton)
2/25/2021	Structure Fire	478 Arbor Ln (Clarksville)
2/25/2021	Search and Rescue	2000 Barnsville HWY (Bacon District)
2/28/2021	MVA	HWY 47/Draper Rd
2/28/2021	MVA	547 Bailey Dr
	ICE STORM	
2/13/2021-2/14/2021	80+ Calls for service	Multiple Jurisdictions

80

CHASE CITY POLICE DEPARTMENT
219 EAST SECOND STREET
CHASE CITY, VIRGINIA 23924

REPORT FOR FEBRUARY-2021

TOTAL SUMMONS':71

TOTAL TRAFFIC: 63

14-speeding
20-expired/no inspection
5-expired/no registration
8-drive on suspended/no operator's license
2-reckless driving by speed
2-defective equipment
9-fail to obey highway sign
1-fail to obey traffic signal
1-improper display of license plate
1-reckless driving

OTHER: 8

1-DUI
1-trespassing
1-B&E
1-larceny
1-vandalism
1-assault
2-domestic assaults

WORKED: 12-town service, 6-assist other officers/agencies, 4-assist fire/rescue, 2-traffic control, 1-message/motorist assist, 11-stand by at closing/security checks, 26-citizen complaints.

INVESTIGATED: 1-animal complaint, 5-prowler/trespasser complaints, 4-alarms, 1-mental health, 5-larceny complaints, 2-B&E reports, 3-domestic complaints, 3-assaults, 1-threat, 1-vandalism report, 3-911 hang up calls, 1-stolen vehicle complaint, 9-disturbance complaints.

MISC: 1-direct call for fire, 3-calls for county, 15-calls to talk directly to Chief/200, 11-calls to talk to Officer on duty, 1-warrant service.

PATROLLED: 5,555

$$$$$$$$$$$$$$

TOTAL LOSS:	**$585**
TOTAL RECOVERED:	**$0**
VANDALISM:	**$1,000**

Town of Chase City
Including all check statuses
For Bank Id GC and Check Date from 02/01/2021 to 02/28/2021

BANK ID	CHECK #	STATUS	VENDOR #	VENDOR NAME	CHECK DATE	RECONCILE / VOID DATE	AMOUNT	EFT	D
GC	041645	O	0000001530	ASIA POWELL	02/02/2021		221.20		
GC	041646	O	0000000908	BMS DIRECT, INC.	02/02/2021		450.00		
GC	041647	O	0000001469	COMCAST	02/02/2021		433.57		
GC	041648	O	0000000802	COMCAST COMMUNICATIONS	02/02/2021		1.45		
GC	041649	V	0000000072	DOMINION ENERGY VIRGINIA	02/02/2021		0.00		
GC	041650	O	0000000072	DOMINION ENERGY VIRGINIA	02/02/2021		7,726.57		
GC	041651	O	0000001254	GreatAmerica Financial Svcs.	02/02/2021		13.72		
GC	041652	O	0000001531	JESSIE L. STATON	02/02/2021		79.40		
GC	041653	O	0000001852	MINNESOTA LIFE	02/02/2021		24.00		
GC	041654	O	0000002570	NATIONAL BUSINESS FURNITURE, LLC	02/02/2021		416.97		
GC	041655	O	0000001494	PAIGE'S CLEANING SERVICE	02/02/2021		1,300.00		
GC	041656	O	0000002109	PETERSEN, VIRGINIA W.	02/02/2021		78.68		
GC	041657	O	0000000122	TOWN OF CHASE CITY	02/02/2021		830.13		
GC	041658	O	0000001030	TREASURER OF VIRGINIA	02/02/2021		2,837.00		
GC	041659	O	0000002679	TROTTINRIDGE COMMERCIAL PROPERTIES LLC	02/02/2021		115.80		
GC	041660	O	0000001288	TYLER TECHNOLOGIES, INC.	02/02/2021		5,731.46		
GC	041661	O	0000001495	VERIZON	02/02/2021		66.77		
GC	041662	O	0000000846	VIRGINIA COOPERATIVE EXTENSION - NOTTOWAY COUNTY	02/02/2021		10.00		
GC	041663	O	0000000906	VIRGINIA QUILTING, INC.	02/02/2021		80.00		
GC	041664	O	0000000014	AUTO PARTS & EQUIP. CO., INC.	02/05/2021		23.55		
GC	041665	O	0000000182	CHASE CITY FLOWER SHOP	02/05/2021		41.86		
GC	041666	O	0000000024	CHASE CITY VOLUNTEER FIRE DEPT	02/05/2021		55.16		
GC	041667	O	0000001096	DCLS	02/05/2021		187.61		
GC	041668	O	0000000290	DEPARTMENT OF MOTOR VEHICLES	02/05/2021		225.00		
GC	041669	O	0000000032	F-A AUTOMOTIVE PARTS, INC.	02/05/2021		149.69		
GC	041670	O	0000001705	GRAHAM HARDWARE	02/05/2021		185.60		
GC	041671	O	0000002667	JACK & SON REFRIGERATION SERVICE	02/05/2021		167.95		
GC	041672	O	0000002748	KIMBALL MIDWEST	02/05/2021		54.67		
GC	041673	O	0000000398	MARK ROSE	02/05/2021		4,486.97		
GC	041674	O	0000000054	PARKER OIL CO., INC.	02/05/2021		1,637.63		
GC	041675	O	0000001532	PIONEER RESEARCH CORPORATION	02/05/2021		179.90		
GC	041676	O	0000002777	RAY'S AUTO SUPPLY	02/05/2021		578.76		
GC	041677	O	0000001534	ROBERT BONDURANT	02/05/2021		275.00		
GC	041678	O	0000000882	SOSMETAL PRODUCTS, INC.	02/05/2021				

Town of Chase City
Including all check statuses
For Bank Id GC and Check Date from 02/01/2021 to 02/28/2021

BANK ID	CHECK #	STATUS	VENDOR #	VENDOR NAME	CHECK DATE	RECONCILE / VOID DATE	AMOUNT	EFT	D
GC	041679	O	0000000286	SOUTHERN CORROSION INC.	02/05/2021		12,479.91		
GC	041680	O	0000002390	SOUTHSIDE REGIONAL PUBLIC	02/05/2021		3,643.60		
GC	041681	O	0000000461	SPAULDING EQUIPMENT CO., INC.	02/05/2021		357.00		
GC	041682	O	0000001449	VERIZON WIRELESS	02/05/2021		885.22		
GC	041683	O	0000001828	VIRGINIA UTILITY PROTECTION SERVICE, INC.	02/05/2021		91.35		
GC	041684	O	0000000895	XYLEM WATER SOLUTIONS U.S.A., INC.	02/05/2021		2,478.00		
GC	041685	O	0000001536	HH TECHNOLOGIES, INC.	02/11/2021		2,198.00		
GC	041686	O	0000001668	BENTON-THOMAS OFFICE PRODUCTS	02/11/2021		494.41		
GC	041687	O	0000000088	CHASE CITY CHAMBER OF COMMERCE	02/11/2021		50.00		
GC	041688	O	0000000024	CHASE CITY VOLUNTEER FIRE DEPT	02/11/2021		5,207.93		
GC	041689	O	0000000566	COLUMBIA GAS OF VIRGINIA	02/11/2021		2,076.38		
GC	041690	O	0000000072	DOMINION ENERGY VIRGINIA	02/11/2021		4,146.32		
GC	041691	O	0000000036	FUEL FREEDOM CARD	02/11/2021		2,805.29		
GC	041692	O	0000001207	FUSION, LLC	02/11/2021		16.36		
GC	041693	O	0000000135	JIM'S SUPPLY OF VA., INC.	02/11/2021		259.45		
GC	041694	O	0000001535	LERETA LLC	02/11/2021		246.05		
GC	041695	O	0000001285	MARKS SEAMLESS GUTTERS	02/11/2021		650.00		
GC	041696	O	0000000065	MECKLENBURG SUN	02/11/2021		117.00		
GC	041697	O	0000000634	T & J FARM EQUIPMENT SALES, INC.	02/11/2021		40.29		
GC	041698	O	0000001288	TYLER TECHNOLOGIES, INC.	02/11/2021		70.03		
GC	041699	O	0000000037	VERIZON	02/11/2021		131.16		
GC	041700	O	0000000083	XEROX CORPORATION	02/11/2021		44.70		
GC	041701	O	0000001537	HOLLAND INDUSTRIAL	02/11/2021		7,526.43		
GC	041702	O	0000000322	ROANOKE RIVER SERVICE AUTHORITY	02/11/2021		18,912.96		
GC	041703	O	0000000604	ADVANCE AUTO PARTS	02/19/2021		414.56		
GC	041704	O	0000001455	ALDEN FAHRINGER	02/19/2021		333.33		
GC	041705	O	0000000015	B & B CONSULTANTS, INC. (CC)	02/19/2021		4,519.20		
GC	041706	O	0000000802	COMCAST COMMUNICATIONS	02/19/2021		322.72		
GC	041707	O	0000000072	DOMINION ENERGY VIRGINIA	02/19/2021		357.72		
GC	041708	O	0000002807	THE NEWS-PROGRESS	02/19/2021		124.84		
GC	041709	O	0000001527	THOMSON REUTERS - WEST	02/19/2021		101.67		
GC	041710	O	0000001495	VERIZON	02/19/2021		67.62		
GC	041711	O	0000000077	WHOLESALE PARTS, INC.	02/19/2021		327.85		
GC	041712	O	0000000004	ANTHEM BLUE CROSS & BLUE SHIELD	02/26/2021		21		

Selective Check Register

Town of Chase City

Including all check statuses

For Bank Id GC and Check Date from 02/01/2021 to 02/28/2021

BANK ID	CHECK #	STATUS	VENDOR #	VENDOR NAME	CHECK DATE	RECONCILE / VOID DATE	AMOUNT	EFT	D
GC	041713	O	0000001351	ARAMARK	02/26/2021		1,146.73		
GC	041714	O	0000000016	B & B CONSULTANTS, INC. (SH)	02/26/2021		1,095.00		
GC	041715	O	0000000026	CLARKSVILLE AUTO SUPPLY, INC.	02/26/2021		293.88		
GC	041716	O	0000001287	DEERFIELD FENCE CO. LLC	02/26/2021		3,600.00		
GC	041717	O	0000000072	DOMINION ENERGY VIRGINIA	02/26/2021		1,306.57		
GC	041718	O	0000001302	ELLIOTT ELECTRIC, INC.	02/26/2021		120.00		
GC	041719	O	0000001427	FERGUSON ENTERPRISES, INC. #1938 #5	02/26/2021		538.10		
GC	041720	V	0000001942	FIRST CITIZENS BANK	02/26/2021		0.00		
GC	041721	O	0000001942	FIRST CITIZENS BANK	02/26/2021		2,530.34		
GC	041722	O	0000001350	FORBES, CHARLES F.	02/26/2021		93.52		
GC	041723	O	0000002666	GALLS, LLC	02/26/2021		245.27		
GC	041724	O	0000001254	GreatAmerica Financial Svcs.	02/26/2021		33.68		
GC	041725	O	0000002748	KIMBALL MIDWEST	02/26/2021		205.96		
GC	041726	O	0000000587	LINCOLN FINANCIAL GROUP	02/26/2021		614.24		
GC	041727	O	0000000043	MECKLENBURG ELECTRIC COOPERATIVE	02/26/2021		832.61		
GC	041728	O	0000001136	MOBILE COMMUNICATIONS AMERICA, INC.	02/26/2021		95.50		
GC	041729	O	0000002086	PETERSEN, VIRGINIA W	02/26/2021		21.28		
GC	041730	O	0000001898	PITNEY BOWES POSTAGE BY PHONE	02/26/2021		320.99		
GC	041731	O	0000001261	SHARE CORPORATION	02/26/2021		1,544.51		
GC	041732	O	0000000882	SOSMETAL PRODUCTS, INC.	02/26/2021		319.71		
GC	041733	O	0000001466	TERRI GOLLHARDT	02/26/2021		12.37		
GC	041734	O	0000000068	U. S. POST OFFICE	02/26/2021		395.28		
GC	041735	O	0000000083	XEROX CORPORATION	02/26/2021		58.22		
Bank ID:	**GC**	**Name:**	**General Checking**	**Checking Account #:**	**0206906508**	**Bank ID Totals:**	**137,278.72**		
						Report Totals:	**137,278.72**		

ACCOUNT	DESCRIPTION	ANNUAL BUDGET	CURRENT PERIOD	YEAR TO DATE	% USED	BUDGET REMAINING	PRIOR YEAR TO DATE
Total Revenues		**5,669,638.00**	**509,415.71**	**3,683,588.36**	**64.97**	**1,986,049.64**	**2,686,052.12**
Total Expenditures		**5,669,638.00**	**311,229.60**	**3,504,750.59**	**61.82**	**2,164,887.41**	**2,567,718.22**
Excess of Revenues over Expenditures for Report			**198,186.11**	**178,837.77**		**4,150,937.05**	**118,333.90**

Statement of Revenues & Expenditures

Town of Chase City
For Period Ending 02/28/2021

ACCOUNT	DESCRIPTION	ANNUAL BUDGET	CURRENT PERIOD	YEAR TO DATE	% USED	BUDGET REMAINING	PRIOR YEAR TO DATE
10-0011-0101	CURRENT TAXES	485,000.00	72,063.96	480,519.19	99.08	4,480.81	477,920.08
10-0011-0102	DELINQUENT TAXES	30,000.00	1,301.42	19,069.18	63.56	10,930.82	20,242.87
10-0011-0103	PPTR FROM STATE	66,000.00		65,899.09	99.85	100.91	65,899.09
10-0011-0501	CAPITAL CREDITS MECK EL	750.00		125.59	16.75	624.41	270.07
10-0011-0601	PENALTY ON TAXES	6,500.00	1,415.32	3,176.07	48.86	3,323.93	3,735.15
10-0011-0602	INTEREST ON TAXES	4,700.00	222.73	2,282.75	48.57	2,417.25	2,155.50
10-0011-0603	ADMIN FEE FOR DELINQUEN	10,500.00	390.00	6,561.97	62.49	3,938.03	5,627.18
10-0011-0604	DEBT SET OFF	1,100.00		172.50	15.68	927.50	214.29
Totals for : 0011 (GENERAL PROPERTY TAXES)		**604,550.00**	**75,393.43**	**577,806.34**	**95.58**	**26,743.66**	**576,064.23**
10-0012-0101	SALES TAX	280,000.00		179,097.75	63.96	100,902.25	181,389.48
10-0012-0102	GAME OF SKILL TAX			432.00		432.00-	
10-0012-0302	BUSINESS LICENSE	120,000.00	50,374.94	60,238.46	50.20	59,761.54	56,462.55
10-0012-0402	UTILITY TAX	82,000.00	6,532.01	45,720.37	55.76	36,279.63	46,602.34
10-0012-0501	MOTOR VEHICLES	26,000.00	13,137.09	16,464.57	63.33	9,535.43	15,188.29
10-0012-0601	BANK FRANCHISE TAX	73,000.00				73,000.00	
10-0012-0604	GOLF CART PERMITS			50.00		50.00-	
10-0012-1101	MEALS TAX	205,000.00	18,940.34	139,666.74	68.13	65,333.26	132,662.86
Totals for : 0012 (OTHER LOCAL TAXES)		**786,000.00**	**88,984.38**	**441,669.89**	**56.19**	**344,330.11**	**432,305.52**
10-0013-0307	ZONING APPEALS	400.00		440.00	110.00	40.00-	90.00
Totals for : 0013 (PERMIT/PREV & REG LICENSE)		**400.00**		**440.00**	**110.00**	**40.00-**	**90.00**
10-0014-0101	POLICE COURT FINES	29,000.00	2,944.94	22,104.33	76.22	6,895.67	19,329.01
10-0014-0102	PARKING FINES	1,285.00	347.23	747.23	58.15	537.77	750.00
10-0014-0103	MISCELLANEOUS REVENUE	900.00		6,092.00	676.89	5,192.00-	50.00
10-0014-0104	DRUG FORFEITURE	7,000.00		4,265.62	60.94	2,734.38	
Totals for : 0014 (FINES & FORFEITURES)		**38,185.00**	**3,292.17**	**33,209.18**	**86.97**	**4,975.82**	**20,129.01**
10-0015-0101	INTEREST EARNED	17,500.00	346.80	1,889.94	10.80	15,610.06	11,324.86
10-0015-0102	ROBERT E LEE INT INCOME	15.00	0.32	1.92	12.80	13.08	9.39
10-0015-0201	RENT-A-TRUCK	500.00				500.00	66.80
10-0015-0202	ROBERT E. LEE BLDG	3,000.00		150.00	5.00	2,850.00	1,778.82
10-0015-0206	AIRPORT HANGER, SHOP RE	5,400.00	500.00	4,000.00	74.07	1,400.00	2,450.00
Totals for : 0015 (USE OF MONEY & PROPERTY)		**26,415.00**	**847.12**	**6,041.86**	**22.87**	**20,373.14**	**15,629.87**
10-0016-0702	SIDEWALKS, CURB & GUTT	3,500.00				3,500.00	
10-0016-0802	GARBAGE FEES	210,000.00	17,766.80	144,612.01	68.86	65,387.99	119,074.71
10-0016-0803	WEED CUTTING CHARGES	5,500.00		2,200.00	40.00	3,300.00	1,025.00
10-0016-0805	DEBRIS & JUNK REMOVAL	1,000.00				1,000.00	45.00
10-0016-0813	PENALTIES - GA	7,500.00	861.40	5,231.20	69.75	2,268.80	3,342.46
Totals for : 0016 (CHARGES FOR SERVICES)		**227,500.00**	**18,628.20**	**152,043.21**	**66.83**	**75,456.79**	**123,487.17**
10-0018-9905	DMV REGISTRATION STOP	2,000.00	150.00	1,282.38	64.12	717.62	1,425.00
10-0018-9909	SURPLUS EQUIPMENT	2,000.00	2,584.00	5,908.00	295.40	3,908.00-	
10-0018-9913	MISCELLANEOUS REVENUE	20,000.00	151,206.92	190,914.37	954.57	170,914.37-	

ACCOUNT	DESCRIPTION	ANNUAL BUDGET	CURRENT PERIOD	YEAR TO DATE	% USED	BUDGET REMAINING	PRIOR YEAR TO DATE
10-0018-9915	MECK. CO. FOR AIRPORT	10,000.00		10,000.00	100.00	0.00	
10-0018-9916	COVID - MECKLENBURG CO		10,000.00	165,837.90		165,837.90-	
Totals for : 0018 (MISC REVENUE)		**34,000.00**	**163,940.92**	**373,942.65**	**1,099.83**	**339,942.65-**	**9,386.84**
10-0019-0214	VRSA - RISK MANAGEMENT			2,000.00		2,000.00-	
10-0019-4000	RECOVERED COSTS-FIRE D	56,394.00				56,394.00	
Totals for : 0019 (RECOVERED COSTS)		**56,394.00**		**2,000.00**	**3.55**	**54,394.00**	
10-0022-0108	ROLLING STOCK TAX	1,400.00		1,266.32	90.45	133.68	1,293.48
Totals for : 0022 (STATE - NON CATAGORICAL AID)		**1,400.00**		**1,266.32**	**90.45**	**133.68**	**1,293.48**
10-0024-0406	STREET REVENUE	470,000.00		234,293.82	49.85	235,706.18	232,449.14
10-0024-0407	LITTER GRANT	1,600.00		1,165.00	72.81	435.00	1,014.00
10-0024-0412	FIRE PROGRAM FUND	15,000.00		15,000.00	100.00	0.00	10,000.00
10-0024-0414	LAW ENFORCEMENT ASSIS	63,000.00		31,684.00	50.29	31,316.00	31,684.00
10-0024-0421	HIGHWAY SAFETY GRANT	6,500.00		4,810.54	74.01	1,689.46	2,527.34
10-0024-0450	COMMUNICATION TAX	50,000.00	3,353.32	27,159.52	54.32	22,840.48	29,248.03
10-0024-0451	U-HAUL CO OF VIRGINIA	900.00	150.63	1,083.50	120.39	183.50-	263.22
Totals for : 0024 (STATE - CATAGORICAL AID)		**607,000.00**	**3,503.95**	**315,196.38**	**51.93**	**291,803.62**	**307,185.73**
10-0033-0103	LLEBG FUNDS			3,901.00		3,901.00-	
Totals for : 0033 (FEDERAL - CATAGORICAL AID)				**3,901.00**	**0.00**	**3,901.00-**	
10-0041-0101	INSURANCE PROCEEDS		3,600.00-	5,039.70-		5,039.70	29,570.74
10-0041-0119	LODA INSURANCE PROCEEI		2,837.00-	17,143.00		17,143.00-	10,920.00
10-0041-0418	LOAN PROCEEDS			31,851.50		31,851.50-	
Totals for : 0041 (NON-REVENUE RECEIPTS)			**6,437.00-**	**43,954.80**	**0.00**	**43,954.80-**	**40,490.74**
Total Revenues		**2,381,844.00**	**348,153.17**	**1,951,471.63**	**81.93**	**430,372.37**	**1,526,062.59**
10-1101-1100	SALARIES & WAGES - REGU	29,000.00	1,856.87	17,854.98	61.57	11,145.02	21,146.50
10-1101-2100	FICA	1,345.00	106.80	858.48	63.83	486.52	1,091.38
10-1101-2210	RETIREMENT (VRS)	1,100.00	151.41	1,135.17	103.20	35.17-	650.51
10-1101-2300	HEALTH INSURANCE	3,840.00	320.00	2,560.00	66.67	1,280.00	2,444.00
10-1101-2400	GROUP LIFE INSURANCE	340.00	30.16	237.77	69.93	102.23	219.57
10-1101-2600	UNEMPLOYMENT INSURAN	10.00		8.64	86.40	1.36	1.52
10-1101-2700	DISABILITY INSURANCE	250.00	15.68	120.66	48.26	129.34	166.36
10-1101-2720	WORKER'S COMP	120.00		78.12	65.10	41.88	58.00
10-1101-3103	BUILDING OFFICIAL/DEMOLI	20,000.00	65.00	15,702.00	78.51	4,298.00	1,957.45
10-1101-3500	PRINTING & BINDING	2,200.00		2,386.28	108.47	186.28-	148.27
10-1101-3600	ADVERTISING	200.00		200.00	100.00	0.00	200.00
10-1101-5510	TRAVEL (MILEAGE)	500.00				500.00	
10-1101-5530	TRAVEL (SUBSIST/LODGING	2,000.00		47.12	2.36	1,952.88	
10-1101-5540	TRAVEL (CONVENTION/EDU	250.00		539.00	215.60	289.00-	
10-1101-5810	DUES & ASSOC MEMBERSHI	1,300.00		1,288.50	99.12	11.50	

ACCOUNT	DESCRIPTION	ANNUAL BUDGET	CURRENT PERIOD	YEAR TO DATE	% USED	BUDGET REMAINING	PRIOR YEAR TO DATE
10-1101-5898	HALLOWEEN - TRUNK OR T	500.00		83.49	16.70	416.51	200.00
10-1101-5899	MISCELLANEOUS	400.00	41.86	441.90	110.48	41.90-	171.63
10-1101-8103	WEB PAGE DESIGN			125.00		125.00-	
Totals for : 1101 (LEGISLATIVE)		**63,355.00**	**2,587.78**	**43,667.11**	**68.92**	**19,687.89**	**29,747.19**
10-1201-1100	SALARIES & WAGES - REGU	75,400.00	6,296.26	50,370.08	66.80	25,029.92	40,933.82
10-1201-1302	TOWN MANAGER - INTERIM					0.00	8,790.83
10-1201-2100	FICA	5,550.00	459.38	3,675.04	66.22	1,874.96	2,983.72
10-1201-2210	RETIREMENT (VRS)	3,000.00	404.00	3,029.00	100.97	29.00-	1,735.77
10-1201-2300	HEALTH INSURANCE					0.00	611.00
10-1201-2400	GROUP LIFE INSURANCE	620.00	79.99	630.44	101.68	10.44-	582.15
10-1201-2600	UNEMPLOYMENT INSURAN	20.00		21.59	107.95	1.59-	3.80
10-1201-2700	DISABILITY INSURANCE	500.00	39.07	308.35	61.67	191.65	370.69
10-1201-2720	WORKER'S COMP	280.00		182.31	65.11	97.69	130.48
10-1201-3110	MEDICAL SERVICES	500.00				500.00	
10-1201-3140	ENG. & ARCHITECTURAL SE	250.00				250.00	
10-1201-3160	SURVEYING	250.00		700.00	280.00	450.00-	
10-1201-3600	ADVERTISING	7,500.00	52.00	1,111.90	14.83	6,388.10	3,120.77
10-1201-5230	TELECOMMUNICATIONS	2,300.00	218.44	1,959.05	85.18	340.95	979.95
10-1201-5510	TRAVEL (MILEAGE)	1,700.00	93.52	637.23	37.48	1,062.77	691.84
10-1201-5530	TRAVEL (SUBSIST/LODGING	2,500.00	275.00	330.50	13.22	2,169.50	951.06
10-1201-5540	TRAVEL (CONVENTION/EDU	1,000.00		250.00	25.00	750.00	640.00
10-1201-5810	DUES & ASSOC MEMBERSHI	850.00	50.00	505.50	59.47	344.50	450.00
10-1201-5899	MISCELLANEOUS	400.00		400.00	100.00	0.00	400.00
10-1201-6001	OFFICE SUPPLIES	700.00		787.77	112.54	87.77-	508.66
Totals for : 1201 (EXECUTIVE ADMIN - TOWN MGR)		**103,320.00**	**7,967.66**	**64,898.76**	**62.81**	**38,421.24**	**63,884.54**
10-1221-3150	PROF SRV - LEGAL	8,000.00		2,672.07	33.40	5,327.93	10,506.40
Totals for : 1221 (LEGAL SERVICES)		**8,000.00**		**2,672.07**	**33.40**	**5,327.93**	**10,506.40**
10-1224-3120	PROF SRV - ACCOUNTING	11,300.00		11,375.00	100.66	75.00-	11,100.00
Totals for : 1224 (INDEPENDANT AUDITOR)		**11,300.00**		**11,375.00**	**100.66**	**75.00-**	**11,100.00**
10-1241-1100	SALARIES & WAGES - REGU	110,000.00	9,069.90	72,559.20	65.96	37,440.80	73,675.71
10-1241-2100	FICA	7,400.00	610.20	4,883.73	66.00	2,516.27	4,975.12
10-1241-2210	RETIREMENT (VRS)	5,000.00	650.61	4,877.87	97.56	122.13	2,795.27
10-1241-2300	HEALTH INSURANCE	19,200.00	1,600.00	12,800.00	66.67	6,400.00	14,053.00
10-1241-2400	GROUP LIFE INSURANCE	1,760.00	145.03	1,143.02	64.94	616.98	1,055.52
10-1241-2600	UNEMPLOYMENT INSURAN	20.00		32.40	162.00	12.40-	5.72
10-1241-2700	DISABILITY INSURANCE	780.00	52.65	424.55	54.43	355.45	520.70
10-1241-2720	WORKER'S COMP	510.00		332.11	65.12	177.89	250.96
10-1241-2730	ACTUARIAL VALUATION OP	2,000.00		4,700.00	235.00	2,700.00-	2,000.00
10-1241-3310	REPAIRS & MAINTENANCE	2,000.00		929.62	46.48	1,070.38	2,000.00
10-1241-3600	ADVERTISING	500.00	124.84	124.84	24.97	375.16	
10-1241-3605	LEGAL FEES FOR ADV DEL	900.00		899.66	99.96	0.34	

ACCOUNT	DESCRIPTION	ANNUAL BUDGET	CURRENT PERIOD	YEAR TO DATE	% USED	BUDGET REMAINING	PRIOR YEAR TO DATE
10-1241-3606	DMV REGISTRATION STOP F	1,000.00	225.00	1,325.00	132.50	325.00-	1,525.00
10-1241-5210	POSTAGE	3,900.00	819.94	3,380.58	86.68	519.42	3,062.97
10-1241-5230	TELECOMMUNICATIONS	2,300.00	218.44	1,774.04	77.13	525.96	764.89
10-1241-5308	GENERAL LIABILITY INS.	9,050.00		7,288.80	80.54	1,761.20	4,517.32
10-1241-5410	EQUIPMENT RENTAL	2,000.00	102.92	1,123.36	56.17	876.64	1,142.43
10-1241-5510	TRAVEL (MILEAGE)	1,000.00	21.28	246.00	24.60	754.00	302.81
10-1241-5530	TRAVEL (SUBSIST/LODGING	600.00				600.00	
10-1241-5540	TRAVEL (CONVENTION/EDU	600.00		251.49	41.92	348.51	
10-1241-5810	DUES & ASSOC MEMBERSHI	110.00		110.00	100.00	0.00	110.00
10-1241-5899	MISCELLANEOUS	700.00		92.45	13.21	607.55	513.09
10-1241-6001	OFFICE SUPPLIES	7,100.00	506.89	5,533.65	77.94	1,566.35	5,667.99
Totals for : 1241 (FINANCIAL ADMIN - TREASURER)		**178,430.00**	**14,147.70**	**124,832.37**	**69.96**	**53,597.63**	**119,093.15**
10-1251-3320	MAINT SERVICE CONTRACT	14,000.00		14,200.00	101.43	200.00-	19,145.00
10-1251-6014	OTHER OPERATING SUPPLI	1,600.00	560.00	1,157.30	72.33	442.70	1,348.13
10-1251-8207	COMPUTER - CENTRALIZED	2,000.00		912.94	45.65	1,087.06	777.94
Totals for : 1251 (COMPUTER PROCESSING)		**17,600.00**	**560.00**	**16,270.24**	**92.44**	**1,329.76**	**21,271.07**
10-3110-1100	SALARIES & WAGES - REGU	455,500.00	37,538.74	302,171.52	66.34	153,328.48	294,168.95
10-3110-1150	SALARIES & WAGES - HOLI	32,000.00	1,600.32	20,804.16	65.01	11,195.84	21,013.56
10-3110-1183	SHOP LABOR	5,800.00	128.36	2,080.50	35.87	3,719.50	3,732.16
10-3110-1200	SALARIES & WAGES - OVER	24,500.00	623.50	11,177.85	45.62	13,322.15	15,585.38
10-3110-1300	SALARIES & WAGES - PART	7,000.00	81.04	1,256.12	17.94	5,743.88	5,823.52
10-3110-2100	FICA	38,600.00	2,915.20	24,671.97	63.92	13,928.03	24,908.17
10-3110-2210	RETIREMENT (VRS)	19,000.00	2,536.46	19,016.98	100.09	16.98-	10,897.65
10-3110-2300	HEALTH INSURANCE	76,800.00	6,400.00	51,200.00	66.67	25,600.00	49,491.00
10-3110-2400	GROUP LIFE INSURANCE	4,200.00	377.39	2,974.26	70.82	1,225.74	2,746.53
10-3110-2600	UNEMPLOYMENT INSURAN	60.00		187.89	313.15	127.89-	33.15
10-3110-2700	DISABILITY INSURANCE	2,800.00	199.34	1,625.86	58.07	1,174.14	1,903.89
10-3110-2720	WORKER'S COMP	7,600.00		4,948.81	65.12	2,651.19	3,701.90
10-3110-2740	LINE OF DUTY ACT	19,500.00		18,668.25	95.73	831.75	8,162.00
10-3110-3110	MEDICAL SERVICES	2,500.00				2,500.00	173.00
10-3110-3151	COURT APPOINTED ATTORN	1,000.00		680.00	68.00	320.00	
10-3110-3310	REPAIRS & MAINTENANCE	3,000.00		3,457.23	115.24	457.23-	314.60
10-3110-3320	COMPUTER - MAINT/SER C	6,810.00	5,801.49	6,368.49	93.52	441.51	
10-3110-3330	REPAIRS & MAINT - VEHICL	4,000.00		743.89	18.60	3,256.11	82.59
10-3110-5210	POSTAGE	400.00				400.00	
10-3110-5230	TELECOMMUNICATIONS	11,000.00	1,366.90	9,463.56	86.03	1,536.44	3,278.18
10-3110-5305	MOTOR VEHICLE INS.	3,400.00		2,738.34	80.54	661.66	1,673.44
10-3110-5310	LAW ENF. LIABILITY INS.	6,200.00		4,993.44	80.54	1,206.56	3,069.38
10-3110-5530	TRAVEL (SUBSIST/LODGING	1,000.00				1,000.00	
10-3110-5540	TRAVEL (CONVENTION/EDU	5,000.00		4,445.00	88.90	555.00	3,904.90
10-3110-5804	TO EXPEND FORFEITURE M	2,500.00		5,234.77	209.39	2,734.77-	
10-3110-5805	DRUG ENFORCEMENT	5,100.00		2,550.00	50.00	2,550.00	
10-3110-5807	LLEBG					0.00	

ACCOUNT	DESCRIPTION	ANNUAL BUDGET	CURRENT PERIOD	YEAR TO DATE	% USED	BUDGET REMAINING	PRIOR YEAR TO DATE
10-3110-5809	TO EXPEND SAFETY GRANT			2,000.00		2,000.00-	
10-3110-5810	DUES & ASSOC MEMBERSHI	100.00				100.00	100.00
10-3110-5812	TO EXPEND MAC BAILEY DO			1,423.98		1,423.98-	
10-3110-5899	MISCELLANEOUS	1,000.00				1,000.00	101.56
10-3110-6001	OFFICE SUPPLIES	2,500.00	1,237.78	1,708.35	68.33	791.65	1,140.45
10-3110-6008	VEHICLE/POWER EQUIP FU	21,000.00	1,671.60	11,064.93	52.69	9,935.07	12,947.76
10-3110-6009	VEHICLE/POWER EQUIP SU	7,000.00	17.48	2,208.81	31.55	4,791.19	3,380.51
10-3110-6010	POLICE SUPPLIES	7,500.00		187.46	2.50	7,312.54	729.59
10-3110-6011	UNIFORMS	6,000.00	245.27	1,612.96	26.88	4,387.04	3,653.43
10-3110-6014	OTHER OPERATING SUPPLI	2,000.00		514.02	25.70	1,485.98	370.61
10-3110-8210	PUBLIC SAFETY SYSTEM U	10,000.00				10,000.00	4,447.53
Totals for : 3110 (POLICE DEPARTMENT)		**802,370.00**	**62,740.87**	**522,179.40**	**65.08**	**280,190.60**	**484,910.39**
10-3220-1100	SALARIES & WAGES - REGU					0.00	4,869.00
10-3220-1183	SHOP LABOR	650.00				650.00	632.40
10-3220-2100	FICA	60.00				60.00	45.86
10-3220-3110	MEDICAL SERVICES					0.00	1,554.00
10-3220-3310	REPAIRS & MAINTENANCE	9,500.00	1,121.42	2,915.56	30.69	6,584.44	3,077.84
10-3220-3316	COVID-19			98,257.72		98,257.72-	
10-3220-5230	TELECOMMUNICATIONS					0.00	2,052.59
10-3220-5305	MOTOR VEHICLE INS.	5,911.00		6,695.16	113.27	784.16-	2,955.38
10-3220-5312	FIREMEN LIABILITY INS.	5,300.00		4,946.00	93.32	354.00	5,170.00
10-3220-5530	TRAVEL (SUBSIST/LODGING					0.00	119.42
10-3220-5540	TRAVEL (CONVENTION/EDU					0.00	70.00
10-3220-5840	STATE FIRE PROGRAM FUN	15,000.00		15,000.00	100.00	0.00	10,000.00
10-3220-6008	VEHICLE/POWER EQUIP FU	5,000.00	491.16	3,006.60	60.13	1,993.40	3,171.84
10-3220-6009	VEHICLE/POWER EQUIP SU	1,600.00				1,600.00	230.72
10-3220-6014	OTHER OPERATING SUPPLI					0.00	1,231.15
10-3220-8204	FIRE HOSE					0.00	1,000.00
10-3220-8206	TURN OUT GEAR (1/2) ON 1					0.00	947.13
10-3220-8213	FIRE DEPARTMENT STIPEN	49,700.00	4,141.67	33,133.36	66.67	16,566.64	
Totals for : 3220 (FIRE DEPARTMENT)		**92,721.00**	**5,754.25**	**163,954.40**	**176.83**	**71,233.40-**	**37,127.33**
10-3230-5641	RESCUE SQUAD DONATION	1,000.00		1,000.00	100.00	0.00	1,000.00
Totals for : 3230 (RESCUE SQUAD)		**1,000.00**		**1,000.00**	**100.00**	**0.00**	**1,000.00**
10-4120-1100	SALARIES & WAGES - REGU	145,000.00	10,392.96	93,595.57	64.55	51,404.43	77,626.83
10-4120-1183	SHOP LABOR	19,000.00	1,251.51	10,806.31	56.88	8,193.69	12,189.05
10-4120-1200	SALARIES & WAGES - OVER	4,100.00	1,958.65	3,675.13	89.64	424.87	1,623.58
10-4120-1300	SALARIES & WAGES - PART			3,789.00		3,789.00-	
10-4120-2100	FICA	12,000.00	962.61	8,067.01	67.23	3,932.99	6,472.15
10-4120-2210	RETIREMENT (VRS)	8,000.00	1,056.86	7,923.75	99.05	76.25	4,540.67
10-4120-2211	RETIREMENT (HYBRID)	5,800.00	813.66	6,462.15	111.42	662.15-	4,088.41
10-4120-2300	HEALTH INSURANCE	28,416.00	2,368.00	20,864.00	73.42	7,552.00	
10-4120-2400	GROUP LIFE INSURANCE	3,000.00	246.59	1,943.41	64.78	1,056.59	

ACCOUNT	DESCRIPTION	ANNUAL BUDGET	CURRENT PERIOD	YEAR TO DATE	% USED	BUDGET REMAINING	PRIOR YEAR TO DATE
10-4120-2600	UNEMPLOYMENT INSURAN	50.00		53.99	107.98	3.99-	9.52
10-4120-2700	DISABILITY INSURANCE	700.00	56.42	485.52	69.36	214.48	476.68
10-4120-2720	WORKER'S COMP	5,000.00		3,255.81	65.12	1,744.19	2,427.60
10-4120-3310	REPAIRS & MAINTENANCE	100,000.00		100,000.00	100.00	0.00	
10-4120-5140	STREET LIGHTS - ELECTRIC	62,000.00	4,822.23	38,495.28	62.09	23,504.72	40,227.07
10-4120-5220	FREIGHT & EXPRESS	100.00		100.00	100.00	0.00	48.00
10-4120-5230	TELECOMMUNICATIONS	1,200.00	0.49	588.80	49.07	611.20	850.94
10-4120-5305	MOTOR VEHICLE INS.	4,000.00		3,221.58	80.54	778.42	1,951.92
10-4120-5510	TRAVEL (MILEAGE)	300.00				300.00	
10-4120-5530	TRAVEL (SUBSIST/LODGING	200.00		22.26	11.13	177.74	84.28
10-4120-5540	TRAVEL (CONVENTION/EDU	700.00	10.00	273.34	39.05	426.66	30.00
10-4120-5899	MISCELLANEOUS	700.00		700.00	100.00	0.00	278.22
10-4120-6008	VEHICLE/POWER EQUIP FU	9,000.00	347.36	3,162.73	35.14	5,837.27	4,328.89
10-4120-6009	VEHICLE/POWER EQUIP SU	16,000.00	1,095.92	11,404.05	71.28	4,595.95	9,035.15
10-4120-6011	UNIFORMS	14,000.00	1,146.73	9,249.16	66.07	4,750.84	4,293.00
10-4120-6014	OTHER OPERATING SUPPLI	40,000.00	4,988.07	31,425.18	78.56	8,574.82	20,426.88
10-4120-6016	OTHER OPER SUPPLIES X-	30,000.00		30,646.55	102.16	646.55-	334.18
10-4120-8105	MOTOR VEHICLES - REPLA	15,000.00		46,872.79	312.49	31,872.79-	
Totals for : 4120 (HIGHWAYS/STREETS/BRIDGES/SIDE WALKS		**524,266.00**	**31,518.06**	**437,083.37**	**83.37**	**87,182.63**	**208,694.72**
10-4230-1100	SALARIES & WAGES - REGU	80,000.00	2,801.44	31,915.89	39.89	48,084.11	50,369.63
10-4230-1183	SHOP LABOR	17,000.00	1,251.51	10,970.19	64.53	6,029.81	10,691.65
10-4230-1200	SALARIES & WAGES - OVER	400.00		597.11	149.28	197.11-	262.80
10-4230-1300	SALARIES & WAGES - PART	32,000.00	2,983.15	26,409.98	82.53	5,590.02	21,485.99
10-4230-2100	FICA	9,300.00	508.34	5,032.57	54.11	4,267.43	5,973.86
10-4230-2210	RETIREMENT (VRS)	4,700.00	647.61	4,855.42	103.31	155.42-	2,782.37
10-4230-2300	HEALTH INSURANCE	13,056.00	1,088.00	8,093.00	61.99	4,963.00	13,197.60
10-4230-2400	GROUP LIFE INSURANCE	2,200.00	197.20	1,554.22	70.65	645.78	1,435.22
10-4230-2600	UNEMPLOYMENT INSURAN	50.00		48.58	97.16	1.42	8.56
10-4230-2700	DISABILITY INSURANCE	700.00	30.12	211.42	30.20	488.58	452.48
10-4230-2720	WORKER'S COMP	9,600.00		6,251.12	65.12	3,348.88	4,732.20
10-4230-3100	PROFESSIONAL SERVICES	38,000.00		6,588.98	17.34	31,411.02	3,300.25
10-4230-3171	TIPPING FEE	46,000.00	3,643.60	27,626.00	60.06	18,374.00	30,644.80
10-4230-3310	REPAIRS & MAINTENANCE	6,000.00		3,811.01	63.52	2,188.99	4,748.04
10-4230-5210	POSTAGE	800.00	59.29	464.65	58.08	335.35	462.68
10-4230-5230	TELECOMMUNICATIONS	1,500.00	0.48	588.76	39.25	911.24	850.83
10-4230-5305	MOTOR VEHICLE INS.	4,800.00		3,865.89	80.54	934.11	2,399.90
10-4230-5841	ANNUAL FEES - LANDFILL	1,200.00		1,172.00	97.67	28.00	1,149.00
10-4230-5899	MISCELLANEOUS	600.00		73.45	12.24	526.55	364.34
10-4230-6008	VEHICLE/POWER EQUIP FU	12,000.00	642.53	5,196.80	43.31	6,803.20	6,614.74
10-4230-6009	VEHICLE/POWER EQUIP SU	7,000.00	155.65	3,817.98	54.54	3,182.02	3,633.24
10-4230-6014	OTHER OPERATING SUPPLI	4,000.00	144.05	3,019.56	75.49	980.44	
10-4230-8106	EQUIP. - ADDITION - DUMPS	6,000.00		6,000.00	100.00	0.00	

ACCOUNT	DESCRIPTION	ANNUAL BUDGET	CURRENT PERIOD	YEAR TO DATE	% USED	BUDGET REMAINING	PRIOR YEAR TO DATE
Totals for : 4230 (REFUSE COLLECTION)		**296,906.00**	**14,152.97**	**158,164.58**	**53.27**	**138,741.42**	**172,852.84**
10-4320-1100	SALARIES & WAGES - REGU	42,000.00	2,873.68	24,775.57	58.99	17,224.43	26,051.73
10-4320-2100	FICA	3,100.00	208.85	1,807.93	58.32	1,292.07	1,899.37
10-4320-2210	RETIREMENT (VRS)	2,000.00	236.11	1,770.21	88.51	229.79	1,014.42
10-4320-2300	HEALTH INSURANCE	7,680.00	640.00	5,120.00	66.67	2,560.00	4,888.00
10-4320-2400	GROUP LIFE INSURANCE	560.00	49.27	388.27	69.33	171.73	358.56
10-4320-2600	UNEMPLOYMENT INSURAN	10.00		10.80	108.00	0.80-	1.90
10-4320-2700	DISABILITY INSURANCE	360.00	22.93	180.16	50.04	179.84	236.65
10-4320-2720	WORKER'S COMP	900.00		586.05	65.12	313.95	440.92
10-4320-3310	REPAIRS & MAINTENANCE	10,000.00	1,300.00	5,622.17	56.22	4,377.83	6,468.20
10-4320-3316	COVID-19			104,476.85		104,476.85-	
10-4320-5110	ELECTRIC	19,000.00	1,929.28	11,906.17	62.66	7,093.83	12,531.94
10-4320-5120	HEATING & FUEL	9,400.00	1,789.13	4,836.90	51.46	4,563.10	4,067.75
10-4320-5301	BOILER INSURANCE	2,904.00		2,338.86	80.54	565.14	1,451.94
10-4320-5304	PROPERTY INSURANCE	9,900.00		7,973.40	80.54	1,926.60	4,907.30
10-4320-5899	MISCELLANEOUS	400.00		400.00	100.00	0.00	188.99
10-4320-6005	JANITORIAL SUPPLIES	2,000.00	137.13	1,294.15	64.71	705.85	409.83
10-4320-6007	REPAIRS & MAINT SUPPLIE	4,000.00	426.11	1,533.29	38.33	2,466.71	2,495.61
10-4320-6009	VEHICLE/POWER EQUIP SU	1,000.00		1,433.36	143.34	433.36-	421.79
10-4320-6014	OTHER OPERATING SUPPLI	700.00		225.83	32.26	474.17	369.87
Totals for : 4320 (BUILDINGS AND GROUNDS)		**115,914.00**	**9,612.49**	**176,679.97**	**152.42**	**60,765.97-**	**68,204.77**
10-7120-5430	RENT FOR B'BALL COURT	675.00		800.00	118.52	125.00-	660.69
10-7120-5637	COMMUNITY DONATIONS	500.00				500.00	
10-7120-5639	VIRGINIA DEPT OF HISTORI					0.00	4,500.00
10-7120-5643	SOCCER DONATION	1,000.00				1,000.00	
10-7120-5644	MACCALLUM MORE GARDE	7,500.00		4,500.00	60.00	3,000.00	4,500.00
10-7120-5645	COMMUNITY PARK	1,000.00		50.00	5.00	950.00	
10-7120-5646	MECK. BUS. ED. FUND - DO	1,000.00		1,000.00	100.00	0.00	1,000.00
10-7120-5648	ROANOKE RIVER RAILS - T	100.00		100.00	100.00	0.00	100.00
10-7120-5649	MAIN STREET FACADE	5,000.00		1,000.00	20.00	4,000.00	
10-7120-6013	ED. & RECREATION SUPPLIE	500.00		33.99	6.80	466.01	393.95
Totals for : 7120 (PARKS/RECREATION/CULTURAL)		**17,275.00**		**7,483.99**	**43.32**	**9,791.01**	**11,154.64**
10-7150-3100	PROFESSIONAL SERVICES			3,019.11		3,019.11-	
10-7150-3310	REPAIRS & MAINTENANCE	2,155.00		1,480.54	68.70	674.46	220.84
10-7150-5110	ELECTRIC	2,000.00	230.27	1,227.00	61.35	773.00	1,235.55
10-7150-5230	TELECOMMUNICATIONS	810.00	67.62	535.47	66.11	274.53	529.77
10-7150-5309	AIRPORT LIABILITY INS.	2,700.00		2,688.00	99.56	12.00	2,688.00
10-7150-5899	MISCELLANEOUS	200.00				200.00	49.98
10-7150-6007	REPAIRS & MAINT SUPPLIE	2,000.00		256.30	12.82	1,743.70	530.35
10-7150-6014	OTHER OPERATING SUPPLI	135.00		33.55	24.85	101.45	28.00
Totals for : 7150 (AIRPORT)		**10,000.00**	**297.89**	**9,239.97**	**92.40**	**760.03**	

ACCOUNT	DESCRIPTION	ANNUAL BUDGET	CURRENT PERIOD	YEAR TO DATE	% USED	BUDGET REMAINING	PRIOR YEAR TO DATE
10-7260-3310	REPAIRS & MAINTENANCE	30,000.00	745.24	840.64	2.80	29,159.36	15,229.52
10-7260-5110	ELECTRIC	2,500.00	32.53	238.83	9.55	2,261.17	966.50
10-7260-5120	HEATING & FUEL	2,800.00	287.25	769.31	27.48	2,030.69	545.18
10-7260-6005	JANITORIAL SUPPLIES	300.00	20.97	20.97	6.99	279.03	234.39
10-7260-6007	REPAIRS & MAINT SUPPLIE	1,600.00		386.55	24.16	1,213.45	193.56
Totals for : 7260 (ROBERT E LEE COM. CTR.)		**37,200.00**	**1,085.99**	**2,256.30**	**6.07**	**34,943.70**	**17,169.15**
10-7320-3310	REPAIRS & MAINTENANCE	2,000.00		127.90	6.40	1,872.10	309.95
10-7320-5110	ELECTRIC	4,000.00	432.20	1,748.61	43.72	2,251.39	2,107.87
10-7320-5120	HEATING & FUEL	4,000.00	432.20	1,748.59	43.71	2,251.41	2,107.85
10-7320-5600	LIBRARY DONATION	4,775.00				4,775.00	
10-7320-6005	JANITORIAL SUPPLIES	500.00		104.90	20.98	395.10	278.81
10-7320-6007	REPAIRS & MAINT SUPPLIE	500.00	167.95	206.50	41.30	293.50	58.52
Totals for : 7320 (LIBRARY)		**15,775.00**	**1,032.35**	**3,936.50**	**24.95**	**11,838.50**	**4,863.00**
10-8110-3100	PROFESSIONAL SERVICES	100.00		15.00	15.00	85.00	7.50
10-8110-3600	ADVERTISING	100.00				100.00	100.00
10-8110-5210	POSTAGE	100.00				100.00	100.00
10-8110-5510	TRAVEL (MILEAGE)	50.00				50.00	
10-8110-5530	TRAVEL (SUBSIST/LODGING	100.00				100.00	100.00
10-8110-5540	TRAVEL (CONVENTION/EDU	100.00				100.00	100.00
10-8110-5810	DUES & ASSOC MEMBERSHI	100.00				100.00	100.00
Totals for : 8110 (PLANNING & ZONING)		**650.00**		**15.00**	**2.31**	**635.00**	**507.50**
10-8150-5210	POSTAGE	100.00				100.00	
10-8150-5640	CHAMBER OF COMMERCE/R	6,000.00		4,500.00	75.00	1,500.00	3,750.00
10-8150-5899	MISCELLANEOUS	2,000.00				2,000.00	2,000.00
Totals for : 8150 (ECONOMIC DEVELOPMENT)		**8,100.00**		**4,500.00**	**55.56**	**3,600.00**	**5,750.00**
10-9210-5830	REFUND ON TAXES	200.00				200.00	224.40
Totals for : 9210 (REVENUE REFUNDS)		**200.00**			**0.00**	**200.00**	**224.40**
10-9500-9110	DEBT SERVICE - PRINCIPAL	47,491.00				47,491.00	15,000.00
10-9500-9120	DEBT SERVICE - INTEREST	8,903.00				8,903.00	
Totals for : 9500 (NON-DEPARTMENTAL)		**56,394.00**			**0.00**	**56,394.00**	**15,000.00**
10-9990-0001	CONTINGENCY	21,068.00		9,610.00	45.61	11,458.00	8,001.50
Totals for : 9990 (CONTINGENCY)		**21,068.00**		**9,610.00**	**45.61**	**11,458.00**	**8,001.50**
Total Expenditures		**2,381,844.00**	**151,458.01**	**1,759,819.03**	**73.88**	**622,024.97**	**1,296,345.08**
Excess of Revenues over Expenditures for 10 General Fund			**196,695.16**	**191,652.60**	**77.91**	**1,052,397.34**	

ACCOUNT	DESCRIPTION	ANNUAL BUDGET	CURRENT PERIOD	YEAR TO DATE	% USED	BUDGET REMAINING	PRIOR YEAR TO DATE
20-0033-0101	CDBG - ENDLY STREET	2,074,406.00	42,841.99	820,391.54	39.55	1,254,014.46	408,348.53
Totals for : 0033 (FEDERAL - CATAGORICAL AID)		**2,074,406.00**	**42,841.99**	**820,391.54**	**39.55**	**1,254,014.46**	**408,348.53**
Total Revenues		**2,074,406.00**	**42,841.99**	**820,391.54**	**39.55**	**1,254,014.46**	**408,348.53**
20-8140-9300	CDBG- ENDLY STREET	2,074,406.00	42,841.99	820,411.89	39.55	1,253,994.11	408,348.53
Totals for : 8140 (CDBG)		**2,074,406.00**	**42,841.99**	**820,411.89**	**39.55**	**1,253,994.11**	**408,348.53**
Total Expenditures		**2,074,406.00**	**42,841.99**	**820,411.89**	**39.55**	**1,253,994.11**	**408,348.53**
				20.35-	**39.55**	**2,508,008.57**	

Excess of Revenues over Expenditures for 20
CDBG - Endly Street Project

ACCOUNT	DESCRIPTION	ANNUAL BUDGET	CURRENT PERIOD	YEAR TO DATE	% USED	BUDGET REMAINING	PRIOR YEAR TO DATE
25-0015-0101	INTEREST EARNED		2.85	30.75		30.75-	544.33
Totals for : 0015 (USE OF MONEY & PROPERTY)			**2.85**	**30.75**	**0.00**	**30.75-**	**544.33**
25-0018-9914	MISCELLANEOUS RECEIVAB		954.00	22,136.75		22,136.75-	11,698.00
Totals for : 0018 (MISC REVENUE)			**954.00**	**22,136.75**	**0.00**	**22,136.75-**	**11,698.00**
Total Revenues			**956.85**	**22,167.50**	**0.00**	**22,167.50-**	**12,242.33**
25-8140-9300	CDBG- PROGRAM INCOME E		587.30	27,516.91		27,516.91-	8,070.40
Totals for : 8140 (CDBG)			**587.30**	**27,516.91**	**0.00**	**27,516.91-**	**8,070.40**
Total Expenditures			**587.30**	**27,516.91**	**0.00**	**27,516.91-**	**8,070.40**
Excess of Revenues over Expenditures for 25 CDBG - West 4th Street Project Phase Two			**369.55**	**5,349.41-**	**0.00**	**49,684.41-**	

ACCOUNT	DESCRIPTION	ANNUAL BUDGET	CURRENT PERIOD	YEAR TO DATE	% USED	BUDGET REMAINING	PRIOR YEAR TO DATE
51-0015-0101	INTEREST EARNED	8,000.00	147.93	869.70	10.87	7,130.30	4,226.50
Totals for : 0015 (USE OF MONEY & PROPERTY)		**8,000.00**	**147.93**	**869.70**	**10.87**	**7,130.30**	**4,226.50**
51-0016-0811	WATER	520,000.00	41,008.97	347,478.87	66.82	172,521.13	314,824.62
51-0016-0813	PENALTIES	19,000.00	1,486.35	14,526.54	76.46	4,473.46	11,476.70
51-0016-0821	WATER CONNECTIONS	4,500.00				4,500.00	
51-0016-0823	CUT-ON FEES	9,000.00	700.00	6,700.00	74.44	2,300.00	4,550.00
Totals for : 0016 (CHARGES FOR SERVICES)		**552,500.00**	**43,195.32**	**368,705.41**	**66.73**	**183,794.59**	**330,851.32**
51-0018-9913	MISCELLANEOUS REVENUE	3,000.00	1,604.66	2,999.03	99.97	0.97	6,954.92
Totals for : 0018 (MISC REVENUE)		**3,000.00**	**1,604.66**	**2,999.03**	**99.97**	**0.97**	**6,954.92**
Total Revenues		**563,500.00**	**44,947.91**	**372,574.14**	**66.12**	**190,925.86**	**342,032.74**
51-4502-1100	SALARIES AND WAGES - RE	133,900.00	14,692.19	101,181.69	75.57	32,718.31	90,414.72
51-4502-1183	SHOP LABOR	15,800.00	1,251.51	10,324.94	65.35	5,475.06	10,466.72
51-4502-1200	SALARIES AND WAGES - OV	3,500.00	1,114.22	5,853.73	167.25	2,353.73-	2,189.56
51-4502-2100	FICA	11,800.00	1,241.88	8,945.03	75.81	2,854.97	7,879.46
51-4502-2210	RETIREMENT (VRS)	5,500.00	843.24	6,322.13	114.95	822.13-	3,622.88
51-4502-2300	HEALTH INSURANCE	36,096.00	3,968.00	24,704.00	68.44	11,392.00	22,973.60
51-4502-2400	GROUP LIFE INSURANCE	1,800.00	164.41	1,295.73	71.99	504.27	1,196.51
51-4502-2600	UNEMPLOYMENT INSURAN	25.00		29.16	116.64	4.16-	5.14
51-4502-2700	DISABILITY INSURANCE	800.00	92.81	637.18	79.65	162.82	761.14
51-4502-2720	WORKER'S COMP	5,000.00		3,255.81	65.12	1,744.19	2,473.60
51-4502-3100	PROFESSIONAL SERVICES	2,500.00		1,786.50	71.46	713.50	3,760.50
51-4502-3102	BONUS	6,900.00		6,605.37	95.73	294.63	6,713.67
51-4502-3310	REPAIRS AND MAINTENANC	3,000.00				3,000.00	1,250.00
51-4502-3311	REPAIRS AND MAINT - WA T	24,900.00	12,479.91	24,959.82	100.24	59.82-	24,810.96
51-4502-5111	ELECTRIC	5,000.00	1,286.87	3,549.61	70.99	1,450.39	5,080.43
51-4502-5120	HEAT	700.00	222.72	222.72	31.82	477.28	456.08
51-4502-5150	WATER - R.R.S.A.	235,000.00	18,912.96	126,580.27	53.86	108,419.73	173,117.56
51-4502-5210	POSTAGE	2,390.00	169.97	1,332.04	55.73	1,057.96	1,326.35
51-4502-5220	FREIGHT AND EXPRESS	100.00	17.31	50.72	50.72	49.28	
51-4502-5230	TELECOMMUNICATIONS	1,250.00	0.48	588.78	47.10	661.22	850.86
51-4502-5305	MOTOR VEHICLE INS.	1,910.00		1,538.31	80.54	371.69	951.46
51-4502-5510	TRAVEL (MILEAGE)	100.00				100.00	58.00
51-4502-5540	TRAVEL (CONVENTION/EDU	325.00		243.33	74.87	81.67	
51-4502-5810	DUES AND ASSOC MEMBER:	400.00		400.00	100.00	0.00	400.00
51-4502-5841	WATER FEES/DEPT OF HE	3,800.00		3,770.10	99.21	29.90	3,770.10
51-4502-5860	PERMITS/LICENSES	300.00				300.00	
51-4502-5861	MISC UTILITY	275.00	91.35	605.85	220.31	330.85-	170.10
51-4502-5899	MISCELLANEOUS	200.00				200.00	
51-4502-6001	OFFICE SUPPLIES	400.00		400.00	100.00	0.00	
51-4502-6007	REPAIR AND MAINTENANCE	500.00				500.00	
51-4502-6008	VEHICLE/POWER EQUIP FU	9,000.00	347.35	3,162.71	35.14	5,837.29	
51-4502-6009	VEHICLE/POWER EQUIP SU	4,000.00	167.06	1,543.81	38.60	2,456.19	1,623.74

ACCOUNT	DESCRIPTION	ANNUAL BUDGET	CURRENT PERIOD	YEAR TO DATE	% USED	BUDGET REMAINING	PRIOR YEAR TO DATE
51-4502-6014	OTHER OPERATING SUPPLI	25,000.00	1,147.91	15,638.54	62.55	9,361.46	11,025.48
51-4502-8211	VALVE REPLACEMENT	15,000.00				15,000.00	
Totals for : 4502 (WATER)		**557,171.00**	**58,212.15**	**355,527.88**	**63.81**	**201,643.12**	**381,677.50**
51-9990-0001	CONTINGENCY	6,329.00				6,329.00	
Totals for : 9990 (CONTINGENCY)		**6,329.00**			**0.00**	**6,329.00**	
Total Expenditures		**563,500.00**	**58,212.15**	**355,527.88**	**63.09**	**207,972.12**	**381,677.50**
Excess of Revenues over Expenditures for 51 Water Fund			**13,264.24-**	**17,046.26**	**64.61**	**398,897.98**	

ACCOUNT	DESCRIPTION	ANNUAL BUDGET	CURRENT PERIOD	YEAR TO DATE	% USED	BUDGET REMAINING	PRIOR YEAR TO DATE
52-0016-0807	SEWER CLEANING	4,000.00	360.00	2,520.00	63.00	1,480.00	1,440.00
52-0016-0812	SEWER	330,000.00	29,139.47	234,383.21	71.03	95,616.79	184,494.84
52-0016-0813	PENALTIES	13,000.00	994.42	7,060.86	54.31	5,939.14	6,764.55
52-0016-0822	SEWER CONNECTION	2,500.00				2,500.00	
Totals for : 0016 (CHARGES FOR SERVICES)		**349,500.00**	**30,493.89**	**243,964.07**	**69.80**	**105,535.93**	**192,699.39**
52-0018-9913	MISCELLANEOUS REVENUE	10,500.00				10,500.00	
52-0018-9916	COVID - MECKLENBURG CO			66,309.48		66,309.48-	
Totals for : 0018 (MISC REVENUE)		**10,500.00**		**66,309.48**	**631.52**	**55,809.48-**	
Total Revenues		**360,000.00**	**30,493.89**	**310,273.55**	**86.19**	**49,726.45**	**192,699.39**
52-4503-1100	SALARIES AND WAGES - RE	134,000.00	14,542.19	100,618.32	75.09	33,381.68	90,916.61
52-4503-1150	SALARIES & WAGES - HOLI	2,000.00	132.64	1,660.32	83.02	339.68	1,590.88
52-4503-1183	SHOP LABOR	10,000.00	1,251.51	10,453.32	104.53	453.32-	10,813.07
52-4503-1200	SALARIES AND WAGES - OV	3,000.00	3,249.92	8,598.31	286.61	5,598.31-	5,530.45
52-4503-2100	FICA	10,000.00	1,398.83	8,745.03	87.45	1,254.97	7,787.52
52-4503-2210	RETIREMENT (VRS)	5,800.00	927.19	6,951.54	119.85	1,151.54-	3,983.57
52-4503-2300	HEALTH INSURANCE	36,096.00	3,968.00	24,704.00	68.44	11,392.00	22,973.60
52-4503-2400	GROUP LIFE INSURANCE	810.00	74.73	588.95	72.71	221.05	543.86
52-4503-2600	UNEMPLOYMENT INSURAN	25.00		30.23	120.92	5.23-	5.33
52-4503-2700	DISABILITY INSURANCE	780.00	92.81	637.18	81.69	142.82	770.56
52-4503-2720	WORKER'S COMP	1,980.00		1,289.31	65.12	690.69	975.34
52-4503-3100	PROFESSIONAL SERVICES	32,000.00	5,614.20	22,493.50	70.29	9,506.50	36,363.75
52-4503-3310	REPAIRS AND MAINTENANC	18,000.00	8,189.71	24,302.72	135.02	6,302.72-	20,251.36
52-4503-3316	COVID-19			32,483.33		32,483.33-	
52-4503-5111	ELECTRIC	46,000.00	4,867.48	28,615.92	62.21	17,384.08	30,082.91
52-4503-5120	HEAT	1,500.00	372.85	471.99	31.47	1,028.01	247.76
52-4503-5210	POSTAGE	2,000.00	166.02	1,301.07	65.05	698.93	1,295.52
52-4503-5220	FREIGHT AND EXPRESS	200.00		91.60	45.80	108.40	178.52
52-4503-5230	TELECOMMUNICATIONS	2,045.00	147.52	1,405.76	68.74	639.24	1,417.35
52-4503-5305	MOTOR VEHICLE INS.	1,900.00		1,530.24	80.54	369.76	948.96
52-4503-5510	TRAVEL (MILEAGE)	100.00				100.00	79.24
52-4503-5540	TRAVEL (CONVENTION/EDU	1,500.00		270.96	18.06	1,229.04	1,091.61
52-4503-5841	ANNUAL FEES - WWTP	2,900.00		2,889.00	99.62	11.00	2,825.00
52-4503-5899	MISCELLANEOUS	200.00	197.23	200.00	100.00	0.00	121.58
52-4503-6001	OFFICE SUPPLIES	300.00	69.99	369.99	123.33	69.99-	300.00
52-4503-6007	REPAIR AND MAINTENANCE	1,500.00	1,467.28	1,494.25	99.62	5.75	1,000.00
52-4503-6008	VEHICLE/POWER EQUIP FU	9,000.00	347.35	3,162.69	35.14	5,837.31	5,704.59
52-4503-6009	VEHICLE/POWER EQUIP SU	4,000.00	452.31	2,080.68	52.02	1,919.32	2,711.43
52-4503-6014	OTHER OPERATING SUPPLI	24,000.00	666.01	22,800.61	95.00	1,199.39	22,061.02
Totals for : 4503 (SEWER)		**351,636.00**	**48,195.77**	**310,240.82**	**88.23**	**41,395.18**	**272,571.39**
52-9990-0001	CONTINGENCY	8,364.00	2,478.00	2,478.00	29.63	5,886.00	
Totals for : 9990 (CONTINGENCY)		**8,364.00**	**2,478.00**	**2,478.00**	**29.63**	**5,886.00**	

ACCOUNT	DESCRIPTION	ANNUAL BUDGET	CURRENT PERIOD	YEAR TO DATE	% USED	BUDGET REMAINING	PRIOR YEAR TO DATE
Total Expenditures		**360,000.00**	**50,673.77**	**312,718.82**	**86.87**	**47,281.18**	**272,571.39**
Excess of Revenues over Expenditures for 52 Sewer Fund			**20,179.88-**	**2,445.27-**	**86.53**	**97,007.63**	

ACCOUNT	DESCRIPTION	ANNUAL BUDGET	CURRENT PERIOD	YEAR TO DATE	% USED	BUDGET REMAINING	PRIOR YEAR TO DATE
53-0015-0101	INTEREST EARNED	4,000.00	13.92	127.97	3.20	3,872.03	2,357.18
Totals for : 0015 (USE OF MONEY & PROPERTY)		**4,000.00**	**13.92**	**127.97**	**3.20**	**3,872.03**	**2,357.18**
53-0016-0806	SEWER ESCROW	116,000.00	8,575.12	69,484.21	59.90	46,515.79	68,418.56
53-0016-0813	PENALTIES	4,000.00	309.41	2,253.27	56.33	1,746.73	2,280.28
Totals for : 0016 (CHARGES FOR SERVICES)		**120,000.00**	**8,884.53**	**71,737.48**	**59.78**	**48,262.52**	**70,698.84**
Total Revenues		**124,000.00**	**8,898.45**	**71,865.45**	**57.96**	**52,134.55**	**73,056.02**
53-4504-9110	DEBT SERVICE - PRINCIPLE	102,000.00		102,000.00	100.00	0.00	100,000.00
53-4504-9120	DEBT SERVICE - INTEREST	16,029.00		15,957.17	99.55	71.83	17,998.62
Totals for : 4504 (SEWER ESCROW)		**118,029.00**		**117,957.17**	**99.94**	**71.83**	**117,998.62**
53-9990-0001	CONTINGENCY	5,971.00				5,971.00	8,001.00
Totals for : 9990 (CONTINGENCY)		**5,971.00**			**0.00**	**5,971.00**	**8,001.00**
Total Expenditures		**124,000.00**		**117,957.17**	**95.13**	**6,042.83**	**125,999.62**
Excess of Revenues over Expenditures for 53 Sewer Escrow			**8,898.45**	**46,091.72-**	**76.54**	**58,177.38**	

ACCOUNT	DESCRIPTION	ANNUAL BUDGET	CURRENT PERIOD	YEAR TO DATE	% USED	BUDGET REMAINING	PRIOR YEAR TO DATE
54-0015-0101	INTEREST EARNED		4.32	40.03		40.03-	563.63
Totals for : 0015 (USE OF MONEY & PROPERTY)			**4.32**	**40.03**	**0.00**	**40.03-**	**563.63**
54-0016-0808	RD SEWER/2014	71,488.00	6,541.47	53,647.44	75.04	17,840.56	53,042.57
54-0016-0813	PENALTIES	2,000.00	243.05	1,777.10	88.86	222.90	1,802.83
Totals for : 0016 (CHARGES FOR SERVICES)		**73,488.00**	**6,784.52**	**55,424.54**	**75.42**	**18,063.46**	**54,845.40**
Total Revenues		**73,488.00**	**6,788.84**	**55,464.57**	**75.47**	**18,023.43**	**55,409.03**
54-4505-9110	DEBT SERVICE - PRINCIPAL	37,005.00	3,025.24	24,350.07	65.80	12,654.93	23,831.49
54-4505-9120	DEBT SERVICE - INTEREST	36,483.00	3,098.76	24,641.93	67.54	11,841.07	25,160.51
Totals for : 4505 (WASTEWATER PROJECT)		**73,488.00**	**6,124.00**	**48,992.00**	**66.67**	**24,496.00**	**48,992.00**
Total Expenditures		**73,488.00**	**6,124.00**	**48,992.00**	**66.67**	**24,496.00**	**48,992.00**
Excess of Revenues over Expenditures for 54 Wastewater Project / Rural Development Constructio			**664.84**	**6,472.57**	**71.07**	**42,519.43**	

ACCOUNT	DESCRIPTION	ANNUAL BUDGET	CURRENT PERIOD	YEAR TO DATE	% USED	BUDGET REMAINING	PRIOR YEAR TO DATE
55-0015-0101	INTEREST EARNED		4.83	41.67		41.67-	73.80
Totals for : 0015 (USE OF MONEY & PROPERTY)			**4.83**	**41.67**	**0.00**	**41.67-**	**73.80**
Total Revenues			**4.83**	**41.67**	**0.00**	**41.67-**	**73.80**
55-4506-3103	BUILDINGS OFFICIAL/DEMOL			8,074.00		8,074.00-	
55-4506-3310	REPAIRS AND MAINTENANC			312.00		312.00-	
Totals for : 4506 (BUILDING OFFICIAL/DEMOS)				**8,386.00**	**0.00**	**8,386.00-**	
Total Expenditures				**8,386.00**	**0.00**	**8,386.00-**	
Excess of Revenues over Expenditures for 55 Building Official/Demolitions			**4.83**	**8,344.33-**	**0.00**	**8,427.67-**	

ACCOUNT	DESCRIPTION	ANNUAL BUDGET	CURRENT PERIOD	YEAR TO DATE	% USED	BUDGET REMAINING	PRIOR YEAR TO DATE
72-0015-0101	INTEREST EARNED	400.00	15.41	80.90	20.23	319.10	271.59
72-0015-0102	INTEREST EARNED - MAUSC	350.00	7.97	47.78	13.65	302.22	233.30
Totals for : 0015 (USE OF MONEY & PROPERTY)		**750.00**	**23.38**	**128.68**	**17.16**	**621.32**	**504.89**
72-0016-1305	GRAVE DIGGING	10,000.00		7,925.00	79.25	2,075.00	6,675.00
72-0016-1306	LETTERING ON CRYPT DOO	500.00				500.00	
Totals for : 0016 (CHARGES FOR SERVICES)		**10,500.00**		**7,925.00**	**75.48**	**2,575.00**	**6,675.00**
72-0018-9907	SALE OF LOTS	7,000.00	500.00	8,500.00	121.43	1,500.00-	8,000.00
72-0018-9913	SALE OF CRYPTS AND NIC	3,400.00		4,390.00	129.12	990.00-	
72-0018-9914	SALE OF CRYPT TRAYS	300.00		100.00	33.33	200.00	
72-0018-9916	MISCELLANEOUS REVENUE	200.00		140.00	70.00	60.00	220.00
Totals for : 0018 (MISC REVENUE)		**10,900.00**	**500.00**	**13,130.00**	**120.46**	**2,230.00-**	**8,220.00**
Total Revenues		**22,150.00**	**523.38**	**21,183.68**	**95.64**	**966.32**	**15,399.89**
72-7140-1100	SALARIES AND WAGES - RE	6,000.00		667.61	11.13	5,332.39	2,817.28
72-7140-1183	SHOP LABOR	50.00				50.00	
72-7140-1200	SALARIES AND WAGES - OV	3,000.00	413.40	2,199.68	73.32	800.32	1,174.54
72-7140-2100	FICA	600.00	30.19	207.12	34.52	392.88	285.59
72-7140-2210	RETIREMENT (VRS)	700.00	41.96	314.68	44.95	385.32	180.34
72-7140-2300	HEALTH INSURANCE	1,536.00	128.00	1,024.00	66.67	512.00	977.60
72-7140-2400	GROUP LIFE INSURANCE	250.00	19.10	150.52	60.21	99.48	138.98
72-7140-2600	UNEMPLOYMENT INSURAN	20.00		8.64	43.20	11.36	1.52
72-7140-2700	DISABILITY INSURANCE	100.00	12.41	94.23	94.23	5.77	109.27
72-7140-2720	WORKER'S COMP	40.00		26.03	65.08	13.97	19.00
72-7140-3310	REPAIRS AND MAINTENANC	400.00		400.00	100.00	0.00	
72-7140-3312	LETTERING - OLD MAUSOLE	300.00				300.00	
72-7140-5110	ELECTRIC	800.00	336.73	890.51	111.31	90.51-	138.68
72-7140-5899	MISCELLANEOUS	100.00		100.00	100.00	0.00	1.69
72-7140-6007	REPAIRS AND MAINT SUPPL	200.00		152.28	76.14	47.72	
72-7140-6009	VEHICLE/POWER EQUIP SU	250.00				250.00	2.57
72-7140-6014	OTHER OPERATING SUPPLI	1,850.00		1,441.24	77.90	408.76	58.12
Totals for : 7140 (CEMETERY DEPARTMENT)		**16,196.00**	**981.79**	**7,676.54**	**47.40**	**8,519.46**	**5,905.18**
72-9990-0001	CONTINGENCY	5,954.00				5,954.00	
Totals for : 9990 (CONTINGENCY)		**5,954.00**			**0.00**	**5,954.00**	
Total Expenditures		**22,150.00**	**981.79**	**7,676.54**	**34.66**	**14,473.46**	**5,905.18**
Excess of Revenues over Expenditures for 72 Cemetary Fund			**458.41-**	**13,507.14**	**65.15**	**15,439.78**	

ACCOUNT	DESCRIPTION	ANNUAL BUDGET	CURRENT PERIOD	YEAR TO DATE	% USED	BUDGET REMAINING	PRIOR YEAR TO DATE
73-0015-0101	INTEREST EARNED	250.00	6.66	89.90	35.96	160.10	190.12
73-0015-0102	INTEREST EARNED - VIP 1-3	70,000.00	391.16	3,680.35	5.26	66,319.65	60,537.68
73-0015-0103	INTEREST EARNED - EDWAF		25,408.58	41,193.60		41,193.60-	
Totals for : 0015 (USE OF MONEY & PROPERTY)		**70,250.00**	**25,806.40**	**44,963.85**	**64.01**	**25,286.15**	**60,727.80**
73-0018-9916	MISCELLANEOUS REVENUE			13,190.78		13,190.78-	
Totals for : 0018 (MISC REVENUE)				**13,190.78**	**0.00**	**13,190.78-**	
Total Revenues		**70,250.00**	**25,806.40**	**58,154.63**	**82.78**	**12,095.37**	**60,727.80**
73-7140-5899	MISCELLANEOUS - DON'T U					0.00	565.99
Totals for : 7140 (CEMETERY DEPARTMENT)					**0.00**	**0.00**	**565.99**
73-7160-3310	REPAIRS AND MAINTENANC	70,250.00	34.63	43,518.73	61.95	26,731.27	16,858.93
73-7160-5899	MISCELLANEOUS		315.96	2,225.62		2,225.62-	2,383.60
Totals for : 7160 (CEMETERY BEQUEST)		**70,250.00**	**350.59**	**45,744.35**	**65.12**	**24,505.65**	**19,242.53**
Total Expenditures		**70,250.00**	**350.59**	**45,744.35**	**65.12**	**24,505.65**	**19,808.52**
Excess of Revenues over Expenditures for 73 Cemetary / Allen W. Gregory			**25,455.81**	**12,410.28**	**73.95**	**36,601.02**	
Excess of Revenues over Expenditures for Report			**198,186.11**	**178,837.77**		**4,150,937.05**	**118,333.90**

CHARGE OFFS FOR THE MONTH OF FEBRUARY 2021

RUBY R. CHUMNEY 4 STRATFORD DRIVE CHASE CITY, VA 23924 CHARGE OFF PER CAKNIPE - PENALTY - NEVER BEEN LATE	$13.00
CAROL C. THOMAS 229 EAST FIFTH STREET CHASE CITY, VA 23924 CHARGE OFF PER CAKNIPE - LEAK IN YARD	$54.50
THOMAS HARRIS 331 HUTCHESON AVENUE CHASE CITY, VA 23924 CHARGE OFF PER CAKNIPE - PENALTY - NEVER BEEN LATE	$13.00
HARDEES WASTE INDUSTRIES 230 EAST SECOND STREET CHASE CITY, VA 23924 CHARGE OFF PER CAKNIPE - BILLING ERROR	$375.00
Total	**$455.50**

Vacant Building Registration

Item: To require owners of vacant properties to pay a registration fee.

Discussion:

1. Derelict vacant buildings make the Town appear run down and unwelcoming.

2. Requiring owners of vacant and derelict buildings to pay a yearly registration fee will discourage the owner from allowing the property to fall into disrepair and encourage the owners to find a suitable tenant for the property.

3. A yearly registration fee has been successful in other areas of Virginia in reducing vacant and blighted buildings on Main Street.

Recommendation:

1. Town Council approve as a second reading and adopt the following addition to the Town Ordinance:

Article F – Vacant Building Registration; civil penalty

§ 6-4-51 – Vacant Building Registration; civil penalty

In accordance with Section 15.2-1127 of the Code of Virginia as amended; owners of buildings that have been vacant for a continuous period of 12 months or more, and which meet the definition of derelict building, to register such buildings on an annual basis and may impose an annual registration fee not to exceed $100.00 to defray the cost of processing such registration. The registration of buildings shall be on forms designated by the locality and filed with the Town Office. Failure to register shall be a $200.00 civil penalty; however, failure to register in conservation and rehabilitation districts designated by the governing body, or in other areas designated as blighted, shall be punishable by a civil penalty not exceeding $400.00. Notice shall be mailed to the owner or owners, at the address which property tax notices are sent, at least 30 days prior to the assessment of the civil penalty.

Application for Rezoning

Item: To adopt the recommendation of the Planning Commission for rezoning application 20-01

Discussion:

1. An application for rezoning of 27 North Main Street from commercial to residential was submitted by Glenn and Lisa Gillispie.

2. A Public Hearing was held on this matter on 3/2/2021 at 5:15 pm at the Estes Center.

3. The Planning Commission recommends the property located at 27 North Main Street be rezoned to R-1.

Recommendation:

1. Town Council passes a motion to rezone the property located at 27 North Main Street from B-2 to R-1.

No. 20-01

Date: 11-18-2020

APPLICATION FOR REZONING

TO THE PLANNING COMMISSION AND TOWN COUNCIL OF CHASE CITY, VIRGINIA

I (we), the undersigned, do hereby respectfully make application and petition the Governing Body to amend the Zoning Ordinance and to change the Zoning Map of Chase City as hereinafter requested, and in support of this application, the following facts are shown:

1. The property sought to be rezoned is located at 27 North Main Street between Mecklenburg Drive ~~Street~~ and Sycamore Street on the left side of the street and known as lot(s) Number _____. It has a frontage of _____ feet and a depth of _____ feet.

2. The property sought to be rezoned is owned by: Ray Glenwood Gillispie, Jr + Lisa Q. Gillispie As evidenced by deed from _____ recorded in Book 030004803, Page 236, Registry of County of Mecklenburg.

3. It is desired and requested that foregoing property be rezoned

FROM	TO
Commercial	Residential - 1

4. The following are all of the individuals, firms, or corporations owning property adjacent to both sides and rear, and the property in front of (across street from) the property sought to be rezoned:

	NAME	STREET ADDRESS
(a)	Chase City Rescue Squad	335 Mecklenburg Dr
(b)	Town of Chase City	319 North Main Street
(c)	Lisa Gillispie	302 East Sycamore St
(d)	Lisa Gillispie	315 North Main Street
(e)		29 North Main Street
(f)	Elijah Thomas - 29865 Hwy 49	41 N. Main St
(g)		
(h)		

(If more space is needed for listing, add continuation sheet)

5. It is proposed that the property will be put to the following use:

Residential

6. It is proposed that the following buildings will be constructed:

7. It is proposed that the following setbacks and off-street parking provision will be made:

8. Attached is a copy of a Vicinity Map.

Roy G. Gillispie Jr.
Signature of Applicant

27 North Main Street
Chase City VA 23924
Address of Applicant

434-210-1552 or 210-1421 (Glen)
Telephone Number

ggillispie327@gmail.com
Email Address

TO THE COUNCIL OF THE TOWN OF CHASE CITY, VIRGINIA

This petition for rezoning property within the jurisdiction of the Town of Chase City was received on 11-18-2020, a joint public hearing was held on 3/2/2021, and the Planning Commission wishes to make the following recommendations to the Governing Body.

The Planning Commission Recommends that the property located 27 N Main St be Rezoned as R-1 due to it's historical signifigance.

PLANNING COMMISSION

By Tanya McDuffie
Secretary

ACTION OF THE COUNCIL OF THE TOWN OF CHASE CITY

On _____, the Governing Body took the following action on the attached petition for rezoning:

_____

_____

_____

_____
Clerk of Council

Conditional Use Permit 21-01

Item: To set a Joint Public Hearing for April 12, 2021 for Conditional Use Permit 21-01.

Discussion:

1. MacCallum More Museum and Gardens has applied for a conditional use permit to install a private well on the property to be used for irrigation of plants and flowers.

2. The Planning Commission has recommended that the matter be set for Public Hearing.

Recommendation:

1. Town Council set the matter for a Joint Public Hearing on April 12, 2021.

No. 21-01 Date: January 27, 2021

TOWN OF CHASE CITY, VIRGINIA

ZONING APPLICATION FOR CONDITIONAL USE PERMIT

This permit will be reviewed at the pleasure of the Planning Commission and the Town Council, but at least once annually.

---

1. REFERENCES: A. Article D, Title 6, Code of the Town of Chase City, Virginia.
B. Chapter IV, Administrative Instructions, Zoning Ordinance, Town of Chase City, Virginia.

---

2. APPLICANT TO COMPLETE THE FOLLOWING:

A. I (we) the undersigned do hereby respectfully make application and petition The governing body to grant a Conditional Use Permit to MacCallum More Museum and Gardens at the property located at 603 Hudgins Street between Berry Street Street and Walker Street Street on the Right side of the street and known as lot(s) number _____. It has a frontage of _____ feet and a depth of _____. See plat (Map) (scale drawing) attached.

B. The property is owned by: MacCallum More as evidenced by deed from 20868 16-39 Plat-Old recorded in Book See attached deeds, Page _____, Registry of the County of Mecklenburg.

C. The property is zoned R1 Residential Low density.

D. The code section which authorizes this specific condtional use permit is: Sect 6-3-162 _____.

E. I (we) offer the following conditions and guarantees for the protection of the public interest to assure compliance with the standards specified in Section 6-3-76 (Section _____) of the Code of Chase City: _____
We will not endanger public property or impede development and will be within restrictions outlined in the code & sections applicable

Cat - 434-372-0502

F. The following are all the individuals, firms, or corporations owning property adjacent to both sides and rear, and the property in front of (across the street from) the property to be issued a conditional use permit.

	NAME	STREET ADDRESS
(a)	mmmG- Gift Shop	603 Hudgin
(b)	Ramsey	440 Hudgins
(c)	mmmG- Museum	504 Walker
(d)	King	505 Walker
(e)	Colgate	511 Walker
(f)	Adams	517 Walker
(g)	Britton	525 Walker
(h)	Huff	539 Walker

(If any more space is needed for listing, add continuation sheet)

Cat Graham
Signature of Applicant

603 Hudgins
Address of Applicant

mmmg@verizon.net
Email Address

---

3. PLANNED DEVELOPMENTS: Section 6-3-20 (85) Code of Chase City;

In addition to the information listed above the datum attached at enclosure(s) _____ is hereby submitted in accordance with Section 6-3-78 of the Town Code.

Cat Graham
Signature of Applicant

603 Hudgins St
Chase City VA
Address of Applicant

mmmG@verizon.net
Email Address

4. ACTION BY PLANNING COMMISSION: This petition for a conditional use permit was received on _____. A public hearing was held on _____, and the Planning Commission wishes to make the following Recommendations (s) to the Town Council: _____

_____

_____

_____

_____

_____.

_____

Secretary, Planning Commission

---

5. ACTION BY THE COUNCIL OF THE TOWN OF CHASE CITY:

On _____ the governing body took the following action on the petition:_____

_____

_____

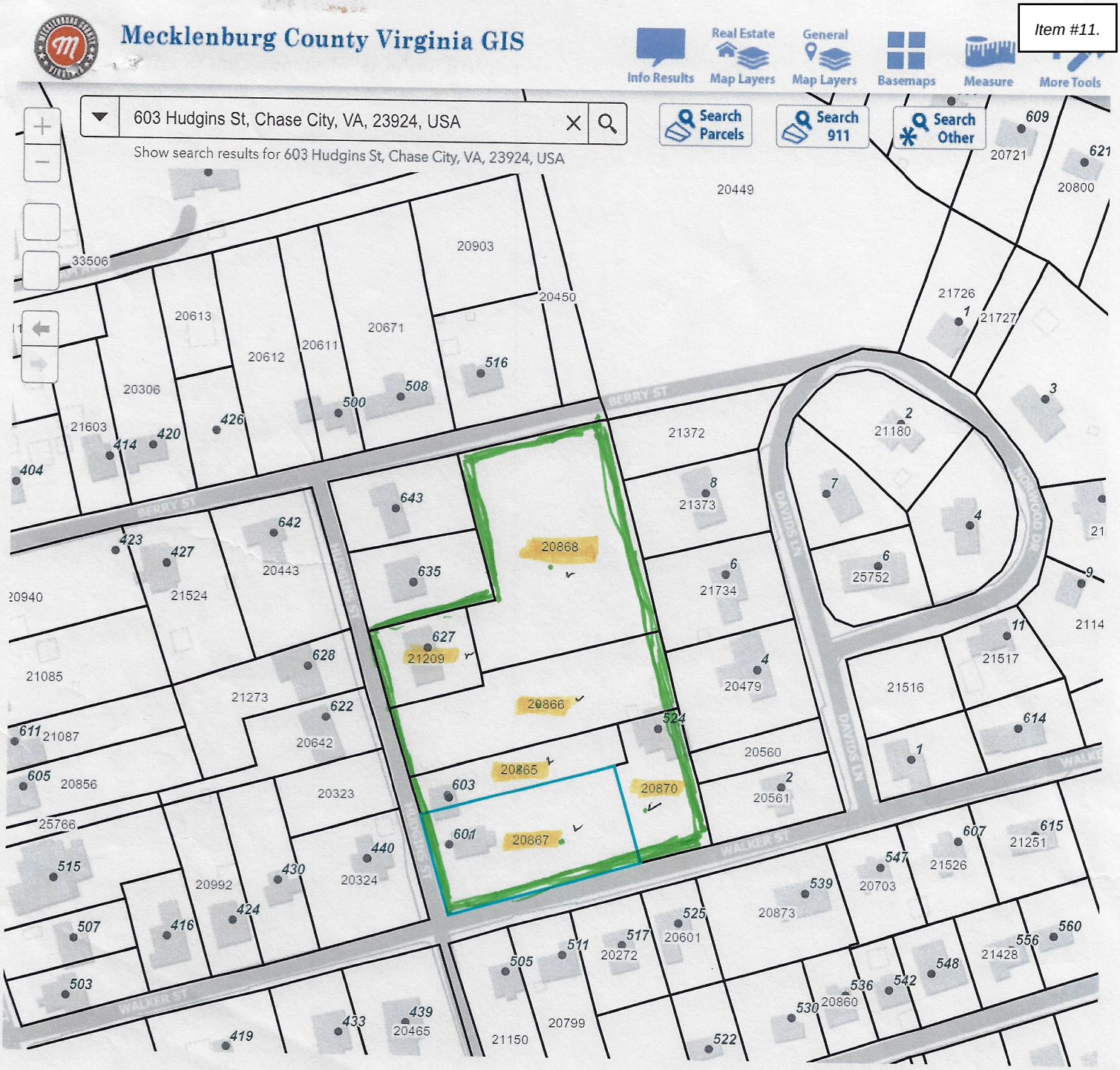
_____

_____

_____.

_____

Clerk of Council



21209 - MMMG Garden House Deed 13-4631

20867
20865
20866
} Fine Arts Museum Deed 447-610

20868
20870
} 16-39. Prehistoric, American Indian & Meck Museum 330-414

Application for Rezoning

Item: To set a Joint Public Hearing Date of April 12, 2021 for an application for rezoning submitted by Paul Jackson.

Discussion:

1. An application for rezoning of 757 Boyd Street from commercial to residential was submitted by Paul Jackson.

2. The Planning Commission recommends this matter be set for a joint public hearing on April 12, 2021.

Recommendation:

1. Town Council set the matter for a Joint Public Hearing on April 12, 2021.

No. 2101

Date: JAN. 20, 2020

APPLICATION FOR REZONING

TO THE PLANNING COMMISSION AND TOWN COUNCIL OF CHASE CITY, VIRGINIA

I (we), the undersigned, do hereby respectfully make application and petition the Governing Body to amend the Zoning Ordinance and to change the Zoning Map of Chase City as hereinafter requested, and in support of this application, the following facts are shown:

1. The property sought to be rezoned is located at 757 Boyd, St. Chase City VA between North MAIN Street and Boyd St. Street on the EAST OF Boyd side of the street and known as lot(s) Number _____. It has a frontage of _____ feet and a depth of _____ feet.

2. The property sought to be rezoned is owned by: PAUL JACKSON
As evidenced by deed from _____
recorded in Book _____, Page _____, Registry of County of _____.

3. It is desired and requested that foregoing property be rezoned

FROM	TO
B 2	R 2

4. The following are all of the individuals, firms, or corporations owning property adjacent to both sides and rear, and the property in front of (across street from) the property sought to be rezoned:

	NAME	STREET ADDRESS
(a)	HILER BUFFALO L.L.C.	75 Columbia Ave. ~~Cedarhurst~~ Columbia Ave.
(b)		Cedarhurst N.Y. 11516
(c)	CHASE City Medical CLINIC	946 N. MAIN St. CHASE city, VA 23924
(d)		
(e)	Virginia Power	14500 MidLothian Turnpike
(f)		MidLothian, VA. 23113
(g)	HeLen Pickett	746 Boyd St. CHASE City VA. 23924
(h)		

(If more space is needed for listing, add continuation sheet)

JAN 2021
PAID
DUFFER
TOWN OF CHASE CITY

5. It is proposed that the property will be put to the following use:
residential

6. It is proposed that the following buildings will be constructed:
NONE

7. It is proposed that the following setbacks and off-street parking provision will be made:
Existing building

8. Attached is a copy of a Vicinity Map.

Paul D. Jackson
Signature of Applicant

4746 Traffic Road
Victoria, VA. 23974
Address of Applicant

434-210-0589
Telephone Number

raven@kerrlake.com
Email Address

TO THE COUNCIL OF THE TOWN OF CHASE CITY, VIRGINIA

This petition for rezoning property within the jurisdiction of the Town of Chase City was received on _____, a joint public hearing was held on _____, and the Planning Commission wishes to make the following recommendations to the Governing Body.

PLANNING COMMISSION

By _____
Secretary

Hazard Mitigation Plan

Item: Adopt the Southside Planning District Hazard Mitigation Plan 2020.

Discussion:

1. The Town must adopt the updated Hazard Mitigation Plan in order to receive FEMA money.

Recommendation:

1. Town Council adopts the updated Southside Planning District Hazard Mitigation Plan 2020.

Regional Hazard Mitigation Plan













Southside Planning District Commission | 2020

Acknowledgements

This report was funded by the Federal Emergency Management Agency through the Virginia Department of Emergency Management, via Grant Agreement Number FEMA-DR-4262-VA-009 for $100,000.

2006 Hazard Mitigation Plan
Prepared by: Andy K. Wells, GIS/IT Coordinator
Southside Planning District Commission
200 S. Mecklenburg Avenue, South Hill, VA

2013 Natural Hazard Mitigation Plan Update
Prepared by: Andy K. Wells, GIS/IT Coordinator and Sara Fulks, Regional Planner
Southside Planning District Commission
200 S. Mecklenburg Avenue, South Hill, VA

Regional Hazard Mitigation Plan | 2020
Prepared by: Southside Planning District Commission & Hazard Mitigation Planning Team
200 S. Mecklenburg Avenue, South Hill, VA

Cover Pictures:
Flood – Bryan Newbill
Wind Damage – Lisa Clary
Hail – Stephanie Jackson Watts

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Section

1

Executive Summary

Overview of Hazard Mitigation

Hazard mitigation, defined by the Disaster Mitigation Act of 2000, is any sustained action taken to reduce or eliminate long-term risks to human life and property from hazards. Mitigation encourages long-term reduction of hazard vulnerability, with the goal of saving lives and reducing property damage, while also being cost-effective and environmentally sound. Mitigation applies to homes, businesses, industry, utilities, and any other vital or essential facility.

Many disasters, particularly natural disasters, cannot be prevented. Hazard mitigation focuses attention and resources on community policies and actions that will produce successive benefits over time. A mitigation plan states the goals and specific courses of action that a community intends to follow to reduce vulnerability and exposure to future hazard events. The hazard mitigation plan and course of actions are formulated through a systematic process centered on the participation of citizens, businesses, public officials, and other community stakeholders.

The specific area covered by this Plan includes the Southside Planning District, which is made up of the following jurisdictions:

Brunswick County
- Town of Alberta
- Town of Brodnax
- Town of Lawrenceville

Halifax County
- Town of Halifax
- Town of Scottsburg
- Town of South Boston
- Town of Virgilina

Mecklenburg County
- Town of Boydton
- Town of Chase City
- Town of Clarksville
- Town of La Crosse
- Town of South Hill

Hazard Mitigation Plan Sections

Section 2, Introduction, provides an overview of the planning process followed during the creation of this plan.

Section 3, Regional Profile, provides a snapshot of the region, including: relevant geographic, demographic, and economic characteristics. Transportation, housing, and land use patterns are also profiled.

Section 4, Hazard Identification, includes descriptions of each hazard that can pose a realistic threat to the region. In addition to describing each hazard, the profiles include information relating to what locations are most likely to be negatively impacted, the anticipated strength of the hazard, previous occurrences within the region, and the future probability of the hazard striking the region. In previous versions of this Plan the Hazard Identification section was separate from the hazard profiles. They have been combined in this Plan and numerous hurricane tracking maps at scales not relevant to the region have been removed.

Section 5, Risk Assessment, includes hazard rankings and the methodology utilized, an inventory of community assets and critical facilities, loss estimations calculated by FEMA's Hazus program for various flooding and hurricane scenarios, and the results of a public survey to learn what hazards have impacted respondents as well as what hazards they are concerned about. The public survey has not been utilized in previous updates of the Plan.

Section 6, Capability Assessment, profiles each jurisdictions capabilities as they relate to implementing mitigation actions. The assessment looks at existing plans, ordinances, staff, funding, and other programs and opportunities.

Section 7, Regional Mitigation Strategies, includes strategies and actions to better address hazard vulnerabilities on a regional level. A new addition to this section is the inclusion of mitigation actions for the Halifax County Service Authority and Roanoke River Service Authority, both of whom participated throughout the planning process.

Section 8, Jurisdiction Executive Summaries and Mitigation Actions, is a collection of jurisdiction relevant hazard rankings, mitigation actions, various hazard maps, local results from the public survey, and the localities National Flood Insurance Program survey responses.

Section 9, Plan Maintenance, covers how this plan will be implemented, monitored, evaluated, and updated. It also identifies ways in which the public can remain involved.

Progress with Mitigation Actions Since 2013

Brunswick County

- Radio system upgrades completed with generators placed at each site.
- Floodplain ordinance continues to be enforced.
- Brunswick Alert mass notification system has been implemented.
- New classrooms completed at the Mecklenburg-Brunswick Regional Fire Training Center.

Town of Brodnax
- Actively pursuing the renovation of an old train depot to serve as a new town office.
- Fire hydrants are inspected by Public Works staff.

Town of Lawrenceville
- Pump stations are equipped with generators or wired for quick connect.
- Siren installed for fire and tornado events.
- Floodplain ordinance continues to be enforced.
- Fire hydrants are inspected by Public Works staff.
- Town continues to utilize and update an emergency preparedness checklist for major storm events.

Halifax County
- A $2.9 million upgrade to the emergency communications network is in progress
- Floodplain ordinance continues to be enforced.
- Implemented a new emergency mass notification warning system.
- Coordinated to hold a Sky Warn class in 2019.
- In the process of drafting an expanded Emergency Operations Program.
- Actively looking to participate in the StormReady program.

Town of Halifax
- Early warning siren installed.
- Encouraged local workshops, such as those for rain barrels.
- Town has an email blast program that can be utilized for emergency warnings if necessary.
- Floodplain ordinance continues to be enforced.

Town of South Boston
- Generators have been put in place at critical town facilities.
- Floodplain ordinances continue to be enforced.
- Firefighter education and training have been integrated into normal functions of the Fire Department.
- Public Works staff ensure access to fire hydrants remains unencumbered by trimming weeds, etc.
- Town is currently pursuing grant funds to purchase repetitive loss properties in the Riverdale area and convert them into green space.
- Town has utilized Revenue Sharing funds from VDOT to help address stormwater issues.

Town of Virgilina
- Town has coordinated with VDOT to address stormwater issues.
- A new pump station was installed above any known flood levels.
- Fire hydrants are inspected by the Fire Department.
- Coordinates with the NWS on emergency weather events and use of siren.
- Began exploring possibility of tying local siren to County Emergency Services office.

Mecklenburg County
- Implemented a new emergency mass notification warning system to replace their old one.
- Floodplain ordinance continues to be enforced.
- Emergency communications system has been upgraded, with backup power at critical facilities.
- County is currently pursuing grant funds to purchase generators for critical facilities.

- New classrooms completed at the Mecklenburg-Brunswick Regional Fire Training Center.

Town of Boydton
- Floodplain ordinance continues to be enforced.
- Fire hydrants are inspected by Public Works staff.

Town of Chase City
- Several buildings have had roof repairs completed, including the hangers at the airport.
- The Town recently connected to the Roanoke River Service Authority water system but retained their wells in the event that some emergency prevents reliable access to the RRSA system.
- Stormwater improvements completed on W 5th Street.

Town of Clarksville
- Several roofs and buildings have been repaired/updated since the last Hazard Mitigation Plan.
- Continue to implement preventative maintenance procedures relating to stormwater issues.
- Floodplain ordinance continues to be enforced.
- Fire hydrants are inspected by Public Works staff.
- Town has maintained their local communications channel, with backup power capabilities.

Town of La Crosse
- Fire hydrants are inspected by Public Works staff.
- In the process of pursuing grants funds to help address stormwater issues on Pine Street.

Town of South Hill
- Continue to implement preventative maintenance procedures relating to stormwater issues.
- Town has an email blast program that can be utilized for emergency warnings if necessary.
- Fire hydrants are inspected by Public Works staff.
- Replaced generators at the Taylor's Creek and Mountain Creek pump stations.

Section

2

Introduction

Hazard mitigation is any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards. The overall goal is to save lives and reduce property damage while being cost-effective and environmentally sound. This plan will serve as a functional tool for all jurisdictions and community stakeholders by increasing public awareness concerning local hazards and risks while providing information on various options and resources available to better address them.

Local Mitigation Plan Requirements

In an effort to reduce the Nation's mounting natural disaster losses, the United State Congress passed the Disaster Mitigation Act of 2000 (DMA 2000). DMA 2000 amends the Robert T. Stafford Disaster Relief and Emergency Assistance Act in several ways, most notably by adding Section 322, which emphasizes local mitigation planning. In order to encourage this local governments are required to develop and submit hazard mitigation plans as a condition of receiving mitigation project grants under the Pre-Disaster Mitigation Program and the post-disaster Hazard Mitigation Grant Program. Other FEMA programs also require localities to have an approved hazard mitigation plan. Communities with an adopted and federally approved hazard mitigation plan thereby become eligible to receive available mitigation funds before and after the next disaster strikes.

This Plan has been prepared in coordination with FEMA and Virginia Department of Emergency Management (VDEM) officials to ensure that it meets all applicable DMA 2000 and State requirements. The Local Mitigation Plan Review Tool (from FEMA's *Local Mitigation Planning Handbook, 2013*), located in Appendix A, provides a detailed summary of Federal and State minimum standards and notes the location where each requirement is met within this Plan.

Planning Process and Public Involvement

Grant Awarded & Planning Preparation

In November of 2017 the Southside Planning District was notified that it would receive grant funding to update the Regional Hazard Mitigation Plan. The contract with the Virginia Department of Emergency Management was signed in February of 2018. Shortly thereafter SPDC staff spent time reviewing the *Natural Hazard Mitigation 2013 Plan Update* and FEMA's *Local Mitigation Planning Handbook* in preparation for the update process.

VDEM Meeting
After meeting with VDEM officials on May 23rd to discuss the grant contract and an upcoming kickoff meeting, it was decided that SPDC staff should attend another jurisdictions Hazard Mitigation Plan kickoff meeting to better understand and prepare for its own later on in the year. On June 14th SPDC staff attended Region 2000's meeting in Lynchburg. Due to scheduling conflicts the SPDC wasn't able to hold its kickoff meeting until August 2, 2018.

Kickoff Meeting
The kickoff meeting was well attended (see Appendix B for sign-in sheet). VDEM staff provided a brief presentation on what grant funding is available and described numerous types of projects that the grant funds can be used for. SPDC staff then informed those in attendance that the 2013 HMP had expired earlier in the year. It will need to be updated and adopted prior to the localities having access to several funding opportunities through VDEM. Regarding elements in the Plan, staff noted that the Regional Profile was nearly complete and described the Hazard Identification and Risk Assessment (HIRA) to those in attendance. A list of hazards was then reviewed by the Planning Team to determine which ones would be included in the plan and which ones were not relevant to the region. Other elements of the plan were also discussed, including: capability assessment, mitigation actions, and plan maintenance procedures. Time was also spent on what was expected of the HMP Planning Team with many in attendance stating that they would serve in that capacity for their locality after the meeting.

Regional Profile and Hazard Identification
Following the kickoff meeting, the Regional Profile and Hazard Identification sections were updated through the use of numerous databases and newspaper articles (See Sections 3 "Regional Profile" and 4 "Hazard Identification"). The Regional Profile includes an overview of the regions: location, physical geography, land use/development trends, population, top employers, housing, and transportation facilities. The Hazard Identification section profiles the hazards determined by the HMP Planning Team to be relevant to the Southside Planning District. Information included in this section includes: description of each hazard, location that it impacts, extent or strength of the hazard, previous occurrences, and potential for future occurrence.

FEMA & VDEM Meeting
FEMA and VDEM officials conducted a site visit on October 30, 2018. FEMA provided numerous comments that they wished to see addressed based on the 2013 version of the HMP.

Inventory of Critical Assets and Facilities
Work then began on a local inventory of critical assets and facilities. SPDC staff held numerous meetings with localities to gather information to include in the Community Assets and Critical Facilities section. These meetings also provided an opportunity to bring any locality up-to-speed on the HMP update process if they had been unable to attend the kickoff meeting and determine who would serve on the Planning Team.

Planning Team Meeting #1
A HMP Planning Team meeting was held on February 14, 2019. SPDC staff presented the Regional Profile, Hazard Identification, and work that had been completed on the Community Assets and Critical Facilities. The Planning Team was encouraged to provide any feedback they had on the draft materials. Other matters covered at the meeting included: update on the Risk Assessment section, discuss

outreach strategies, and go over what to expect from the Capability Assessment before providing them to the localities for completion.



February 14, 2019 Planning Team meeting.

Capability Assessment
In early April, Capability Assessment worksheets were mailed to each of the localities for completion. The worksheets were largely taken from those suggested in FEMA's *Local Mitigation Planning Handbook*.

Planning Team Meeting #2
A HMP Planning Team meeting was held August 5, 2019. This meeting included discussion on the following: hazard rankings/methodology, local inventories/assets, capability assessments, review and updating of the regional mitigation goals and actions, Hazus, review of a proposed public survey, and the need for a public meeting.

Locality Meetings – Mitigation Actions
Following the Planning Team meeting, numerous meetings with localities were scheduled to review their locality specific hazard rankings and review and update their mitigation actions.

Hazus
Once the inventory for Community Assets and Critical Facilities was completed, SPDC staff worked to review and update the data within FEMA's Hazus software program before running numerous flood and hurricane scenarios. Much of this data came from existing GIS data, data collected from localities during the one-on-one meetings, and from several websites. Maps and loss estimation data generated by Hazus can be found in Section 5 of this Plan under "Loss Estimation".

Public Survey

The public survey questions were drafted based on examples provided by FEMA and from reviewing other PDC plans. The Planning Team reviewed and approved the questions at the August 5, 2019 meeting. The public survey was launched on August 30th and was made available online until September 30th. Each of the Planning Team members and local Chambers of Commerce were asked to share the survey link with the public through websites and social media if possible. 112 responses were ultimately collected. Additional details can be found in Section 5 under "Public Survey".

Public Meeting #1

A public meeting was held on October 28, 2019. The meeting was promoted through public notices being placed in three local newspapers, listing on the SPDC website and Facebook page, and providing the meeting information to each of the localities. The meeting was essentially broken into two formats, the beginning had a formal presentation on the HMP for the benefit of the public, and the second half of the meeting changed into an open house format to allow for a more relax atmosphere for asking questions and providing input. Display boards for each of the localities was provided with locality specific information, including: hazard rankings, hazard maps, proposed mitigation actions, and the results from several survey questions. In addition, a comment sheet was provided at each display board in the event anyone from the public wished to provide input without having to speak in front of others. Brochures on flooding and wildfire prevention were also made available to those in attendance. Numerous questions were asked during a questions and answer period. No written comments were submitted.



The SPDC conference room prior to the October 28, 2019 Public Meeting.

Public Meeting #2

A second public meeting was held on January 15, 2020. The meeting was promoted through public notices being placed in three local newspapers, listing on the SPDC website, shared on the SPDC's Facebook page, emails sent to the County Extension offices of Brunswick, Halifax and Mecklenburg, and emails sent to the five local chambers of commerce. Additionally, a letter was mailed to those localities who have not yet participated in the update process to notify them of the meeting and encourage their attendance. The meeting was organized in the same format as the first one. It began with a

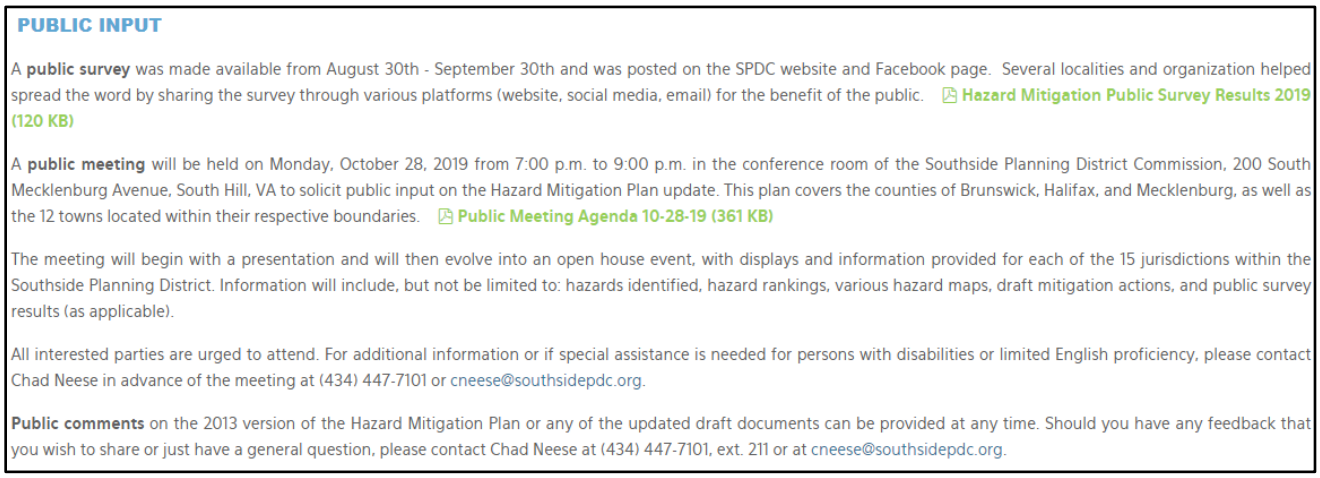
presentation and was followed with an open house format. Display boards for each locality were once again utilized. Comments were provided in writing concerning the Town of South Hill.

Planning Team Meeting #3

A HMP Planning Team meeting was held January 28, 2020. The meeting focused on addressing any last comments before the HMP is finalized. Once comments are addressed the HMP will be submitted to VDEM for their review and comments.

Public Input Opportunities

It is also worth noting the SPDC website has a dedicated page to the HMP update. The webpage includes: an overview of hazard mitigation planning, a downloadable version of the Natural Hazard Mitigation 2013 Plan Update, a "Current Status" section with meeting summaries and draft documents available for public viewing, and a "Public Input" section that profiles the several methods in which the public can become involved in the planning process. While the survey and public meetings have a finite window for participation, the webpage notes that public comments can be submitted at any time and provides direct contact information.



PUBLIC INPUT

A **public survey** was made available from August 30th - September 30th and was posted on the SPDC website and Facebook page. Several localities and organization helped spread the word by sharing the survey through various platforms (website, social media, email) for the benefit of the public. **Hazard Mitigation Public Survey Results 2019 (120 KB)**

A **public meeting** will be held on Monday, October 28, 2019 from 7:00 p.m. to 9:00 p.m. in the conference room of the Southside Planning District Commission, 200 South Mecklenburg Avenue, South Hill, VA to solicit public input on the Hazard Mitigation Plan update. This plan covers the counties of Brunswick, Halifax, and Mecklenburg, as well as the 12 towns located within their respective boundaries. **Public Meeting Agenda 10-28-19 (361 KB)**

The meeting will begin with a presentation and will then evolve into an open house event, with displays and information provided for each of the 15 jurisdictions within the Southside Planning District. Information will include, but not be limited to: hazards identified, hazard rankings, various hazard maps, draft mitigation actions, and public survey results (as applicable).

All interested parties are urged to attend. For additional information or if special assistance is needed for persons with disabilities or limited English proficiency, please contact Chad Neese in advance of the meeting at (434) 447-7101 or cneese@southsidepdc.org.

Public comments on the 2013 version of the Hazard Mitigation Plan or any of the updated draft documents can be provided at any time. Should you have any feedback that you wish to share or just have a general question, please contact Chad Neese at (434) 447-7101, ext. 211 or at cneese@southsidepdc.org.

Screenshot of "Public Input" section of the Hazard Mitigation Planning webpage on the SPDC website.

Hazard Mitigation Planning Team

The Planning Team assembled for the 2020 Update drew heavily from the Steering Committee that was used for the 2013 version of the Plan as suggested by FEMA. However, for the 2020 Plan additional members were invited to create a more diverse group with differing backgrounds as it relates to hazard mitigation (emergency services, public administration, public works/maintenance, water/sewer, elected officials, planning and zoning, GIS, etc.).

The amount of time and input that the Planning Team provided throughout the update process is greatly appreciated. By serving as a Planning Team member they were tasked with the following:

- Serve as a point of contact for their respective jurisdiction.
- Attend meetings and/or participate digitally.
- Help provide and/or collect data.
- Assist with defining goals and mitigation actions for the region and their locality.

- Assess and prioritize mitigation actions for the region and their locality.
- Provide feedback on the Hazard Mitigation Plan.

Jurisdiction	Planning Team Member
Brunswick County	Aubrey "Buddy" Hyde, Jr. (Emergency Services Coordinator)
Town of Brodnax	Ben Spence (former Town Manager) Don Dugger (Mayor)
Town of Lawrenceville	C. J. Dean (Town Manager)
Halifax County	Steven Dishman (Emergency Services Coordinator)
Town of Halifax	Carl Espy, IV (Town Manager)
Town of South Boston	Steve Philips (Fire Chief) Daniel Clark (Fire Captain) Hope Cole (Planner/Zoning Administrator)
Town of Virgilina	Jason Johnson (Town Councilman)
Mecklenburg County	Jon Taylor (Emergency Services Coordinator) Lew Stringer (Emergency Services Assistant Coordinator)
Town of Boydton	John "Johnny" Kirkland (Mayor)
Town of Chase City	Angela Lawrence (former Town Manager)
Town of Clarksville	Jeff Jones (Town Manager)
Town of La Crosse	Tom Tanner (Mayor)
Town of South Hill	Mark Novsak (Fleet & Facilities Superintendent)
Roanoke River Service Authority	Jeffrey Hinkle (Executive Director)
Halifax County Service Authority	Mark Estes (Executive Director)
Virginia Department of Emergency Management	Chris Bruce (All Hazards Emergency Planner Region 3) Doug Gagnon (All Hazards Emergency Planner Region 1) Trina Addison (Grants Administrator)
Virginia Department of Conservation and Recreation	Scott Thomas, P.E. (Regional Dam Safety Engineer – Region 3)
Southside Planning District Commission	Andy Wells (GIS & Cartography Manager) Chad Neese (GIS Planner)

Other Stakeholders that Participated in or Provided Assistance with the HMP Update

Jurisdiction	Stakeholder
Halifax County	Detrick Easley (Zoning Administrator) Stephanie Jackson (Finance Director)
Town of South Boston	Tom Raab (Town Manager) Danny McCormick (former Public Works Director)
Town of Virgilina	Ralph Murray (Mayor)
Mecklenburg County	Robert Hendrick (Zoning Administrator)
Town of Boydton	R.H. Park, III (Waste Water Treatment Chief Operator)
Town of Clarksville	Richard Elliott (Public Works Director) Tara Murphy (Treasurer/Clerk)
Town of South Hill	Bill Wilson (Public Works Director) Wayne Hudson (Chief Operator – Wastewater Treatment Plant) Katherine Bigelow (Finance Director)

Roanoke River Service Authority	Paul Malone Michael Funderburk (former Assistant Superintendent)
Halifax County Service Authority	Bryant Francisco (Director – Operations and Maintenance)
Virginia Department of Conservation and Recreation	Kristin Owen (Acting NFIP Coordinator)
Commonwealth Regional Council	Todd Fortune (Deputy Director)
Humanity Road	Catherine Graham (Chief Operations Officer)
VDOT	Tommy Johnson (South Hill Residency Administrator)
Southside Planning District Commission	Gail Moody (former Executive Director) Deborah Gosney (Executive Director)
FEMA	Mari Radford (Community Planning Lead)
Town of Chase City	William Hall (Interim Town Manager) Eddie Bratton (Mayor)
Scotts (Lawn Care Products)	Don Dugger
Virginia Rural Water Association	Mike Ritchie

Planning Process Time Frame

Time Frame	Activity
Aug. 1, 2018	Kick-Off Meeting for Hazard Mitigation Plan Update
Aug. 2018 – Feb. 2019	Research and draft Hazard Identification & Regional Profile
Oct. 30, 2018	FEMA – Comments on 2013 Plan and 2020 Update
Dec. 2018 – March 2019	Inventory of Critical Assets & Facilities
Feb. 14, 2019	Present Hazard Identification & Regional Profile to Planning Team
April – October 2019	Capability Assessment
June – October 2019	Hazus & CDMS
July – September 2019	Locality Meetings to Review & Update Mitigation Actions
Aug. 5, 2019	Present Risk Assessment & Review and Update Regional Mitigation Actions with Planning Team
Aug. 30, 2019 – Sept. 30, 2019	Public Survey
Oct. 28, 2019	Public Meeting #1
Nov. 2019-Jan. 2020	Create Draft of the Updated Regional Hazard Mitigation Plan
Jan. 15, 2020	Public Meeting #2
Jan. 28, 2020	HMP Reviewed and Finalized by the Planning Team
Feb. 5, 2020	Submit Plan to VDEM
June 2020	VDEM Submitted Plan to FEMA
Aug. – Oct. 2020	Adoption of Plan by Localities
August 2018-Ongoing	SPDC Website Provides Opportunities for Public to Provide Comments and Participate in the Update Process.

Incorporation of Existing Plans/Reports/Studies/ Technical Information

The following documents were reviewed and incorporated as appropriate within the Regional Hazard Mitigation Plan update.

Plans
Southside Planning District Commission. *Natural Hazard Mitigation 2013 Plan Update*.
FEMA. *Local Mitigation Planning Handbook*.
VDEM. *Commonwealth of Virginia Hazard Mitigation Plan*.
Southside Planning District Commission. *2045 Rural Long-Range Transportation Plan*.
Southside Planning District Commission. *Lake Country Water Supply Plan & Drought Response Plan*.
Brunswick County. *Brunswick County, VA Comprehensive Plan 2037*.
Town of Lawrenceville. *Lawrenceville, Virginia 2017-2037 Comprehensive Plan*.
Halifax County. *Halifax County, Virginia 2017-2037 Comprehensive Plan*.
Town of South Boston. *South Boston Comprehensive Plan 2030*.
Town of Boydton. *Boydton, Virginia Comprehensive Plan*.
Town of Chase City. *Chase City Comprehensive Plan*.
Town of Clarksville. *Clarksville Comprehensive Plan*.
Mecklenburg County. *Mecklenburg County Comprehensive Plan 2035*.
Town of South Hill. *2017-2037 Comprehensive Plan, Town of South Hill*.
Town of La Crosse. *Town of La Crosse Comprehensive Plan*.
Studies
FEMA. *Digital Flood Insurance Rate Maps*.
US Army Corps of Engineers. *Kerr Dam Break Study*.
Reports and Technical Information
Virginia Employment Commission. *Quarterly Census of Employment and Wages.*
National Drought Mitigation Center. *Tabular Data Archive*.
Weldon Cooper Center for Public Service. *Population Projections*.
U.S. Census Bureau. *Population Data*.
National Centers for Environmental Information. *Storm Events Database*.
National Weather Service. *Advanced Hydrologic Prediction Service*.
Virginia Department of Conservation and Recreation. *Repetitive Loss Properties & Inventory of Dams*.
Vaisala. *U.S. Cloud-to-Ground Flash Density per County, 2009-2018*.
Virginia Department of Forestry. *VDOF Wildland Fire Incidents*.
Virginia Department of Environmental Quality. *VPDES Individual Permits*.
FEMA. *Hazus*.

*Many additional data sources were utilized and are cited as “Data References” throughout this Plan.

Section

3

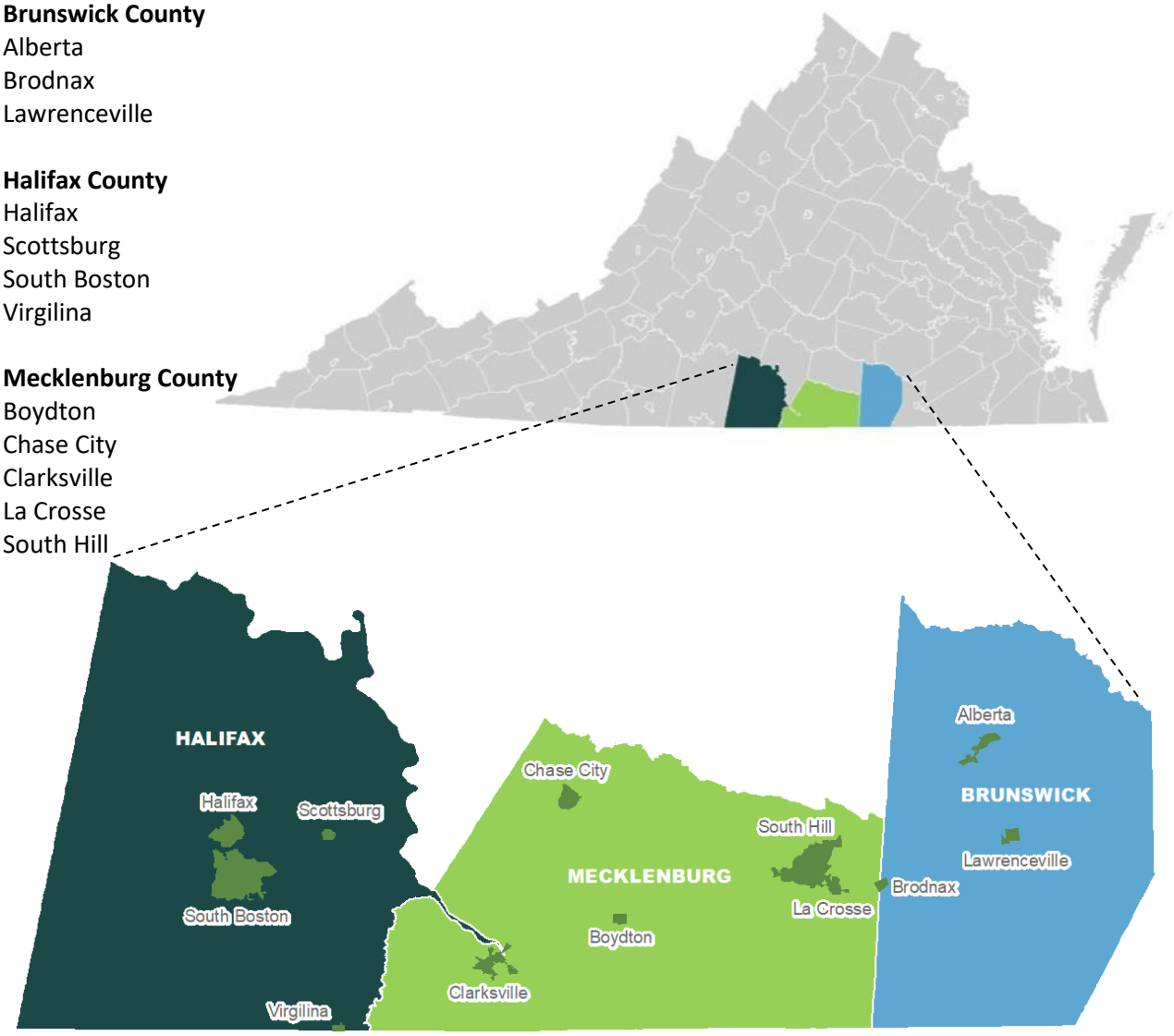
Regional Profile

The Southside Planning District includes the Counties of Brunswick, Halifax, and Mecklenburg, and the twelve towns located within those counties.

Brunswick County
Alberta
Brodnax
Lawrenceville

Halifax County
Halifax
Scottsburg
South Boston
Virgilina

Mecklenburg County
Boydton
Chase City
Clarksville
La Crosse
South Hill



Physical Geography

The District's terrain is characterized by gently rolling hills with elevations varying from 200 feet to 600 feet above sea level. Southside Virginia, much like other areas throughout the Piedmont Region, is predominately rural. Agriculture and forestry dominate land use.

The geology is quite diverse, which leads to a wide range of water availability and quality levels. The availability of both groundwater and surface water resources are present throughout the District. The most common use of groundwater for the area is for rural and domestic supplies. Soil associations and underlying rock formations produce water of generally good quality, dependent upon well construction and location. The potential for groundwater pollution is low to moderate, due to the areas rural nature and natural ground filtration properties. Land disposal of solid waste materials and sewage from septic systems present the greatest threats to existing groundwater quality.

Climate

Climate is an important environmental factor as it affects tourism, recreation, agriculture, and even industrial concerns. The Southside region has a fairly moderate climate and experiences the four traditional seasons. The average annual mean temperature has been 58.7 degrees (2013-2017). The previous five-year period (2008-2012) saw temperatures 0.7 degrees cooler. The average annual rainfall total for the region is 46.3" (2013-2017). This represents an increase of over 3" when compared to the preceding five-year period (2008-2012).

Land Use & Development Trends

The region has seen much of its residential development over the past 20 years concentrated around the lakes and within the larger towns. Many of the lake properties have been developed as vacation homes and subdivisions. Commercial growth has been relatively steady in South Boston and South Hill, while remaining largely stagnant or falling in many of the other smaller towns. Clarksville and Chase City have seen the closure of large textile mills while Boydton and Lawrenceville have had to deal with the closing of large prisons and Saint Paul's College.

A few new land uses of substantial size have appeared in recent years, with a massive Microsoft Data Center being located in the Boydton area, a Dominion Virginia Power Plant east of Lawrenceville, a new regional hospital in South Hill, and solar farms being pursued in the counties of Halifax and Mecklenburg. Numerous local schools have closed their doors over the years and have consolidated into more centralized facilities. Most recently, Mecklenburg County has started construction on a new consolidated middle school and high school campus between Boydton and South Hill.

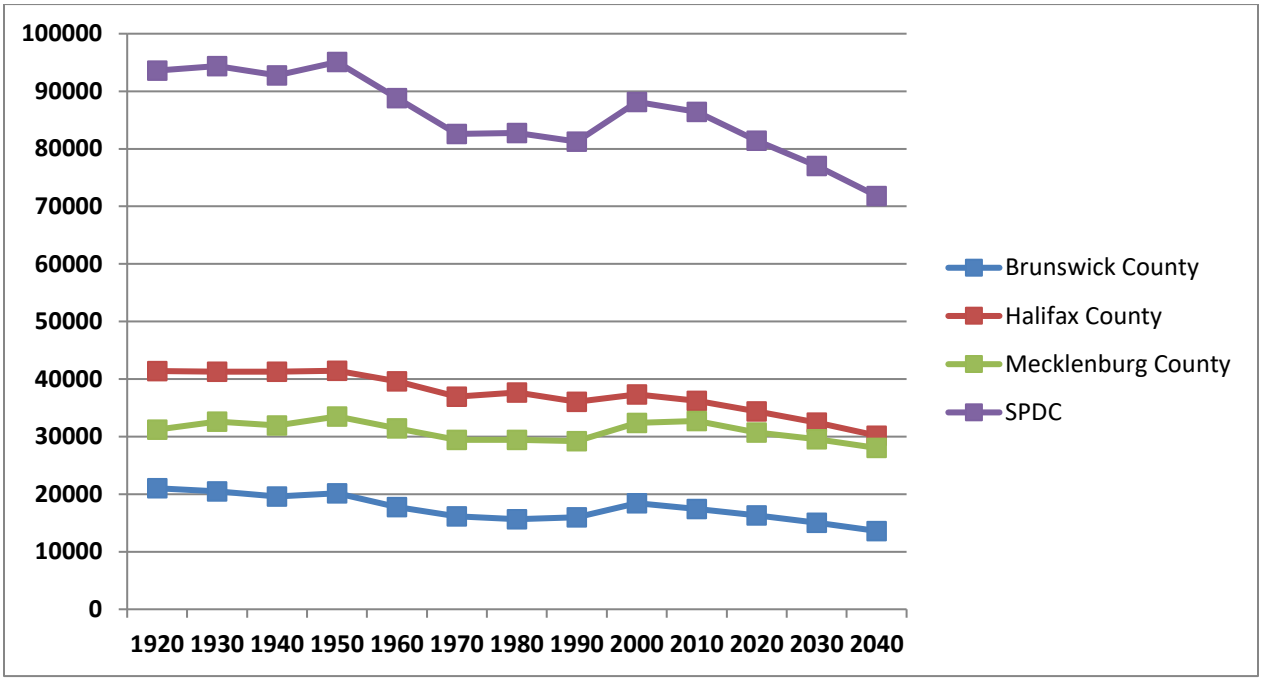
Population

After seeing an increase of 8.5% in total population from 1990 to 2000, the region saw it drop 2% from 2000 to 2010. The regions total population was projected to drop an additional 6% over the period of 2010 to 2018.

Over the course of the last 50 years, the Planning District suffered its greatest population losses during the twenty-year period from 1950 through 1970. This was followed by a stable period of minimal decline from 1970 to 1990. This population trend is characteristic of other rural and non-metropolitan localities throughout Virginia during that time period.

The Weldon Cooper Center for Public Service provides long-term population projections for the Commonwealth. These projections indicate the population within the Southside Planning District is expected to decline a total of 16.9% between 2010 and 2040, from 86,402 down to 71,832. Over the same period, Virginia's population is anticipated to increase 23.4%. All three counties are expected to see overall population declines.

Historic Population Totals for the Southside Planning District



Source: US Census Bureau

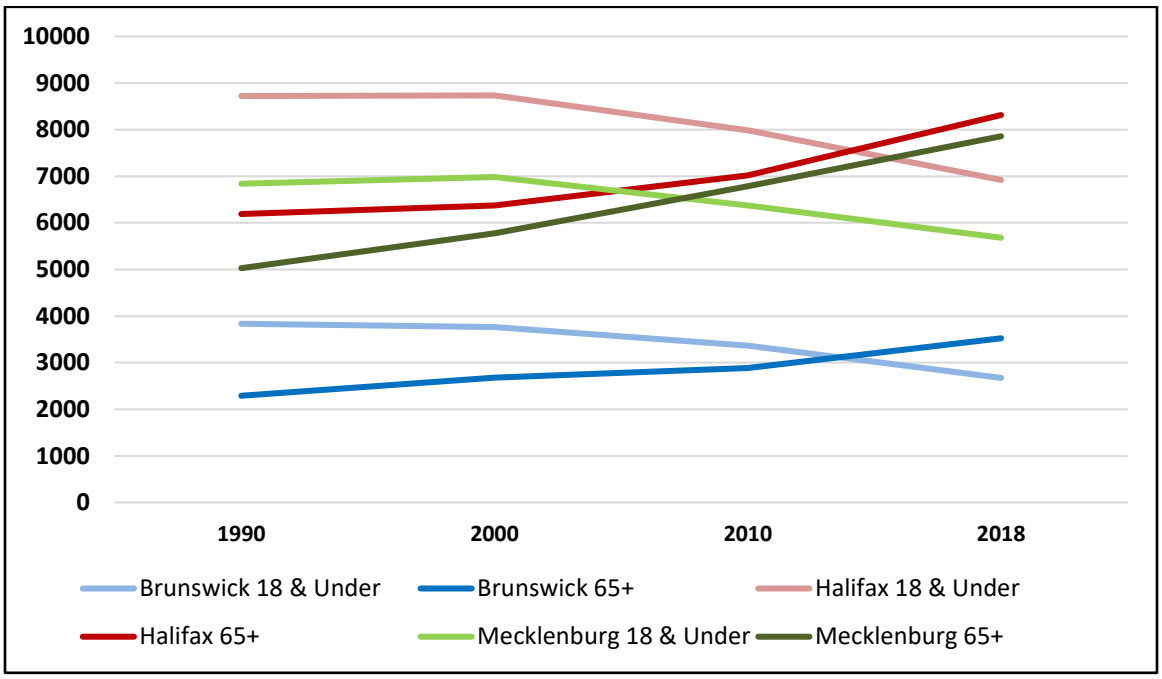
Population Projections for the Southside Planning District

	2010 Census	2020 Projection	2030 Projection	2040 Projection
Brunswick Co.	17,434	16,320	15,045	13,617
Halifax Co.	36,241	34,389	32,457	30,176
Mecklenburg Co.	32,727	30,691	29,527	28,030
Southside PDC	86,402	81,400	77,029	71,823
Virginia	8,001,024	8,655,021	9,331,666	9,876,728

In addition to a declining population base for the region, it is also becoming an older one. During the period of 1990 to 2018 those under 18 are projected to have dropped by 30.3% in Brunswick County, 20.7% in Halifax County, and 16.9% in Mecklenburg. Over the same time period, those 65 and older are

projected to have increased by 53.8% in Brunswick County, 34.3% in Halifax County, and 56.3% in Mecklenburg County.

Under 18 and 65+ Trends for the Southside Planning District



Employment by Industry

In utilizing data provided by the Virginia Employment Commission (VEC), the top five employment industries within the Southside Planning District are: Manufacturing, Health Care/Social Assistance, Retail Trade, Educational Services, and Accommodation/Food Service. Although in a slightly different order, the same five industries were the region's top five in 2013 as well.

While the following data can help provide insights into the leading industries within the region, the VEC also included many notes through their data sets indicating "disclosure suppression". Due to these gaps in the data one should view the VEC data as a snapshot of the region's industries and not a definitive count of every employee within a given industry.

Employment Numbers by Industry in the Southside Planning District

Industry	2013	2014	2015	2016	2017
Total, All Industries	27449	27543	28001	27830	27464
Agriculture/Forestry/Fishing/Hunting	627	640	640	582	628
Mining/Quarrying/Oil and Gas Extraction	4	0	0	0	0
Utilities	0	79	80	77	0
Construction	964	1019	1030	1250	1143
Manufacturing	3272	3359	3433	3429	3406
Wholesale Trade	504	529	538	544	448

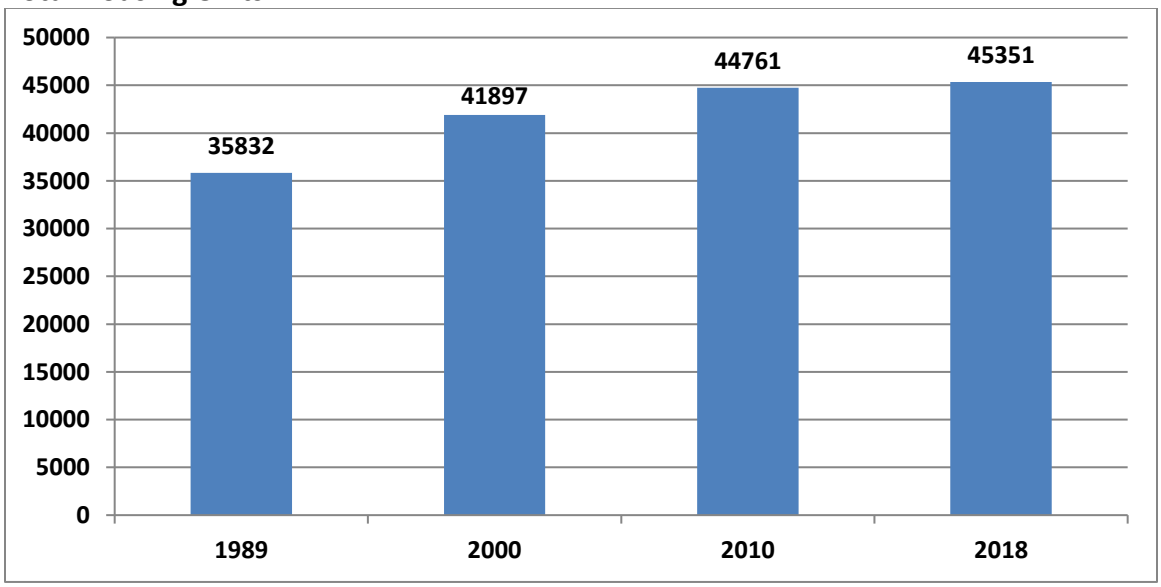
Retail Trade	2684	2528	2720	2580	2893
Transportation/Warehousing	818	793	777	871	950
Information	159	157	203	209	139
Finance/Insurance	479	545	554	502	477
Real Estate/Rental/Leasing	171	143	172	126	119
Professional/Scientific/Technical Service	521	554	562	568	554
Management of Companies/Enterprises	18	129	121	175	139
Administrative/Support/Waste Management	1225	1258	1306	1342	1254
Educational Services	3035	2907	2828	2720	2694
Health Care/Social Assistance	3270	3482	3642	3485	3389
Arts/Entertainment/Recreation	124	73	80	102	85
Accommodation/Food Service	2125	2238	2263	2206	2235
Other Service	596	608	668	724	857
Public Administration	1429	1407	1434	1443	1450
Unclassified	0	0	7	19	45

Housing

The lakes have been helping to redefine the area in part as a retirement and vacation destination. In 1995 a survey conducted by Century 21 Real Estate Corporation ranked the South Hill-Lake Gaston area the number one second home market in the South. This is still evident by recent construction in and around the lake areas, which has become a growth area for housing. New residential construction seems to be mainly focused in and around the towns and along the lakes.

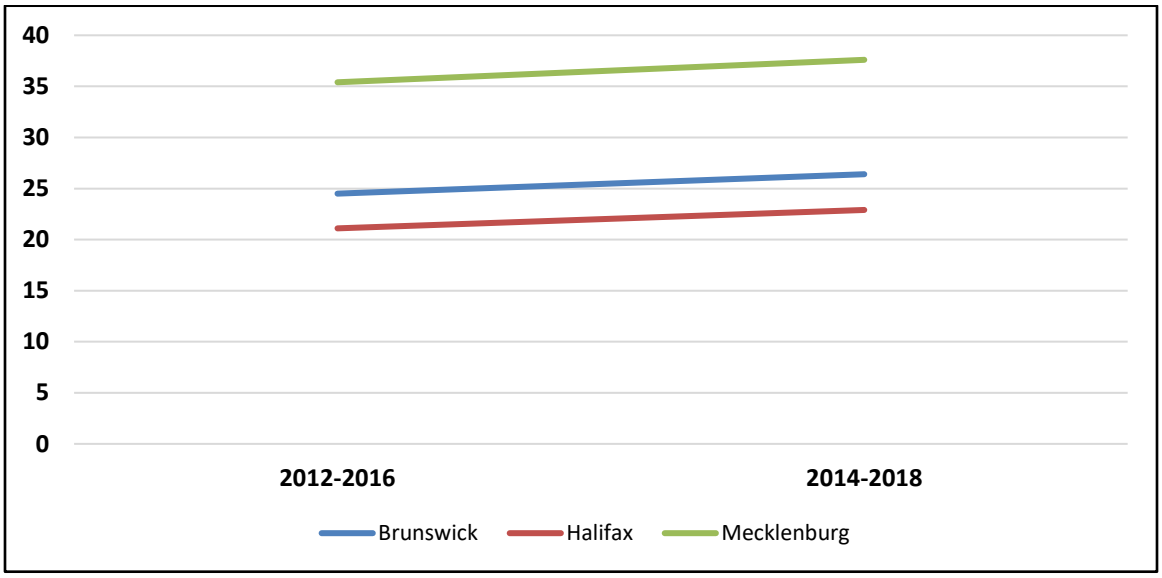
In 1989, there were 35,832 housing units in the District. This number increased by 17% in 2000 to 41,897. Growth slowed to 6.8% in 2010 with 44,761 units being identified in the region. Current projections indicate that growth has slowed even further, to 1.4%, with total housing units estimated at 45,351.

Total Housing Units



The percentage of vacant housing across the region has shown a slight increase when comparing American Community Survey data from 2012-2016 and 2014-2018. While Mecklenburg County has the highest vacancy rate among the three counties, a large portion of that is identified as seasonal and/or recreational use. That topic will be explored further in the paragraph that follows the chart below.

Percentage of Vacant Housing in Each County



One housing trend to keep an eye on is that of the seasonal/recreational home. Whether it's occupied as a second home or serves as a vacation rental, there is a chance that it will be occupied by people who may not be familiar with local hazards and ensuring that they have access to, or receive, emergency communications may prove challenging. In 2010, "seasonal, recreational, and occasional use" housing units comprised 10.5% of the region's total housing stock. At that time, Mecklenburg County was shown to contain the most seasonal housing with 18%. According to projections from 2016, the region's overall seasonal housing stock has risen to 12.6%, with 20.8% of Mecklenburg County's housing stock in this category.

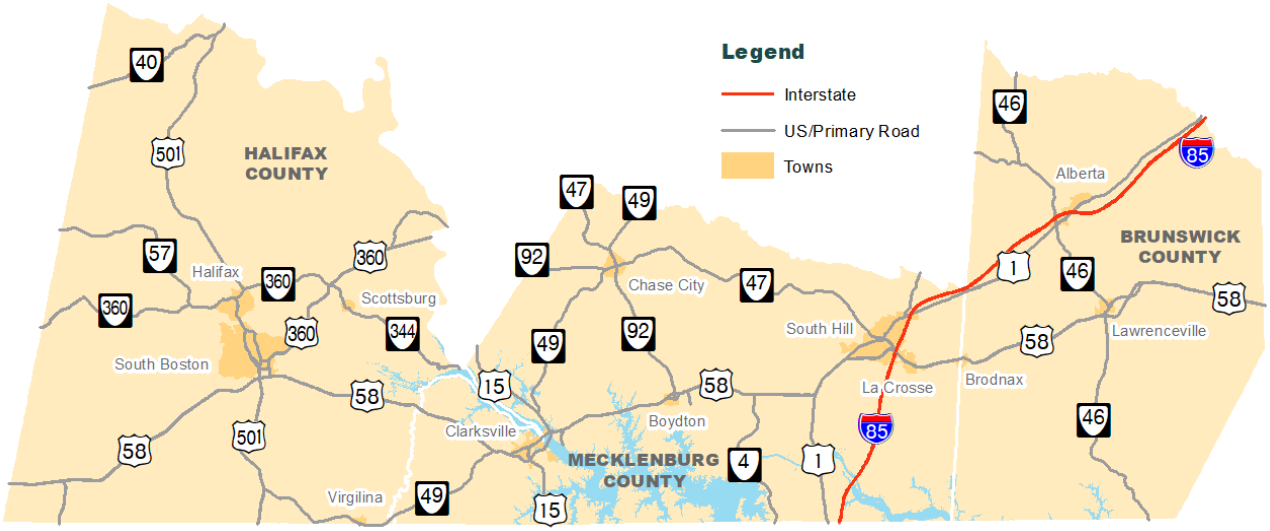
Transportation

The Southside Planning District is served by an Interstate (I-85), several US Highways (1, 15, 58, 501, and 360) and many state highways and secondary routes. I-85 passes through the eastern part of the region running generally north to south. Other north-south corridors within the Southside Planning District are US 1, US 15, and US 501. Primary east-west corridors include US 58 and US 360.

The Commonwealth Transportation Board has designated US 58 as a Corridor of Statewide Significance (CoSS), meaning that it supports multiple modes of transportation, provides for an extended corridor for the movement of freight, connects regions and activity centers, accommodates a high volume of traffic, and helps fulfill a statewide goal or function.

I-85, US 58, US 15, and US 360 are part of the National Highway System (NHS), which are roadways of importance to the nation's economy, defense and mobility.

US 58, eastward from I-85 through Brunswick County, is also part of the Strategic Highway Network (STRAHNET). These are roadways identified as being important for their access, continuity and emergency capabilities as it relates to the United States strategic defense policy.



Map of the Primary Roadways within the Southside Planning District

Other Modes of Transportation

There are three public transit services in the Southside region: The Brunswick Express operated by the Blackstone Area Bus System (BABS) and the Halifax Area Regional Transit (HART) and Lake Area Bus (LAB) operated by the Lake Country Area Agency on Aging.

There are currently 1,100 miles of existing and proposed bicycle and pedestrian facilities throughout the region with opportunities for both on and off-road. The area is home to the Tobacco Heritage Trail and also includes portions of US Bike Route 1, the East Coast Greenway and the Beaches to Bluegrass Trail.

There are no commercial airports in the region but there are three general aviation airports (Mecklenburg-Brunswick Regional, William M. Tuck, and Lake Country Regional) and two local airports (Chase City Municipal and Brunswick).

Within the Southside Planning District there are several short lines providing service for the movement of freight. Passenger rail is currently not available in the region, although the Southeast High Speed Rail project may provide access to this mode of transportation at some point in the future.

Data References

NOAA. *Global Summary of the Year Station Details (Alberta, Chase City, South Boston)*. Retrieved 11/02/18 from https://ncdc.noaa.gov/cdo-web/datasets/GSOY/stations/GHCND:USC00440079/detail (other GHCND numbers include: USC00441606 and USC00447925).

Southside Planning District Commission. *2045 Rural Long-Range Transportation Plan*. January 23, 2020.

U.S. Census Bureau. 2010 Census. Retrieved 11/16/18 from https://factfinder.census.gov

U.S. Census Bureau. Annual Estimates of Housing Units for the United States, Regions, Divisions, States and Counties: April 1, 2010 – July 1, 2017 Population Estimates. Retrieved 11/16/18 from https://factfinder.census.gov

U.S. Census Bureau. QT-H1 General Housing Characteristics: 2010, 2010 Census Summary File 1. Retrieved 11/16/18 from https://factfinder.census.gov

University of Virginia Weldon Cooper Center, Demographics Research Group. Virginia Population Projections. 2019. Retrieved 10/30/19 from https://demographics.coopercenter.org/virginia-population-projections

Virginia Employment Commission. Quarterly Census of Employment and Wages (QCEW), 4th Quarter 2013-2017. Retrieved from https://data.virginialmi.com

Section

4

Hazard Identification

The hazard identification section will focus on profiling hazards that can pose a realistic threat to the Southside Planning District. In addition to describing each hazard, the profiles include information relating to what locations are most likely to be negatively impacted, the anticipated strength of the hazard, previous occurrences within the region, and the future probability of the hazard striking the region.

Dam and Other Impoundment Failure

Flooding due to impoundment failure refers to a collapse, breach, or other failure that causes an uncontrolled release of water or sludge from an impoundment, resulting in downstream flooding. Dam or levee failures can occur with little warning in either wet or dry conditions. Intense storms may produce a flood in a few hours or even minutes from upstream locations. Flash floods can occur within six hours of the beginning of heavy rainfall, and impoundment failure may occur within minutes to hours of the first signs of breaching. Other failures and breaches can take much longer to occur, from days to weeks, because of debris jams or the accumulation of melting snow.



John H. Kerr Dam and Reservoir. Photo credit: US Army Corps of Engineers.

Levee/Floodwall Failure
FEMA defines a levee as 'a man-made structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water to reduce the risk from temporary flooding. A levee designed to provide flood protection from at least the 1% annual chance flood is eligible for accreditation by FEMA. When accredited, the area protected by the levee will be mapped as a moderate risk zone instead of a high-risk zone on the Flood Insurance Rate Map (FIRM). Many of the causes and effects of levee failure are similar to dam failure.

Before a levee can be accredited, it must complete FEMA's levee certification process which focuses exclusively on design construction standards that must be certified by a licensed engineer or related federal agency.

Any questions or information requests regarding levees or floodwalls located in the Commonwealth should be sent to the locality where the levee / floodwalls are located, the US Army Corps of Engineers (US ACOE), or the Federal Emergency Management Agency (FEMA).

Dam Impoundments
Dams and associated lakes, ponds, and impoundments are part of the Commonwealth's overall water resource landscape. As such, a dam failure or breach can have an extensive impact on the magnitude of downstream flooding which could result in wide scale damages. The Virginia Department of Conservation and Recreation's Division of Dam Safety and Floodplain Management (Virginia DSFPM) administers the Virginia Dam Safety Program, under the authority of the Virginia Soil and Water Conservation Board (Virginia SWCB). The Virginia DSFPM by authority of the Virginia SWCB is the key regulatory entity for dams in Virginia not otherwise regulated by the Virginia State Corporation Commission, Virginia Department of Mining, Minerals, and Energy (DMME), United States Government, or as defined in Section 4VAC50-20-30 of the Virginia Impounding Structure Regulations. Any references to VA DSFPM shall be made with the understanding that the VA DSFPM administers the Virginia Dam Safety Program under direct authority of the Virginia SWCB.

The Virginia SWCB regulates impounding structures in the Commonwealth to ensure that they are properly and safely constructed, maintained, and operated. Per section 4VAC50-20-50 of the Virginia Impounding Regulations, "an impounding structure shall be regulated if the impounding structure is 25 feet or greater in height and creates a maximum impounding capacity of 15 acre-feet or greater, or the impounding structure is six feet or greater in height and creates a maximum impounding capacity of 50 acre-feet or greater and is not otherwise exempt from regulation by the Code of Virginia. The regulations, known as the Virginia Impounding Structure Regulations are promulgated to achieve these ends and are recorded in the Virginia Administrative Code ongoing dam inspections and Virginia's participation in the National Dam Safety Program administered by FEMA and the US Army Corps of Engineers serve as a preventative measure against dam failures. Disaster recovery programs include assistance to dam owners and local officials in assessing the condition of dams following a flood disaster and assuring the repairs and reconstruction of damaged structures are in compliance with the National Flood Insurance Program (NFIP) regulations.

Per the current Virginia Impounding Structure Regulations, an "impounding structure" or "dam" can be defined as the following: "a man-made structure, whether a dam across a watercourse or structure outside a watercourse, used or to be used to retain or store waters or other materials." Dams are classified with a hazard potential depending on the downstream impacts during a dam failure event

situation. Hazard potential is not related to the structural integrity of a dam or environmental impacts but strictly to the potential for adverse downstream effects if the dam were to fail. Regulatory requirements, such as the frequency of dam inspection, the standards for spillway design, and actions within established emergency plans, are dependent upon the dam's assigned hazard potential classification. The following table provides additional information on these hazard potential classifications and the possible effects on downstream areas if failure were to occur.

Hazard Potential	Description	Inspection
High	Failure will cause probable loss of life or serious economic damage (to residences, businesses buildings, facilities, other occupied structures, public utilities, major roadways, railroads, etc.)	Annual owner inspection, Professional Engineer inspection every 2 years.
Significant	Failure may cause loss of human life or appreciable economic damage (to residences, businesses, buildings, facilities, other occupied structures, public utilities, secondary roadways, etc.)	Annual owner inspection, Professional Engineer inspection every 3 years.
Low	Failure would result in no expected loss of human life, and cause no more than minimal economic damage.	Annual owner inspection, Professional Engineer inspection every 6 years.
Low, Special*	Failure would cause economic damage to property of the dam owner.	Annual owner inspection, Professional Engineer inspection every 6 years.

*Low, Special is a sub-category of the "Low" classification per DCR's *Dam Classification* webpage.

The owner(s) of each regulated high, significant, or low hazard potential dam is required to apply to Virginia DSFPM for a Regular Operation and Maintenance Certificate every 6 years. The application must include an assessment of the dam by a licensed Virginia Professional Engineer, an Emergency Plan (EAP – Emergency Action Plan or EPP – Emergency Preparedness Plan), the appropriate forms, and the appropriate fee(s), submitted separately. An executed copy of the Emergency Plan must be filed with the appropriate local emergency management official and the Virginia Department of Emergency Management. Please note the Emergency Plan may also be routinely updated by the dam owner during the term of the six-year certificate if any relevant information has changed.

Virginia DSFPM issues Regular Operation and Maintenance Certificates to the dam owner for a period of six years. If a dam has a deficiency but does not pose imminent danger, Virginia DSFPM may issue a Conditional Operation and Maintenance Certificate, during which time the dam owner is to correct the deficiency. After a dam has been granted a Regular Operation and Maintenance Certificate by Virginia DSFPM, annual inspections are required by a Professional Engineer or the dam owner, and the Annual Inspection Report is submitted to the appropriate Virginia DSFPM Regional Dam Safety Engineer.

In September 2017, Virginia DSFPM began utilizing the online enterprise application "Dam Safety Inventory System" (DSIS) for all of its dam related information and daily tasks. The DSIS is an inventory system designed to house all of VA DSFPM dam related data and regulatory documents for every known dam in the Commonwealth. The system allows users to apply for and submit regulatory documents and certifications. Backed by a customer service style workflow, DSIS users can quickly submit applications and receive live updates via email of each applications current status. The workflow methods utilized allow Virginia DSFPM to collect all required regulatory information and supporting documents while ensuring all applications proceed through all required approval steps. With all information collected during the application process, Virginia DSFPM has all information and documents housed in a central location which can be accessed by anyone willing to request a DSIS account.

This centralized storage method allows Virginia DSFPM to easily review and share data needed for emergency situations, including but not limited to:

- Emergency Plan Documents
- Query System for Emergency Plan Details
- Dam Drainage Areas
- Dam Points
- Dam Inundation Studies
- Dam Inundation Zones

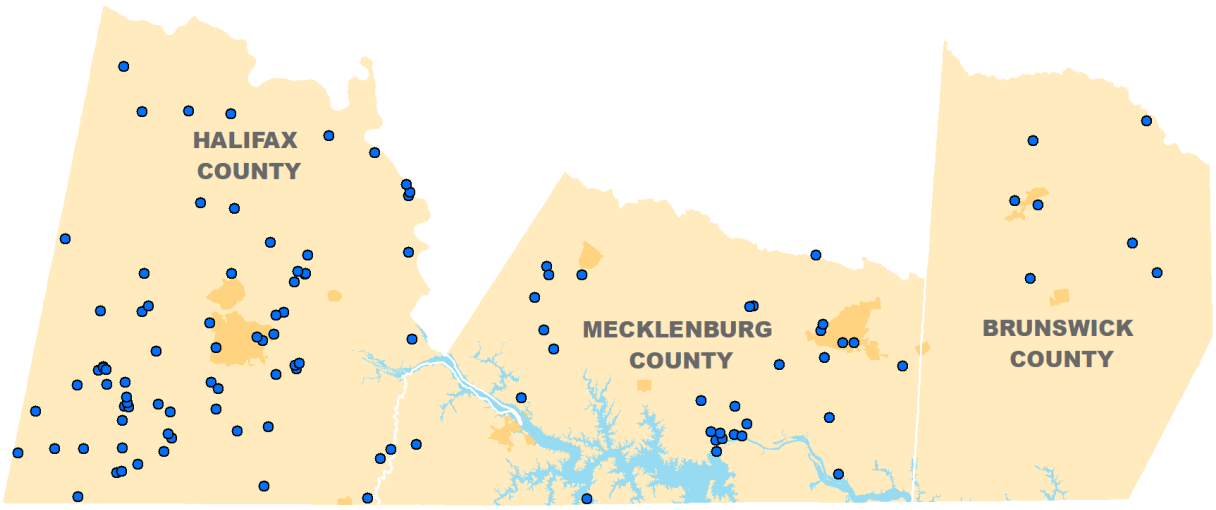
Aside from spatial data and emergency plans, users can access data and documents related to inundation studies, inspections, permits, certificates, and PMP studies. With all data available for a dam, the application provides all information that would be needed to make decisions for emergency preparations and reactions.

Dam Failure
Flooding following a dam failure may occur due to any one or a combination of the following causes:

- Prolonged periods of rainfall and flooding;
- Inadequate spillway capacity;
- Internal erosion caused by embankment or foundation leakage or piping;
- Improper maintenance, including failure to remove trees and/or woody vegetation, repair internal seepage problems, replace lost material from the cross section of the dam and abutments, failure to clean and remove debris or obstructions, or maintain gates, valves, or other operational components;
- Improper design, including the use of improper construction materials and incorrect construction practices or methods;
- Improper operation, including failure to remove or open gates or valves during high flow periods;
- Failure of upstream dams on the same waterway (dams in series condition);
- High winds, which can cause significant wave action and result in substantial erosion; or
- Intentional terrorism or criminal acts.

Location

The Southside Planning District is home to 110 dams scattered throughout the region. There are 7 dams located in Brunswick County, 31 in Mecklenburg County and 72 in Halifax County. The largest is the John H. Kerr Dam, located in Mecklenburg County. Additionally, the towns of South Hill and South Boston have dams located within their corporate limits, totaling 2 and 4 respectively.



Dam Locations within the Southside Planning District.

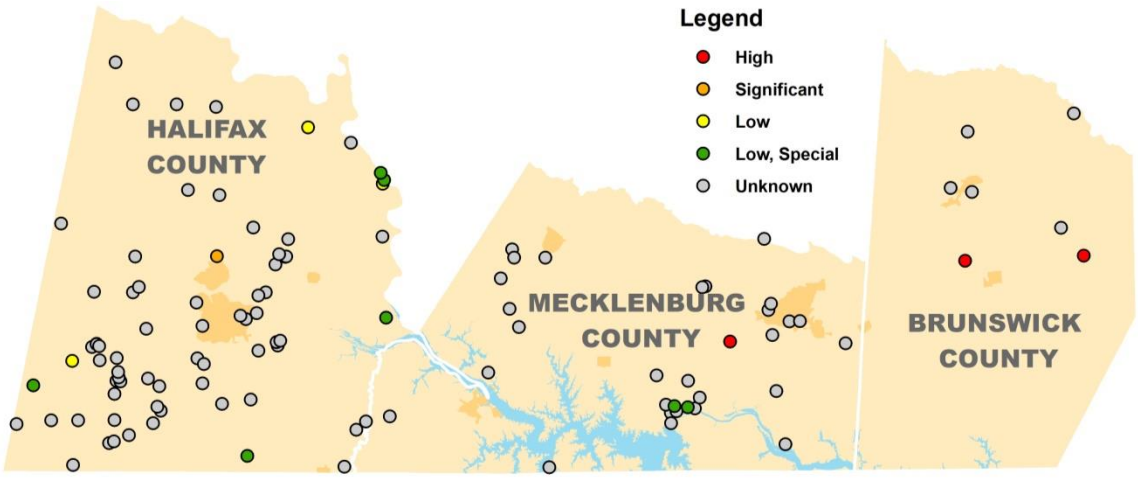
Dam Classification – Hazard Potential

The Department of Conservation and Recreation classifies dams based upon the potential of loss of human life or property damage in the event that the dam was to fail. Classifications are not related to the physical condition or probability that a dam will fail, rather the potential for loss in the downstream inundation zone. Classifications can change over time based upon changes in a dam inundation zone. For example, if houses are constructed downstream from a low hazard dam, the dam could be reclassified as a high hazard dam due to the increase potential for loss of life and/or property now present in the inundation zone.

Within the region, DCR has classified 3 dams as High Hazard Potential, 1 as Significant, 3 as Low, Special, 3 as Low, and 96 that are unknown at this time. Additional details, including regulation, ownership, height, storage acreage, etc., can be found under Community Assets and Critical Facilities in the Risk Assessment section of this Plan.

Hazard Potential	Dam(s)
High	Brunswick County Dam, Great Creek Dam #6A, and Gordon's Dam.
Significant	Banister Dam.
Low, Special	Horse Shoe Lake Dam, Stump Pond Dam, Reeves Dam, Heart Pond Dam, Edmunds Lake, Clyde's Pond Dam, and Hundley Dam.
Low	Conner Dam, Raw Water Storage Pond, and Fye Dam.
Unknown*	96 other dams throughout the region.

* Requires study to be performed by dam owner/engineer and submitted, reviewed, and approved (confirmed) by DCR prior to assignment of final hazard potential classification.



Dam Hazard Potential Classifications within the Southside Planning District per VA DSFPM.

High Hazard Potential Dams

VA ID Number	Dam Name	Regulatory Agency	Owners	County	Lat.	Long.	Structures in Inundation Zone
025001	Brunswick County Dam	VA DSFPM	VA DGIF	Brunswick	36.7812	-77.7286	1 Business
025007	Great Creek Dam #6A	VA DSFPM	County of Brunswick	Brunswick	36.7765	-77.8921	370 Dwellings
117004	Gordons Dam	VA DSFPM	VA DGIF	Mecklenburg	36.6882	-78.2165	3 Dwellings

*The above information was obtained from the Virginia Department of Conservations' Virginia Dam Safety Inventory System.

Please be aware that there are other known high hazard dams within the Commonwealth of Virginia which are not regulated by or under the jurisdiction of Virginia DSFPM as dictated by the Code of Virginia (§10.1-604). These high hazard dams are regulated by agencies such as the US Army Corps of Engineers (ACOE), Federal Energy Regulatory Commission (FERC), Department of Defense (DOD), and Virginia Department of Mines, Minerals, and Energy (DMME). As Virginia DSFPM is not the regulatory authority for the dams mentioned in this paragraph, it is recommended that the appropriate jurisdictional Agency be contacted for any dam related questions or concerns.

A list of the known high hazard potential classification dams NOT regulated by or under the jurisdiction of Virginia DSFPM is as follows:

High Hazard Potential Dams – Not Regulated by VA DSFPM

VA ID Number	Dam Name	Regulatory Agency	Owners	County	Latitude	Longitude
117001	John H. Kerr Dam	US ACOE	US ACOE – Wilmington District	Mecklenburg County	36.5982	-78.298
083001	Banister Dam	FERC	Banister Hydro Inc.	Halifax	36.7822	-78.9234

Dam related data, including geographically based information, is constantly being revised and updated within the Commonwealth of Virginia as better data/technology becomes available. As a result, latitude/longitude coordinates were provided for all included high hazard dams for use by the public to

locate high hazard dams rather than pre-made geographic maps. Please contact either the Virginia Department of Emergency Management (VDEM) GIS section or Virginia DSFPM if geographically based maps are required. This approach regarding geographic based maps will ensure that the most up-to-date dam related information is being provided at the time of the mapping request.

Please note that it is recommended by Virginia DSFPM that the dam related information presented in this section be reviewed annually and updated as necessary to ensure accurate information is provided for planning, public safety, and emergency management purposes.

Extent

Failure of dams may result in catastrophic localized damages at both the dam location and downstream areas. Vulnerability to dam failure is dependent on dam operations planning and the nature of downstream development. Depending on the elevation and storage volume of the impoundment, the impact of flooding due to dam failure may include loss of human life, economic losses such as property damage and infrastructure disruption, and environmental impacts such as destruction of habitat. Evaluation of vulnerability and impact is highly dependent on site-specific conditions; no broad-brush approach can be applied at a statewide level.

Owners of impounding structures are required to have dam break inundation zone maps that meet the standards of the Virginia Impoundment Structure Regulations. The properties that are identified within the dam break inundation zone are recorded in the dam safety Emergency Plan (EAP – Emergency Action Plan or EPP – Emergency Preparedness Plan) for that impoundment. Please note that due to the overall limitations of this Report, the impact and vulnerability to downstream state facilities and critical facilities due to dam failure was not estimated.

Dams with known deficiencies continue to create an ever-growing public safety issue for downstream residents, communities, and overall infrastructure. Virginia DSFPM's main goals are to protect public safety and ensure regulated dams within the Commonwealth of Virginia adhere to the current Impounding Structure Regulations. Virginia DSFPM's yearly Grant Program provides potential financial aid through a 50% match to dam owners looking to work on their regulated dams to keep them in compliance. In addition, Virginia DSFPM provides dam focused educational trainings to the public to help dam owners understand their dam related regulatory/maintenance responsibilities and to ensure private engineers understand dam related requirements.

As dam related infrastructure continues to age, Virginia DSFPM continues to look into ways to keep dams safe, continues to work to bring newly located dams into compliance, and continues to offer the yearly Grant Program to dam owners. Avenues are being considered to help increase the Virginia DSFPM staff to better manage existing workloads and staff is looking into creative ways to institute online video based training centered around dam related information/dam ownership.

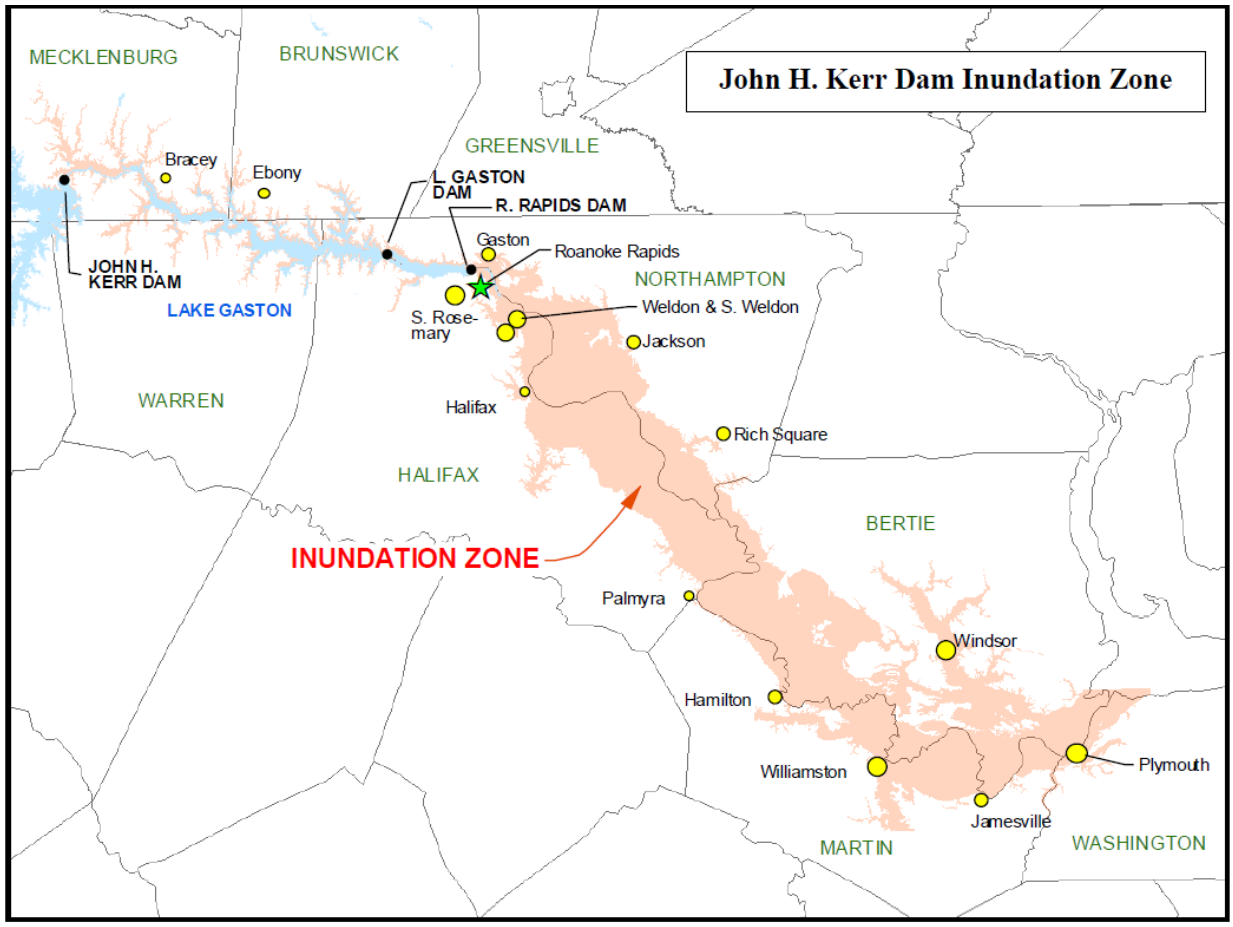
As discussed earlier within this section, Virginia DSFPM has implemented a new online database called DSIS which continues to be populated with dam related data. By continuing to maintain and populate DSIS with important data such as inundation studies and Emergency Plans, Virginia DSFPM has real-time access to critical dam information which is invaluable during emergencies and helpful in planning situations (development downstream). Access to a system like DSIS helps to reduce long term dam related vulnerabilities within the Commonwealth and decrease the ever-growing unacceptable risk to the general public.

John H. Kerr Dam – Kerr Dam Break Study

Studies provided by the U.S. Corps of Engineers in its *Kerr Dam Break Study, August 1986*, show that a breach (500' wide at the base) of the John H. Kerr Dam could cause an inundation zone of 684 square miles. As a point of reference, 684 square miles is approximately the size of Mecklenburg County. This inundation zone would be created, assuming the failure of the John H. Kerr, Gaston and Roanoke Rapids dams. The potential catastrophe was mapped by considering a "Spillway Design Flood", the most severe meteorological event considered reasonably possible in the region. The maps also assume that Buggs Island Lake would have risen to an elevation of 325.6' above sea level, well above its normal surface elevation of 300' above sea level at the date of the report.

The Kerr Dam Break Study notes: "The information contained herein is intended to use as an aid in planning emergency evacuation. The plates do not represent a precise definition of the effects of dam failure, since the various conditions attending failure cannot be forecasted. Preparation of these maps does not reflect on the safety or integrity of the JH Kerr Dam."

According to the maps, the flooding during this scenario could affect eight Virginia and North Carolina counties and possibly destroy two more major dams (Gaston and Roanoke Rapids) in addition to the Kerr Dam. The floodwaters would expand out to the Albemarle Sound, on the coast of North Carolina. A map depicting the inundation zone for the John H. Kerr Dam has been included for reference purposes.



The following table shows various points downstream of Kerr Dam and the water elevation during a potential dam break.

Point	Miles Down From Kerr	Flood Wave Arrival (Hrs. From dam Break)	Peak Wave Arrival (hrs. from dam break)	Max. Water Surface Elevation (Mean Sea Level)	Normal Water Surface Elevation (Mean Sea Level)
Buggs Island	0.25	<0.25	2.50	254	200
Confluence with Allen Creek	2.65	0.25	4.75	244	200
US 1 Bridge	5.63	0.50	6.75	239	200
I-85 Bridge	8.83	0.75	7.25	235	200
Old Seaboard Coast Line Bridge	10.01	1.00	8.25	235	200
Confluence with Poplar Creek	19.15	1.50	10.00	231	200
Gasburg Bridge	23.74	2.00	10.50	230	200
Confluence with Pea Hill Creek	30.15	2.25	10.50	228	200
Head of Gaston Dam	32.65	2.25	10.50	227	200
Tail of Gaston Dam	32.75	3.00	14.25	171	132
Confluence with Deep Creek	36.40	3.25	14.50	165	132
Head of Roanoke Rapids Dam	41.20	3.50	14.75	163	132
Tail of Roanoke Rapids Dam	41.30	3.75	16.50	141	60 to 65*
SR 48 Bridge	42.71	4.00	20.25	136	60 to 65*
Roanoke Rapids Gage	44.43	4.25	22.00	133	50*
I-95 Bridge	45.33	4.75	24.75	128	45* *(85)*
Seaboard Coast Line Bridge	47.77	5.00	28.50	122	45*
US 158/301 Bridge	47.90	5.25	28.75	121	45* *(70)*
Mile 50	50.00	5.50	31.50	117	45*
Halifax, NC	57.50	7.00	39.25	107	35*
Mile 60	60.00	8.25	41.50	104	35*
State Prison Farms	67.00	12.00	49.50	90	30 to 35*
Mile 70	70.00	12.50	55.00	83	30*
Scotland Neck Gage (US 258)	76.36	13.25	64.00	68	30*
Mile 80	80.00	13.50	69.50	63	30*
Seaboard Coast Line Bridge	84.54	14.00	74.00	60	20 to 25* *(43)*
Mile 90	90.00	16.75	81.50	56	20 to 25*
Palmyra, NC	98.60	21.00	92.50	51	15 to 20*
Mile 100	100.00	22.25	94.75	49	15 to 20*
SR 11 Bridge	106.61	25.00	105.00	48	15 to 20* *(39)*
Mile 110	110.00	26.50	114.50	46	10 to 15*
Hamilton, NC Boat Ramp	114.30	28.75	129.75	43	5 to 10*
Mile 120	120.00	31.50	147.50	40	5 to 10*

Quitsna Landing	128.18	35.75	182.50	32	5 to 10*
Mile 130	130.00	36.50	185.50	31	0 to 5*
Williamston Gage (US 17)	137.17	40.25	196.50	29	0 to 5*
Mile 140	140.00	41.50	199.75	27	0 to 5*
Mile 150	150.00	46.50	208.50	24	0 to 5*
Jamesville, NC Boat Ramp	154.50	48.75	211.25	23	0 to 5*
Mile 160	160.00	51.50	214.25	21	0 to 5*
Confluence with Cashie River	162.55	52.75	215.25	19	0 to 5*
Plymouth, NC	166.70	55.00	216.75	15	0 to 5*
SR 45 Bridge	170.45	56.75	218.00	9	0 to 5*
Windsor, NC		56.75	219.25	25	0 to 5*
*Indicates an approximate value, computed by interpolating contours on USGS topographic maps. *Elevations in italics and parenthesis are for the structure, not the water surface.*					

As can be seen in the above table, at the US 1 Bridge over the Roanoke River, the water would have risen 39 feet at maximum flood levels. The beginning of the flood wave would arrive a half-hour after the dam burst, and the peak of the flood wave would arrive 6.75 hours after the failure of the dam.

Floodwaters would reach the old Seaboard Air Line railroad bridge 1 hour after the dam breach. The peak of the wave would hit after 8.25 hours. At this point, Lake Gaston would be 35 feet above normal. The bridge over Smith Creek, at normal elevation of about 212 feet would also be under water. The new welcome center on Interstate 85 would also be surrounded by floodwaters.

Along the way, every creek that feeds into Lake Gaston and the Roanoke River would also rise well over their banks. Allen, Flat, Parham, Sixpound, Smith, Poplar, Pea Hill, and Lizard Creeks would see major flooding. Miles Creek would swell out of its banks all the way to its dam at Lake Gordon.

About twenty miles downstream, at the confluence of Pea Hill Creek and Lake Gaston, the water level could reach 30 feet above normal. The waters here would threaten many homes, boat docks, and other structures. Inundation maps show that the floodwaters would reach to about 230 feet above sea level. Many of these homes are sitting at an elevation of between 210 and 220 feet above sea level. There is at least one large trailer park located on the banks of Pea Hill Creek. From aerial photos, there appears to be approximately 75 trailers in that park. Nearly all lie within the inundation zone.

A failure of the Gaston Dam would cause the Roanoke Rapids Lake, located just below the dam, to rise. At the tail of the Gaston Dam, the water elevation would be 171 feet above sea level. At the lower end of Roanoke Rapids Lake, the surface elevation would be 163 feet above sea level. The normal elevation of Roanoke Rapids Lake is 132 feet above sea level.

Below Roanoke Rapids Lake lies the Roanoke Rapids Dam. In the scenario defined in the Kerr Dam Break Study, this dam would fail if Roanoke Rapids Lake reached a level of 162 feet above sea level.

On the banks of the Roanoke River, below Roanoke Rapids Lake and Dam, lies the City of Roanoke Rapids, North Carolina. This city has a population of almost 17,000 (15,754 during 2010 US Census). If the river rose to levels depicted in the study, up to 5 blocks of the town could be flooded. There is also a paper mill in the city and an industrial waste pond that lies right next to the river, squarely in the inundation zone.

The Town of Gaston (1,152) is located across the Roanoke River from Roanoke Rapids. This small North Carolina town could also see several blocks flooded if there was a failure of the three aforementioned dams.

At this point downstream there are no more lakes to help contain some of the flooding. Instead there is only the Roanoke River and its floodplain. Therefore, the next town downstream, Weldon (1,655), could experience complete flooding as the entire town lies within the inundation zone. Halifax Community College and much of the Town of South Weldon (705) are also in the inundation zone.

Flooding in the Weldon vicinity, according to the maps, would reach to approximately 120 feet above sea level. The Town of Weldon, according to USGS maps, is approximately 80 feet above sea level. A sewage disposal plant on Mush Island, lies at only 65 feet, meaning it could be completely inundated by over 50 feet of water. At Weldon, the inundation zone would extend nearly three miles across.

At 50 miles downstream from John H. Kerr Dam the maximum water elevation could reach 117 feet above sea level. At this point, the normal water surface elevation of the Roanoke River is approximately 30 feet above sea level.

Downstream from Weldon lies the Town of Halifax (234). At 57.5 miles from Kerr Dam, this North Carolina town would see the beginning of the flood effects 7 hours after Kerr's failure. The peak of the flooding would occur 39.25 hours after the breach. The maximum water level could be up to 107 feet above sea level, with a couple of blocks in town being located within the inundation zone.

Also within the path of the inundation zone is the medium security Caledonia Correctional Institution, located just south of the Roanoke River in Halifax County. Caledonia, according to the North Carolina Department of Corrections, employs a staff of 405 with an inmate capacity of 1,038. The facility opened in 1892 and farms approximately 5,500 acres. The maximum elevation of floodwaters at the prison could reach 90 feet above sea level, with the prison site sitting at roughly 60 feet above sea level.

Located about two miles northest of Caledonia on the north side of the Roanoke River s the Odom Correctional Institution. Odom maintains a staff of 174 and an inmate capacity of 352. The prison opened in 1961 and contains 2,200 acres of farm land. Odom and Caledonia are both approximately 67 miles downstream from the John H. Kerr Dam.

A USGS gauging station located 76.36 miles downstream from John H. Kerr Dam could see water elevations 68 feet above sea level. The normal elevation of the land near this gauging station is 48 feet above sea level.

The next major population center that could be affected by the dam failures is Williamston, NC, located 137 miles downstream from the Kerr Dam. Williamston is a town of 5,946 (5,511 in 2010) that is situated along the Roanoke River. Although most of the town is located above the inundation zone indicated in the *Kerr Dam Break Study, August 1986*, there are still several blocks that could be affected by the floodwaters. In addition, according to USGS topographic maps, there is a radio tower, a park, and sewage treatment plant in danger of flooding.

Windsor, North Carolina (3,630) is located on the Cashie River, a tributary of the Roanoke. The town is 19.4 miles up the Cashie River from its confluence with the Roanoke River. Based upon topographic

maps, the inundation zone for Windsor would include two sewage disposal facilities, Bertie County High School and most of the town.

The Town of Plymouth (3,878) sites approximately 165 miles downstream from the Kerr Dam. Much of the town could be in danger of flooding. There is also a paper mill and industrial waste ponds within the inundation zone in this area.

At about 173 miles from the John H. Kerr Dam, the Roanoke River empties into the Albemarle Sound. At that point, the river would normally measure about 0.2 miles across. The floodwaters from the failure of Kerr, Gaston, and Roanoke Rapids dams could result in the Roanoke River being 5 miles across at this point.

Previous Occurrences

There are no comprehensive databases of historical dam failures, breaches, or dam related flooding in Virginia. Most dam related failures occur due to a lack of maintenance, overtopping events, seismic situations, seepage or internal erosion issues, major precipitation events such as hurricanes and thunderstorms, or a combination of any of these factors.

A recent article in The Gazette-Virginian made reference to a dam failing in Halifax County due to the effects of Tropical Storm Michael in 2018. It was noted that the impoundment area was known as Cedar Lake, located off of Cedar Lake Road, just east of Jones Ferry Road. It was not known what effects the release of this water had on those downstream.

The Banister Dam is known to have breached in the 1940's and in 1996 it overtopped during Hurricane Fran.

Future Occurrence

As precipitation amounts fluctuate and extreme weather events become more common, the flood controls and impoundment infrastructure in the region becomes more of a concern. Like most of the country, the infrastructure within the Southside Planning District is overwhelmingly privately owned and maintained, and it is aging. The occurrence of more frequent high intensity rainfall events may create conditions that exceed the original design criteria of these aging facilities.

Rainfall totals within the Southside Planning District have increased for two consecutive 5-year periods as shown in the following table. This can be viewed in a variety of ways. First, the area needs rain to help with the numerous agricultural crops produced in the region and to help recharge local wells and other sources of drinking water. Conversely, too much rain at one time can trigger flood events, possibly to include dam failures, thus inflicting increased damage upon the area. Rainfall totals for the region can be seen in the following table.

Average Rainfall Totals Over 5-Year Periods

	2003-2007	2008-2012	2013-2017	Increase
Alberta	40.9"	44.2"	47.3"	+6.4"
Chase City	39.8"	42.2"	44.1"	+4.3"
South Boston	45.5"	42.2"	47.5"	+2.0"

Predicting the probability of flooding due to dam failure requires a detailed, site-specific engineering analysis for each dam in question. Failure may result from hydrologic and hydraulic design limitations, from geotechnical or operational factors, or from force majeure weather events. The data and time necessary to perform a probabilistic failure analysis for each dam in the region is beyond the scope of this plan and regulatory capabilities of Virginia DSFPM. The probability of dam failure due to hydrologic and hydraulic design limitations is related to the regulatory standards for dam spillway design in Virginia. Dams are required to safely pass a spillway design flood (SDF) without failure based on their assigned hazard potential classification, as indicated in the following table.

Performance Standards for Dams

Hazard Potential	Spillway Design Flood (SDF)	Spillway Design Flood (SDF) for Existing Impounding Structures	Minimum Threshold for Incremental Damage Analysis (IDA)
High	PMF	0.9 PMP	100-Yr
Significant	0.50 PMF	0.50 PMF	100-Yr
Low	100-Yr	100-Yr	50-Yr

Note that a dam may be designed to a slightly lower standard than the spillway design flood based on a detailed incremental damage analysis showing the designing the dam to a higher spillway design flood does not further protect the public downstream of the impoundment (i.e. infrastructure downstream already under water/destroyed before any danger from a dam failure were to develop). Low hazard dams expected to result in no loss of human life and no economic damaged to any property, except the dam owners, may qualify for a Special Low Hazard rating lowering the required spillway design flood to the 50-year storm event as well as possibly being exempt from other standards required by the regulations.

Data References

DCR. *Dam Classification*. 05/09/17. Retrieved 10/25/18 from http://dcr.virginia.gov/dam-safety-and-floodplains/damclass

DCR. *Dam Safety Inventory System*. Retrieved from https://consapps.dcr.virginia.gov/DSIS/#/

Halifax Town Council Current Affairs Committee. *Memo of Phone Conference with Federal Energy Regulatory Commission Regarding Halifax Dam (FERC Project No. P-9028)*. 12/8/2019.

North Carolina Department of Public Safety. *Caledonia Correctional Institution*. Retrieved 12/11/18 from https://www.ncdps.gov/adult-corrections/prisons/prison-facilities/caledonia-correctional-institution

North Carolina Department of Public Safety. *Odom Correctional Institution*. Retrieved 12/11/18 from https://www.ncdps.gov/adult-corrections/prisons/prison-facilities/odom-correctional-institution

The Gazette-Virginian. *'It's the Worst' Update: Tropical Storm Michael lashes county with devastating deluge, fierce winds*. 10/12/18. Retrieved 12/11/18 from www.yourgv.com/news/local_news/update-tropical-storm-michael-lashes-county-with-devastating-deluge-fierce/article_0a2384c0-ce39-11e8-a32e-b3bbebcc18cc.html

U.S. Census Bureau. *DP-1, Profile of General Population and Housing Characteristics: 2010, 2010 Demographic Profile Data, Gaston, NC*. Retrieved 12/11/18 from https://factfinder.census.gov

U.S. Census Bureau. *DP-1, Profile of General Population and Housing Characteristics: 2010, 2010 Demographic Profile Data, Halifax, NC*. Retrieved 12/11/18 from https://factfinder.census.gov

U.S. Census Bureau. *DP-1, Profile of General Population and Housing Characteristics: 2010, 2010 Demographic Profile Data, Plymouth, NC*. Retrieved 12/11/18 from https://factfinder.census.gov

U.S. Census Bureau. *DP-1, Profile of General Population and Housing Characteristics: 2010, 2010 Demographic Profile Data, Roanoke Rapids, NC*. Retrieved 12/11/18 from https://factfinder.census.gov

U.S. Census Bureau. *DP-1, Profile of General Population and Housing Characteristics: 2010, 2010 Demographic Profile Data, South Weldon, NC*. Retrieved 12/11/18 from https://factfinder.census.gov

U.S. Census Bureau. *DP-1, Profile of General Population and Housing Characteristics: 2010, 2010 Demographic Profile Data, Weldon, NC*. Retrieved 12/11/18 from https://factfinder.census.gov

U.S. Census Bureau. *DP-1, Profile of General Population and Housing Characteristics: 2010, 2010 Demographic Profile Data, Williamston, NC*. Retrieved 12/11/18 from https://factfinder.census.gov

U.S. Census Bureau. *DP-1, Profile of General Population and Housing Characteristics: 2010, 2010 Demographic Profile Data, Windsor, NC*. Retrieved 12/11/18 from https://factfinder.census.gov

VDEM. *Commonwealth of Virginia Hazard Mitigation Plan.* 03/2018. Retrieved 02/03/2020 from https://www.vaemergency.gov/wp-content/uploads/2018/03/COV-SHMP-3-2018-Public.pdf

Drought

A drought is a period of abnormally dry weather that lasts long enough to cause an imbalance in the area's hydrologic system. This hazard is defined by rainfall amounts, conditions of vegetation, soil moisture levels, agricultural productivity, reservoir levels, stream flow, and economic impact. Drought levels are relative to the climate of the area in which they are affecting. Normal conditions for a dry area, such as the state of New Mexico, could be the equal of an extreme drought in Southside Virginia.

What are the different types of drought?

The most common type of drought is an agricultural drought. This event is generally recognized as occurring during the growing season and is characterized by its unusually dry conditions. Droughts that tend to linger for longer periods of time, six months or more, and which see precipitation account for less than 75 percent of the normal accumulation, are referred to as meteorological droughts. Finally, a hydrologic drought is one in which flow levels in local streams are extremely low, usually the result of an extended meteorological drought.

A drought can last for years, and particularly to this District, can have devastating effects on crops. Without water, crops will wither and die. Farmers can help delay this effect in the short-term by irrigating their fields, but without proper rainfall irrigation sources are not able to be recharged. Crop losses can easily reach into the millions of dollars. Tobacco, still the primary crop in the region, is quite hardy but still requires water.

Livestock are also not immune to the problems associated with droughts. Without proper water, pasture grasses die and other food sources must be utilized. When farmers are forced to feed hay before winter it can set in motion a chain reaction of events. Since growing hay during a drought realistically doesn't occur, hay can become scarce and thus prices for it will rise. Farmers are then left to pay these higher costs to offset the hay that is now needed to see their livestock through the winter.

In a severe drought, the water level in wells can drop to such a degree they go dry. Sometimes wells can replenish themselves before the end of the drought, but in most cases there must be rain to bring the underground water level back up. Other sources of drinking water such as rivers and reservoirs can also dry up or see their levels drop below that of water intakes. In response to the lower water levels experienced by ground and surface waters during a drought, localities can mandate the implementation of water-saving measures when a water source drops to a pre-defined level. Such measures are generally carried out through the adoption of a drought ordinance and may include prohibiting the watering of lawns, washing of cars or filling of pools. In some instances, restaurants may be asked to not serve water to customers immediately upon their seating, but rather only if the customers ask for water.

Lake Country Water Supply Plan & Drought Response Plan

In 2011, the Lake Country Water Supply Plan & Drought Response Plan was adopted. Participating localities included: Brunswick and Mecklenburg counties, and the towns of Alberta, Boydton, Brodnax, Chase City, Clarksville, La Crosse, Lawrenceville, and South Hill. The plan evaluated existing water resources, assessed future water demands and established drought responses and contingencies based on the severity of drought conditions.

Location

SPDC staff was not able to determine which portions of the region may be more prone to drought events. Variables such as access to irrigation methods and whether water is accessed on the surface or in the ground may further impact when and to what degree drought conditions are felt at a given location.

Extent

For the purposes of this plan, the measureable effects of a drought will be taken from the United States Drought Monitor. The production of data and maps is a collaboration between the National Drought Mitigation Center at the University of Nebraska-Lincoln, the United States Department of Agriculture, and the National Oceanic and Atmospheric Administration. Drought Monitor data is utilized from various climatic, hydrologic, and soil conditions. The group also takes any reported impacts and field observations into account.

The U.S. Drought Monitor consists of six different classifications based upon current conditions:

Category	Description	Possible Impacts
None	Drought conditions are not present	
D0	Abnormally Dry	Going into Drought: Short-term dryness slowing planting, growing of crops or pastures. Coming out of a Drought: Some lingering water deficits. Pastures and crops not fully recovered.
D1	Moderate Drought	Some damage to crops and pasture. Streams, reservoirs, or wells low, some water shortages developing or imminent. Voluntary water-use restrictions requested.
D2	Severe Drought	Crop or pasture losses likely. Water shortages common. Water restrictions imposed.
D3	Extreme Drought	Major crop/pasture losses. Widespread water shortages or restrictions.
D4	Exceptional Drought	Exceptional and widespread crop/pasture losses. Shortages of water in reservoirs, streams, and well creating water emergencies.

Previous Occurrences

During the mid-to-late 1970's the region was experiencing drought conditions. According to FEMA records an Emergency Declaration was issued in October of 1976 and in July of 1977 in response to dry conditions throughout region. The declaration in 1976 covered all three counties, while the one issued in 1977 only included Brunswick and Mecklenburg Counties.

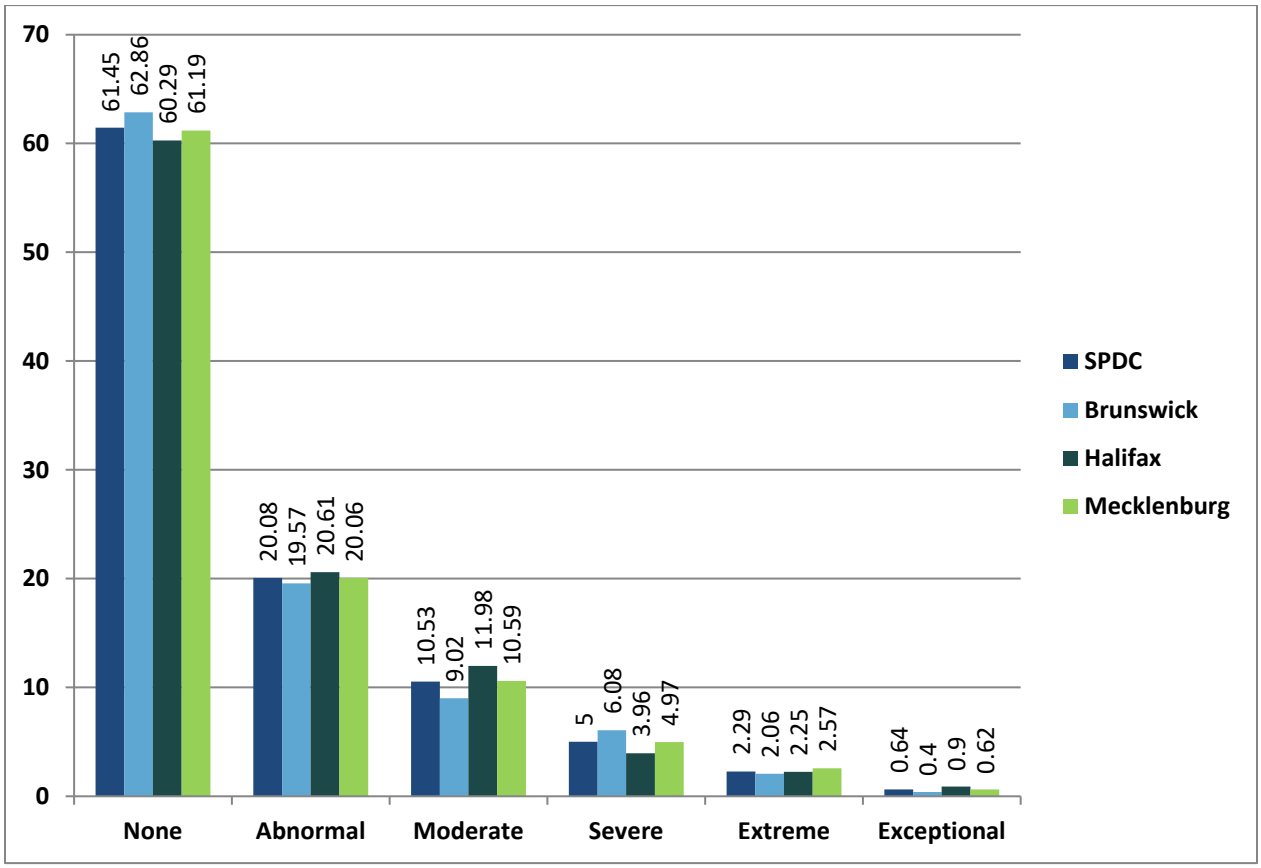
A review of the Storms Events Database provided by NOAA yielded the following data on drought events within the Southside Planning District:

Drought Events and Reported Damage per NOAA

Location	Date	Deaths/Injuries	Crop Damage
Brunswick County	09/01/1997	0/0	$1,130,000
Brunswick County	10/01/1998	0/0	$2,000,000
Brunswick County	11/01/1998	0/0	$1,000,000
Totals		**0/0**	**$4,130,000**

Since 2000, the region has experienced regular intervals of abnormally dry and moderate drought conditions according to data from the U.S. Drought Monitor. More severe conditions have been sporadic and harder to account for. Note that the six drought conditions previously profiled in this section are represented in the graph below.

Percentage of Time Drought Conditions Impacted the Region from 2000-2018



Drought of 1998 – 2002

One of the most severe drought periods to afflict the Southside Planning District lasted from July 1998 to 2002, with a brief respite during the second half of 1999 when the area received heavy rains from Hurricane Dennis. The drought covered much of the southeast United States, including Brunswick, Halifax, and Mecklenburg Counties.

In 1999 Banister Lake in Halifax County dropped so low that the electrical generators at the dam had to be shut down for a long time. Leroy Farmer, who managed the dam at that time for Synergics, was quoted in the August 16, 1999 edition of the News and Record as saying "I've never seen the Banister this low…When it starts raining, the land is so dry that it will soak up every bit of the moisture, and it'll be a long time before the river is back to normal."

Because of unusually low amounts of precipitation many crops were adversely affected and people had to be careful with water supplies. In 2002 the Roanoke River Basin was considered to be one of the hardest hit by the drought conditions.

Due to the crop damages that resulted from the drought, Halifax County applied for agricultural disaster relief in 1999 and 2002. In September of 1999, the Halifax County Board of Supervisors was advised by the local Extension Agent that such action was needed to insure that farmers could qualify for livestock assistance. At the time, many fields that should have been flush with green grass were dead or dying. This was forcing many farmers to feed hay to the livestock, which was supposed to be used during the winter. In addition, applying for disaster relief would allow farmers up to two years to declare profits from the sale of livestock.

Estimated Losses for Halifax County in 1999

Crop/Field	Acres Impacted	Financial Loss
Pastureland	67,000	$5,600,000
Tobacco (non-irrigated)	3,225	$4,300,000
Tobacco (irrigated)	2,533	$1,800,000
Hay	18,673	$1,700,000
Soybeans	2,500	$195,000
Corn/Vegetables/Tree Farms	Info not provided	Info not provided
Total Estimated Losses		**$16,500,000**

Future Occurrence

Forecasting future droughts and how long they will last is quite difficult. However, there are some sources that attempt to predict upcoming drought conditions based upon recent and current data. The U.S. Seasonal Drought Outlook, by NOAA, releases maps that show the drought outlook for the upcoming three months.

Drought conditions will continue to occur in the Southside Planning District, even if their effects are moderate and happen over a short time period. Data collected over the past eighteen years clearly shows that the region experiences moderate drought conditions to some extent on a fairly regular basis.

Virginia as a whole is believed to be in line for more widespread drought conditions moving forward according the Governor's Climate Commission. To further that concern, NASA's Langley Research Center predicts that temperatures in Virginia could rise by up to 9 degrees on average by 2100. This is founded on the fact that the overwhelming majority of the hottest temperature years on record have occurred since 2000, with the two hottest on record occurring within the last ten year cycle. This data is significant in that increased temperatures can greatly affect agricultural operations in rural areas.

Data References

National Centers for Environmental Information. *Storm Events Database*. NOAA. Retrieved 11/16/18 from https://ncdc.noaa.gov/stormevents/

National Drought Mitigation Center. *Background*. 2018. Retrieved 08/10/18 from http://droughtmonitor.unl.edu/AboutUSDM/Background.aspx

National Drought Mitigation Center. *Drought Classification*. 2018. Retrieved 08/10/18 from http://droughtmonitor.unl.edu/AboutUSDM/DroughtClassification.aspx

National Drought Mitigation Center. *Tabular Data Archive*. 2018. Retrieved 08/10/18 from http://droughtmonitor.unl.edu/Data/DataTables.aspx

News and Record Online. *County to Seek Disaster Relief for Farmers as Result of Drought*. 09/09/99. Retrieved 11/20/04 from http://www.thenewsrecord.com/archives/1999/09091999.htm

News and Record Online. *The Banister Mud Flat?* 08/16/99. Retrieved 11/12/04 from http://thenewsrecord.com/archives/1999/08161999.htm

Virginia Department of Emergency Management. *Commonwealth of Virginia Hazard Mitigation Plan, Section 3.08, page 1*. 2017. Retrieved 10/11/18 from http://www.vaemergency.gov/emergency-management-community/recovery-and-resilience/commonwealth-of-virginia-hazard-mitigation-plan/

Virginia Department of Emergency Management. *Drought in Virginia*. January 2003. Retrieved 11/11/04 from http://www.vaemergency.com/prepare/drought/index.cfm

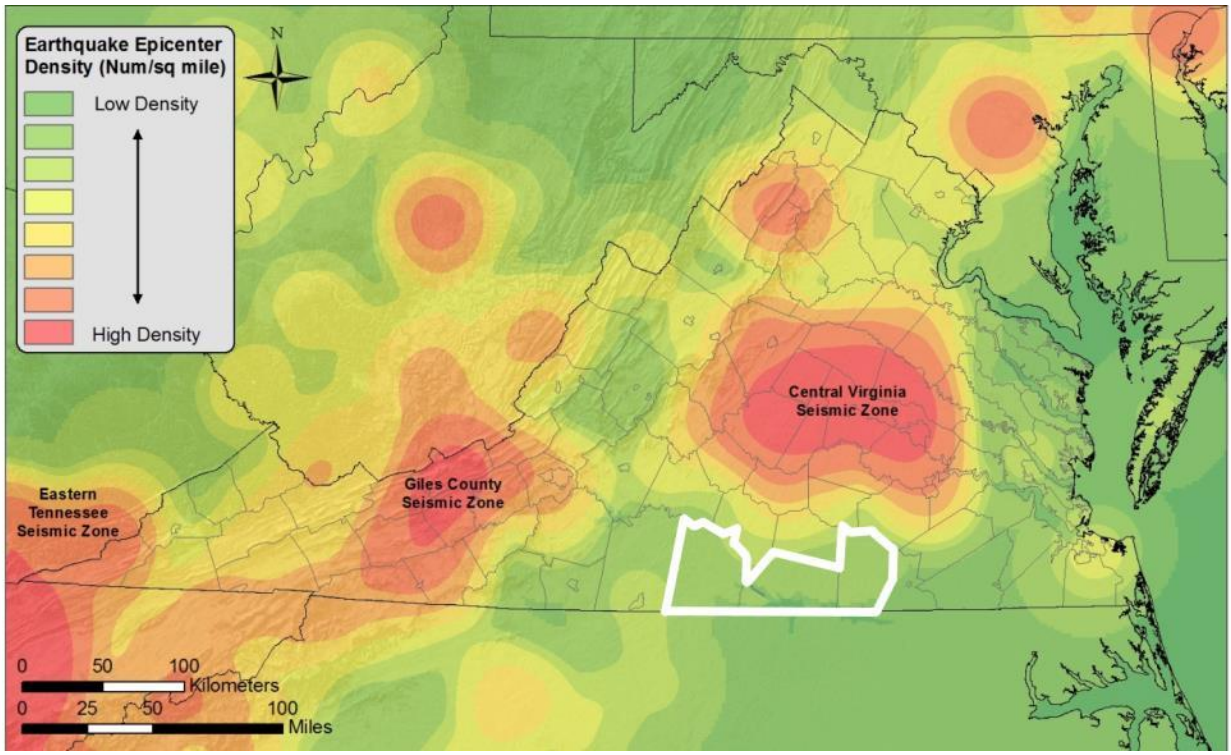
Earthquakes

An earthquake is a sudden movement or tremor of the Earth that is caused by the release of a strain between slow moving plates under the Earth's surface. Earthquakes originate at a fault, or epicenter. Some of these events are very slight and barely noticeable while others can cause extreme destruction and death.

Location

There are no known faults or high density seismic zones within the Southside Planning District. The two closest areas most susceptible to seismic activity are the Giles County Seismic Zone and the Central Virginia Seismic Zone (see below).

Map Showing Earthquake Epicenter Density for the Commonwealth of Virginia.



*The borders of the Southside Planning District are highlighted in white.

Extent

Earthquakes can be measured in two very distinct manners. The first measurement is the events magnitude, which is the amount of seismic energy that is released at the earthquakes epicenter. The Richter Scale uses numbers to rate the magnitude based upon readings from a seismograph. The second measurement relates to the events intensity, essentially the noticeable effects of shaking on the surface. The Modified Mercalli Intensity Scale is used to rate the effects of an earthquake.

Comparison of Magnitude and Intensity

Magnitude (Richter Scale)	Intensity (Mercalli Intensity Scale)
1.0 – 3.0	I
3.0 – 3.9	II – III
4.0 – 4.9	IV – V
5.0 – 5.9	VI – VII
6.0 – 6.9	VII – IX
7.0 – Higher	VIII – Higher

Mercalli Scale	Expected Effects
I	Generally not felt unless under especially favorable conditions.
II	A few people might notice movement if they are at rest, specifically if they are on the upper floors of a building.
III	Quite noticeable indoors by people, specifically if they are on the upper floors of a building. Many people outdoors may not recognize this event as an earthquake.
IV	Most people indoors feel movement. Hanging objects swing. Dishes, windows and doors rattle. The earthquake feels like a heavy truck hitting the walls. A few people outdoors may feel movement. Parked vehicles may rock.
V	Almost everyone feels movement. Sleeping people are awakened. Doors swing open or closed. Dishes are broken. Pictures on the wall move. Small objects move or are turned over. Trees might shake. Liquids might spill out of open containers.
VI	Everyone feels movement. People have trouble walking. Objects fall from shelves and pictures fall off of walls. Furniture moves. Plaster in walls may crack. Trees and bushes shake. Damage is slight in poorly built buildings. No structural damage.
VII	People have difficulty standing. Drivers can feel their vehicles shaking. Some furniture may break. Loose bricks can fall from buildings. Damage is slight to moderate in well-built structures; considerable in poorly built structures.
VIII	Drivers have trouble steering. Houses that are not bolted down might shift on their foundation. Tall structures such as towers and chimneys might twist and fall. Well-built structures suffer slight damage. Poorly built structures suffer severe damage. Tree branches break. Hillsides may crack if the ground if wet. Water levels in wells may change.
IX	Well-built structures suffer considerable damage. Houses that are not bolted down move off their foundations. Some underground pipes are broken, the ground cracks. Reservoirs suffer serious damage.
X	Most buildings and their foundations are destroyed. Some bridges are destroyed. Dams are seriously damaged. Large landslides can occur. Water is thrown on the banks of canals, rivers and lakes. The ground cracks in large areas. Railroad tracks can become slightly bent.
XI	Most buildings collapse, some bridges collapse. Large cracks appear in the ground. Underground pipelines are destroyed. Railroad tracks are badly bent.
XII	Almost everything is destroyed. Objects are thrown into the air. The ground moves in waves or ripples. Large amounts of rock may move.

Previous Occurrences

While no earthquake epicenters have occurred within the District, their effects have been felt in the Southside area a few times throughout history. The two most recent and best documented occurred in December of 2003 and August of 2011. The effects from these earthquakes were very minor in our region, and maps from the USGS continue to show that the three counties have an extremely low probability of any major earthquake event from occurring in the District.

<u>December 9, 2003</u>

This earthquake was centered just west of Richmond with effects being felt in many parts of the Commonwealth, including the Southside area. The event measured in at 4.5 on the Richter Scale.

Damages in the Southside Planning District were limited to some items falling off shelves and breaking. No dollar amounts were provided, but it's generally accepted to be quite low.

August 23, 2011

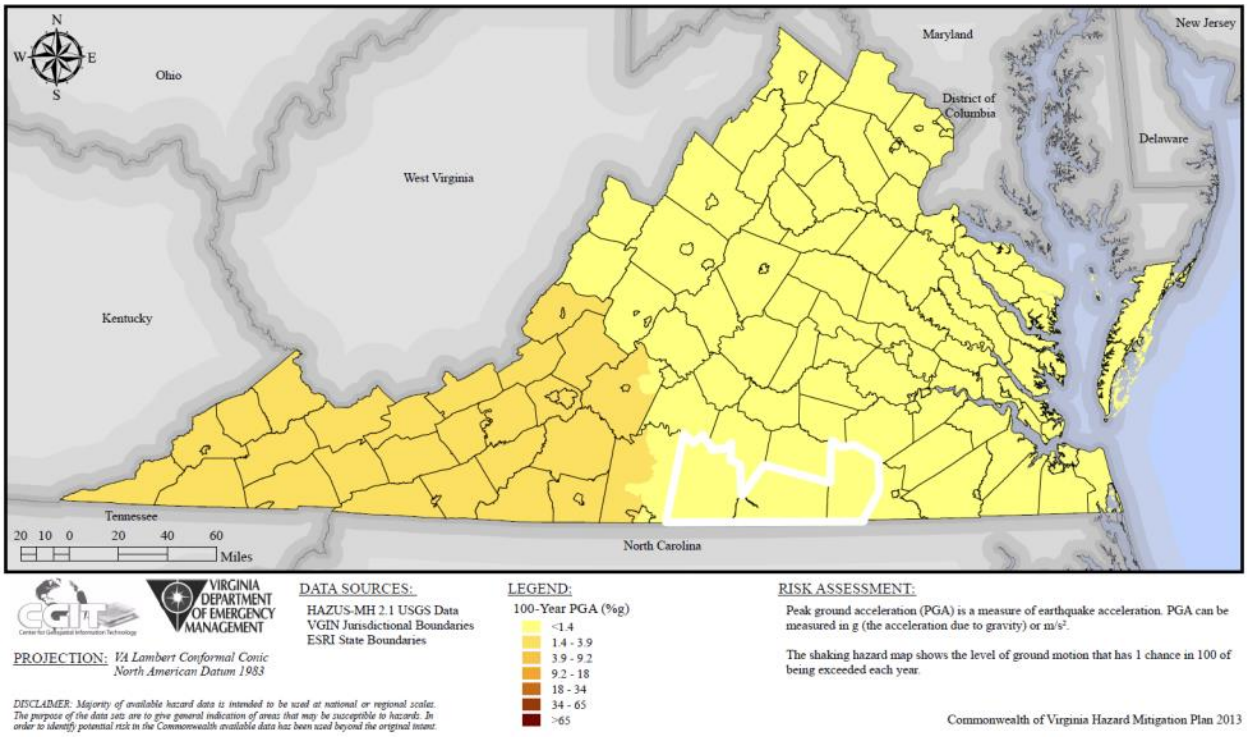
5.8 Mineral, VA earthquake

A 5.8 earthquake on the Richter Scale took place four miles from Mineral, Virginia. Effects were felt as far north as Rhode Island and down to Chapel Hill, NC. This earthquake was the largest felt in the Commonwealth since a 5.9 event on May 31, 1897. Locally, the earthquake did not produce any more than very light damage, although some businesses and facilities did evacuate their buildings for a period of time, disrupting business.

Future Occurrence

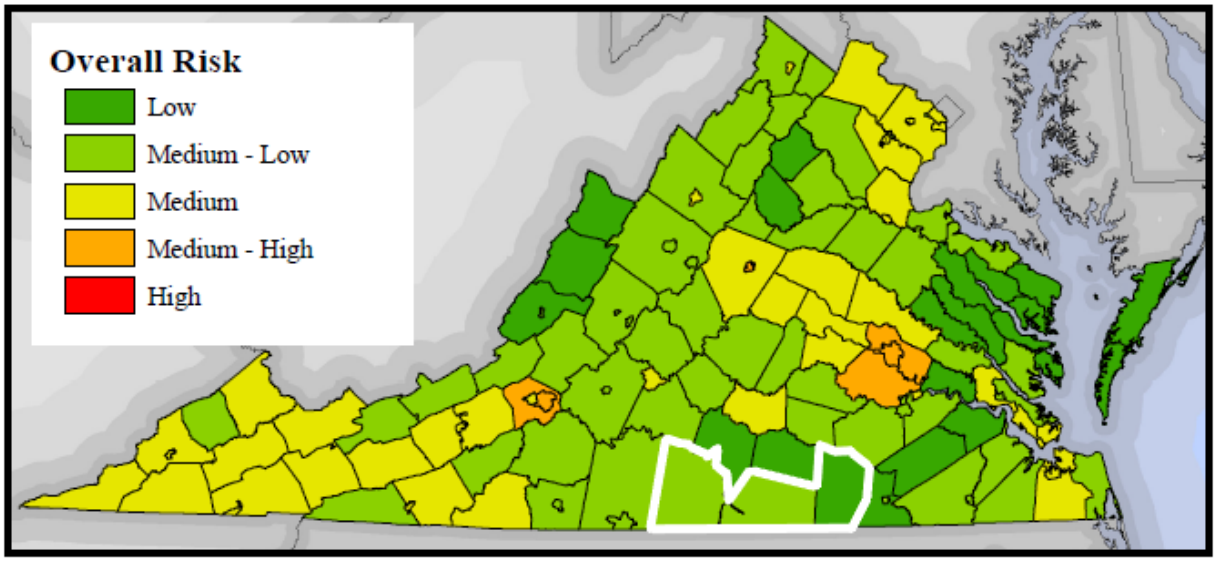
The future occurrence of an earthquake in the Southside District is unlikely. In fact, a 2013 map included in the Commonwealth of Virginia Hazard Mitigation Plan specifically shows that the region has a very small likelihood of experiencing a peak ground acceleration event. Additionally, the overall risk for the region moving forward, including factors ranging from injuries/death to geographic extent, has been accessed at Low to Medium-Low for the Southside District.

100-Year Return Period Peak Ground Acceleration



*The borders of the Southside Planning District are highlighted in white.

Statewide Earthquake Risk Map



*The borders of the Southside Planning District are highlighted in white.

Data References

Corum. *No Injuries from Tremor*.

Shaken & Stirred.

USGS. *Magnitude/Intensity Comparison*. Retrieved 08/16/18 from https://earthquake.usgs.gov/learn/topics/mag_vs_int.php

VDEM. *Commonwealth of Virginia Hazard Mitigation Plan, 100-Year Return Peak Ground Acceleration Map*. Retrieved 10/15/18 from https://www.vaemergency.gov/wp-content/uploads/2018/03/COV-SHMP-3-2018-Public.pdf

VDEM. *Commonwealth of Virginia Hazard Mitigation Plan, Earthquake Hazard Ranking Parameters and Risk Map*. Retrieved 10/15/18 from https://www.vaemergency.gov/up-content/uploads/2018/03/COV-SHMP-3-2018-Public.pdf

Virginia Department of Mines, Minerals and Energy. *Mapping Seismic Hazards in Virginia*. Retrieved 08/16/18 from https://www.dmme.virginia.gov/dgmr/EQHazardMapping.shtml

Extreme Temperatures

Extreme temperature events are extended periods of abnormally high or low temperature. A "heat wave" is a prolonged period of excessive heat and humidity with temperatures that hover 10 degrees or more above the average high temperature for a specific region. Generally speaking; it is most dangerous to those working outside, the elderly, and children.

What's a heat wave?

The most important aspect of a heat wave is not be how hot it gets, but how long the event will last. Studies show a rise in heat-related illnesses when excessive heat lasts for more than two days. During a heat wave everyone must recognize the symptoms of heat-related illnesses. From the Virginia Department of Emergency Management, the following table provides an overview of heat-related illnesses and symptoms.

Heat Related Health Issues

Disorder	Symptoms
Sunburn	Redness and pain. Severe cases include swelling of skin, blisters, fever and headaches.
Heat Cramps	Muscular pains and spasms usually involving the abdominal muscles or legs due to heavy exertion. Loss of water from heavy sweating is generally the cause. Heat cramps are often the first sign that the body is having trouble with heat.
Heat Exhaustion	Cool, moist, pale or flushed skin; heavy sweating; headache; nausea or vomiting; dizziness; and exhaustion. Body temperature may be normal or starting to rise. Typically occurs when people exercise heavily or work in a warm, humid place where body fluids are lost through heavy sweating. Blood flow to the skin increases, causing blood flow to decrease to the vital organs. This results in a form of mild shock. If not treated, the victim's condition will worsen. Body temperature will keep rising and the victim may suffer heat stroke.
Heat Stroke/Sunstroke	Hot, red, dry skin; changes in consciousness; rapid, weak pulse; and rapid, shallow breathing. High body temperature (105 degrees Fahrenheit or higher). If the person was sweating from heavy work or exercise, skin may be wet; otherwise, it will feel dry. The victim's temperature control system, which produces sweating to cool the body, stops working. The body temperature can rise so quickly that brain damage and death may result if the body is not cooled quickly.

Heat waves generally lead to a higher demand for electricity, thus greatly taxing the power grid. This increase in energy consumption can potentially lead to disruptions in service and ultimately result in the loss of air-conditioning, fans, and other home cooling systems.

When extreme heat events are forecast or occurring within a given region, the National Weather Service will issue alerts based upon the potential impact of the coming or on-going temperatures. Emergency messages are distributed through the media and emergency alert systems. These messages generally state the anticipated severity of the event, who are most at risk, and safety tips. The following table outlines the various alerts that are issued.

Alert Issued	Criteria
Excessive Heat Outlook	Outlooks are issued when the potential exists for an excessive heat event in the next three to seven days. An "outlook" provides information to those who need considerable lead-time to prepare for the event.
Excessive Heat Watch	Heat watches are issued when conditions are favorable for an excessive heat event in the next 24 to 72 hours. A "watch" is used when the risk of a heat wave has increased but its occurrence and timing is still uncertain.
Heat Advisory	Heat advisories are issued within 12 hours of the onset of extremely dangerous heat conditions. The general rule of thumb for this "advisory" is when the maximum heat index temperature is expected to be 100°F or higher for at least two days, and nighttime air temperatures will not drop below 75°F; however, these criteria vary across the country, especially for areas that are not used to dangerous heat conditions. Take precautions to avoid heat illness. If you don't take precautions, you could become seriously ill or even die.
Excessive Heat Warning	This warning is issued within 12 hours of the onset of extremely dangerous heat conditions. The general rule of thumb for this warning is when the maximum heat index temperature is expected to be 105°F or higher for at least two days and nighttime air temperatures will not drop below 75°F; however, these criteria vary across the country, especially for areas not used to extreme heat conditions. If you don't take precautions immediately when conditions are extreme, you can become seriously ill or even die.

What's a cold wave?

Conversely, unusually long periods of below average temperatures constitute a cold wave. It takes its toll on many of the same people as a heat wave, particularly the elderly and children.

Because of the extreme cold, many heating systems must work overtime to keep homes warm. The stress on these systems can cause them to break down. The cold temperatures can also lead to numerous issues associated with frozen water pipes. The unemployed and poor have a hard time getting by during the winter, with little money to pay the ever-increasing costs of fuel. Homeless people are directly exposed to the elements, spending time and energy looking for warming shelters or simply taking refuge on stoops, under bridges or other similar locations to that provide some form of protection from the weather.



A nearly frozen Dan River in South Boston.
Photo: Mike Wilborne

Prolonged exposure to intense cold temperatures can also bring about health related issues. The following table provides information on frostbite, hypothermia and winter death. Recent data also indicates that cold related deaths are usually higher than heat related deaths in the U.S.

Cold Related Health Issues

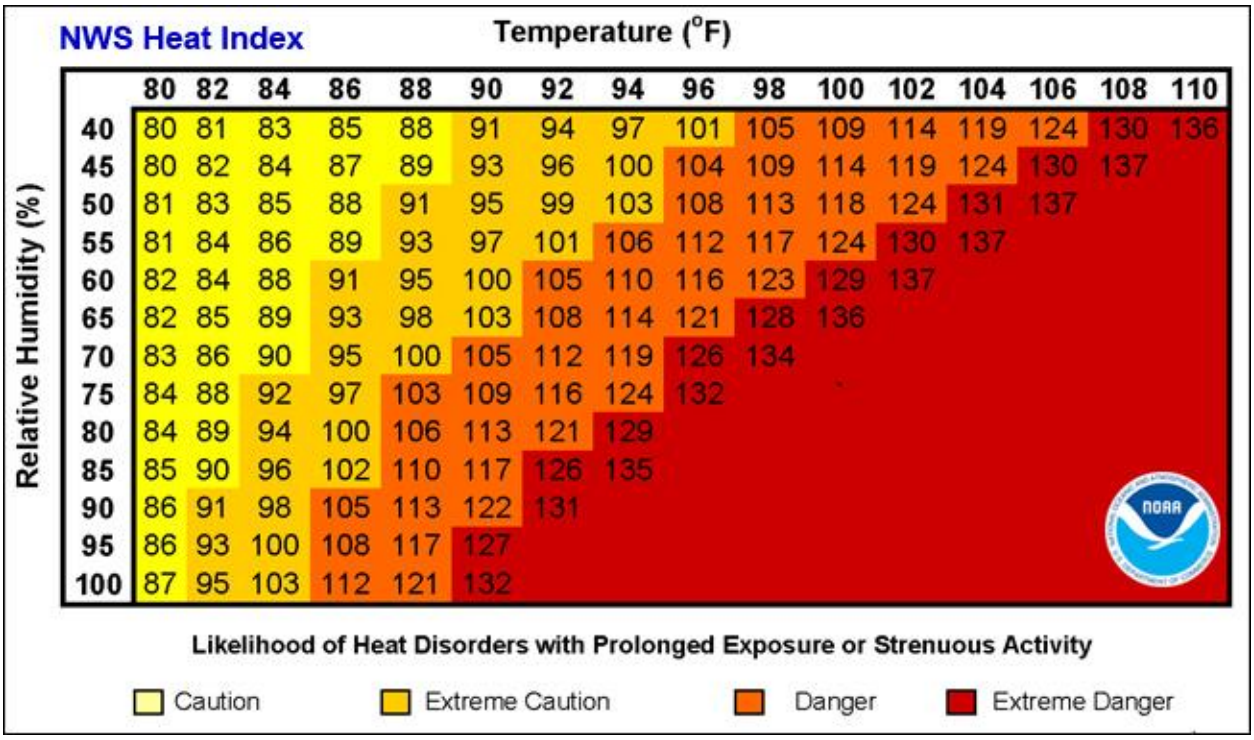
Disorder	Description
Frostbite	A severe reaction to cold exposure of the skin that can permanently damage fingers, toes, the nose and ear lobes. Symptoms are loss of feeling and a white or pale appearance to the skin. If these symptoms are apparent, seek medical help immediately.
Hypothermia	A condition brought on when the body temperature drops to less than 95°F. Symptoms include slow or slurred speech, incoherence, memory loss, disorientation, uncontrollable shivering, drowsiness, repeated stumbling and apparent exhaustion. If these symptoms are detected, take the person's temperature. If below 95°F, immediately seek medical help.
Winter Death	Everyone is potentially at risk, with the actual threat depending upon individual situations. Deaths can be related specifically to ice and snow, such as becoming stranded in a storm, or they can relate to exposure to the cold.

Location

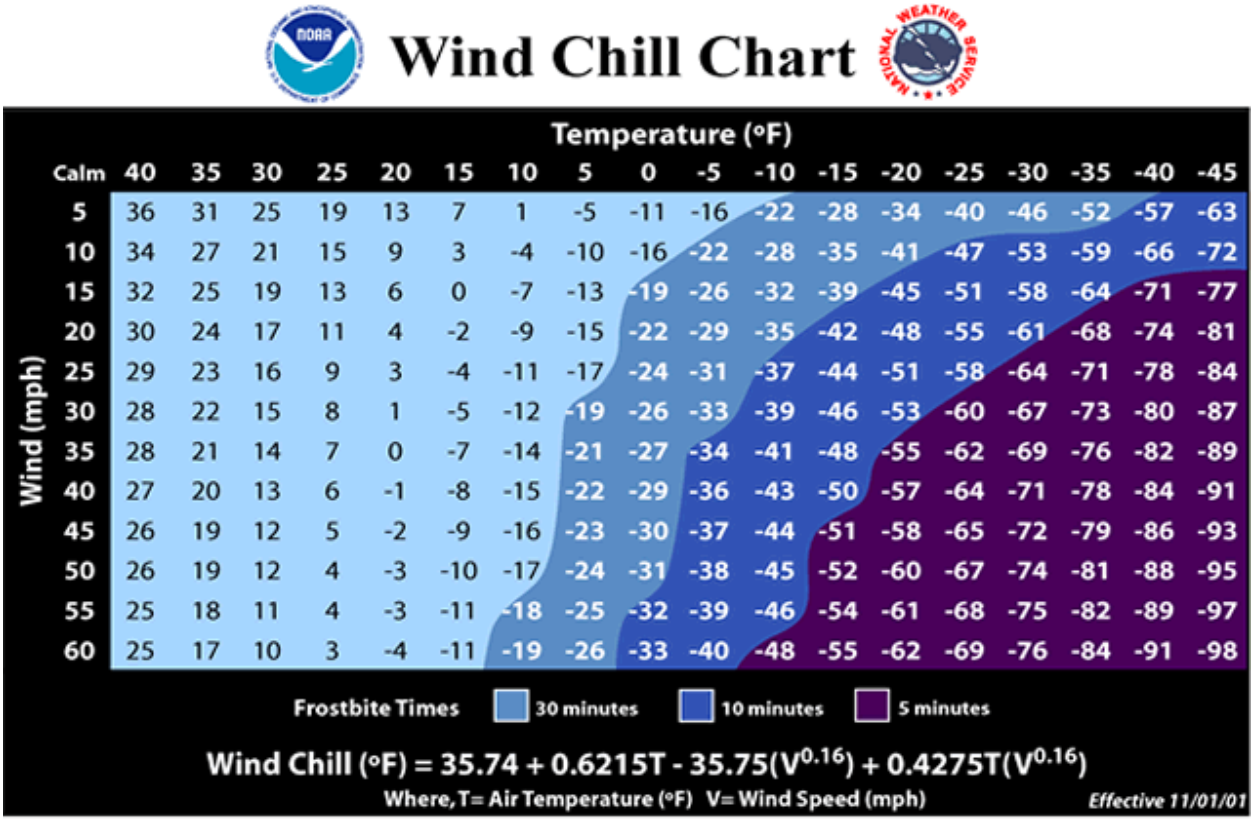
While temperatures have slight variations across the District it is generally accepted that the entire region could be affected by a heat or cold wave, although Halifax County appears to be more likely to experience a cold wave than the other two counties based on NOAA's Storm Event Database.

Extent

The heat index is the number of degrees in Fahrenheit that indicates how hot it feels when relative humidity is factored into the actual air temperature. Full sunshine can increase the heat index by 15 degrees. The mean heat index, instituted by NOAA, is a measure of how hot the temperatures actually feel to a person throughout the day. Surface heat and ambient heat are combined with humidity and other environmental factors in determining this measurement. The following diagram shows the heat index based upon the temperature and humidity level.



For cold weather, temperature is not the only measurement. Wind chill is used to measure how cold it feels when wind is factored in. The wind chill temperature calculates wind speed at an average height of five feet (typical height of a human face) based on readings from a national standard of 33 feet. The wind chill index is based on a human face model and incorporates modern heat transfer theory. It assumes no impact from the sun. The following diagram shows how quickly one can receive frostbite in any given temperature, at a given wind speed.



Previous Occurrences

Summer heat waves and winter cold spells are hazards that have affected the Southside Planning District. Dating back to 1996 there have been two cold waves, three heat waves and one excessive heat event. NOAA's Storm Event Database provided information on the notable events that follow. Counties that were specifically identified as having a qualified heat/cold event are listed, although the remainder of the District most likely experienced nearly similar conditions.

February 3-6, 1996 (Halifax County)
During this time period, bitterly cold winds invaded the area, bringing below normal temperatures with it. The following table provides some context to the temperatures experienced in the region.

Location	Feb. 3	Feb. 4	Feb. 4	Feb. 5
Fort Pickett	28°/16°	28°/11°	22°/-3°	21°/-2°
Chase City	29°/22°	31°/15°	23°/-1°	24°/0°
Lawrenceville	28°/18°	21°/9°	20°/-4°	35°/6°

March 8-12, 1996 (Halifax County)
Record breaking cold temperatures preceded the coming of spring. The late freeze damaged peach and berry crops resulting in approximately $25,000 in losses.

Location	March 8	March 9	March 10	March 11	March 12
South Boston	59°/13°	30°/14°	33°/14°	38°/16°	46°/19°

May 18-21, 1996 (Brunswick/Mecklenburg County)
A four-day heat wave affected the District, as well as many other parts of the Commonwealth. While daytime temperatures routinely topped 90°F, nighttime lows were also considered high for the time of year. The heat wave contributed to numerous reports of heat exhaustion and some schools without air-conditioning closed or held early dismissals.

Location	May 18	May 19	May 20	May 21
Chase City	82°/62°	92°/62°	95°/64°	96°/66°
Kerr Dam	84°/64°	91°/64°	94°/66°	95°/72°
Lawrenceville	85°/63°	89°/62°	94°/65°	95°/69°

July 21-23, 2011 (Brunswick/Mecklenburg County)
An excessive heat event struck the region with exceptionally high daytime temperatures and heat index values. Little relief came during the night as temperatures remained in the mid-70's to low-80's.

Location	July 21	July 22	July 23
Kerr Dam	99°/75°	102°/79°	105°/81°
Fort Pickett	93°/73°	96°/74°	98°/74°

June 29-30, 2012 (Halifax County)

This heat wave was made worse by massive power outages resulting from the June 29th Derecho event. There were two heat related medical emergencies that were reported.

Location	June 29	June 30
South Boston	94°/58°	103°/67°

July 5-8, 2012 (Brunswick/Mecklenburg County)

Location	July 5	July 6	July 7	July 8
Kerr Dam	94°/74°	95°/76°	103°/72°	104°/82°
Fort Pickett	96°/71	98°/71°	97°/72°	100°/74°

Future Occurrence

Since 1996 the region has only had one extreme heat event, lasting three days, according to NOAA. No extreme cold events were recorded during the same time frame. While the area can certainly experience periods that feel quite hot or cold, it does not appear that future occurrences of extreme temperatures will occur on any regular basis.

Data References

American Red Cross, VDEM. *Talking Disaster*.

Ingraham, Christopher. *Cold temperatures kill more Americans than hot ones, CDC data show*. The Washington Post. 12/17/16. Retrieved on 08/22/18 from https://www.washingtonpost.com/news/wonk/wp/2016/12/17/cold-temperatures-kill-more-americans-than-hot-ones-cdc-data-show/?noredirect=on&utm_term=.39e703862e38

National Centers for Environmental Information. *Storm Events Database*. NOAA. Retrieved 08/22/18 from https://www.ncdc.noaa.gov/stormevents/

National Weather Service. *Heat Index*. Retrieved on 08/22/18 from http://www.weather.gov/safety/heat-index

National Weather Service. *Wind Chill Chart*. Retrieved on 08/22/18

VDEM. *Commonwealth of Virginia Hazard Mitigation Plan, Chapter 3 – HIRA, Section 3.08 Drought*. 03/18. Retrieved on 08/22/18 from http://www.vaemergency.gov/wp-content/uploads/2018/03/COV-SHMP-3-2018-Public.pdf

Flooding



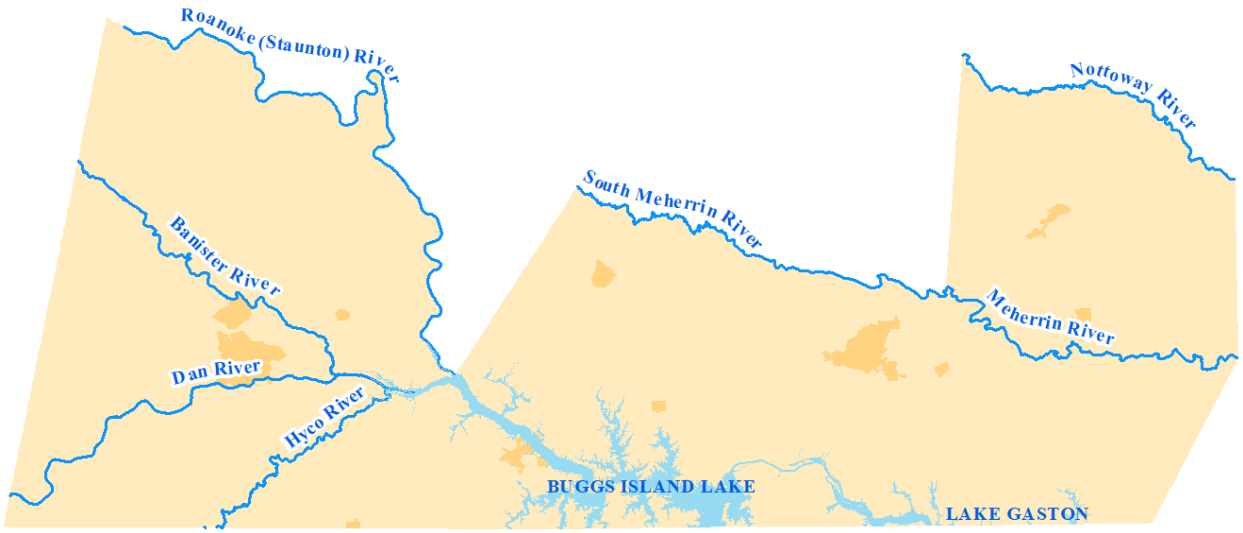
Dan River flooding the Riverdale area (US 501) of South Boston in April of 2017. Photo credit: Bryan Newbill.

A flood occurs when a river, creek, stream or other body of water overflows and inundates a normally dry area with water. This is usually due to an extraordinary amount of rainfall upstream or melting snow. Some of the worst flooding comes after a hurricane or tropical storm passes over an area, completely saturating it with rain. Major floods are considered to be those that cause significant physical damage, economic despair, and risk to life. An example of a major flood would be when the Dan River swells up out of its banks and floods homes and businesses in the Riverdale area.

Flooding is not limited to rivers, creeks, and streams.

Flooding can also occur due to the accumulation of storm water in more urbanized areas. Permeable surfaces and natural green spaces allow for water to soak into the ground. As these permeable areas are covered over by development, storm water begins to accumulate in increasing amounts as the water is displaced from where it would naturally have gone. If this newly created storm water is not properly addressed it will cause issues, notably flooding. To help offset this, many localities have been requiring developers to use low impact development techniques to allow storm water to naturally infiltrate the ground. Common examples include: rain gardens, rain barrels and cisterns, planting of trees and shrubs, and permeable pavement (pavers, porous asphalt and/or concrete).

As the Southside region is many rural, damage is not limited to just structures. The area contains a lot of cropland that is also subject to flooding. These fields near rivers and creeks are especially vulnerable to damage from flooding events. Livestock are also at risk, as many pastures are located in the floodplain. If care is not taken during flood events, livestock may become stranded and possibly drown.



Major Rivers and Lakes for the Southside Planning District

Flash floods are floodwaters that rise very quickly and then in turn subside rapidly. These floods usually cause most of their damage from the velocity of the rushing floodwaters. Flash floods can wipe out bridges, destroy roads, and move cars and houses in seconds. This type of flood tends to occur without advance notice.



Chalk Level Road near South Hill after heavy rains in May, 2018. Photo credit: SoVaNow.com

Other floods, and those most frequently experienced in the Southside Planning District, inflict most of their damage not by velocity but through inundating an area with water. This involves a body of water slowly rising up until its crests and then slowly recedes back down. Properties that are normally dry land can be flooded for days or weeks.

Floods are classified by the probability of their occurrence on an annual basis. A base flood is a flood having a 1% chance of occurring in a given year, sometimes referred to as a 100-year flood. However, this does NOT mean that the flood will only occur once a century. In addition, there are more frequently

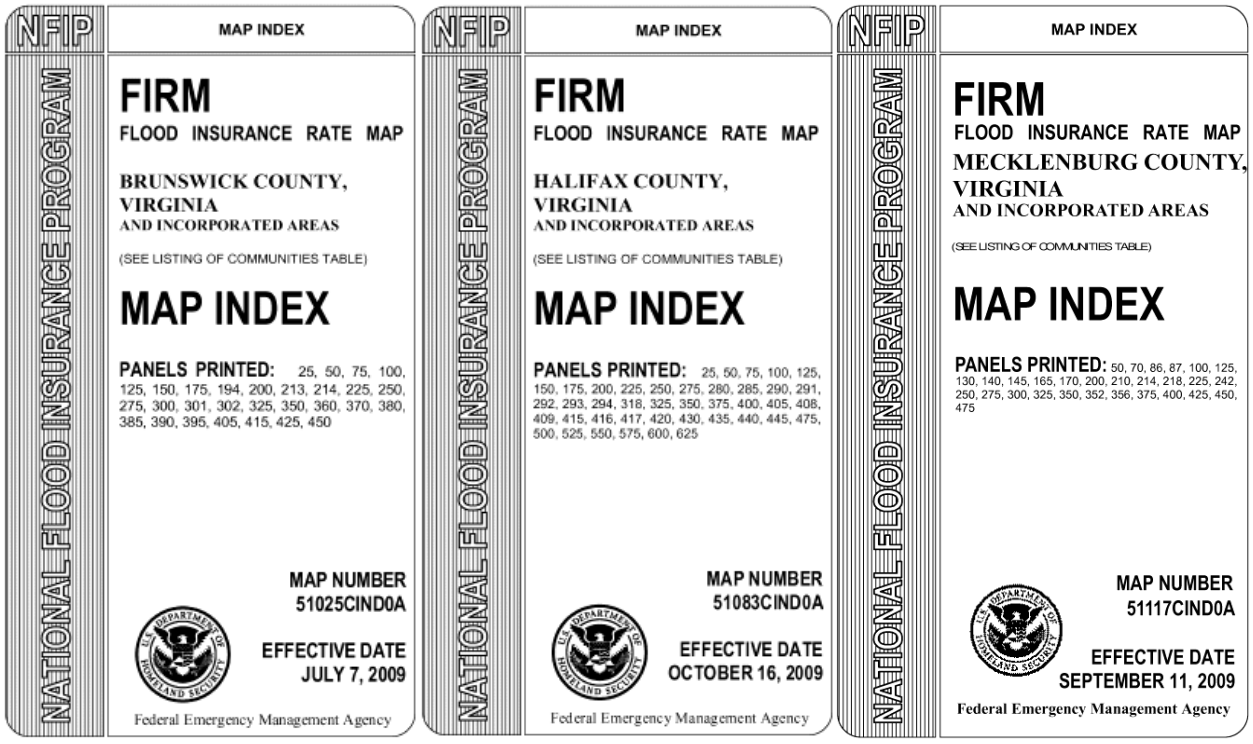
occurring floods events (5-year, 50-year, etc.) and those that occur less frequently (0.2% annual chance or 500-year flood).

Flood data is most often obtained from the Flood Insurance Study, part of the National Flood Insurance Program (NFIP). The Flood Insurance Study provides Flood Insurance Rate Maps (FIRM) which serve as the official maps of a community showing areas at risk of flooding from a base flood. The following table is meant to provide a brief description of the different types of flood zones depicted on a FIRM. The table was obtained from FEMA's State and Local Mitigation Planning How-To Guide. Please note that some designations were not included as they do not appear on the local the FIRM's.

FIRM Flood Zone Designations

Zone A	Base Flood or 100-year floodplain	
	A	The base floodplain mapped by approximate methods, i.e., base flood elevations (BFE's) are not determined. This is often called an unnumbered A zone or an approximate A zone.
	AE	The base floodplain where base flood elevations are provided.
Zone X (shaded)	Area of moderate flood hazard, usually the area between the limits of the 100-year and 500-year floods.	
Zone X (unshaded)	Area of minimal flood hazard, usually depicted on FIRMs as exceeding the 500-year flood level.	

FIRM Flood Maps



DFIRM – Digital Flood Insurance Rate Map

FEMA discontinued paper maps in 2009. This led to converting FIRM maps into a digital format and making them available for viewing and downloading online. The DFIRM data used in this plan is from 2009. Letter of Map Amendments (LOMA) since that time have not been factored into this plan.

Local Jurisdictions Participating in the National Flood Insurance Program

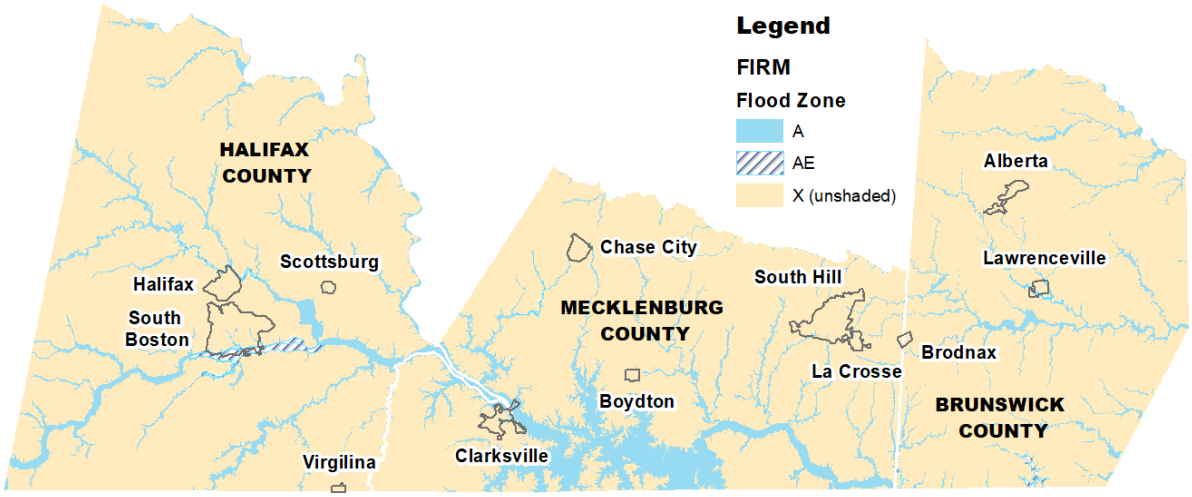
The mission of the National Flood Insurance Program (NFIP) is to reduce the negative impacts associated with flooding on all structures. This is accomplished by working with localities to adopt and enforce floodplain regulations and by making insurance policies available to property owners, renters and businesses.

Local Jurisdiction	Effective Map Date	NFIP Policies
Town of Alberta	7/7/2009	0
Town of Boydton	9/11/2009	0
Brunswick County	7/7/2009	21
Town of Chase City	9/11/2009	1
Town of Clarksville	9/11/2009	1
Halifax County	10/16/2009	12
Town of Halifax	10/16/2009	1
Town of Lawrenceville	7/7/2009	3
Mecklenburg County	9/11/2009	47
Town of South Boston	10/16/2009	11

*The towns of La Crosse, Scottsburg and South Hill do not participate in the National Flood Insurance Program. The towns of Brodnax and Virgilina do not have any areas identified within the 100-year floodplain.

Location

Unlike numerous other hazards, major flooding will generally occur in predefined flood areas. Flood zones “A” and “AE”, the most commonly affected areas during a flood event (100-year floodplain), take up approximately 10.5% of the District’s total area. An overview of various flood zones in a broad context is shown below and was generated using DFIRM maps. Zone X (shaded) is excluded as it’s not visible at the current scale.



Map of the 100-year Floodplain for the Southside Planning District

Urban Flooding

It is also important to note that areas outside of identified floodplains may also be subject to flooding on occasion, with common examples including ponding and urban drainage issues. Ponding tends to occur when the topography does not allow for the natural drainage of the stormwater. Urban drainage refers to stormwater infrastructure, including: ditches, storm drains, retention ponds, rain gardens, etc. These systems are typically designed to account for 10-year storms, so when larger storms occur they tend to overwhelm the stormwater infrastructure and cause localized flooding issues. Some areas that lack or have improperly maintained stormwater infrastructure can also be subject to localized flooding.



House on Montgomery St. in La Crosse - 2016
Photo credit: Tom Tanner

Locality	Location of Urban Flooding Issues
La Crosse	East Pine Street/Montgomery Street area
Lawrenceville	From 5th Avenue to below 6th Avenue, just west of South Hicks Street
Lawrenceville	From 5th Avenue to 6th Avenue, near an old alley just east of South Hicks Street
Lawrenceville	West Church Street and Plank Road area, running along the west side of Plank Road
Lawrenceville	West Church Street and High Street, storm drain issue
Lawrenceville	West 3rd Street and Park Street, storm drain issue
South Hill	Franklin Street and Windsor Street
South Hill	East Atlantic Street near Memory Makers
South Hill	West Atlantic Street between Lunenburg and Matthews
South Hill	Sunset Lane area
Clarksville	4th Street between Market Street and Sizemore Street
Boydton	Jefferson Street between School Street and Sheriff Street
Boydton	Carter Lane area, behind the Copper Kettle Restaurant
Chase City	West 5th Street from Jefferson Street to Little Bluestone Creek
Chase City	West 2nd Street from N. Washington Street to Jefferson Street
Alberta	Alberta Volunteer Fire Department lot

Extent

For the purposes of this plan, flood events will be measured and categorized by the readings from various river gauges within and along the borders of the Southside Planning District. Each gauge location generally has specific flood level categories identified as stages, including: action stage, flood stage, moderate flood stage, and major flood stage. According to the National Weather Service, each of the aforementioned stages is defined as follows:

Action Stage – Stage at which preparations should be considered for the possibility of flooding.
Minor Flooding Stage – Minimal to no property damage occurs, but possibly some public threat exists (such as roads becoming inundated).
Moderate Flood Stage – Some inundation of structures and roads occurs near the river channel. Some evacuations of people and/or transfer of property to higher elevations are necessary.

Major Flood Stage – Extensive inundation of structures and roads occurs. Numerous evacuations of people and/or transfer of property to higher elevations are necessary.

River Gauge Locations – Measurements

Location	Action Stage	Flood Stage	Moderate Flood Stage	Major Flood Stage	Historic Crest	Date
Dan River @ Paces***	18'	20'	24'	27'	33.15'	6/23/1972
Dan River @ South Boston***	15'	19'	25'	29'	33.37'	6/24/1972
Banister River @ Halifax	16'				40.80'	9/20/1944
Roanoke River @ Brookneal	20'	23'	27'	30'	46.00'	8/15/1940
Roanoke River @ Randolph	21'	24'	30'	34'	41.60'	8/16/1940
Allen Creek @ Boydton		15'			23.35'	5/26/2003
Roanoke River @ Buggs Island					11.20'	3/29/1984
Roanoke River @ Kerr Dam*	320'	320'	322'	324'	319.67'	4/29/1987
Meherrin River near South Hill					38.58'	10/12/2018**
Meherrin River near Lawrenceville	12'	15'	25'	29'	42.00'	8/17/1940
Nottoway River near Rawlings	8'	10'	13'	16'	23.25'	10/6/1972
Nottoway River near McKenney					17.87'	10/13/2018**

*Measurements at the John H. Kerr Dam are based upon the elevation above sea level.
**Measurements are preliminary values that may be subject to further review.
***Flood stages on the Dan River at Paces and South Boston were revised in September, 2019. This change was made to better reflect the NWS definitions to the actual impacts incurred. See below for more details.

Dan River @ Paces – New Flood Stage Levels Effective September 5, 2019***

Flood Stage Category	Former Stage Elevation	New Stage Elevation
Action Stage	18'	20'
Minor Flood Stage	20'	22'
Moderate Flood Stage	24'	29'
Major Flood Stage	27'	35'

Dan River @ South Boston – New Flood Stage Levels Effective September 5, 2019***

Flood Stage Category	Former Stage Elevation	New Stage Elevation
Action Stage	15'	18'
Minor Flood Stage	19'	22'
Moderate Flood Stage	25'	29'
Major Flood Stage	29'	34'

The flooding along the Roanoke River in 1940 actually served as a major point of consideration when the decision was made to control flooding by building a dam. The John H. Kerr Dam and Reservoir (known locally as Buggs Island Lake) was completed in the 1950's for the purpose of flood control. A few miles downstream, Lake Gaston was also constructed. These two dams have helped save millions in damages on the Roanoke River.

Other measurements that can be applied to show the extent of a flood event could be the amount of damage it leaves behind. This could include damages and/or losses to personal property, infrastructure, crops and livestock. According to the NOAA Storm Events Database, there has been approximately

$14.4 million in personal property damage and $5.2 million in crop damage as a result of flooding in the region since 1996.

Previous Occurrences

Flooding has been a major concern to many residents and businesses of the Southside Planning District over the years. The towns of South Boston (particularly the Riverdale area) and Lawrenceville have seen the worst of the flooding. Buggs Island Lake and Lake Gaston were built to help regulate and alleviate flooding issues along the southern portion of Mecklenburg and Brunswick counties.

The six locations within and along the District that have river gauges are profiled in the table that follows. The table shows total flood events at each gauge location, which flood stage each event crested at, and the annual percentage that any type of flood has occurred at each gauge location based upon its reporting history.

The two locations that have the most recorded flood activity at the various river gauges are the South Boston and Lawrenceville locations. These are the two most frequently cited areas when reviewing past floods and the damage that they inflict upon the region. It is also important to note that the South Boston and Lawrenceville locations have averaged roughly one flood event each year while other areas have averaged almost half of that.

All Recorded Flood Events by Gauge Location, Flood Stage, and Annual Average

Location	Flood Stage	Mod. Stage	Major Stage	Total Floods	Flood Avg. per Year
Dan River @ Paces	40	21	10	71	89.9%
Dan River @ South Boston	85	29	11	125	105.0%
Roanoke River @ Brookneal	31	13	18	62	63.9%
Roanoke River @ Randolph	60	6	3	69	58.0%
Meherrin River near Lawrenceville	118	19	10	147	113.1%
Nottoway River near Rawlings	29	10	9	48	60.7%

The following data, flood events from 1989-2019, shows that river flooding has exceeded the historical average as shown in the previous table. The two locations previously examined, South Boston and Lawrenceville, have averaged roughly 3 flood events per year since 1989 versus the historical average of 1 flood event per year.

Flood Events from 1989-2019 by Gauge Location, Flood Stage, and Annual Average

Location	Flood Stage	Mod. Stage	Major Stage	Total Floods	Flood Avg. per Year
Dan River @ Paces	31	16	5	52	167.7%
Dan River @ South Boston	73	22	4	99	319.4%
Roanoke River @ Brookneal	19	11	3	33	106.5%
Roanoke River @ Randolph	30	0	1	31	100.0%
Allen Creek @ Boydton*	38	-	-	38	122.6%
Roanoke River @ Kerr Dam**	0	0	0	0	0.0%
Meherrin River near Lawrenceville	76	8	3	87	280.6%
Nottoway River near Rawlings	18	6	3	27	87.1%

*Allen Creek only tracks “Flood Stage” data.

**Data on the Kerr Dam did not show any historic crests that were in the "Flood Stage".

Several noteworthy flood events include, but are not limited to:

Flooding in 1940

The flood that took place in 1940 is considered the second worst that the region has ever seen. Much of the flooding centered on the Roanoke River, which flows through the southern portion of all three counties in the District. It is important to remember that this flood event occurred before the creation of Buggs Island Lake and Lake Gaston, which have both helped to control the Roanoke River's flooding since their construction.

Floodwater Level	Dan River @ Paces – 32.20' Dan River @ South Boston – 31.80' Roanoke River @ Brookneal – 46.00' Roanoke River @ Randolph – 41.60' Meherrin River near Lawrenceville – 42.00' Nottoway River near Rawlings – 20.80'
Areas Affected	Brunswick, Halifax, and Mecklenburg Counties
Specific Towns Flooded	South Boston (specifically the Riverdale area)
Estimated Damage ($)	$5 million (described to be in Roanoke River Basin, 1940 dollars)
Specific Effects	Riverdale businesses flooded, many roads impacted, steel bridge on US 1 over Roanoke River flooded to top of steel girders, numerous fields and pastures flooded.

Flooding in 1972

During the summer of 1972, the remnants of Hurricane Agnes brought the area its worst flooding event on record. While flooding impacted many parts of the three county District, the most notable flooding occurred in the Riverdale section of South Boston. The area generally lies around the intersections of US 58 and 501, and US 58 and what was then Route 304 (now US 360). Riverdale takes in all the area from the Dan River to US 58.

Most every commercial building between the river and US 58 saw water cover nearly all of the ground floor. This ruined food, clothes, paper and cardboard products, carpets, drapes, furniture, appliances, and walls of businesses in this area. Rising waters also affected many homes, with single-wides in several trailer parks being especially hard hit.

The Town of Lawrenceville has two creeks that run through it, Rose Creek and Great Creek. It was these two creeks that brought most of the flooding to the town. US 58 was closed in two places and many roads in the area were washed away. Numerous businesses flooded with their stock being ruined.

Mecklenburg County fared pretty well compared to Brunswick and Halifax County thanks to the construction of Buggs Island Lake (John H. Kerr Dam and Reservoir). While the lake rose to a then record height of 314.58 feet above sea, it was able to absorb the floodwaters before slowly releasing them downstream in a more controlled manner. This allowed areas downstream to avoid any major flooding issues. While there was flooding in camping areas the lake, no homes or businesses were flooded along the lake as they were all constructed away from the water's edge to avoid such hazards.

Floodwater Level	Dan River @ Paces – 33.15' Dan River @ South Boston – 33.37' Roanoke River @ Brookneal – 34.27' Roanoke River @ Randolph – 30.96'

Areas Affected	Brunswick, Halifax, and Mecklenburg Counties
Specific Towns Flooded	South Boston (specifically the Riverdale area) and Lawrenceville
Estimated Damage ($)	$1 million (described to be in Roanoke River Basin, 1972 dollars)
Specific Effects	Brunswick County: Numerous businesses were flooded; appliances ruined; 18 miles of roadway washed out. Halifax County: Many businesses, industrial buildings, and homes flooded; Inventories ruined; 35 secondary roads closed due to high water; oat crop and 3,000 acres of corn destroyed or damaged.

Flooding in March 1998

Six inches of rain fell on the area caused by two large rainstorms. This resulted in major flooding along the Meherrin River. Of note is that debris and branches stopped up South Hill's water intake at Whittle's Mill for 53 hours. Shortly after this interruption to the water supply, the town began obtaining water from the Roanoke River as a part of the Roanoke River Service Authority.

Flooding in March 2003

The Dan River flooded during March of 2003 in Halifax County. The March 21st floodwaters closed the intersection of US 501 and US 58 in Riverdale, resulting in traffic having to detour through secondary roads. Other roadways closed in Halifax County including VA 344, and State Secondary Routes: 602, 604, 610, 617, 626, 685, 710, 716, 737, 738, and 739. Some businesses within the Riverdale area had up to two feet of water in them.

Flooding in May 2003

Heavy rains caused the flooding of at least three roads in Halifax County. State Secondary Route 797 experienced a 12 foot deep wash as a resulted of the floodwaters. One person was injured when the vehicle they were driving was swept away as the road gave way. Coming to his aid, a Virginia State Trooper also fell into the washout. The driver of the car had serious injuries and the vehicle was a total loss. The police cruiser was also totaled.

Flooding in November 2009 (Remnants of Tropical Storm Ida)

Flooding occurred on November 13th and 14th as Tropical Storm Ida and a nor'easter passed over the area, bringing widespread heavy rains. The Dan River reached 27.5 feet during the flood, well above the flood stage of 19 feet. There were problems forecasting when the flooding would reach the Riverdale area, and how high it would get, due to a malfunctioning USGS river gauge (which had been malfunctioning for some time prior to this event). Buildings in the Riverdale area were flooded, and there were also flooding problems on Summit Drive and Railroad Avenue in South Boston. Numerous other roads in Halifax County were closed due to high water.

There were 13 private properties that were damaged from at least two feet of water. Part of US 501 South was washed out by the flood waters. The Maples Avenue Water Treatment Facility sustained $121,000 in damages due to large solids passing through the system. Halifax County was declared a disaster area by the President.

Flooding in April 2017

Floodwater Level	Dan River @ Paces – 29.14' Dan River @ South Boston – 30.25'
Areas Affected	Halifax County
Specific Towns Flooded	South Boston (specifically the Riverdale area)

Estimated Damages ($)	Business owners alone were projecting thousands of dollars in property damage.
Specific Effects	Riverdale businesses flooded, US 501/US 58 intersection closed, three rescues (2 vehicle related, 1 kayak), numerous road closures, and closing of Halifax County Public Schools. This storm event exposed a discrepancy between the flood impacts, listed on the NWS Advanced Hydrological Prediction Service webpage, and the actual flooding that was occurring by approximately two feet. This discrepancy resulted in several Riverdale businesses and the US 501/US 58 intersection being flooded in advance of when they have traditionally been forecast to flood.

Flooding in September 2018 (Remnants of Tropical Storm Florence)

Floodwater Level	Dan River @ South Boston – 27.1’
Areas Affected	Brunswick, Halifax, and Mecklenburg Counties
Specific Towns Flooded	South Boston (specifically the Riverdale area)
Estimated Damage($)	$2 million was estimated for crop damage in Mecklenburg County.
Specific Effects	Due to the effects of Hurricane Florence 51 roads were closed, with 18 due to wash out. Bluestone Middle School had a 10,000 gallon fuel tank push out of the ground. Flooding at Bluestone High School, portions of western Mecklenburg County saw 10+ inches of rain. Halifax County Schools closed for 6 days, Riverdale businesses flooded; damage to tobacco, corn, sweet potatoes, fruits, and other crops.

Flooding in October 2018 (Remnants of Tropical Storm Michael)

Floodwater Level	Dan River @ Paces – 31.36’ Dan River @ South Boston – 31.4’ Roanoke River @ Brookneal – 25.48’ Roanoke River @ Randolph – 28.73’ Meherrin River @ Lawrenceville – 29.97’ Meherrin River @ South Hill – 38.58’ Nottoway River @ Rawlings – 20.86’
Areas Affected	Brunswick, Halifax, and Mecklenburg Counties
Specific Towns Flooded	South Boston
Estimated Damage($)	
Specific Effects	7+ inches of rain in Halifax County over 8 hours, several water rescues, mudslide across US 58, Hupp’s Mill Plaza flooded, Riverdale businesses flooded, more than 100 roads in Halifax County were closed with numerous being washed out, 2 large water line breaks, Cedar Lake destroyed when dam was breached. Crops such as tobacco and soy beans sustained damage, as well as a lot of fencing being destroyed used to contain livestock.

Repetitive Loss Properties

According to FEMA, “a repetitive loss property is any insurable building for which two or more claims of more than $1,000 were paid by the National Flood Insurance Program (NFIP) within any rolling ten-year period, since 1978.” These properties put a strain on FEMA funds due to their frequent flooding. Within the Southside Planning District there are only a total of 23 such properties, with 18 being located in Halifax County and the remaining 5 being located within the Town of South Boston.* It is worth noting that of the 23 properties identified as being repetitive loss, only 1 of those properties currently maintains flood insurance through the NFIP. It is one of many properties that has flooded on a regular basis that the Town of South Boston is looking to acquire through grant funding and then convert into green space as a form of mitigation.

The Flood Mitigation Assistance Program defines a repetitive loss property as “a structure covered by a contract for flood insurance made available under the NFIP that: (a) has incurred flood-related damage

on 2 occasions, in which the cost of the repair, on the average, equaled or exceeded 25 percent of the market value of the structure at the time of each such flood event and (b) at the time of the second incidence of flood-related damage, the contract for flood insurance contains increased cost of compliance coverage."

Since the last update of the Hazard Mitigation Plan, the number of claims and total payments has remained the same in Halifax County. However, there were four claims made in South Boston that totaled over $144,000 in payments. This represents an increase of 92% to funds paid to offset losses since 2013 within the town. Please note that all repetitive loss data is profiled by jurisdiction, as listing properties individually would violate privacy laws.

Repetitive Loss Properties by Jurisdiction

Jurisdiction	Number of Repetitive Loss Structures			Total Number of Losses	Total Building Payment	Total Contents Payment	Total Payment
	Residential	Non-Residential	Total				
Halifax County	5	13	18	61	$256,083.34	$136,278.92	$392,362.26
South Boston	1	4	5	21	$211,130.50	$90,435.29	$301,565.79
Total	**6**	**17**	**23**	**82**	**$467,213.84**	**$226,714.21**	**$693,928.05**

Data current through January 31, 2019.

*SPDC staff discovered several repetitive loss properties appear to be erroneously listed in Halifax County when they are actually located within the Town of South Boston. Other listings lack sufficient address data so creating a buffered map of repetitive loss properties was not possible at this time.

Severe Repetitive Loss

FEMA also tracks severe repetitive loss properties. These include buildings and/or the buildings contents being covered by a flood insurance policy and having incurred flood damage in which four or more claim payments have been made with each exceeding $5,000 or at least two claim payments having been made in which the cumulative amount of the claim payments exceed the fair market value of the insured building prior to the loss occurring. As of January 2019 there was only one property meeting the aforementioned criteria within the Southside Planning District, and it's located within the Town of South Boston.

Future Occurrence

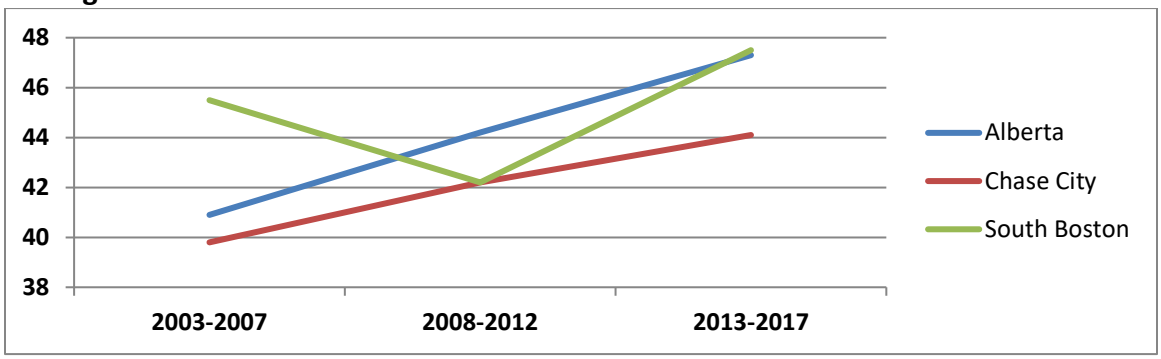
Floods will continue to occur throughout the region on a fairly regular basis. There has been an uptick in events since 1989 and while this current cycle does contain some fluctuation in year-to-year events, on the whole it appears the trend will continue. An increase in impervious areas may be playing a role, as well as a recent increase in rainfall.

Rainfall totals within the Southside Planning District have increased for two consecutive 5-year periods as shown in the following table. This can be viewed in a variety of ways. First, the area needs rain to help with the numerous agricultural crops produced in the region and to help recharge local wells and other sources of drinking water. Conversely, too much rain at one time can trigger flood events, thus inflicting damage upon the area.

Average Rainfall Totals Over 5-Year Periods

Time Frame	Alberta	Chase City	South Boston	Average
2013-2017	47.3”	44.1”	47.5”	46.3”
2008-2012	44.2”	42.2”	42.2”	42.9”
2003-2007	40.9”	39.8”	45.5”	42.1”

Average Rainfall Totals Measured in Inches Over 5-Year Time Frames



An additional concern for future flooding that was brought up during meetings with localities was that of silt building up in the Banister and Dan Rivers. It is believed that this silting is displacing water and causing floodwaters to rise more quickly than they have in the past and reach higher elevations than prediction services actually forecast.

Data References

FEMA. *Community Status Book*. Retrieved 03/14/19 from https://www.fema.gov/cis/VA.htm

FEMA. *Definitions*. 03/20/19. Retrieved 06/05/19 from https://www.fema.gov/national-flood-insurance-program/definitions

FEMA. *E/L0102: Science of Disaster, Student Manual (Virginia Edition)*. March 2017.

FEMA. *National Flood Insurance Program*. Retrieved 03/19/19 from https://www.fema.gov/national-flood-insurance-program

Hodge, Ashley. *Severity of Flooding Catches Businesses in Riverdale by Surprise*. The Gazette-Virginian. 04/27/17. Retrieved 10/23/18 from http://www.yourgv.com/news/local_news/severity-of-flooding-catches-businesses-in-riverdale-by-surprise-/article_87f32b2e-2b80-11e7-acd4-639e1c225492.html

National Centers for Environmental Information. *Climate Data Online*. NOAA. Retrieved 11/2/18 from https://www.ncdc.noaa.gov/cdo-web/

National Weather Service. *Advanced Hydrologic Prediction Service*. Blacksburg and Wakefield, VA offices. Retrieved 8/27/19

National Weather Service. *Proposal to Raise Flood Stage Categories: The Dan River at Both Paces and South Boston, VA*. Retrieved on 09/03/19 from https://www.weather.gov/rnk/danriver

News and Record Online. *Route 58 Reopens Sunday for Truck Traffic as Flood Recedes*. 1/15/04. Retrieved 11/15/04 from http://www.thenewsrecord.com/archives/2003/03242003.htm

News and Record Online. *Two Vehicles Totaled, Driver Injured in Road Washout*. 05/29/03. Retrieved 11/15/04 from http://www.thenewsrecord.com/archives/2003/05292003.htm

Saunders, W. Kirby. *Response to Natural Hazard Mitigation Plan Survey*. Halifax County Emergency Services. 2011.

SoVaNow.com. *Flood Stage Readings Revised on the Dan*. 09/02/19. Retrieved 09/03/19 from http://www.sovanow.com/index.php?/news/article/flood_stage_readings_revised_on_the_dan/

SoVaNow.com. *Florence Remnants Strike With Fury*. 09/19/18. Retrieved 09/19/18 from http://www.sovanow.com/index.php?/news/article/florence_remnants_strike_with_fury/

SoVaNow.com. *'Perfect Storm' Delivers Shock, Surprise*. 04/26/17. Retrieved 07/27/18 from http://www.thenewsrecord.com/index.php?/news/article/58_501_intersection_closed_in_riverdale_schools_closed_thursday

SoVaNow.com. *Riverdale Cleans Up After Flood*. 11/14/09. Retrieved 10/14/11 from http://www.thenewsrecord.com/index.php?/news/article/riverdale_cleans_up_after_flood/

SoVaNow.com. *Water Pushes Fuel Tank at BMS to Surface*. 09/19/18. Retrieved 09/19/18 from http://www.thenewsrecord.com/index.php?/news/article/water_pushes_fuel_tank_at_bms_to_surface/

The Gazette-Virginian. *As Floodwaters Recede, Crop Damage Becomes Apparent*. 09/20/18. Retrieved 12/03/18 from http://www.yourgv.com/news/local_news/as-floodwaters-recede-crop-damage-becomes-apparent/article_da7ae9fe-bd10-11e8-8492-fb65eaea9484.html

The Gazette-Virginian. *"It's the Worst"*. 10/12/18. Retrieved 10/15/18 from http://www.yourgv.com/news/local_news/update-tropical-storm-michael-lashes-county-with-devastating-deluge-fierce/article_0a2384c0-ce39-11e8-a32e-b3bbebcc18cc.html

Virginia Department of Conservation and Recreation. *National Flood Insurance Program*.

Landslides

A landslide can be described as the downward movement of a slope and materials under the force of gravity, including such events as rock falls, mudslides, deep failure of slopes and debris flow. Erosion, ground saturation, earthquakes, and excessive weight (natural and made-man) all can be viewed as contributing factors to triggering a landslide, with gravity and steep slopes being identified as the primary factors. In addition to private property loses, landslides can also undermine and/or block roadway infrastructure and cause blockages in rivers, streams and other water features.

Mountainous areas are typically more prone to see landslides, but other areas may also be susceptible. In the Southside Planning District, the most probable locations for landslides are those that contain relatively steep slopes. Common examples of steep slopes within the region could include areas along waterways and road cuts. It's important to note that once a landslide begins it can end up traveling over flat land various distances based upon the materials involved and how much momentum is driving it.



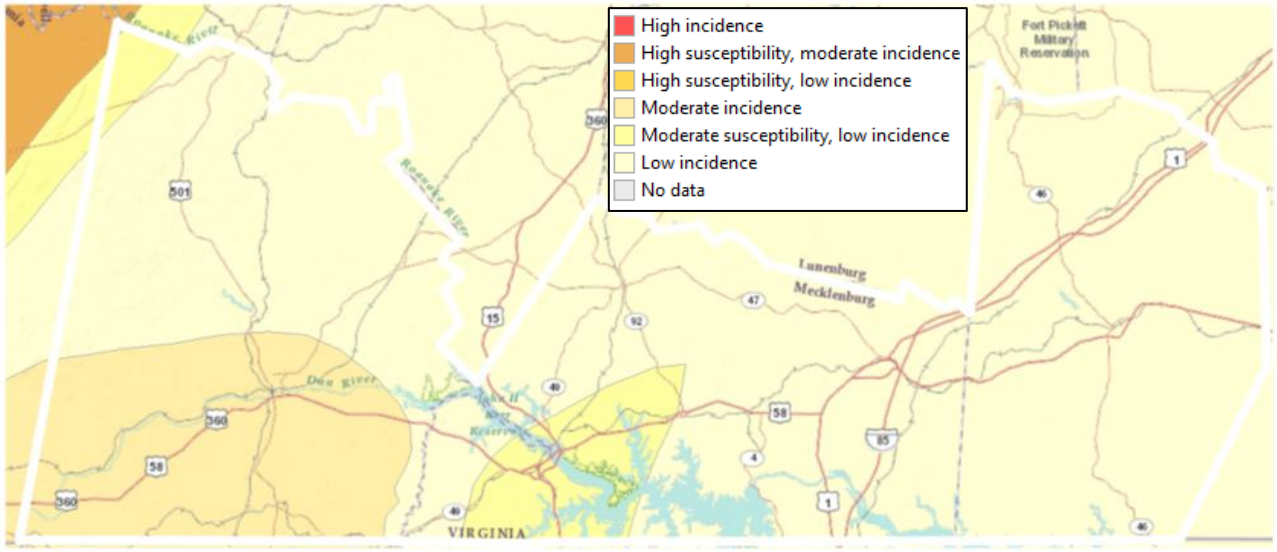


(Left) A small mudslide occurred on US 58 between South Boston and Danville due to the effects of Tropical Storm Michael in October of 2018. Photo Credit: Ginger New.
(Right) A small landslide occurred on the south side of West 2nd Street in Chase City near the railroad tracks as a result of recent heavy rains. Photo Credit: Chad Neese.

Location

In the Southside Planning District there are hazard areas possessing the potential for a landslide to occur. The following map shows those portions of southern Halifax County that are considered as having moderate landslide incidence (1.5% - 15% of the area shaded). The actual risk in this area should be fairly low, however, because most homes and buildings are built on flat areas of the county and not on slopes.

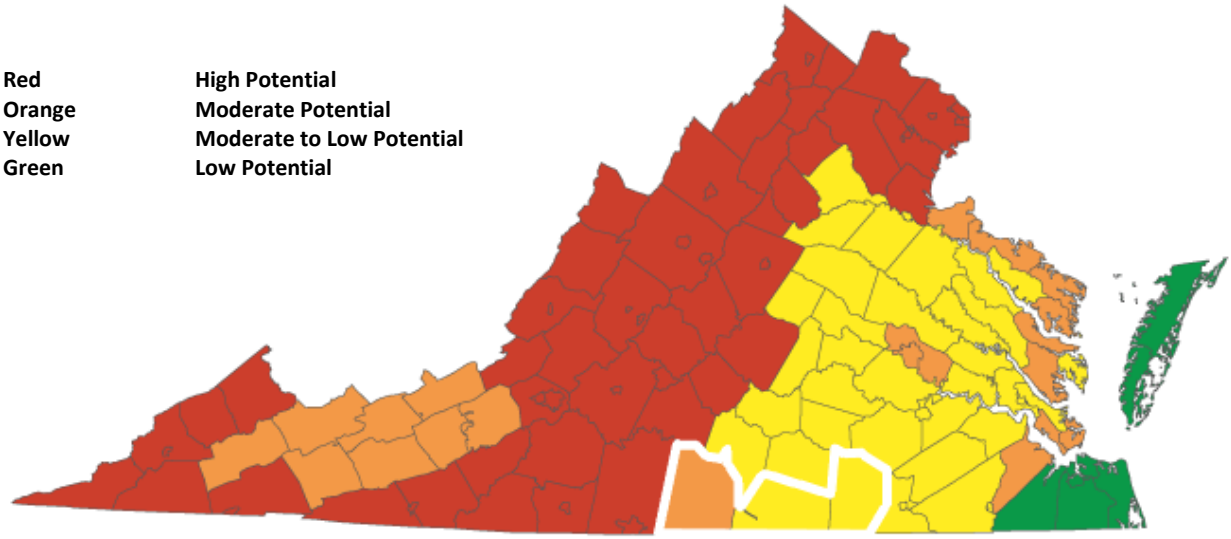
Portions of southwestern Mecklenburg County have a low landslide incidence (less than 1.5% of the area) and moderate susceptibility. Susceptibility to landslides is defined as the probable degree of response of rocks and soil to cutting (natural or artificial) or abnormally high precipitation.



Map of Landslide Susceptibility in the Southside Planning District.

The Commonwealth's Department of Mines, Minerals and Energy have also produced a map relating to landslide susceptibility. It's based upon the USGS Landslide Overview Map of the Conterminous United States but presented in a more simplified format. While there are resources indicating potential susceptibility to landslides, there appears to be no universally accepted methodology for making such determinations. Halifax County has been identified as having moderate potential for a landslide, while the counties of Brunswick and Mecklenburg fall into the moderate to low categories.

Red	**High Potential**
Orange	**Moderate Potential**
Yellow	**Moderate to Low Potential**
Green	**Low Potential**



Counties in Virginia Susceptible to Landslides
*The borders of the Southside Planning District are highlighted in white.

Extent

While landslides cause up to $2 billion worth of damage in the U.S. on an annual basis and are the cause of approximately 25 – 50 deaths, there doesn't appear to be a generally accepted classification of measurable effects for landslide events.

Previous Occurrences

NOAA's Storm Events Database returned no results relating to debris flows for the District through 2017 and no landslides were identifed within the Southside District on the 1999 "Map Showing Inventory and Regional Susceptibility for Holocene Debris Flows, and Related Fast-Moving Landslides in the Conterminous United States" by Earl Brabb, Joseph Colgan and Timoth Best and provided by the USGS.

Small landslides have occurred on US 58, possibly originating from steep slopes that were created from grading along the roadway. A similar event recently occurred along West 2nd Street within the Town of Chase City.

Future Occurrence

It is unlikely that this area will ever see a landslide of any historically devastating proportion as could be experienced in a more mountainous region. The topography of the region is generally flat or rolling with few exceptions. Limiting or prohibiting development on any steep slopes within the region could help further reduce future occurrences or impacts to human life, property, and infrastructure. Future occurrences along US 58, or other similar roadways in which grading has left steep slopes, are possible given the right weather conditions.

Data References

Brabb, Earl, Joseph Colgan, Timoth Best. *Map Showing Inventory and Regional Susceptibility for Holcene Debris Flows, and Related Fast-Moving Landslides in the Conterminous United States*.

ESRI. *USDOI USGS Landslide Susceptibility*. Retrieved 08/13/2018 from http://www.arcgis.com/home/item.html?id=9a9aee60fdc04ce8e1fe203feb855be

National Centers for Environmental Information. *Storm Events Database*. NOAA. Retrieved 11/13/18 from https://www.ncdc.noaa.gov/stormevents/

SoVaNow.com. *Michael Delivers Stiff Blow To Area*. 10/11/18. Retrieved 10/15/18 from http://www.sovanow.com/index?/news/article/michael_delivers_stiff_blow_to_area/

Virginia Department of Mines, Minerals, and Energy. *Landslides*. Retrieved 08/14/2018 from https://www.dmme.virginia.gov/dgmr/landslides.shtml

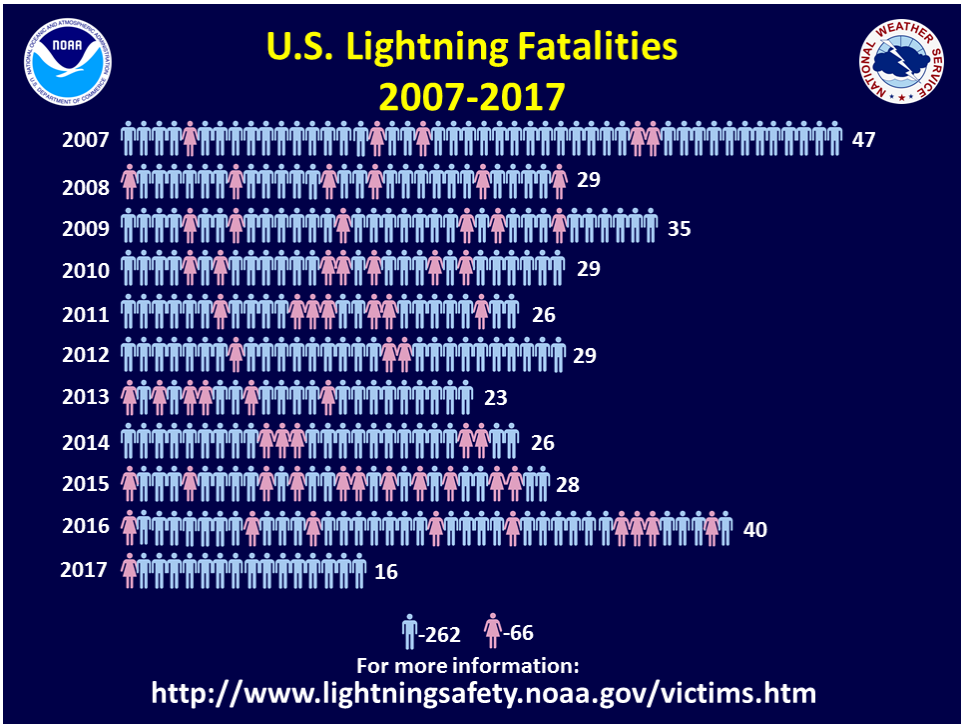
Lightning

Lightning is one of nature's most spectacular displays. Specifically, it is an electrical discharge that results in the buildup of positive and negative charges within a thunderstorm. When the buildup become strong enough, lightning appears as a "bolt." This flash of light usually occurs within the clouds or between the clouds and the ground. A bolt of lightning reaches temperatures approaching 50,000 degrees Fahrenheit in a split second. The rapid heating and cooling of air near the lightning causes thunder.

When lightning hits something on the ground there is the capacity for damage or injury. These lightning bolts typically carry between 10,000 and 200,000 amps of electricity. When they strike power lines there can be massive power surges that are carried by the lines for miles. This can lead to power outages when transformers are blown and substations knocked offline. The surges also travel into homes and destroy many electronic devices plugged into outlets.

Even more disastrous, lightning can cause explosions or fires. This results in many structures burning down each year. A building does not have to be particularly tall to be struck by lightning, though it does increase the chances. Churches with tall steeples are a prime target for lightning.

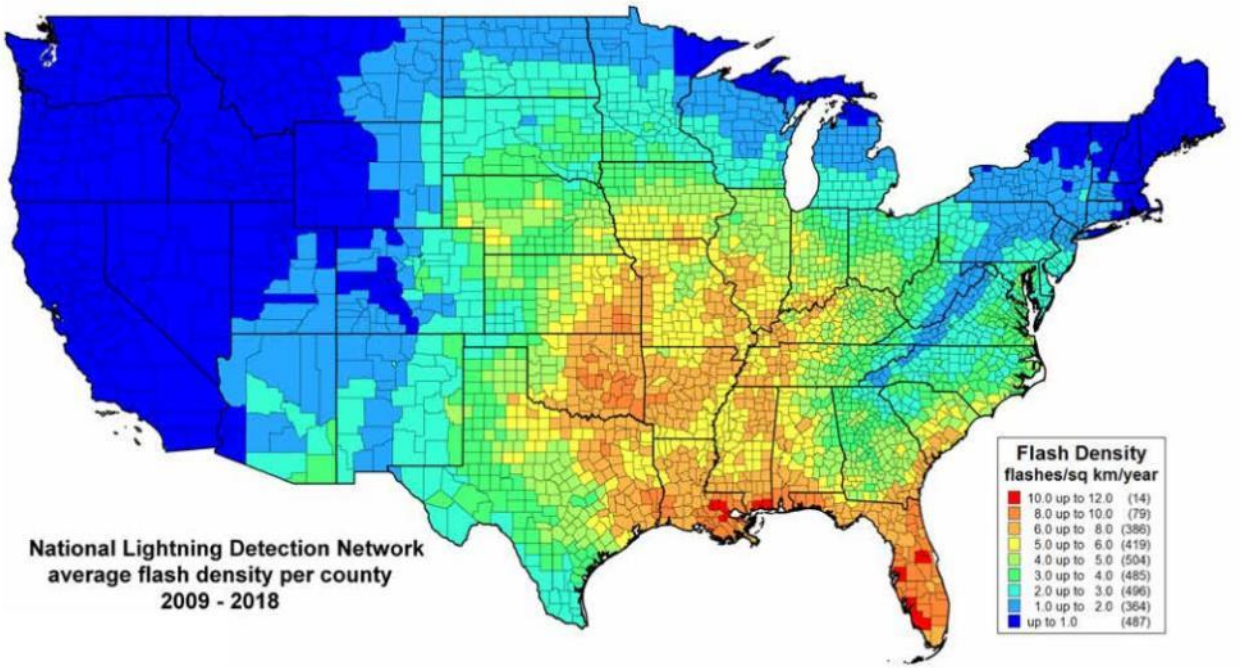
From 2007 – 2017 there was an average of 29.8 fatalities across the United States as the result of being struck by lightning. In general, the total number of fatalities has been falling since the 1940's when annual fatalities topped 400 in two different years.



Location

Like many of the natural hazards affecting the region, lightning is a District-wide hazard. Naturally, some specific locations may be more prone to lightning than others, such as tall buildings, churches, trees out in the open, and towers.

There is no actual classification system regarding the intensity or magnitude of lightning. However, for the purposes of this plan a 10-year lightning flash density map produced by Vaisala will be used to provide context on the matter. The data collected over a period of time and averaged together helps identify any patterns that may exist. Halifax and Mecklenburg Counties average 2-3 lightning flashes per square kilometer per year, while Brunswick County averages 3-4. Due to the scale of the map below, the aforementioned counties are not highlighted.



U.S. Average Cloud-to-Ground Flash Density per County, 2009-2018

Extent

It's important to understand that a lightning strike is very dangerous and can result in a great deal of damage. These bolts are tens of thousands of degrees Fahrenheit and can carry up to 200,000 amps of electricity. They result in a great deal of property damage on an annual basis and carry the capacity to inflict fatalities.

Previous Occurrences

Since 1996, there have been 16 reported events involving lightning, either resulting in injuries and/or property damage. All reported injuries and the overwhelming majority of property damage have occurred in Halifax County. The following table provides an overview of the more notable incidents of record.

County	Date	Injuries	Property Damage	Summary
Halifax	July 4, 2004	4	$0	Four individuals were struck at the Alton Pool along Harmony Road in Turbeville.
Halifax	June 5, 2007	0	$98,000	Lightning created a fire which resulted in a home being destroyed in Scottsburg.
Halifax	May 1, 2012	2	$500	Two men were injured when lightning struck a tree that they were standing next to.
Halifax	June 18, 2019	1	$300	One man sustained minor injuries when a tree was struck by lightning near where he was standing.

Future Occurrences

Based upon the 5-Year Flash Density Map produced by Vaisala in the "Extent" section and general knowledge of the region, lightning will continue to be a District-wide hazard moving forward on a regular basis.

Data References

National Centers for Environmental Information. *Storm Events Database*. NOAA. Retrieved 08/16/18 from https://ncdc.noaa.gov/stormevens/

National Weather Service. *U.S. Lightning Deaths in 2017*. Retrieved on 08/16/18 from https://www.weather.gov/safety/lightning-fatalities17

Vaisala. *U.S. Cloud-to-Ground Flash Density per County, 2009-2018*. 2018 Annual Lighting Report. Retrieved 03/20/19 from https://wwwvaisala.com/sites/default/files/documents/2018%20Lightning%20Report_1.pdf

Watson, Barbara. *Thunderstorms and Lightning*.

Severe Storms (Hail, Heavy Rain, Winds)

A severe storm can bring many weather phenomenons. The strongest storms are capable of producing lightning and tornados (addressed elsewhere in this Plan), while other storms can include heavy rain, hail and high winds.

A typical thunderstorm produces brief, heavy rain and usually lasts for about an hour, though they can be longer or shorter. Thunderstorms frequently form in warm, humid conditions. Cold fronts and afternoon heating lead to thunderstorm formation as well. When the air is very unstable, that is when severe thunderstorms can form and produce damaging winds, large hail, and spawn tornadoes.

Of the elements that can be part of a severe storm (excluding tornados, lightning, and flooding as they are profiled in other sections of this plan), hailstorms cause more monetary damage than any other. As hail can reach a rather large size and fall at speeds of approximately 100 miles per hour.

Hailstorms can be very costly.

Hail does some of its worst damage to crops. Tobacco, the primary crop in this region, has leaves with a large surface area that are quite susceptible to hail damage. The leaves are the part of the plant that are later sold, so damaging them is costly to tobacco farmers. Besides tobacco, virtually all other crops at least sustain major bruising from hailstones, and young plants are especially vulnerable.

In addition to crops, people and livestock are at risk as well. When falling at high rates of speed and being of decent size, hail can cause injury or death if people or livestock do not seek shelter.

Hail also causes physical damage to buildings and property. Windowpanes are easily damaged, car windows can be broken, and sheet metal can be damaged. Roofs may also need to be replaced after an intense hailstorm.

High winds are a dangerous element of severe storms as well. Straight-line winds originate in rain-cooled air that descends with precipitation. These gusts can be upwards of 80 miles per hour.



Trailer overturned by high winds in Mecklenburg County, April 5, 2011. Photo by Lisa Clary.

Another dangerous wind phenomenon is the microburst. A microburst is a strong downdraft that includes an outburst of damaging winds near the ground. When the diameter of the downburst is less than 2.5 miles, it is called a microburst. A macroburst has a diameter greater than 2.5 miles. An event

in Brunswick County from 2004 is believed to have occurred in which a singlewide mobile home was destroyed. These storm events are also very dangerous for aircraft.

Location

Like several other natural hazards, severe storms can happen anywhere in our area and essentially at any time. The entire District is similar in its topographic makeup, which does not give any one area a better chance than any other of seeing the formation of a severe storm.

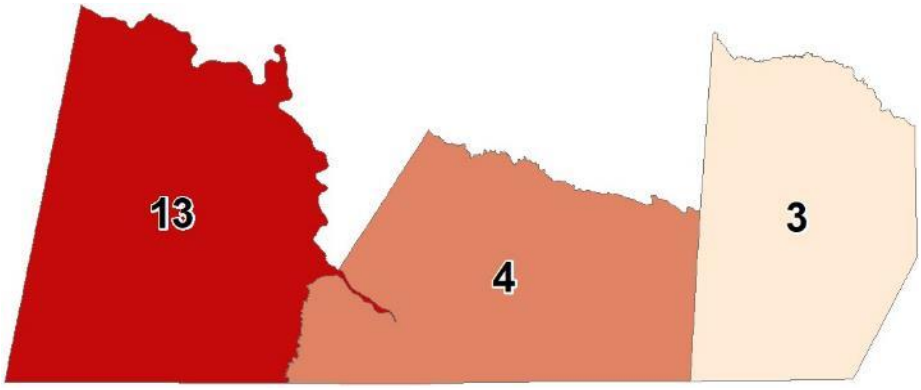
However, utilizing NOAA's Storm Events Database it does appear that some areas of the region have experienced more specific portions of a severe storm event than others.

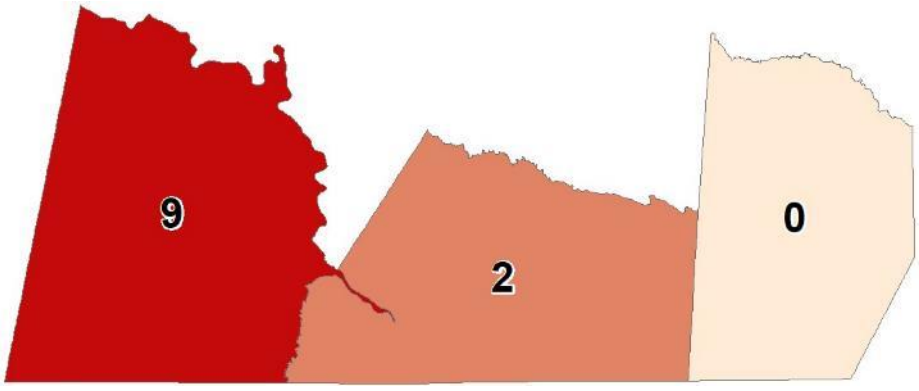
Reporting of hail events in the counties of Brunswick and Mecklenburg have remained relatively low during the last three 5-year periods that were analyzed. However, Halifax County has far surpassed both counties in the number of days that hail was reported to have occurred and has also seen an increase in events during the last five years. It's also noteworthy that the overall size of hail being reported has increased from 0.95" to 1.46" across the region.

Hail Reported by Day, Size, and County

Hail (2005-2009)

Days Reported **18**
Average Size **0.95"**



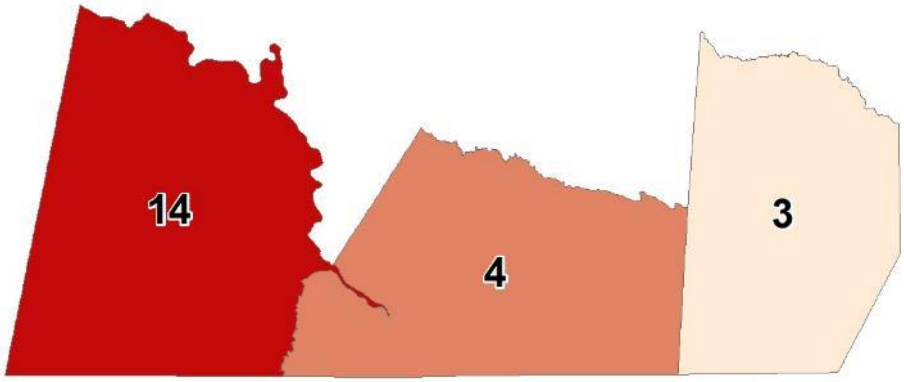


Hail (2010-2014)

Days Reported **9**
Average Size **1.04"**

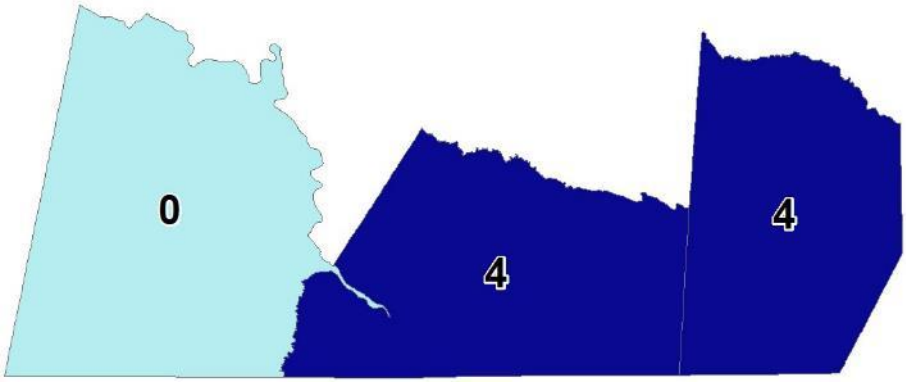
Hail (2015-2019)

Days Reported **17**
Average Size **1.46”**



Heavy rain is defined by the National Weather Service as “unusually large amounts of rain which does not cause a flash flood or flood event, but causes damage, e.g., roof collapse or other human/economic impact.” These events have steadily increased in each of the five-year periods analyzed, going from just 4 days being reported from 2005-2009 to 10 days being reported from 2015-2019. Halifax County has seen a steady rise in heavy rain events, Mecklenburg remained consistent until seeing their events double in the last five years, and Brunswick County has seen their numbers fluctuate up and down.

Heavy Rain Reported by Day and County

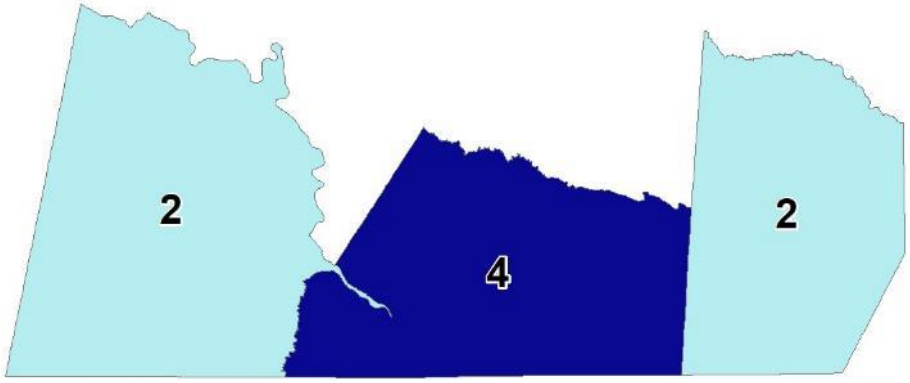


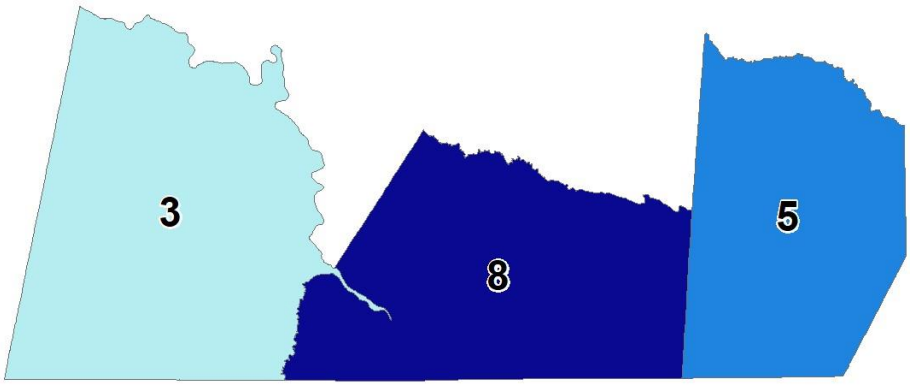
Heavy Rain (2005-2009)

Days Reported **4**

Heavy Rain (2010-2014)

Days Reported **6**





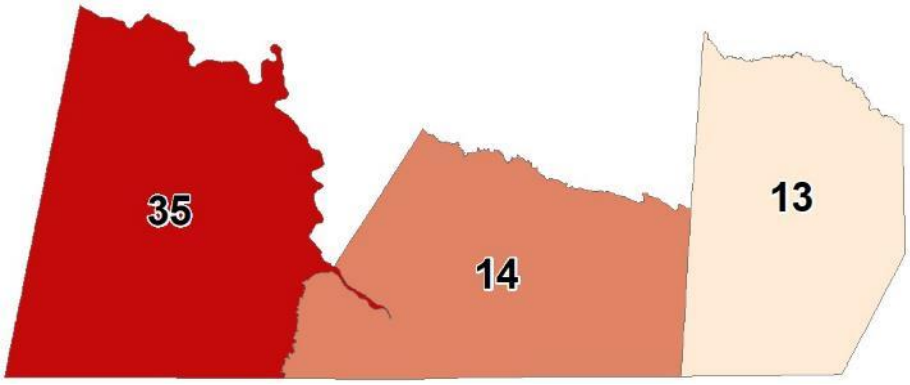
Heavy Rain (2015-2019)

Days Reported **10**

Thunderstorm winds are defined by the National Weather Service as "winds, arising from convection (occurring within 30 minutes of lightning being observed or detected), with speeds of at least 50 knots (58 mph), or winds of any speed (non-severe thunderstorm winds below 50 knots) producing a fatality, injury, or damage."

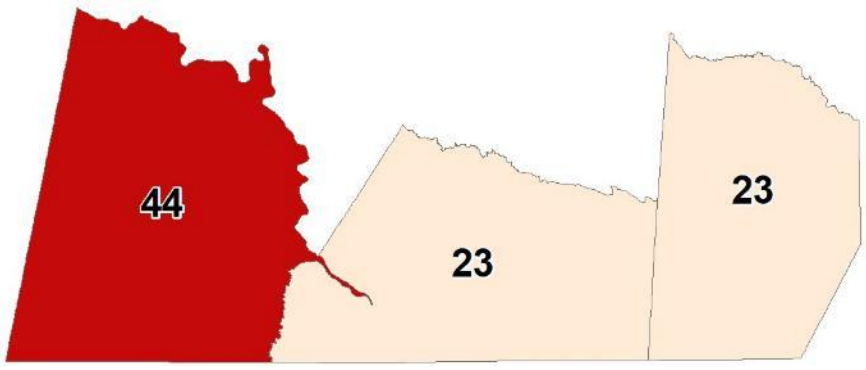
These wind events have been on the rise for most of the region while being more prevalent the further west you move through the District. Halifax County experienced the most thunderstorm wind events in each of the five-year periods analyzed. In fact, there event totals were approximately the same as the those experienced by Mecklenburg and Brunswick counties combined in each of the five-year periods. Mecklenburg County has seen an increase in thunderstorm wind events of 107% from the 2005-2009 period until the one in 2015-2019. Brunswick County has experienced more fluctuation than the other counties.

Thunderstorm Wind Reported by Day and County



Thunderstorm Wind (2005-2009)

Days Reported **48**

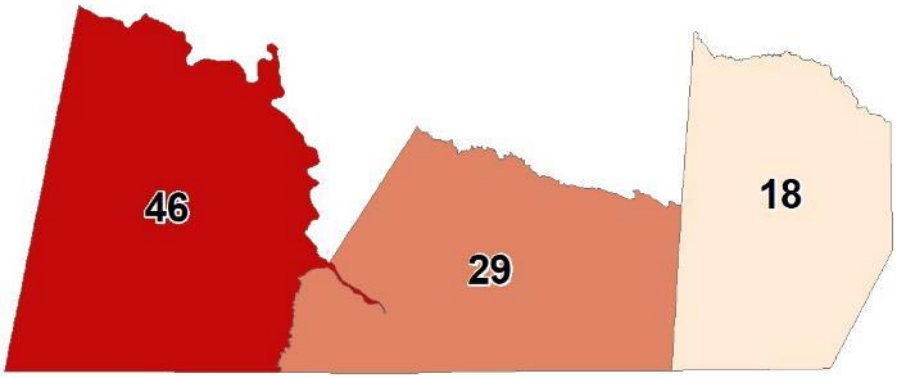


Thunderstorm Wind (2010-2014)

Days Reported **61**

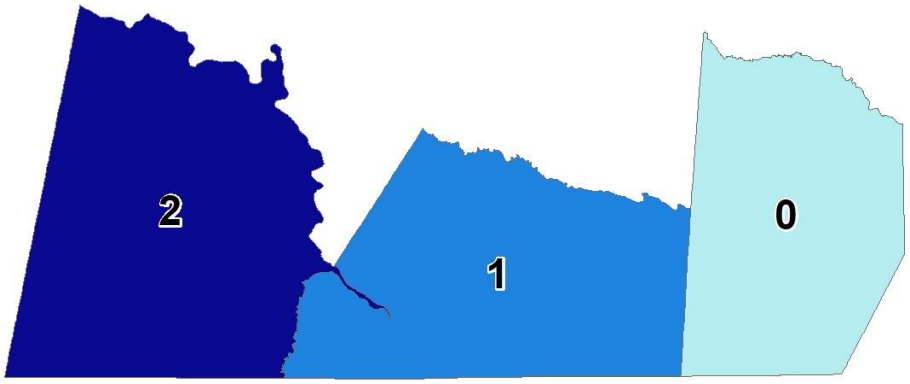
Thunderstorm Wind (2015-2019)

Days Reported **60**



High winds are defined as wind with a sustained speed of 40 mph or higher for one hour or longer or winds matching or exceeding 58 mph for any period of time. Unlike wind associated with thunderstorms, high winds events are much more rare on the whole throughout the entire region. However, the total days being reported with high wind events and a steady increase in Halifax County are noteworthy.

High/Strong Wind Reported by Day and County

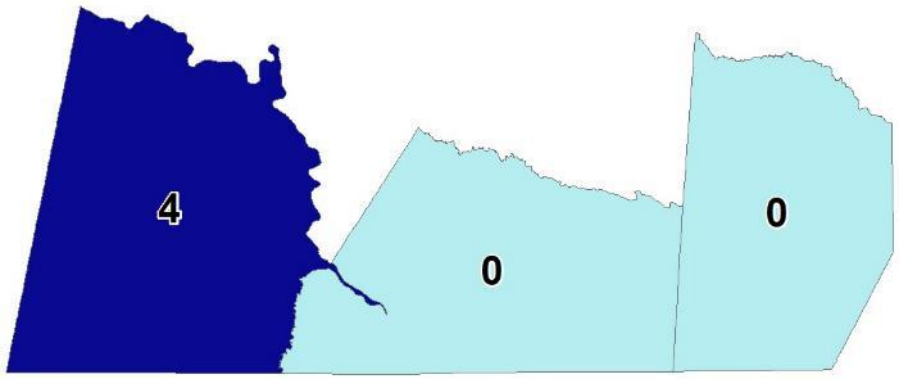


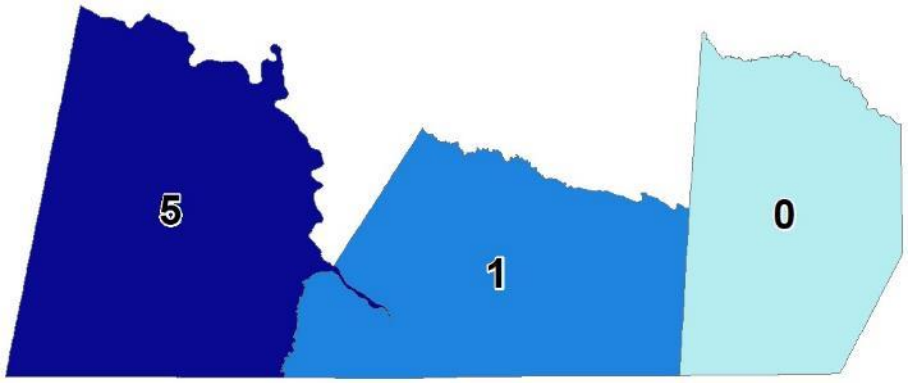
High Winds (2005-2009)

Days Reported **2**

High Winds (2010-2014)

Days Reported **4**





High Winds (2015-2019)

Days Reported **6**

Extent

Severe thunderstorms do not typically have a classification. Instead, they are usually remembered by how much damage is done by the accompanying wind, hail, lightning, and flash floods.

Hailstones themselves are generally described by their size, using common objects as a reference:

Estimating Hail Size

Description	Size/Diameter
Pea	¼"
Marble/Mothball	½"
Dime/Penny	¾"
Nickel	7/8"
Quarter	1"
Ping-Pong Ball	1 ½"
Golf Ball	1 ¾"
Tennis Ball	2 ½"
Baseball	2 ¾"
Tea Cup	3"
Grapefruit	4"
Softball	4 ½"
Large hail is considered to be ¾" or larger.	



Hail the size of a baseball in the Alton area. Photo by Stephanie Jackson Watts.

Previous Occurrences

Thunderstorms, hailstorms, and other high wind events make up the majority of the natural events that the people of Southside Virginia have to endure. According to the Storm Events Database provided by the National Oceanic and Atmospheric Administration (NOAA), the District has experienced 895 reported events involving the aforementioned natural hazards since 1950. Also, according to the same source, this has resulted in estimated damages of over $4 million, eight injuries and one fatality. However, these are just the incidents that are actually reported to authorities. Undoubtedly, much more damage occurs from these storms than is ever reported.

The following table provides a brief overview of the number of events recorded as containing hail, high winds and thunderstorms between the years of 1950 and 2019 in the NOAA Storm Events Database.

Type	Total Reported Events	Property Damage	Crop Damage	Deaths/ Injuries	Oldest in Database
Brunswick County					
Hail	23	$30,000	$0	0/0	05/07/1967
High/Strong Winds	1	$3,000	$0	0/0	09/16/1999
Thunderstorm Wind	129	$282,500	$0	0/4	07/21/1983
Heavy Rain	14	$0	$0	0/0	01/27/1998
Halifax County					
Hail	123	$661,550	$185,050	0/0	05/27/1957
High/Strong Winds	17	$1,337,000	$30,000	1/2	09/05/1996
Thunderstorm Wind	346	$1,561,000	$2,050	0/0	06/07/1955
Heavy Rain	6	$0	$0	0/0	08/06/2011
Mecklenburg County					
Hail	46	$0	$0	0/0	03/28/1984
High/Strong Winds	2	$11,000	$0	0/0	02/10/2008
Thunderstorm Wind	166	$485,000	$0	0/2	05/25/1960
Heavy Rain	22	$0	$0	0/0	01/27/1998
Totals	**895**	**$4,371,050**	**$217,100**	**1/8**	

Some of the more notable severe thunderstorms are as follow:

August 26, 1993

Areas Affected	Mecklenburg County
Specific Effects	Thunderstorm with high winds struck Clarksville. Houseboat and pontoon boat overturned on Buggs Island Lake. Several trees were blown over as well.
Estimated Damages ($)	$50,000

April 29, 1996

Areas Affected	Mecklenburg County
Specific Effects	A large roof from an auto parts store was completely ripped off, with part of it flying across the roadway and damaging two businesses and a parked van.
Estimated Damages ($)	$23,000

July 8, 1996

Areas Affected	Brunswick County
Specific Effects	According to the South Hill Enterprise, high winds from a thunderstorm blew the roof off of the cafeteria/auditorium of Totaro Elementary School. In addition to debris landing in the building, there was also 2 inches of rainwater inside. Numerous trees were blown down.
Estimated Damages ($)	$15,000

May 2, 2002

Areas Affected	Halifax County
Specific Effects	Thunderstorms produced damaging winds, flash floods and hail up to 3” in diameter. Trees were down on US 501 and hail damaged automobiles and broke out windows in South Boston.

May 9, 2003

Areas Affected	Halifax County
Specific Effects	Thunderstorms produced golf ball sized hail, high winds, and dangerous lightning. In Nathalie there were many fallen trees due to high winds. These trees fell on numerous vehicles and cause

	considerable damage to some houses. Trees were also blown over in Clover, Halifax and Turbeville.
Estimated Damages ($)	$300,000

May 2, 2004

Areas Affected	Brunswick County
Specific Effects	East of Lawrenceville, winds caused major damage as a microburst is believed to be responsible for flipping a singlewide manufactured home upside-down and destroying a truck in the driveway. Debris was found up to several miles away.

January 7, 2009

Areas Affected	Brunswick County
Specific Effects	The Lake Gaston area was hit hard by torrential rain and straight-line winds. In addition to trees blown over, homes and businesses were also damaged.

September 28, 2009

Areas Affected	Halifax County
Specific Effects	Damaging winds in excess of 60 mph. Approximately 26 utility poles and 12 trees were downed by the storm in South Boston. There were two injuries and a family was briefly trapped in their home when a tree fell across their porch. A tree fell on a truck and also brought down a power line. Many homes were damaged, include a tree falling on a garage and destroyed a new car parked inside it.

April 5, 2011

Areas Affected	Mecklenburg County
Specific Effects	Widespread damage throughout the county. In Chase City there were many downed trees and power outages. A possible tornado touched down in La Crosse, flipping an unoccupied mobile home onto its roof. A large tree fell onto another home in La Crosse.

May 24, 2011

Areas Affected	Halifax and Mecklenburg Counties
Specific Effects	Storms and heavy rain resulted in 1,200 losing power in Halifax County, with 12 roads being blocked due to fallen trees. Hail was reported as damaging vehicles. Nathalie, Virgilina, and Cluster Springs also saw many downed trees and power outages. Mecklenburg County saw trees and power lines taken down county-wide. Power was cut to government office in Boydton and at Bluestone High School near Clarksville. More than 1,800 customers were without power. One structure fire was caused due to lightning.

July 30, 2011

Areas Affected	Halifax and Mecklenburg Counties
Specific Effects	Power was cut to approximately 12,000 customers due to high winds and lightning. The Dominion Power Omega substation was hit by lightning, affecting many.

June 29 – July 1, 2012

Areas Affected	Brunswick, Halifax, and Mecklenburg Counties
Specific Effects	The entire region saw high winds, up to 70 mph, down trees and power lines as a derecho moved through Virginia. Two homes in Halifax had trees fall on them and 11 brush fires were started due to the storm. It was reported that across all of Southside Virginia there were 19,000 customers without power. Downed trees blocked roadways and slowed work to restore power to the region. Mecklenburg County saw minimal property damage and only a few power outages were reported. A priceless 17th century bronze Samurai statue was destroyed by the winds at the MacCallum More Museum and Garden.

July 8, 2016

Areas Affected	Brunswick, Halifax, Mecklenburg Counties
Specific Effects	The thunderstorm contained high winds, rain, and lightning. Many were left without power, as Mecklenburg Electric Cooperative reported 6,000, Halifax County had 7,261 and Brunswick County had numerous power outages as well. Halifax County reported two trees falling on houses and one house fire. Additionally, 71 trees had fallen onto roadways and 15 power lines were brought down.

March 2 – March 3, 2018

Areas Affected	Halifax and Mecklenburg Counties
Specific Effects	Halifax County saw 78 trees down in roadways, 28 power lines broken and numerous brush fires throughout the county. Approximately 3,200 customers were without power. Winds peaked around 40 mph but they were sustained for more than 24 hours. Dominion noted that the storm ranked in the top 5 all-time for Virginia in terms utility customers affected. The Town of South Boston had crews clearing streets and properties from fallen trees. Mecklenburg County experienced wind gusts reaching 55 mph, approximately 3,000 M.E.C. customers were without power and 16 power poles were broken. There were also two brush fires and one tree fell on a house in the South Hill area. A county school bus sustained damaged from a falling tree, while students were on it, fortunately no one was injured.

Future Occurrences

Severe thunderstorms, including heavy rain, high winds, and hail, will continue to occur in the Southside Planning District on a regular basis. Heavy rain and thunderstorm wind events have remained low and shown signs of a slight decline in recent years. However, the number of days in which hail has been reported has increased, as has the size of the hail being reported.

Data References

Jones, Cathy. *Strong Winds*. South Hill Enterprise. 07/10/96

Moseley, Mike. *Derecho Brings Power Outages*. South Hill Enterprise. 07/02/12. Retrieved 10/17/18 from http://www.southhillenterprise.com/news/article_c45eaf9c-82de-5057-9d9a-02d69a6cd7a9.html

National Centers for Environmental Information. *Storm Events Database*. NOAA. Retrieved 07/16/2020 from https://www.ncdc.noaa.gov/stormevents/

National Weather Service. Storm Data Preparation. NOAA. Retrieved 07/17/20 from https://www.nws.noaa.gov/directives/sym/pd01016005curr.pdf

National Weather Service. *Watch/Warning/Advisory Definitions*. NOAA. Retrieved 11/19/18 from https://www.weather.gov/lwx/WarningsDefined

The Gazette-Virginian. *Winds Whip Up Trouble For Halifax County; Prolonged Storm Causes Downed Trees, Powers Lines, Fire*. 03/04/18. Retrieved 08/08/18 from http://www.yourgz.com/news/local_news/winds-whip-up-trouble-for-halifax-county-prolonged-storm-causes/article_a192128c-1fec-11e8-974a-cf74400970cf.html

The South Hill Enterprise. *Windstorm Hits Mecklenburg*. 03/06/18. Retrieved 08/07/18 from http://www.southhillenterprise.com/news/article/_428d3490-215b-11e8-a760-97d740db1832.html

Severe Storms Online Meteorology Guide. *Dangers of Thunderstorms*.

SoVaNow.com. *A WILD AND WINDY DAY*. 03/05/18. Retrieved 07/27/18 from http://www.thenewsrecord.com/index.php?/news/article/a_wild_and_windy_day/

SoVaNow.com. *High Winds Pound Halifax, Leaving Thousands Without Power*. 06/30/12. Retrieved 10/17/18 from http://www.thenewsrecord.com/index.php?/news/article/high_winds_pound_halifax_leaving_thousands_without_power/

SoVaNow.com. *More Than 7,000 Lose Power From Wind Storm*. 07/09/16 from http://thenewsrecord.com/index.php?/news/article/more_than_7000_lose_power_from_windstorm1/

SoVaNow.com. *Priceless Samurai Shattered in Saturday's Wind Storm*. 07/05/12. Retrieved 10/17/18 from http://thenewsrecord.com/index.php?/news/article/priceless_samurai_shattered_in_saturdays_wind_storm/

SoVaNow.com. *Violent Storm Rips Through Mecklenburg County*. 04/06/11. Retrieved 10/17/18 from http://www.thenewsrecord.com/index.php?/news/article/violent_storm_rips_through_mecklenburg_county/

SoVaNow.com. *Wind Storm Leaves Thousands Without Power*. 07/13/16. Retrieved 07/27/18 from http://www.thenewsrecord.com/index.php?/news/article/wind_storm_leaves_thousands_without_power/

VaNcNews.com. *High Winds Cause Damage*. 03/07/08. Retrieved 08/08/11 from http://www.vancnews.com/articles/2009/01/14/lake_gaston/news/news01.txt

Severe Winter Weather

Although Southside Virginia is considered to have a fairly mild climate, some winter storms can be quite harsh. These storms can consist of heavy snow, freezing rain, sleet and high winds. Some winter storms may contain two or more of the aforementioned storm elements while others may be a singular event. Winter storms are notable in that they can completely disrupt normal life and bring everything to a halt.



Snow being removed in Clarksville. SoVaNow.com

Snow is precipitation that originates as snowflakes in the clouds. As it falls, in order to remain as snow, it must descend through layers of the atmosphere that are all colder than the freezing point.

Sleet starts out as snow, but melts into rain when it encounters a warmer layer of air in the atmosphere. It then enters a very cold layer of air that extends to the ground, resulting in the rain freezing into small balls of ice.

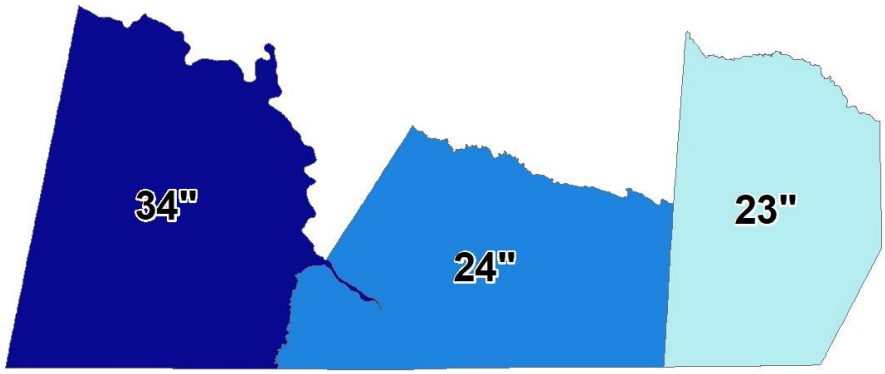
Freezing rain develops as snow but melts into rain as it descends through warmer parts of the atmosphere. Just above the Earth's surface the rain passes through an extremely thin, cold part of the atmosphere and cools to a temperature below freezing, yet remains in liquid form. This is referred to as supercooling. When the supercooled rain drop hits a frozen surface, such as power lines or trees, it instantly turns to ice.

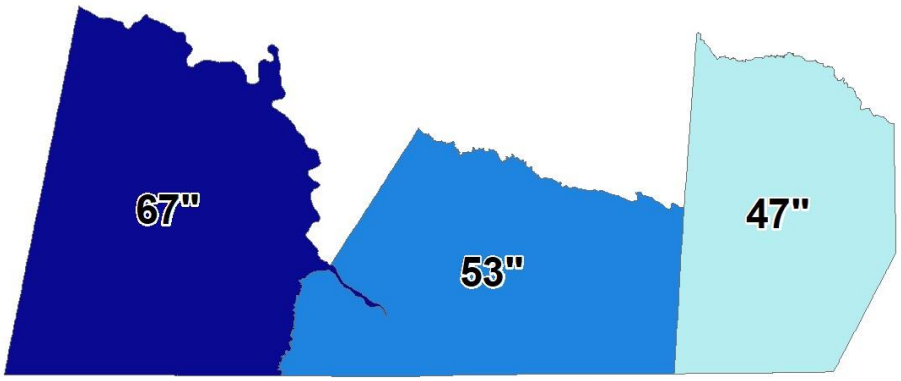
Location

Regarding snowfall totals, they tend to be higher in the western part of the District and lower in the eastern part. Each county has seen the number of snow events rise from the 2010-2014 period to the 2015-2019 period, essentially doubling the number of days and snowfall totals. Snowfall data was obtained from the NOAA Storm Events Database and the highest recorded measurement for each snowfall event was used for each county. Attention should be paid to see if this upward trend of snowfall continues over the next five-year period.

Snowfall Totals (2010-2014)

Days Reported **5**





Snowfall Totals (2015-2019)

Days Reported **9**

Extent

Winter weather events do not have an official classification system, as different regions of the United States have different ideas of what a winter storm is made up of. What is considered heavy snow to some areas is viewed as a nuisance to others. For the purposes of this plan, snowfall events will simply be classified based upon snowfall and ice accumulation totals.

Previous Occurrences

This section highlights winter storm events that contained particularly heavy snowfall or a significant amount of ice.

"The Great Blizzard and Freeze" – 1857

On January 18th and 19th of 1857 over a foot of snow fell across the Commonwealth with temperatures down into the teens. This snowfall was accompanied by high winds that caused damage to buildings. Brunswick County reported up to 18 inches of snow during the storm.

"Blizzard of 1940" – 1940

Date	January 23 and 24, 1940
Areas Affected	Brunswick, Halifax and Mecklenburg Counties
Snowfall Accumulation	Clarksville – 22.2", Halifax – 23.5" and South Hill – 24"
Ice Accumulation	None reported.
Effects	Huge snow drifts and stranded tourists.

1965 – January

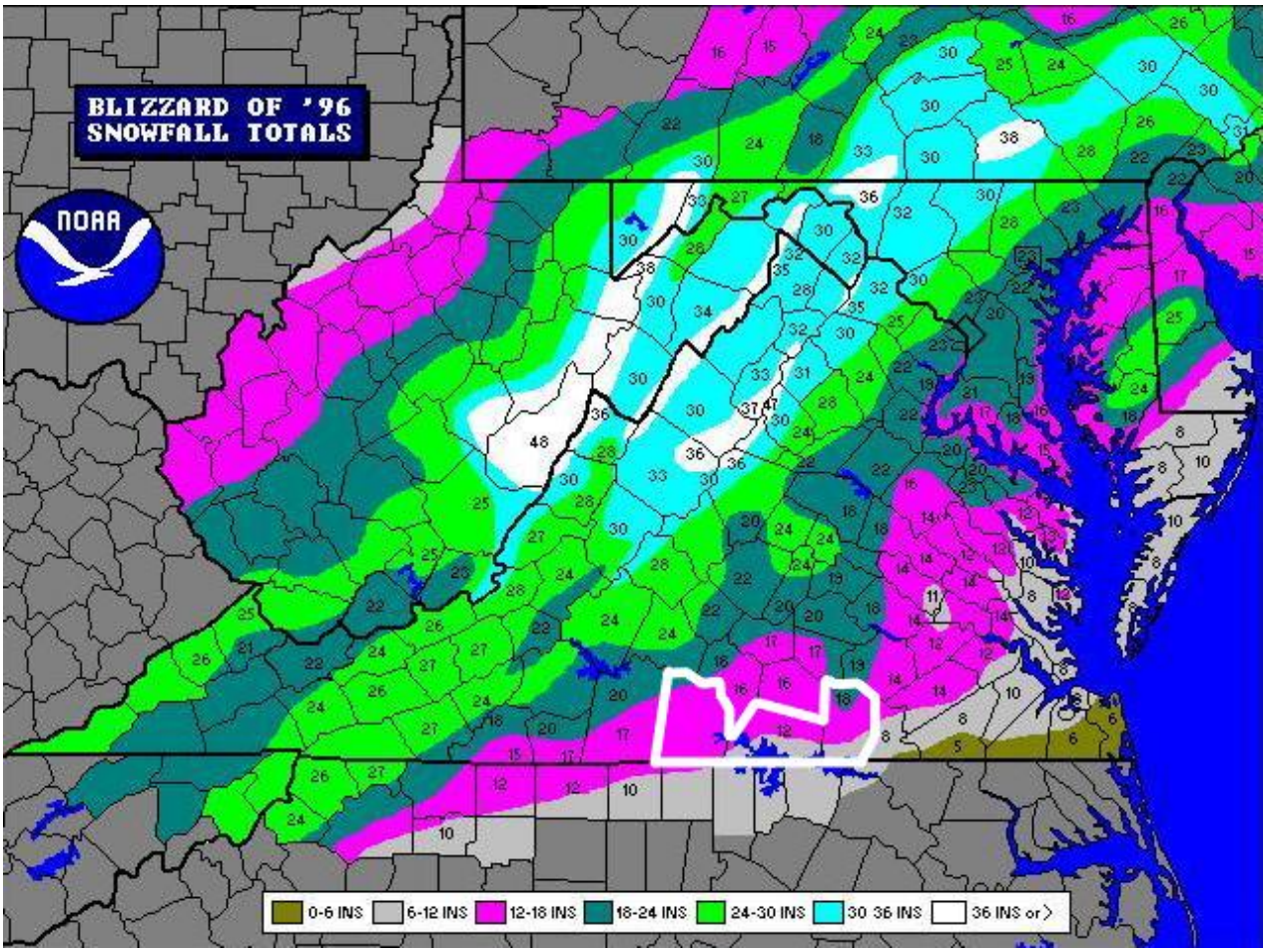
Date	January 18, 1965
Areas Affected	Mecklenburg County
Snowfall Accumulation	Chase City – 10.6"
Ice Accumulation	None reported
Effects	Some minor auto accidents.

1966 – January/February

Date	January 30 – February 2, 1966
Areas Affected	Brunswick, Halifax and Mecklenburg Counties
Snowfall Accumulation	Chase City – 21.0"
Ice Accumulation	Unknown, though it was forecasted.
Effects	Some auto accidents, one train derailment (Norfolk, Franklin and Danville), closed roads, schools being closed for an extended period of time.

"Blizzard of 1996" – 1996

Date	January 6 – 13, 1996
Areas Affected	Brunswick, Halifax and Mecklenburg Counties
Snowfall Accumulations	Chase City – 12.0", Clarksville – 12.0", Lawrenceville – 12.0", the northern parts of Brunswick and Halifax Counties saw up to 17"-18"
Ice Accumulation	Unknown, but reported in northern parts of the counties.
Effects	Some auto accidents, business closings, school closings, and mail unable to be delivered.



"The Christmas Ice Storm" – 1998

Date	December 23, 1998
Areas Affected	Brunswick, Halifax and Mecklenburg Counties
Total Accumulation	Chase City – 2.0"
Ice Accumulation	Approximately 1.0"
Effects	Massive power outages (MEC – 23,000 and VA Power – 12,000).

2000 – January

Date	January 18 -24, 2000
Areas Affected	Brunswick, Halifax and Mecklenburg Counties
Total Accumulation	20.0" – 25.0" across the District
Ice Accumulation	Substantial, mixed with layers of snow. Amount unknown.

Effects	Everything closed, some food shortages, mail wasn't delivered, home destroyed by fire.

2002 – December

Date	December 4, 2002
Areas Affected	Brunswick and Mecklenburg Counties
Snowfall Accumulation	3.5" – 4.5"
Ice Accumulation	Substantial, mixed with snow.
Effects	Power outages (several thousand without power), icy roads.

2003 – March

Date	March 31, 2003
Areas Affected	Brunswick, Halifax and Mecklenburg Counties
Snowfall Accumulation	
Ice Accumulation	0.25" Ice, 4.0" Sleet.
Effects	Power outages (several thousand without power), icy roads.

2014 – February

Date	February 12-13, 2014
Areas Affected	Halifax County
Snowfall Accumulation	8" – 11", moving east to west across the county.
Ice Accumulation	0.25"
Effects	One fatality due to head-on collision. $40,000 in property damage.

2016 – January

Date	January 22-23, 2016
Areas Affected	Brunswick, Halifax and Mecklenburg Counties
Snowfall Accumulation	Generally 7.0" – 10.0". Cluster Springs – 10.0", South Hill – 8.0", and Lawrenceville – 8.0".
Ice Accumulation	Amount unknown, sleet was reported during this event.
Effects	School closings, several auto accidents.

2018 – January

Date	January 17-18, 2018
Areas Affected	Brunswick, Halifax and Mecklenburg Counties
Snowfall Accumulation	Clarksville – 7.4", Gasburg 5.0", and South Boston 10.0"
Ice Accumulation	
Effects	School closings, auto accidents.

2018 – December

Date	December 9-10, 2018
Areas Affected	Brunswick, Halifax and Mecklenburg Counties
Snowfall Accumulation	Halifax County – 12"-15", Mecklenburg County – 9", and Brunswick County – 6"
Ice Accumulation	Significant, amount unknown.
Effects	Schools and government offices were closed. Numerous automobile accidents, although minor. Power outages attributed to the wet snow and ice accumulation bringing down trees/limbs/wires. Halifax County reported that 741 MEC customers were without power, while approximately 2,500 Dominion customers were also affected. In Mecklenburg County, 2,292 MEC customers and 2,367 customers were reported to be without power.

Future Occurrences

Severe winter weather will continue to occur in the Southside Planning District on a regular basis, as most winters tend to experience at least one winter storm event. The number of snowfall events and total accumulation has been on the rise, as all three counties have experienced increases. While

Mecklenburg County continues to account for the most overall snowfall accumulation, the other two counties are not that far behind. This means that future events should impact each of the three counties relatively equal, although the number of snowfall events may continue to occur at a rate higher than the historical average.

Data References

Allen, Sylvia, Tony Holt, and Cathy Jones. *Snowed Under*. South Hill Enterprise. 01/26/00.

Nanney, Frank Jr. *South Hill, Virginia*. Winston Salem, NC: Jostens Inc. 2001.

National Centers for Environmental Information. *Storm Events Database*. NOAA. Retrieved 07/17/20 from https://www.ncdc.noaa.gov/stormevents/

National Weather Service – Wakefield, VA. *Storm Total Snowfall – Dec. 9, 2018*. 12/10/18. Retrieved 12/12/18 from @NWSWakefieldVA (Twitter)

South Hill Enterprise. *Snow and Ice Blanket the Local Area*. 01/10/96.

SoVaNow.com. *Digging out, carefully*. 12/12/18. Retrieved 12/12/18 from http://www.sovanow.com/index.php?/news/article/digging_out_carefully/

SoVaNow.com. *Now Comes Time For Digging Out*. 01/25/16. Retrieved 09/27/18 from http://thenewsrecord.com/index.php?/news/article/now_comes_time_for_digging_out/

SoVaNow.com. *Thousands go without power, crews mobilize to get lights back on*. 12/12/18. Retrieved 12/12/18 from http://sovanow.com/index/php?/news/article/thousands_go_without_power_crews_mobilize_to_get_lights_back_on/

The Gazette Virginian. *Historic December storm dumps more than a foot of snow on county*. 12/11/18. Retrieved 12/12/18 from http://www.yourgv.com/news/local_news/historic-december-storm-dumps-more-than-a-foot-of-snow/article_8dd337d2-fd84-11e8-8ec4-f3711cde3c3.html

Watson, Barbara McNaught. *Virginia Winters*. Virginia Department of Emergency Management. 02/21/02. Retrieved 10/18/04 from http://www.vdem.state.va.us/library/vahurr/va-hurr.htm

Tornadoes

Tornadoes are a violently rotating column of air that extends from a thunderstorm to the ground. These storms can produce devastating winds of 250 mph or more and paths of destruction may extend up to 50 miles in length and a mile in width. Those that have experienced a tornado typically describe the sound as being like a freight train or a waterfall. Depending on the strength of tornado, homes, vehicles, barns, roofs, railroad cars, and livestock can sustain major damage or be picked up and thrown hundreds of feet.

They sound like a freight train or waterfall.

A tornado can occur anywhere, at any time, given the right conditions. Typically, tornadoes develop from storms when cold and warm air masses collide. This does not mean that every storm produces tornadoes. The worst tornadoes originate from a supercell, which is a powerful, rotating thunderstorm with a well-defined radar circulation called a mesocyclone. These storms also produce damaging hail, severe non-tornadic winds, dangerous lightning, and flash flooding.

One of the worst aspects of tornadoes is their unpredictability. Although meteorologists have learned much about tornado formation over the years, and Doppler radar reveals a lot about a thunderstorm, there is still a massive amount of information that is still unknown. This makes it complicated to forecast when and where a tornado will strike.

Generally speaking, tornadoes tend to track in a west to east motion. However, tornadoes have been known to change directions or backtrack on themselves, adding to their unpredictability. A tornado can last from several seconds to an hour or more. Most last for ten minutes or less.

According to data from NOAA, most tornadoes tend to form between the months of April and July. The quietest months relating to tornadoes are January, February and December. They also tend to form most often between the local hours of 2:00PM – 8:00 PM.

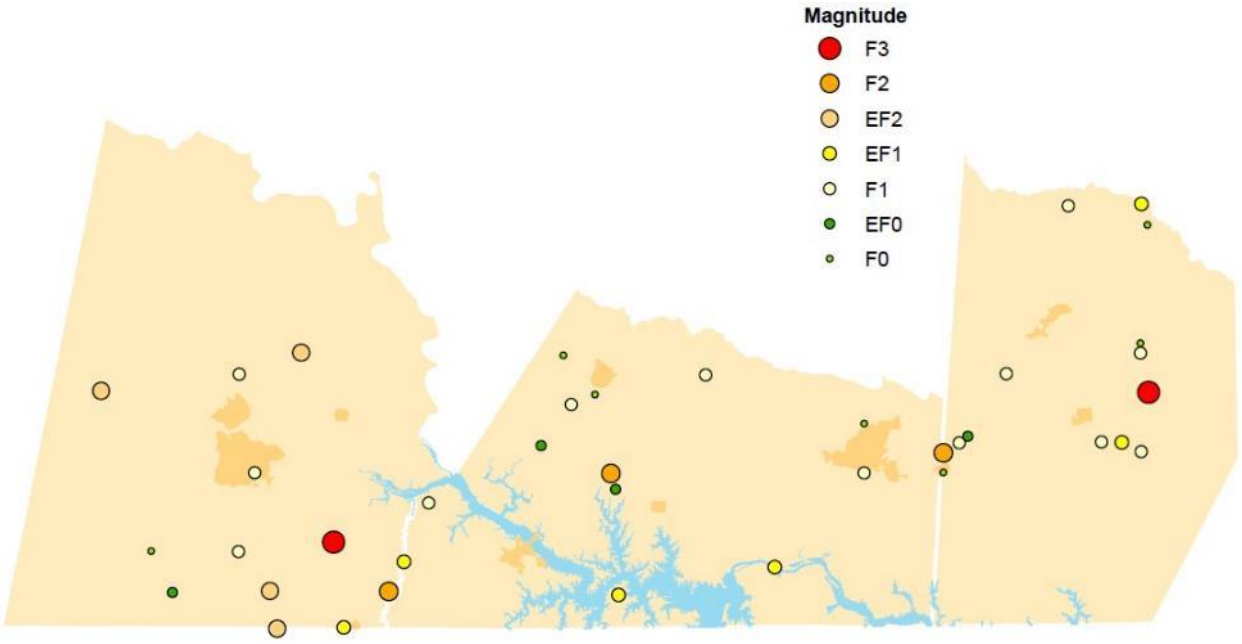


Left: Screenshot from a video of a tornado crossing Kerr Lake (Buggs Island) 2/24/16. Right: Home moved off its foundation in the Palmer Springs area 2/24/16.

Location

In the Southside Planning District tornadoes have occurred in all three counties as can be seen in the following map. Historically, the formation of tornadoes has been relatively equal across the region.

However, patterns are beginning to form with southeastern Halifax County, western Mecklenburg County, and the northern half of Brunswick being the locations in which the majority of tornado events have originated.



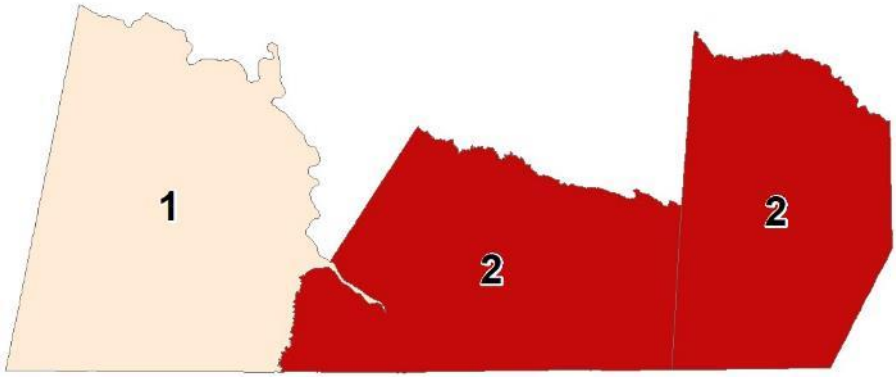
Locations of Confirmed Tornado Formations: 1954-2019

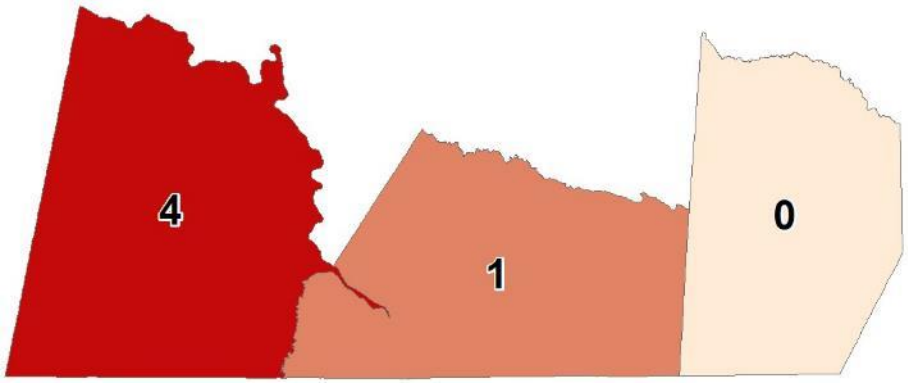
There does not appear to be any clear pattern as to which county may stand a greater chance of being subjected to a tornado than any other county within the District. As can be seen on the following maps, Halifax County experienced five tornadoes from 2008-2012 but there were no tornado events recorded from 2013-2017. The number of events has remained more constant in Brunswick and Mecklenburg Counties over the same time periods.

Total Number of Tornadoes by County

Tornadoes (2005-2009)

Days Reported **3**
Events **5**



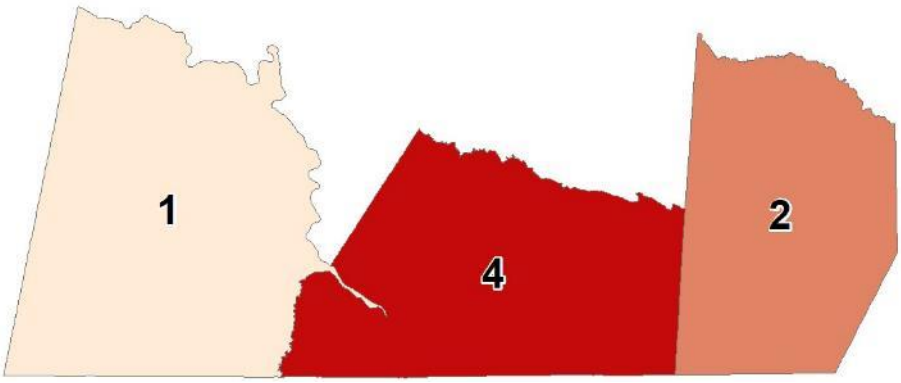


Tornadoes (2010-2014)

Days Reported **4**
Events **5**

Tornadoes (2015-2019)

Days Reported **6**
Events **7**



Extent

Between 1971 and 2007 tornadoes were identified in one of six categories on the Fujita Tornado Scale, named after Dr. T. Theodore Fujita of the University of Chicago. These classifications ranged from F0 (weakest tornado) to F5 (most destructive tornado). The Fujita Scale estimates wind speeds based upon the destruction caused by the tornado. The following table provides an overview of each category.

Fujita Tornado Measurement Scale

Category	Wind Speed	Damage
F0	Gale Tornado 40-72 mph	Light Damage. Some damage to chimneys; breaking branches off trees; push over shallow-rooted trees; damage to sign boards.
F1	Moderate 73-112 mph	Moderate Damage. The lower limit is the beginning of hurricane wind speed; peel surface off roofs; mobile homes pushed off foundations or overturned; moving vehicles pushed off the road.
F2	Significant 113-157 mph	Considerable Damage. Roofs torn off frame houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light object missiles generated.
F3	Severe 158-206 mph	Roof and some walls torn off well-constructed houses; trains overturned; most trees in forest uprooted; cars lifted off ground and thrown.
F4	Devastating 207-260 mph	Well-constructed houses leveled; structures with weak foundations blown off some distance; cars thrown and large missiles generated.
F5	Incredible 261-318 mph	Strong frame houses lifted off foundations and carried considerable distances to disintegrate; vehicle sized missiles fly through the air in excess of 100 meters; trees debarked; steel reinforced concrete structures badly damaged.

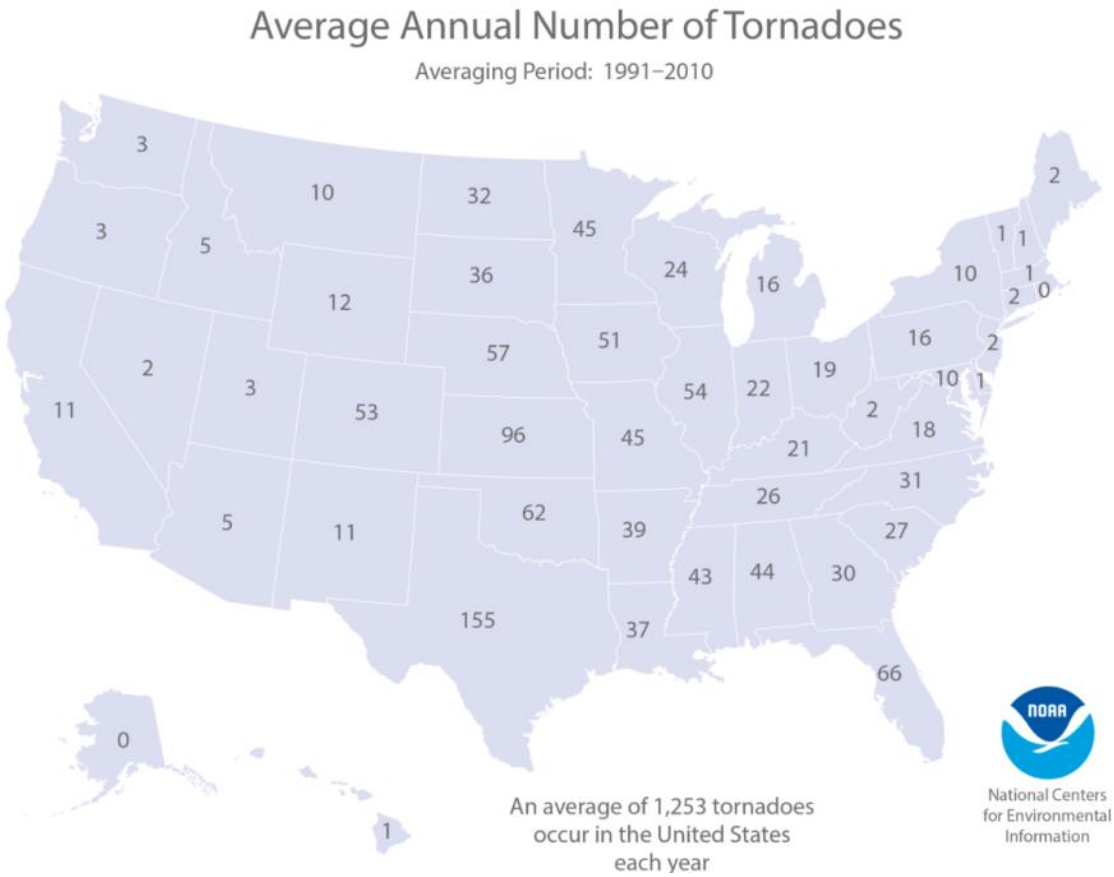
On February 1, 2007 the National Weather Service officially replaced the Fujita Tornado Scale with the Enhanced Fujita Tornado Scale. Some of the more notable improvements include an adjustment of the wind speed categories and more thorough damage descriptions (including pictures) for structures and vegetation. While the new scale includes improvements over the original, it is still based on wind estimates. The following table is meant for comparative purposes between the original Fujita Tornado Scale and the Enhanced Fujita Scale.

Comparison between Fujita Scale and Enhanced Fujita Scale

Fujita Scale		Operational Enhanced Fujita Scale	
F Number	**3 Second Gust (mph)**	**EF Number**	**3 Second Gust (mph)**
0	45-78	0	65-85
1	79-117	1	86-110
2	118-161	2	111-135
3	162-209	3	136-165
4	210-261	4	166-200
5	262-317	5	Over 200

Previous Occurrences

According to NOAA, there are roughly 1,253 tornadoes reported across the United States each year. This information was based upon data covering the years of 1991-2010. The data also showed that Virginia averages 18 tornadoes a year, putting it at 25th among the 50 states.



More specific to the region and based upon NOAA's Storm Events Database (unless otherwise noted), there have been 39 reported tornadoes since 1954 to strike the Southside region. These storms have accounted for 2 fatalities, 19 injuries, $52,000 in crop damages and $9 million in property damage. While most tornadoes to strike the area are in the F1 category, there have been two events in which the tornado was categorized as high as a F3.

Documented Tornadoes by Fujita and Enhanced Fujita Scales (1954-2019)

Category	Tornado Events	Fatalities	Injuries	Property Damage	Crop Damage
F0	7	0	0	$19,500	$2,000
F1	13	0	3	$952,000	$0
F2	3	0	1	$2,527,000	$0
F3	2	1	4	$2,525,000	$0
EF0	4	0	0	$65,000	$0
EF1	6	0	0	$1,710,000	$50,000
EF2	4	1	11	$1,240,000	$0
Total	**39**	**2**	**19**	**$9,038,500**	**$52,000**

The region has seen a dramatic rise in the number of tornadoes that have formed over the last 20 years versus any other proceeding time-period of record. Continuing to monitor this trend will be important moving forward as additional mitigation steps may be needed in the future to help against these violent events.

Tornadoes by Decade

Decade	Number of Tornadoes
1950-1959	3
1960-1969	3
1970-1979	2
1980-1989	3
1990-1999	6
2000-2009	10
2010-2019	12

March 7, 1830

Area Affected	Halifax County
Deaths/Injuries	11/0
Specific Details	The tornado touched down and moved northeast of Meadville, destroying cabins, barns, and some plantation houses. Three people were killed by a falling chimney, while eight others were also killed by the storm. The tornado was described as being approximately ¼ mile wide and travel between 15-20 miles.

April 20, 1959

Area Affected	Halifax County
Category	F1
Property Damage ($)	$250,000
Specific Details	A tornado traveled two miles through Halifax County and measured 167 yards wide.

March 24, 1969

Area Affected	Halifax County
Category	F3
Deaths/Injuries	1/4
Property Damage ($)	$25,000
Specific Details	Briefly touching down in Halifax County, this tornado started about seven miles southeast of South Boston and completely destroyed a six room farm house. It caused one death when a sleeping four year old girl was thrown 75 yards from where her house was previously located. Tree debris was found five miles from the tornado's path. Also destroyed were a barn, stable and trailer.

October 14, 1986

Area Affected	Brunswick County
Category	F3
Deaths/Injuries	0/0
Property Damage ($)	$2,500,000
Specific Details	Touching down five miles east of Lawrenceville, this tornado traveled twelve miles while heading northeast. Fifteen homes were damaged and numerous trees were snapped off.

August 29, 1988

Area Affected	Mecklenburg County
Category	F2
Deaths/Injuries	0/1
Property Damage ($)	$2,500,000
Specific Details	This tornado touched down 8 miles southwest of Chase City and traveled several miles to the north. A mobile home was thrown against a tree, injuring one man that had to be dug out of the debris. There were nine other buildings damaged or destroyed and several vehicles were thrown around.

April 28, 2008

Area Affected	Brunswick and Halifax Counties (different events on the same day)
Category	F1 (both)
Deaths/Injuries	0/0 (both)
Property Damage ($)	$700,000 – Brunswick (other estimates total $1.408 mill.) $500,000 – Halifax
Specific Details	Brunswick – This tornado was near the Freeman area and caused damaged to at least 14 homes. Halifax – Occurring just south of Highways 49 and 96 in the Town of Virgilina, this tornado inflicted major damage to two homes and minor damage to another.

April 16, 2011

Area Affected	Halifax County
Category	F2
Deaths/Injuries	0/4
Property Damage ($)	$700,000
Specific Details	With wind speeds estimated to be up to 120 mph, this tornado traveled 16 ½ miles with a width of 300 yards. Four mobile homes were destroyed with another sustaining major damage. Three stick-built homes were also the recipient of major damage, with four others seeing minor damage. Numerous accessory structures were destroyed. It was estimated that between 60-100 acres of trees were destroyed within the Staunton River State Park.

April 27, 2011

Area Affected	Halifax County
Category	F2
Deaths/Injuries	1/7
Property Damage ($)	$26,000 – Public $500,000 – Private

Specific Details	Initially touching down near High Rock Trail off Thompson Store Road, this tornado is estimated to have had winds up to 125 mph. The storm was 350 yards wide and traveled over 18 miles. In addition to the one death and seven injuries, it destroyed four mobile homes, a camper, and an outbuilding. 14 homes sustained major damage, 6 homes had minor damage, and numerous trees were uprooted.

February 24, 2016

Area Affected	Mecklenburg County
Category	F1
Deaths/Injuries	0/0
Property Damage ($)	$260,000 – Property Damage $50,000 – Crop Damage
Specific Details	Traveling from Keats Point northeast to Palmer Point Recreation Area, this tornado was about 150 yards wide. One home was moved off its foundation. Two others sustained minor damage while numerous trees were downed or snapped.

November 2, 2018

Area Affected	Halifax County
Category	EF2
Deaths/Injuries	0/0
Property Damage ($)	$500,000 – Property Damage
Specific Details	Numerous large trees were uprooted and/or snapped, hay bales were blown across a roadway, and several roofs were blown off or significantly damaged, and one car was crushed by a falling tree.

Future Occurrences

Over the past 65 years, ranging from 1954 to 2019, there have been a total of 39 reported tornadoes according to the NOAA Storm Events Database. This equates to having a 59.1% chance of a reported tornado occurring over that period of time on an annual basis. Of concern though is that from 2010-2019 there were 12 tornadoes which equates to a tornado occurring at the rate of 120% on an annual basis during that time frame.

Moving forward it seems very likely that tornadoes will continue to occur within the Southside District. It is important to remember that any future events, while having the potential to strike anywhere within the region, will most likely inflict damage in a very narrowly defined area and that it should be on the lower end of the Enhanced Fujita Scale. The most powerful tornadoes on record to strike the area have been two F3 events. The last event of this magnitude to occur was in 1986 and they represent a 3% annual occurrence rate over the past 66 years.

Data References

Allison, Olivia. *Home Lifted Off Foundation*. South Hill Enterprise. 02/26/16. Retrieved 08/07/18 from http://www.southhillenterprise.com/news/article_e9beec70-dcc7-11e5-bb76-5be058b23eae.html

National Centers for Environmental Information. *Historical Records and Trends*. NOAA. Retrieved 08/17/18 from https://www.ncdc.noaa.gov/climate-information/extreme-events/us-tornado-climatology/trends

National Centers for Environmental Information. *Storm Events Database*. NOAA. Retrieved 07/20/20 from https://www.ncdc.noaa.gov/stormevents

National Centers for Environmental Information. *The Enhanced Fujita Tornado Scale*. NOAA. Retrieved 10/16/18 from https://www1.ncdc.noaa.gov/pub/data/extremeevents/specialreports/enhanced-fujita-tornado-scale.pdf

National Centers for Environmental Information. *U.S. Tornado Climatology*. NOAA. Retrieved 08/17/18 from https://www.ncdc.noaa.gov/climate-information/extreme-events/us-tornado-climatology

Saunders, W. Kirby. *Natural Hazard Identification and Risk Assessment Survey*.

South Hill Enterprise. *Weather Service Confirms Tornado*. 02/26/16. Retrieved 08/07/18 from http://www.southhillenterprise.com/news/article_601c4880-dcc9-11e5-bea9-1bb86a8db54.html

Storm Prediction Service. *The Online Tornado FAQ*. NOAA. 01/27/05. Retrieved 02/02/05 from https://www.spc.noaa.gov/faq/tornado/f-scale.html

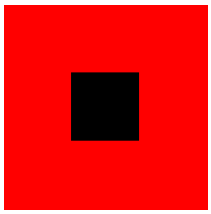
VaNcNews.com. *Tornado Touches Down In Brunswick County*. 04/28/08. Retrieved 08/08/11 from https://www.vancnews.com/articles/2008/04/29/south_hill/news/news0...

Watson, Barbara McNaught. *Virginia Tornadoes*. Virginia Department of Emergency Management. 11/11/04. Retrieved from https://www.vaemergency.com/library/vatorn/va-tors.htm

Tropical Cyclones

Originating over tropical or sub-tropical waters and rotating in a counter-clockwise motion, tropical cyclones generally include organized cloud systems and thunderstorms. Tropical cyclones are classified into one of the following categories, although its classification will change throughout its life cycle based upon measurable characteristics:

Tropical Depression A tropical cyclone with maximum sustained winds of 38 mph or less.
Tropical Storm A tropical cyclone with maximum sustained winds of 39 to 73 mph.
Hurricane A tropical cyclone with maximum sustained winds of 74 mph or higher.
Major Hurricane A tropical cyclone with maximum sustained winds of 111 mph or higher.



Hurricane Warning Flag

Hurricane Season | Atlantic Coast
July 1 – November 30

By the time most hurricanes have reached the Southside Planning District they have been downgraded to a tropical storm. Still, many of the weaker storms are notorious for their high rainfall amounts, damaging winds, and threat of tornados. Rainfall totals from this type of storm can be tremendous. According to FEMA, even a Category 1 hurricane can cause a 500-year flood, which is a flood that has a 0.2% probability of occurring each year.

Winds from tropical cyclones, although typically not extremely high, can cause major damage in Southside Virginia. Unlike many coastal areas, most homes in the Southside Planning District are not built to withstand high winds because of the infrequency with which that type of storm is seen. Also, there are many older homes, mobile homes, and buildings in various states of disrepair throughout the three counties. These homes and buildings are quite vulnerable to damage from this type of storm event.

Being a primarily rural area, the region has many trees that can be impacted by tropical cyclones. High winds can snap off branches or simply topple trees causing damage to power lines, buildings and blocking roadways. With the added problem of super-saturated soil from heavy rainfall, trees are even more prone to falling over.

Location

Tropical cyclones do not have a specific location in the District where they are more prevalent. This hazard event is generally widespread in occurrence and affects all three counties at the same time. Localized areas and certain characteristics that may be more severally impacted throughout the region include: low lying areas susceptible to flooding, overhead utilities, and any property (structures/vehicles) in close proximity to mature trees.



Hurricane Florence on September 15, 2018 in an image from NOAA.

Extent

The Saffir-Simpson Scale is typically used to describe the intensity of tropical cyclones. A category 3, 4, or 5 storm is considered a major hurricane.

Category	Sustained Winds	Description of Potential Damage
1	74-95 mph	**Very dangerous winds will produce some damage**: Well-constructed frame homes could have damage to roof, shingles, vinyl siding and gutters. Large branches of trees will snap and shallowly rooted trees may be toppled. Extensive damage to power lines and poles likely will result in power outages that could last a few to several days.
2	96-110 mph	**Extremely dangerous winds will cause extensive damage**: Well-constructed frame homes could sustain major roof and siding damage. Many shallowly rooted trees will be snapped or uprooted and block numerous roads. Near-total power loss is expected with outages that could last from several days to weeks.
3	111-129 mph	**Devastating damage will occur**: Well-built framed homes may incur major damage or removal of roof decking and gable ends. Many trees will be snapped or uprooted, blocking numerous roads. Electricity and water will be unavailable for several days to weeks after the storm passes.
4	130-156 mph	**Catastrophic damage will occur**: Well-built framed houses can sustain severe damage with loss of most of the roof structure and/or some exterior walls. Most trees will be snapped or uprooted and power poles downed. Fallen trees and power poles will isolate residential areas. Power outages will last weeks to possibly months. Most of the area will be uninhabitable for weeks to months.
5	157 mph or higher	**Catastrophic damage will occur**: A high percentage of framed homes will be destroyed, with total roof failure and wall collapse. Fallen trees and power poles will isolate residential areas. Power outages will last for weeks to possibly months. Most of the area will be uninhabitable for weeks to months.

Previous Occurrences

Looking back at the history of natural events in the Southside area, one can see that tropical cyclones have played a major role. People tend to remember major hurricanes that have ultimately passed through the area. Hurricane names like Fran and Isabel have special meaning to many who have endured their wrath. The strengths of numerous structures in the area are described by their past ability to survive hurricanes such as Hazel.

While not a complete list, the following are historically significant storms that have affected the District. Please note that all data in the tables is meant to reflect the Southside Planning District only, national numbers are not included. Additionally, the storm category is also meant to represent the strength of the storm when passing through the District.

Hurricane Hazel – October 15, 1954

Category	3
Est. Sustained Winds	63 mph at Blackstone
Est. Wind Gusts	92 mph at Blackstone
Rainfall Accumulations	Chase City – 3.62”, Clarksville – 3.67”, Halifax – 4.01”, John H. Kerr Dam – 3.06”, Lawrenceville – 1.40”, Randolph – 3.35”
Deaths	0
Damages ($)	Unknown
Specific Damages	Widespread damage. Damaged roofs, mangled/toppled antennas, toppled chimneys, uprooted trees, power outages; WJWS AM broadcasting tower blown down, Oak Drive-In Theater screen destroyed, flooding in Riverdale, portions of US 501 were washed out.

Hurricane Connie – August 12, 1955

Category	1 & Tropical Storm
Rainfall Accumulations	Chase City – 2.15”, Clarksville – 1.78”, Halifax – 1.59”, John H. Kerr Dam – 2.33”, Lawrenceville – 3.90”, Randolph – 1.51”
Deaths	0
Damages ($)	Unknown
Specific Damages	Widespread damage to tobacco leaves and corn stalks being blown over.

Hurricane Diane – August 17, 1955

Category	Tropical Storm
Rainfall Accumulations	Chase City – 3.82”, Clarksville – 4.43”, Halifax – 2.20”, John H. Kerr Dam – 4.10”, Lawrenceville – 2.95”, Randolph – 4.86”
Deaths	0
Damage ($)	Unknown
Specific Damages	Minimal damage and flooding

Hurricane Ginger – October 2, 1971

Category	Tropical Depression
Est. Sustained Winds	30 mph
Rainfall Accumulations	Chase City – 1.20”, Clarksville – 1.56”, Halifax – 1.33”, John H. Kerr Dam – 2.07”, Lawrenceville – 2.71”, Randolph – 2.72”
Deaths	0
Damage ($)	Unknown
Specific Damages	Wall washed away causing roof to collapse at Beechwood Boat Sales and Marina.

Hurricane Agnes – June 21, 1972

Category	Tropical Storm
Rainfall Accumulations	Chase City – 2.00", Clarksville – 5.27", Halifax – 4.59", John H. Kerr Dam – 3.41", Lawrenceville – 5.88", Randolph – 4.63"
Deaths	At least 2 ("Two Young Children Drown", 9A
Damage ($ adj.)	At least 4,120,000 ("Flood Is Worst in History Here", 1)
Specific Damages	Worst flooding in Southside's history, widespread damage. Stores and homes in Lawrenceville and South Boston were flooded with several feet of water, some structures were completely destroyed. Campgrounds and low-lying roads were flooded. At least $75,000 in crop losses to 3,000 acres of corn in Halifax County.

Hurricane Fran – September 6, 1996

Category	1
Est. Wind Gusts	75 mph
Rainfall Accumulations	Chase City – 2.45", Clarksville – 3.60", John H. Kerr Dam – 3.92", Lawrenceville – 3.52", South Boston – 8.83"
Deaths	0
Damages ($ adj.)	At least $30,000,000
Specific Damages	Widespread flooding; power outages and blocked roads from downed trees; damage to houses, sheds and vehicles from fallen trees; water pumps without power for two days in South Hill; $2,805,000 in damages to tobacco; $405,000 in damages to corn for grain; $528,000 in damages to corn for silage; $480,000 in damages to soybeans; $56,000 in damages to hay; Clarksville Marina heavily damaged; flooded campsites.

Hurricane Dennis – September 6, 1999

Category	Tropical Depression
Rainfall Accumulations	Chase City – 5.20", Clarksville – 6.70", John H. Kerr Dam – 3.91", Lawrenceville – 3.46", South Boston – 5.24"
Deaths	0
Specific Damages	A sinkhole formed on US 58 west of Lawrenceville; a portion of Brunswick Senior High School collapsed; Rt 765 was closed due to washed out drainpipe; downed trees closed other roads.

Hurricane Isabel – September 18, 2003

Category	Tropical Storm
Est. Sustained Winds	50 mph
Est. Wind Gusts	53 mph at Chase City
Rainfall Accumulations	Chase City – 4.10", John H. Kerr Dam – 4.44", Lawrenceville – 6.60", South Boston – 2.55"
Deaths	0
Damages ($)	$4 million in property damage, $3 million in crop damage in Mecklenburg County
Specific Damages	Downed trees fell on power lines, telephone lines, roads, buildings and vehicles; widespread power outages; several roads were damaged through washouts; school cafeteria food lost due to power outage.

Hurricane Irene – August 27, 2011

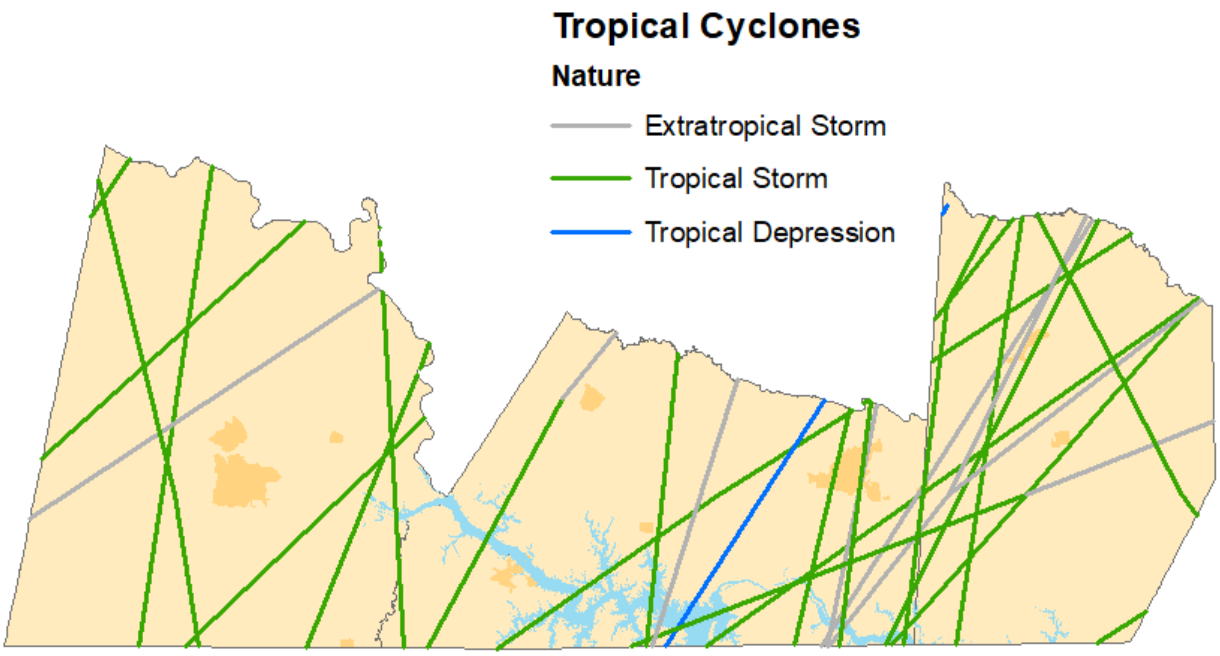
Category	Tropical Storm
Est. Sustained Winds	24.2 mph at South Hill
Est. Wind Gusts	56.8 mph at South Hill
Rainfall Accumulations	Alberta – 0.55", Chase City – 0.21", Clarksville – 0.25", John H. Kerr Dam – 0.28", South Boston – 0"
Deaths	1
Damage ($)	$167,000 in property damage, $6 million in crop damage $5,000 in property damage
Specific Damages	One fatality due to falling tree; Ebony General Store had much of its roof ripped off; thousands were without power; 190 roads were blocked in Brunswick County by fallen trees; approximately 53 power lines were down due to fallen trees.

Hurricane Michael – October 11, 2018

Category	Tropical Storm
Est. Wind Gusts	
Rainfall Accumulations	Halifax County – 7”
Deaths	
Damages ($ adj.)	
Specific Damages	Widespread flooding with many roads closed with several roads and bridges washed out, including US 58 near the Halifax/Pittsylvania County line; 11,000 in Halifax County and 12,000 in Mecklenburg County lost electricity; Planter’s Warehouse in Clarksville partially collapsed from wind and rain; hundreds of acres of agricultural products still in fields were damaged/lost; large quantities of tobacco was ruined in bulk barns when the power went out for extended periods of time and $112,980 in repair work to the Halifax County Service Authority.



Flooding at the intersection of Routes 501 and 58 in South Boston from Tropical Storm Michael.
Joe Chandler/Gazette-Virginian



Tropical Cyclone Paths Directly Over the District | 1859 – 2017

Storm Data For Tropical Cyclones Passing Directly Over the District | 1859 – 2017

Year	Name	Description	Counties	Wind Speed
1859	Unnamed	Tropical Storm	Meck/Bruns	40
1861	Unnamed	Tropical Stom	Mecklenburg	-
1861	Unnamed	Extratropical Storm	Meck/Bruns	-
1863	Unnamed	Tropical Storm	Halifax	-
1882	Unnamed	Tropical Storm	Meck/Bruns	40
1883	Unnamed	Tropical Storm	Brunswick	40
1885	Unnamed	Tropical Storm	Halifax	40
1886	Unnamed	Tropical Storm	Halifax	35
1888	Unnamed	Tropical Storm	Meck/Bruns	35
1889	Unnamed	Tropical Storm	Brunswick	40
1893	Unnamed	Tropical Storm	Mecklenburg	80
1896	Unnamed	Tropical Storm	Halifax	70
1899	Unnamed	Tropical Storm	Meck/Bruns	55
1902	Unnamed	Tropical Storm/Extratropical Storm	Meck/Bruns	40
1928	Unnamed	Extratropical Storm	Halifax	30
1929	Unnamed	Extratropical Storm	Meck/Bruns	50
1944	Unnamed	Tropical Storm	Meck/Bruns	45
1945	Unnamed	Tropical Storm/Extratropical Storm	Mecklenburg	45
1954	Hazel	Extratropical Storm	Mecklenburg	80
1955	Diane	Tropical Storm	Meck/Hali	50
1971	Ginger	Tropical Storm	Meck/Bruns	30
1976	Unnamed	Tropical Depression	Meck/Bruns	15
1985	Danny	Tropical Storm	Meck/Bruns	25
1996	Fran	Tropical Storm	Halifax	65
2000	Gordon	Extratropical Storm	Mecklenburg	20
2003	Isabel	Tropical Storm	Brunswick	85
2004	Jeanne	Tropical Storm	Halifax	20

Future Occurrence

Dating back to 1859, there has never been a hurricane more intense than a Category 3 pass through the region. The chance that a Category 4 or 5 storm directly hitting the District is fairly low, as those storms are usually only seen on the coast. It is far more likely, by reviewing past storm events, that the next tropical cyclone to hit will be categorized as a tropical storm or Category 1. Through calendar year 2017, the annual percentage that a tropical cyclone of any strength will pass directly over the District is 17%.

Data References

Allen, Ricky, Keith Corum, and Susan Kenney. *Hurricane Isabel Rips Through Area*. South Hill Enterprise. 09/24/03.

Gazette-Virginian. *"IT'S THE WORSE".* 10/12/18.

Griffin, Phil. *Fran: DISASTER!*. South Hill Enterprise. 09/11/96.

Halifax News & Record. *Irene Swings, Misses Halifax*. 08/29/11.

National Hurricane Center. *Saffir-Simpson Hurricane Wind Scale*. NOAA. Retrieved 08/13/18 from https://www.nhc.noaa.gov/aboutsshws.php

National Hurricane Center. *Tropical Cyclone Climatology*. Retrieved 08/13/18 from https://www.nhc.noaa.gov/climo

NOAA. *International Best Track Archive for Climate Stewardship – All Data*. Retrieved 08/15/18 from https://www.ncdc.noaa.gov/ibtracs/index.php?name=ibtracs-data

South Hill Enterprise. *Fran Flattens Many Area Crops*. 09/11/96.

South Hill Enterprise. *Irene Kills Brodnax Man*. 08/31/11.

SoVaNow.com. *HCSA tallies up flood toll in Michael's wake*. 10/22/18.

SoVaNow.com. *Storm delivers sucker punch*. 10/17/18.

Wildfire

A wildfire is a fire that spreads uncontrollably and rapidly in a natural environment, such as grasslands or forests. In Southside Virginia, a wildfire would most likely affect forests.

A wildfire can start by natural means or by some form of human activity. A lightning strike that starts a fire is an example of a wildfire being started by natural means. Examples of wildfires being started by human activity can include: failing to extinguish a campfire, allowing burning debris to get out of control, or throwing a cigarette butt on the ground. Once a wildfire begins and given the right conditions, it can take an extremely long time to get it under control.

Wildfires like dry, windy conditions. This is the reason that the larger wildfires are usually seen in the western United States. The Southside District generally receives much more rainfall, and less wind, therefore it doesn't see nearly as many wildfires. In fact, most local fires are classified as brushfires and can be controlled within a few hours.



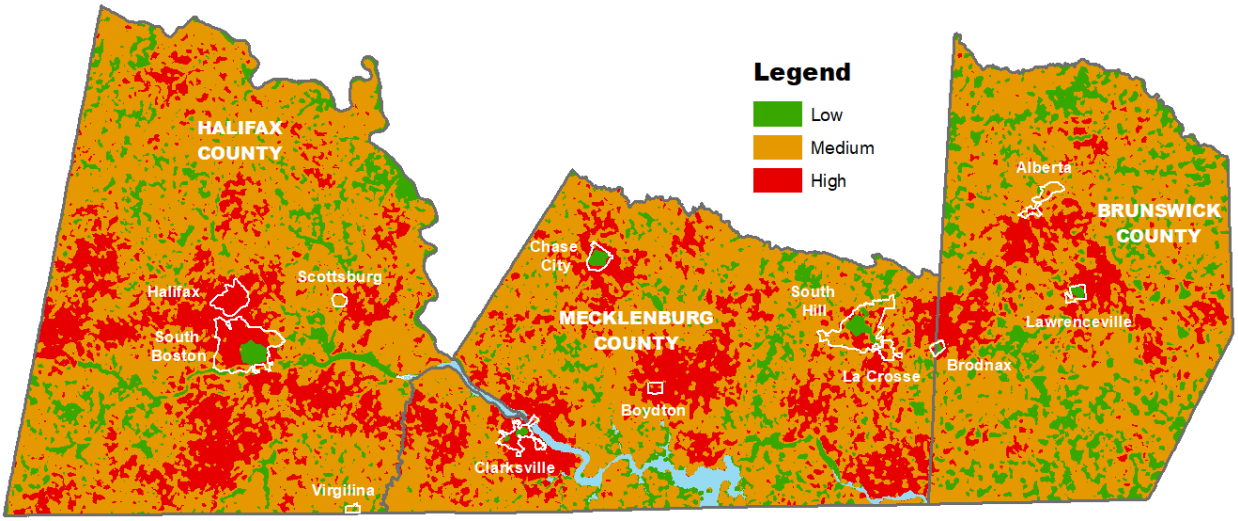
Brush fire along Alpine Road. Photo: Olivia Allison, South Hill Enterprise

Responding to calls for service concerning wildfires are the local fire departments (profiled in Section 5). They are all volunteer based with South Boston being the lone exception, as they are a combination department that has a mix of paid staff and volunteers. One of the ongoing challenges agreed upon by each County and the Town of the South Boston involves their volunteer base. As some volunteers have been reaching the age where there no longer able to actively participate in fire calls, the departments are having a hard time finding more youthful volunteers to replace them. It was also noted that more time and effort are having to be spent fundraising to ensure sufficient funds are in place for equipment.

Location

Some areas within the Southside Planning District are more susceptible to wildfires than other areas. The Virginia Department of Forestry (VDOF) created a model to aid in identifying those areas that are favorable for wildfires. Inputs that were used for this analysis include: historical wildfires, land cover, percent slope, slope orientation, population density, distance to roads, railroad buffer, and road density/developed areas.

As an example, homes within or adjacent to wildfire fuels, in areas of high fire occurrence, and on steep slopes may have a higher risk of burning. Homes that are not located near wildfire fuels, in areas of low fire occurrence and in relatively flat terrain may have a lower risk of burning. Based upon the VDOF's analysis, the District's wildfire risks at various levels include: Low – 11.9%, Medium – 67.8%, and High – 20.3%.



Southside Planning District Wildfire Risk Assessment Map - 2003

Extent

There is no generally used classification system for wildfires. Typically, wildfires are described by the number of acres that have burned and their location.

Previous Occurrences

According to VDOF, the number of wildland fires throughout the Southside District from 2005-2019 totaled 882. This represents an annual average of 58.8 such incidents.

Wildland Fire A general term for a planned or unplanned non-structure fire that is dependent upon vegetation and/or other natural fuels.

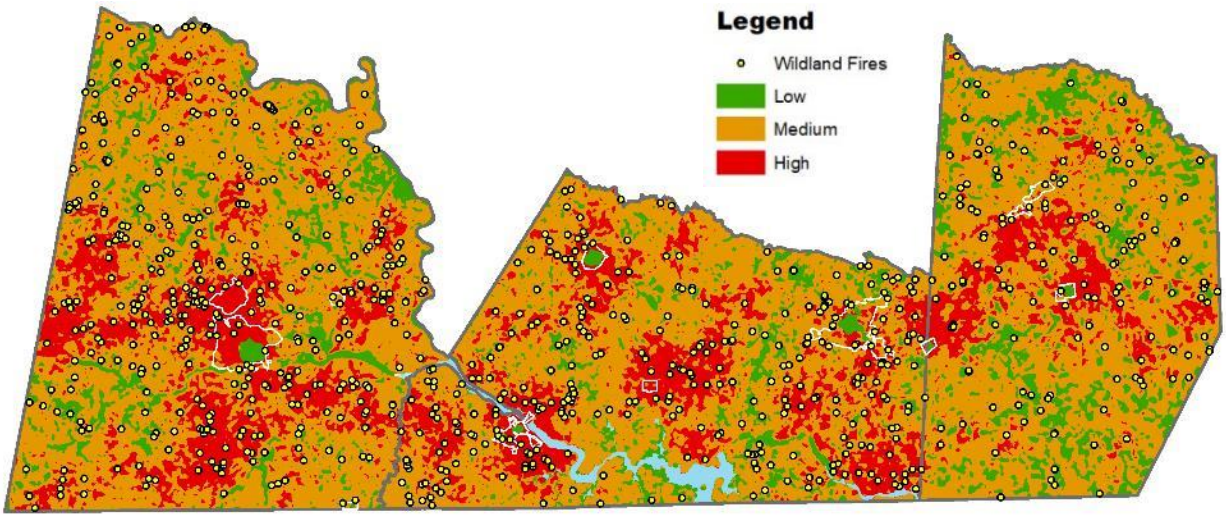
Fuel Any living or dead plant materials that can be ignited by fire.

Source: National Park Service. Wildfires Prescribed Fires and Fuels.

From 2005-2014 the counties of Halifax and Mecklenburg had more than double the number of wildland fires than Brunswick. Numerous factors may contribute to this difference, ranging from Brunswick County containing less overall "high risk" areas to a more limited amount of human activity due to its smaller population base. However, the largest recorded fire during the same timeframe was located in Brunswick County. It occurred in February of 2008 and affected 222 acres.

However, the most interesting data comes from 2015-2019. Halifax and Mecklenburg counties saw huge declines in their total number of wildland fires while Brunswick County remained relatively consistent.

When overlaying the 2003 Wildfire Risk Assessment Map with the 2005-2019 Wildland Fire locations, some interesting results emerged. The "low risk" areas, which comprise 11.9% of the District, have only seen 7.2% of the total fires. The "medium risk" areas, totaling 67.8% of the region's acreage, saw 62.1% of the fires. Finally, the "high risk" areas, consisting of 20.3% of the District's land, incurred the wrath of 30.6% of the region's fires.

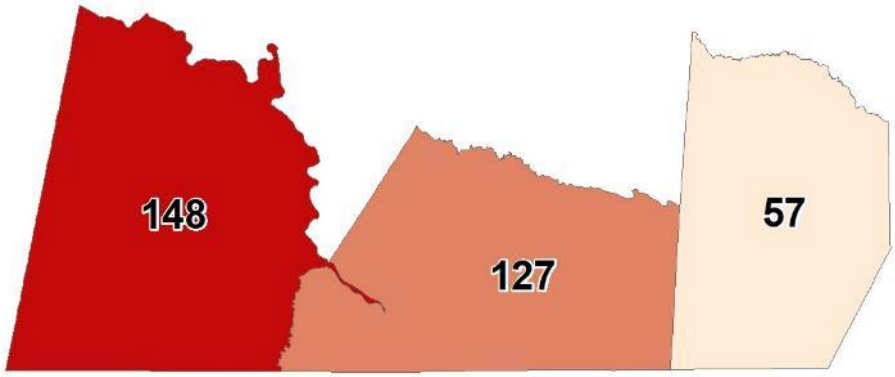


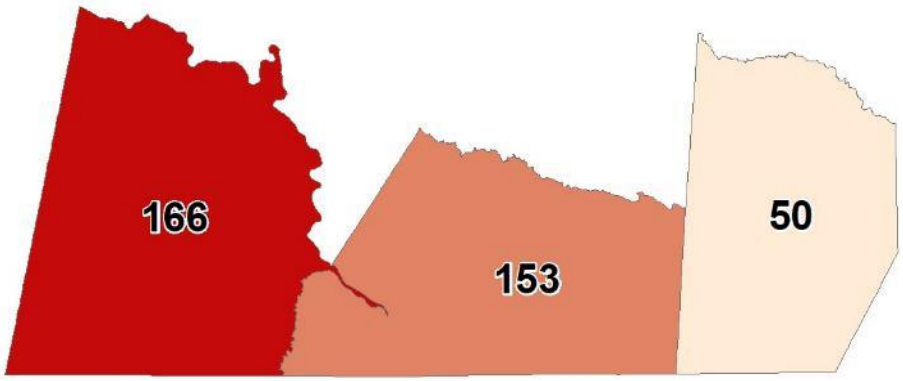
Wildfire Risk Assessment Map (2003) Populated with Reported Wildland Fires (2005-2019)

To more fully explore the total number of wildland fires data from three different time frames was analyzed for this plan. The first set of data covers 2005-2009 and the second spans 2010-2014, and the third goes from 2015-2019.

The total number of wildland fires region-wide and county-wide saw slight increases in Halifax and Mecklenburg counties from 2005-2009 to 2010-2014 while Brunswick County saw a minor decline. However, the data shows an astonishing drop by 57.2% in Halifax County and 59.5% in Mecklenburg County over the final five-year period reviewed. Brunswick County again had a slight decline but has remained relatively stable throughout the reporting periods.

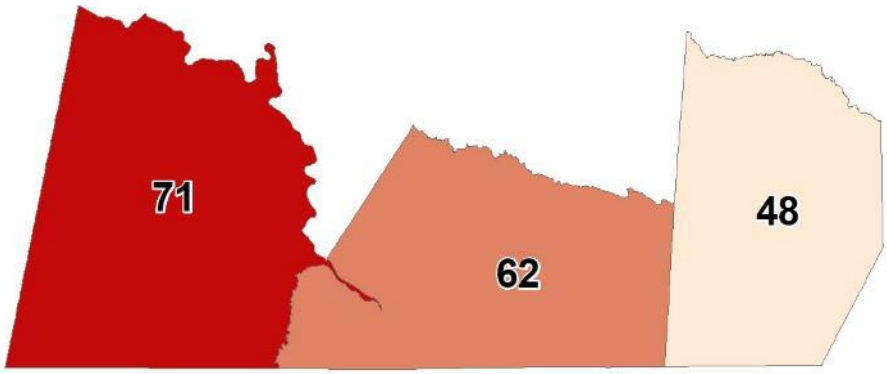
Number of Wildland Fires (2005-2009)





Number of Wildland Fires (2010-2014)

Number of Wildland Fires (2015-2019)



The exact reasoning behind the dramatic lower number of wildland fires for Halifax County and Mecklenburg County isn't known. Some contributing factors could be the increase in average rainfall seen across the region during the past few years, as well as increased snowfall during the winter months. There also appears to be some correlation between drought and wildland fires in our region. However, based on historical data, it probably doesn't account for the significant drop entirely.

Future Occurrences

Large scale wildland fires are generally not found in the Southside Planning District. However, the region is subject to smaller fires that tend to be brought under control more readily. Incidents of a similar nature will most likely continue in the future, even if trends show an overall reduced total number of incidents. It will be important to continue watching precipitation and drought indicators and see if the wildland fires continue to mirror there trends.

Data References

Virginia Department of Forestry. VDOF Wildland Fire Incidents. Retrieved July 20, 2020 from http://www.dof.virginia.gov/gis/dwnload/index.htm

Virginia Department of Forestry. Wildfire Risk Assessment (Statewide). July 2003. Retrieved August 2018 from http://www.dof.virginia.gov/gis/dwnload/index.htm

Hazards Not Included in the Plan

Additional hazards were considered and reviewed, but there was little evidence of them affecting the Southside Planning District enough to warrant inclusion in the Plan. Those hazards include the following:

Avalanche

Avalanches require a steep slope of some height in order to occur. The Southside Planning District does not contain mountains, and thus does not have the natural features necessary for an avalanche to occur.

Coastal Erosion

While the District does contain lakes and rivers, it does not lie along an ocean or bay where waves are substantial enough to cause major damage from erosion.

Coastal Storm

The only coastal storms that affect the District are usually the remains of hurricanes or tropical storms, which are addressed in the Tropical Cyclones section.

Debris Flow

A debris flow is usually associated with mountainous terrain and volcanoes. While the region does experience flooding, most of the damage that occurs is an effect of the water itself. The area was determined to not contain the necessary terrain for debris flows.

Expansive Soils

Expansive soils, more commonly known as shrink-swell soils, shrink when dry and then expand when wet. The pressure from movement has been found to crack sidewalks, foundation walls, and driveways. To eliminate risk of damage to structures, either those soils have to be replaced or structures have to be built on piers that go deep into the ground.

In Virginia, several soil types are believed to have shrink-swell potential. According to the *Soil Science Society of America Journal*, nine soils profiled by Virginia Tech scientists have a “high” or “very high” potential of shrink-swell. One of these soil types is found in the Southside Planning District: Iredell. This soil was found to have a “very high” shrink-swell potential.

Fortunately, Iredell soils make up a very small amount of the total soils in the District. According to the *Mecklenburg County Soil Survey*, 1% of the total soil in Mecklenburg County is of the Iredell type. And that 1% is primarily located in rural areas, under timber land or farmland. The soil survey conducted for Brunswick County found Iredell soils only make up 0.2% of the total soils. A review of the *Soil Survey of Halifax County and the City of South Boston, Virginia* made no mention of Iredell being present.

Due to the excessively small areas that carry the potential for shrink-swell issues, which in turn means little chance of injury to people or damage to structures, it was decided expansive soils warranted no further consideration for the Plan.

Land Subsidence

Land subsidence is the lowering of elevation from changes that have taken place underground, such as pumping water, oil, gas, or the collapsing of mines, excessive drainage of soil, wetting of extremely dry soils, and sinkholes. This hazard typically occurs in the southwest United States, although recent reports identify this issue in the Hampton Roads area as well. No reports of land subsidence have been found for the Southside Planning District so far.

Tsunami

The District is not located close enough to an ocean to be at risk from a tsunami.

Volcano

There are no volcanoes in the area.

Data References

Eastham, Dabney H., Herbert L. Gillispie, Jr., Gregory A. Hammer, Lee Ann Dail, Richard Jones. Soil Survey of Halifax County and the City of South Boston, Virginia. Retrieved 11/7/19 from https://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPT/virginia/VA083/0/Halifax_VA.pdf

Harper, John David, Jr., John C. Nicholson. Soil Survey of Brunswick County, Virginia. Natural Resources Conservation Service. Retrieved 11/7/19 from https://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/virginia/brunswickVA2009/Brunswick_VA.pdf

Mecklenburg County Soil Survey.

Soil Science Society of American Journal.

Section

5

Risk Assessment

Hazard Rankings

Hazards are ranked to better identify those events that pose the greatest threat to each jurisdiction within the Southside Planning District. FEMA's "Worksheet 5.1, Hazard Summary Worksheet" from the *Local Mitigation Planning Handbook* was utilized for this portion of the planning process. The three major components considered for ranking hazards for each jurisdiction include location (geographic area affected), maximum probable extent (magnitude/strength of the event), and the probability of future events. Each of these components is weighted equally to determine the overall hazard ranking. It is important to remember that these rankings are relatively general in nature as consistent data on the local level for fifteen separate jurisdictions is difficult to find and in some cases did not appear to be available or exist.

Each of the following hazards were reviewed as part of this process:

- **Dam Failure** (John H. Herr Dam Inundation Zone and limited data on Banister Dam, data not available for all dams)
- **Drought** (Data from U.S. Drought Monitor)
- **Earthquake** (Data from Commonwealth of Virginia Hazard Mitigation Plan)
- **Extreme Cold** (Data from NCEI)
- **Extreme Heat** (Data from NCEI)
- **Flood** (Data from current DFIRMs)
- **Hail** (Data from NCEI)
- **Tropical Cyclone** (Data from NCEI)
- **Landslide** (Data from ESRI's USDOI USGS Landslide Susceptibility Map)
- **Lightning** (Data from NCEI and Vaisala)
- **Severe Wind** (Data from NCEI)
- **Severe Winter Weather** (Data from NCEI)
- **Tornado** (Data from NCEI)
- **Wildfire** (Data from VDOF's Wildfire Risk Assessment Map – 2003)

Hazard Ranking Methodology

Each hazard was reviewed and scored based on three categories. Within each category a hazard was determined to have a score ranging from 1-4, with 1 representing a low score and 4 representing a high score. After each hazard was scored in all three areas, the three scores were added together to determine the overall score for the hazard. There was no weighting involved in the ranking methodology as all three categories were determined to be equally important.

Location (Geographic Area Affected)

The geographic area affected by a hazard event can be quite different. Events that can easily impact an entire region would include tropical cyclones, earthquakes, and drought, while other storm events are more narrowly focused, such as tornadoes and lightning.

- **Negligible**: <10% of the jurisdiction or isolated single events (1)
- **Limited**: 10-25% of the jurisdiction or limited isolated single events (2)
- **Significant**: 25-75% of the jurisdiction or frequent single events (3)
- **Extensive**: 75-100% of the jurisdiction or consistent single events (4)

Maximum Probable Extent (Magnitude/Strength of Event)

In this category the overall strength of the various hazards impacting the region were reviewed and scored. The maximum strength of hazards was determined by using generally accepted scientific scales or, when there was no scientifically agreed upon scale, a strength scale was developed based upon the best available data (river gauges for flooding, size of hail, etc.). After that, historical data for the region was used to determine the maximum anticipated strength of the regions hazards for each jurisdiction.

Several hazards were reviewed against the descriptions listed below based on historical data. Examples include: extreme cold/heat, landslide, lightning, severe winter weather and wildfire. For other hazards, historical data was reviewed against the table below. Dam failure was limited to the Kerr Dam, with those jurisdictions being located within the inundation zone scoring “Extreme” and those outside of it scoring “Weak”.

- **Weak**: Slow speed of onset, short duration of event, and/or little to no damage (1)
- **Moderate**: Moderate speed of onset, moderate duration of event, and/or some damage and loss of services for days. (2)
- **Severe**: Fast speed of onset, long duration of event, and/or devastating damage and loss of services for weeks or months. (3)
- **Extreme**: Immediate onset, extended duration of event, and/or catastrophic damage and uninhabitable conditions. (4)

Hazard	Scale/Index	Weak	Moderate	Severe	Extreme
Drought	US Drought Monitor	D0	D1	D2	D3, D4
Earthquake	Richter Scale	2,3	4,5	6	7,8
Flood	River Gauge	Action Stage	Flood Stage	Moderate Flood Stage	Major Flood Stage
Hail	Size	<0.5"	0.5"-1"	1"-3"	>3"
Tropical Cyclone	Saffir-Simpson Hurricane Wind Scale	1	2	3	4,5
Severe Wind	Wind Speed	26-49 kts 30-57 mph	50-64 kts 58-74 mph	65-77 kts 75-89 mph	78+ kts 90+ mph
Tornado	Fujita/Enhanced Fujita Scale	F0/EF0	F1,F2/EF1, EF2, EF3	F3/EF4	F4, F5/EF5

Probability of Future Events

The probability of future events was determined by taking the number of historical occurrences of each hazard and dividing by the number of years of data that was available. The result provides an annual percentage of event occurrences for each hazard event. The annual percentage was then used for probability purposes as it relates to the following occurrence levels.

- **Unlikely**: <1% probability of occurrence in the next year. (1)
- **Occasional**: 1-10% probability of occurrence in the next year. (2)
- **Likely**: 10-90% probability of occurrence in the next year. (3)
- **Highly Likely**: 90-100% probability of occurrence in the next year. (4)

Overall Hazard Rankings

The overall hazard ranking was determined by taking the three scores for the various components (location, strength, and probability) of each hazard and totaling them. Those scores were then assigned a hazard ranking based upon the five different levels listed below.

- **Low** (3-4)
- **Low/Medium** (5-6)
- **Medium** (7-8)
- **Medium/High** (9-10)
- **High** (11-12)

Southside Planning District (Brunswick, Halifax and Mecklenburg Counties)

Hazard	Location (Geographic Area Affected)	Maximum Probable Extent (Magnitude/Strength)	Probability of Future Events	Overall Hazard Ranking
Dam Failure	Negligible (1)	Extreme (4)	Occasional (2)	Medium (7)
Drought	Extensive (4)	Extreme (4)	Occasional (2)	Medium/High (10)
Earthquake	Extensive (4)	Weak (1)	Unlikely (1)	Low/Medium (6)
Extreme Cold	Extensive (4)	Moderate (2)	Occasional (2)	Medium (8)
Extreme Heat	Extensive (4)	Moderate (2)	Likely (3)	Medium/High (9)
Flood	Limited (2)	Extreme (4)	Highly Likely (4)	Medium/High (10)
Hail	Significant (3)	Severe (3)	Highly Likely (4)	Medium/High (10)
Tropical Cyclone	Extensive (4)	Severe (3)	Likely (3)	Medium/High (10)
Landslide	Negligible (1)	Weak (1)	Unlikely (1)	Low (3)
Lightning	Negligible (1)	Moderate (2)	Highly Likely (4)	Medium (7)
Severe Wind	Extensive (4)	Severe (3)	Highly Likely (4)	High (11)
Severe Winter Weather	Extensive (4)	Moderate (2)	Highly Likely (4)	Medium/High (10)
Tornado	Negligible (1)	Severe (3)	Likely (3)	Medium (7)
Wildfire	Limited (2)	Moderate (2)	Highly Likely (4)	Medium (8)

*Rankings for each Jurisdiction can be found in the Jurisdiction Executive Summaries sections of this plan.

Community Assets and Critical Facilities

People

The most important asset to account for is people. As such, this section will inventory population density throughout the region and will also look at visiting populations. Visiting populations will be limited to hotels, motels, campgrounds, or other sizeable lodging facilities. Generally speaking, visitors may be less familiar with local hazards than those who live in the area and thus less prepared to deal with its effects. Additional facilities that either house, host or otherwise accommodate people (such as schools, hospitals, nursing homes, and prisons) may be found in the "Critical Facilities" section of this chapter.

People per Square Mile by Jurisdiction

In order to better understand and identify where the highest concentration of people live within the region, the following table was created to determine the number of people per square miles for each jurisdiction. While the 2010 U.S. Census population counts are included, the 2013-2017 American Community Survey population estimates were used when calculating persons per square mile as it is the most recent data available.

Jurisdiction	2010 Population	2013-2017 ACS	Sq. Miles	Persons per Square Mile
Town of Lawrenceville	1,438	1,466	1.20	1,221.67
Town of Chase City	2,351	2,344	2.15	1,090.23
Town of South Boston	8,142	7,887	13.07	603.44
Town of La Crosse	604	644	1.20	536.67
Town of South Hill	4,650	4,438	9.94	446.48
Town of Boydton	431	433	0.78	412.82
Town of Clarksville	1,139	1,311	3.20	409.69
Town of Halifax	1,309	1,441	3.84	375.26
Town of Brodnax	298	247	0.69	357.97
Town of Virgilina	154	110	0.53	207.55
Town of Scottsburg	119	112	0.73	153.42
Town of Alberta	298	301	2.07	145.41
Mecklenburg County	32,727	30,959	679.31	45.57
Halifax County	36,241	35,030	829.61	42.22
Brunswick County	17,434	16,435	569.40	28.86

Hotels/Motels/Campgrounds/Other Lodging

Lodging facilities with 10 or more rooms, cabins, or camp sites are included in the following inventory.

Name & Jurisdiction	Rooms/Camp Sites	Med/High – High Risks
America's Best Value Inn (Halifax County)		Drought, Hail, Tropical Cyclones, Severe Wind, and Severe Winter Weather
America's Best Value Inn (Town of South Hill)	47 rooms	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Berry Hill Resort (Town of South Boston)	92 rooms	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Best Western Plus (Town of South Hill)		Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Budget Inn (Halifax County)		Drought, Hail, Tropical Cyclones, Severe Wind, and Severe Winter Weather
Budget Inn Express (Town of South Hill)		Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Buffalo Park (Mecklenburg County)	21 sites	Flooding, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Clarion Inn (Town of South Boston)	66 rooms	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Comfort Inn & Suites (Town of South Hill)		Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Cooper's Landing Inn (Town of Clarksville)	6 rooms/6 cottages	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Days Inn (Town of South Hill)		Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Fairfield Inn & Suites (Halifax County)	60 rooms/25 suites	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind, and Severe Winter Weather
Fairfield Inn & Suites (Town of South Hill)		Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Greenwood Inn (Town of South Hill)	17 rooms	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Hampton Inn (Town of South Hill)	55 rooms	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Holiday Inn Express & Suites (Town of South Hill)	72 rooms	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Lake Gaston Americamps (Brunswick County)	120 sites/8 cabins	Dam Failure, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind, and Severe Winter Weather
Lake Gaston Inn (Mecklenburg County)		Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Lake Gaston Lodges Brunswick County)		Dam Failure, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind, and Severe Winter Weather
Lake Gaston Resort (Brunswick County)	110 sites	Flooding, Dam Failure, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind, and Severe Winter Weather
Lake Motel (Town of Clarksville)		Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Longwood Park (Mecklenburg County)	66 sites	Flooding, Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Magnuson Hotel on the Lake (Town of Clarksville)		Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Microtel (Town of South Hill)	88 rooms	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
North Bend Park (Mecklenburg County)	200+ sites	Flooding, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Occoneechee State Park (Mecklenburg County)	48 sites/13 cabins /4 yurts	Flooding, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Quality Inn (Town of South Boston)		Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Quality Inn (Town of South Hill)		Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Rudds Creek Park (Mecklenburg County)	99 sites	Flooding, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Staunton River State Park (Halifax County)	47 sites/7 cabins/1 bunkhouse	Flooding, Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind, and Severe Winter Weather
Super 8 (Town of South Boston)		Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
VIR (Halifax County)	62 rooms	Drought, Hail, Tropical Cyclones, Severe Wind, and Severe Winter Weather
Wesco Motel		Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind

(Mecklenburg County)		and Severe Winter Weather

Economy

The ability to have resiliency within the local economy is paramount for recovery from a natural disaster. Each of the jurisdictions have economic drivers and those should be taken into account when considering action items to reduce the impacts of hazards in the future. It is important to note that some of the employers found in the following tables do not necessarily have all of their employees on-site in one location, as they may be spread out over multiple locations.



Scotts



Southside Virginia Community College

Brunswick County – 50 Largest Employers	
1 – Brunswick County School Board	26 – Dbi Services
2 – Geo Corrections & Detention Inc	27 – The Scotts Company
3 – Southside Virginia Community College	28 – VDOT
4 – Meherrin River Regional Jail	29 – Armor Correctional Health
5 – County of Brunswick	30 – Pecht Distributors
6 – Hyponex Corporation	31 – Southside Community Services
7 – Brunswick Academy	32 – Brodnax Lumber Company
8 – Envoy of Lawrenceville	33 – Robert E. Carroll Logging
9 – Food Lion	34 – Calhoun Enterprises Inc
10 – Virginia Carolina Forest	35 – Gasburg Timber Corporation
11 – Melvin L. Davis Oil Company	36 – Aubrey L. Clary, Inc.
12 – Calhoun Timber Inc	37 – Healthcare Services Group
13 – Remac Inc	38 – Kenneth R. Connell Logging
14 – Postal Service	39 – Lawrence P. Dugger Logging LLC
15 – Brunswick County Board of (omitted in data)	40 – Ronald E Wright Logging
16 – Jones Electric Contractors	41 – Dolgencorp LLC
17 – Lake Gaston Resort	42 – R.F. Howerton, Inc.
18 – M.M. Wright, Inc.	43 – Nottoway Motel and Restaurant
19 – Hardee's	44 – Meherrin Regional Library
20 – Meherrin River Forest Pro Inc	45 – Pinos Pizza
21 – Real Tree Wood Corp	46 – Poplar Pointe Marine
22 – C & S Rail Service LLC	47 – Buggs Island Telephone Company
23 – Home Recovery	48 – Lawrenceville Primary Care PC
24 – Redland Brick Inc	49 – Virginia Custom Thinning
25 – Town of Lawrenceville	50 – Virginia Pallets & Wood



Southern Virginia Higher Education Center **ABB**

Halifax County – 50 Largest Employers	
1 – Halifax County School Board	26 – Chase City Family Practice Ltd
2 – Dolgencorp LLC	27 – Bojangles
3 – Sentara Healthcare	28 – ABH Staffing
4 – ABB Service Company Division	29 – Hardee's
5 – Presto Products Company	30 – Halifax County Community Action
6 – The Praxis Companies, LLC	31 – A J Transport
7 – Wal Mart	32 – Gem Management Inc
8 – Halifax County	33 – Personal Homecare Inc
9 – Annin and Company	34 – Pacific Headwear & Promotions Inc
10 – Virginia International Raceway	35 – Southside Community Services
11 – Dominion Virginia Power	36 – Hodges & Miller Logging Inc
12 – Sunshine Mills	37 – Postal Service
13 – Huber Engineered Woods	38 – Virginia Department of Motor Vehicles
14 – Food Lion	39 – McDonald's
15 – Climate Control	40 – Gloster Furniture Inc
16 – Faneuil Inc	41 – Halifax County Department of Social Services
17 – Lowes' Home Centers, Inc.	42 – Commonwealth Assisted Living-South Boston
18 – Administaff	43 – Virginia Employment Commission
19 – Town of South Boston	44 – Southern Virginia Higher Education
20 – R O Harrell Acquisition Inc	45 – The Berry Hill Estate
21 – Care Advantage	46 – Bedford County Adult Detention
22 – VDOT	47 – BHK of America
23 – Berry Hill Nursing Home	48 – Burger King
24 – Dillwyn Correctional Center	49 – Kejaeh Enterprises LLC
25 – Southstone Behavioral Healthcare Center	50 – Vtt LLC



Architects rendering of the VCU Community Memorial Hospital in South Hill.

Mecklenburg County – 50 Largest Employers	
1 – Mecklenburg County School Board	26 – Electronic Data Systems Corp
2 – VCU Health Systems	27 – 7-Eleven
3 – ONE Jeanswear Group	28 – Virginia Quilting
4 – Wal Mart	29 – Southside Medical Management Inc
5 – Global Safety Textiles LLC	30 – Virginia Homes Building Systems
6 – Food Lion	31 – BGF Industries Inc.
7 – County of Mecklenburg	32 – McDonalds
8 – Sentara Healthcare	33 – Town of South Hill
9 – Penmac Personnel Services	34 – Postal Service
10 – Eastern Region Field Unit	35 – Dolgencorp LLC
11 – American Buildings Company	36 – Mecklenburg Electric Co-operative
12 – Microsoft Business Solutions	37 – Rex Materials of Virginia Inc
13 – Southern Textile Service	38 – Mdxcel Inc
14 – Chase City Nursing and Rehab Center	39 – Quik Fuel, Inc.
15 – Monroe Tree Services Division	40 – Brian's Steak House & Lounge
16 – Lake Country Area Agency on Aging	41 – Bojangles
17 – Southside Community Services	42 – McDonald's
18 – Parker Oil Company, Inc.	43 – VQC, Inc.
19 – The Home Depot	44 – American Indust Heat Transfer
20 – Cracker Barrel Old Country Store	45 – Veterans Enterprise Technology Solutions
21 – VDOT	46 – Applebees
22 – Newmart Builders Inc	47 – Cmh Physicians Services
23 – Nipro Glass Americas Corp	48 – CVS Pharmacy
24 – Schneider Electric	49 – Loves Travel Stops Inc
25 – Hardee's	50 – Personal Homecare Inc

Built Environment

The following series of tables provide an approximate number of buildings in each county based on occupancy type, building stock type, and by square footage. This data is not exact, as it has been obtained from FEMA's Hazus database. The methods used by FEMA to generate structure unit data basically involves using square footage amounts provided at the Census block level and determining from that data how many of each type of buildings exist in each block. It's an estimation based on assumptions. While the SPDC does have building footprint data, the accompanying attribute data is not

complete enough to make accurate determinations on the occupancy type and building stock type of each specific building within the district.

Building Count by General Occupancy Type

	Residential	Commercial	Industrial	Agriculture	Religion	Government	Education	Total
Brunswick	7,992	331	113	56	88	25	18	8,623
Halifax	17,268	822	250	130	164	36	47	18,717
Mecklenburg	17,886	892	250	115	158	39	27	19,367
Total	**43,146**	**2,045**	**613**	**301**	**410**	**100**	**92**	**46,707**

Residential Building Count by Specific Occupancy Type

Occ. Code	Description	Brunswick	Halifax	Mecklenburg
RES1	Single Family Dwelling	5,655	13,521	12,883
RES2	Mobile Home	2,262	3,502	4,748
RES3A	Multi-Family Dwelling - Duplex	14	63	42
RES3B	Multi-Family Dwelling – 3-4 Units	20	76	70
RES3C	Multi-Family Dwelling – 5-9 Units	12	39	53
RES3D	Multi-Family Dwelling – 10-19 Units	1	8	10
RES3E	Multi-Family Dwelling – 20-49 Units	0	4	0
RES3F	Multi-Family Dwelling – 50+ Units	0	0	0
RES4	Temporary Lodging (Hotel/Motel)	7	22	38
RES5	Institutional Dormitory	20	20	27
RES6	Nursing Home	1	13	15
Total		**7,992**	**17,268**	**17,886**

Residential Square Footage by Specific Occupancy Type

Occ. Code	Description	Brunswick	Halifax	Mecklenburg
RES1	Single Family Dwelling	8,800,623	20,751,831	20,047,648
RES2	Mobile Home	2,551,536	3,950,256	5,355,744
RES3A	Multi-Family Dwelling - Duplex	26,460	119,070	79,380
RES3B	Multi-Family Dwelling – 3-4 Units	75,600	287,280	264,600
RES3C	Multi-Family Dwelling – 5-9 Units	76,944	250,068	339,836
RES3D	Multi-Family Dwelling – 10-19 Units	12,824	102,592	128,240
RES3E	Multi-Family Dwelling – 20-49 Units	0	124,576	0
RES3F	Multi-Family Dwelling – 50+ Units	0	0	0
RES4	Temporary Lodging	42,478	79,879	224,338
RES5	Institutional Dormitory	374,700	315,600	432,000
RES6	Nursing Home	4,708	121,874	67,948
Total		**11,965,873**	**26,103,026**	**26,939,734**

Commercial Building Count by Specific Occupancy Type

Occ. Code	Description	Brunswick	Halifax	Mecklenburg
COM1	Retail Trade	70	184	213
COM2	Wholesale Trade	75	115	147
COM3	Personal and Repair Services	53	194	173
COM4	Professional/Technical Services	83	165	192
COM5	Banks	9	13	22
COM6	Hospital	0	4	3
COM7	Medical Office/Clinic	11	49	48
COM8	Entertainment & Recreation	30	97	92
COM9	Theaters	0	1	2
COM10	Parking	0	0	0
Total		**331**	**822**	**892**

Commercial Square Footage by Specific Occupancy Type

Occ. Code	Description	Brunswick	Halifax	Mecklenburg
COM1	Retail Trade	231,963	1,101,084	1,262,542
COM2	Wholesale Trade	198,952	554,100	648,704
COM3	Personal and Repair Services	154,413	572,687	528,129
COM4	Professional/Technical Services	251,164	532,178	629,261
COM5	Banks	30,183	54,569	69,764
COM6	Hospital	0	144,878	113,420
COM7	Medical Office/Clinic	23,592	187,894	171,556
COM8	Entertainment & Recreation	79,840	304,560	278,631
COM9	Theaters	0	4,280	9,321
COM10	Parking	0	0	0
Total		**970,107**	**3,456,230**	**3,711,328**

Industrial Building Count by Specific Occupancy Type

Occ. Code	Description	Brunswick	Halifax	Mecklenburg
IND1	Heavy	51	72	58
IND2	Light	9	32	48
IND3	Food/Drugs/Chemicals	1	13	17
IND4	Metals/Minerals Processing	3	12	9
IND5	High Technology	0	0	0
IND6	Construction	49	121	118
Total		**113**	**250**	**250**

Industrial Square Footage by Specific Occupancy Type

Occ. Code	Description	Brunswick	Halifax	Mecklenburg
IND1	Heavy	633,966	414,380	563,974
IND2	Light	21,275	543,744	351,410
IND3	Food/Drugs/Chemicals	2,300	127,799	47,740
IND4	Metals/Minerals Processing	23,500	40,700	69,142
IND5	High Technology	0	0	0
IND6	Construction	107,727	362,763	273,717
Total		**788,768**	**1,489,386**	**1,305,983**

Other Structures Count by Specific Occupancy Type

Occ. Code	Description	Brunswick	Halifax	Mecklenburg
AGR1	Agriculture	56	130	115
REL1	Church/Non-Profit	88	164	158
GOV1	General Services	17	26	24
GOV2	Emergency Response	8	10	15
EDU1	Grade Schools	13	43	26
EDU2	Colleges/Universities	5	4	1
Total		**187**	**377**	**339**

Other Structures Square Footage by Specific Occupancy Type

Occ. Code	Description	Brunswick	Halifax	Mecklenburg
AGR1	Agriculture	144,184	314,842	308,661
REL1	Church/Non-Profit	94,488	99,532	108,591
GOV1	General Services	61,533	25,831	84,979
GOV2	Emergency Response	263,903	591,593	549,203
EDU1	Grade Schools	112,563	323,084	235,963
EDU2	Colleges/Universities	76,506	13,482	3,745
Total		**753,177**	**1,368,364**	**1,291,142**

Building Count by Building Stock Type

	Wood	Steel	Masonry	Concrete	MH	Total
Brunswick	4,582	274	1,651	26	2,262	8,795
Halifax	10,808	625	3,922	63	3,502	18,950
Mecklenburg	10,306	664	3,754	60	4,748	19,532
Total	**25,696**	**1,563**	**9,327**	**149**	**10,512**	**47,277**

*MH = Manufactured Housing

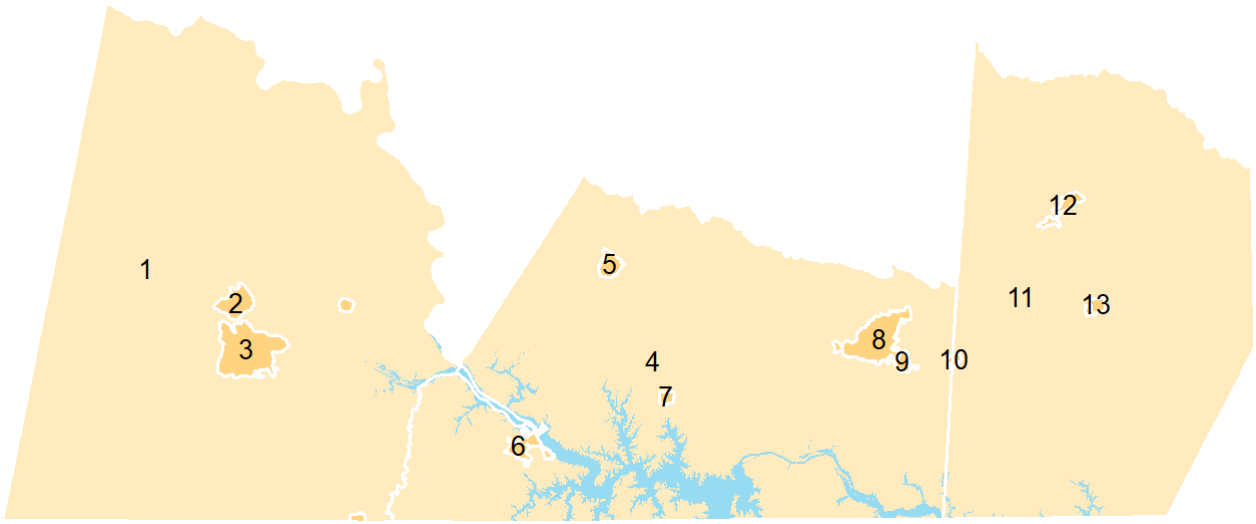
Law Enforcement

The District is served by three Sheriff's Offices and nine town Police Departments. Police departments cover most of the towns, while the Sheriff's Offices handle the counties their located within. There are a few exceptions however, as the Halifax County Sheriff's Office does provide coverage for the towns of Scottsburg and Virgilina. The Virginia State Police also maintain a presence in the District as they have two Bureau of Field Operations Area Offices. One is located in South Hill and the other in Halifax.

Law enforcement agencies work crime scenes, traffic stops, accidents, fires, natural disasters, manmade disasters, as well as delivering court summons and warrants. Departments also engage in educational and safety programs for the public.

Funding

Funds for the operation of the Sheriff's offices and police departments are primarily covered by the town and county governments that they serve.



Law Enforcement Jurisdictions

1. Halifax Co. Sheriff's Office
2. Halifax Police Dept.
3. South Boston Police Dept.
4. Mecklenburg Co. Sheriff's Office
5. Chase City Police Dept.
6. Clarksville Police Dept.
7. Boydton Police Dept.
8. South Hill Police Dept.
9. La Crosse Police Dept.
10. Brodnax Police Dept.
11. Brunswick Co. Sheriff's Office
12. Alberta Police Dept.
13. Lawrenceville Police Dept.

Brunswick County Law Enforcement Departments

The Brunswick County Sheriff's Office is based in Lawrenceville, the county seat. The Department is responsible for all law enforcement outside the incorporated towns in the County. Additionally, the Sheriff's Office provides law enforcement assistance to the towns of Alberta, Brodnax and Lawrenceville as needed.

Population and housing data for all local jurisdictions was obtained from the U.S. Census Bureau.

Department	Area Covered	Population Covered	Housing Units	Med/High-High Risks
Brunswick County Sheriff's Office (Town of Lawrenceville)	566.1 sq. miles	14,835*	7,366*	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Alberta Police Department	2.1 sq. miles	268	166	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Brodnax Police Department	0.7 sq. miles	206	113	Drought, Extreme Heat, Tropical Cyclones, Severe Wind and Severe Winter Weather
Lawrenceville Police Department	1.2 sq. miles	1,470	614	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

*This number is the County population/housing estimate minus the estimated population/housing of towns with their own police department.

Halifax County Law Enforcement Departments

The Halifax County Sheriff's Office is based in the town of Halifax, the county seat. The Department is responsible for all law enforcement outside the incorporated towns in the County, as well as within the

towns of Scottsburg and Virgilina. Assistance is also provided to the towns of Halifax and South Boston as needed.

Department	Area Covered	Population Covered	Housing Units	Med/High-High Risks
Halifax County Sheriff's Office (Town of Halifax)	812.9 sq. miles	25,657*	13,554*	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Halifax Police Department	3.8 sq. miles	1,387	634	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
South Boston Police Department	13.1 sq. miles	8,000	3.763	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

*This number is the County population/housing estimate minus the estimated population/housing of towns with their own police department.

Mecklenburg County Law Enforcement Departments

The Mecklenburg County Sheriff's Office is based in Boydton, the county seat. The Department is responsible for all law enforcement outside the incorporated towns in the County, as well as the Town of Brodnax. The Sheriff's Office provides law enforcement assistance to the towns of Boydton, Chase City, Clarksville, La Crosse, and South Hill as needed. Additionally, there is a satellite office in Bracey, an unincorporated but densely populated area on Lake Gaston. A dive team is also maintained.

Department	Area Covered	Population Covered	Housing Units	Med/High-High Risks
Mecklenburg Co. Sheriff's Office (Town of Boydton)	664.7 sq. miles	22,068*	13,908*	Wildfire, Drought, Extreme Heat, Tropical Cyclones, Severe Wind and Severe Winter Weather
Boydton Police Department	0.8 sq. miles	275	123	Wildfire, Drought, Extreme Heat, Tropical Cyclones, Severe Wind and Severe Winter Weather
Chase City Police Department	2.2 sq. miles	2,406	1,201	Drought, Extreme Heat, Tropical Cyclones, Severe Wind and Severe Winter Weather
Clarksville Police Department	3.1 sq. miles	1,303	893	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
La Crosse Police Department	1.2 sq. miles	652	303	Drought, Extreme Heat, Tropical Cyclones and Severe Winter Weather
South Hill Police Department	10 sq. miles	4,505	2,265	Drought, Extreme Heat, Tropical Cyclones, Severe Wind and Severe Winter Weather

*This number is the County population/housing estimate minus the estimated population/housing of towns with their own police department.

Jails, Prisons, and Detention Centers

Facility	Capacity	Med/High-High Risks
Meherrin River Regional Jail (Town of Alberta)	697	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Lawrenceville Correctional Center (Brunswick County)	1,536	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

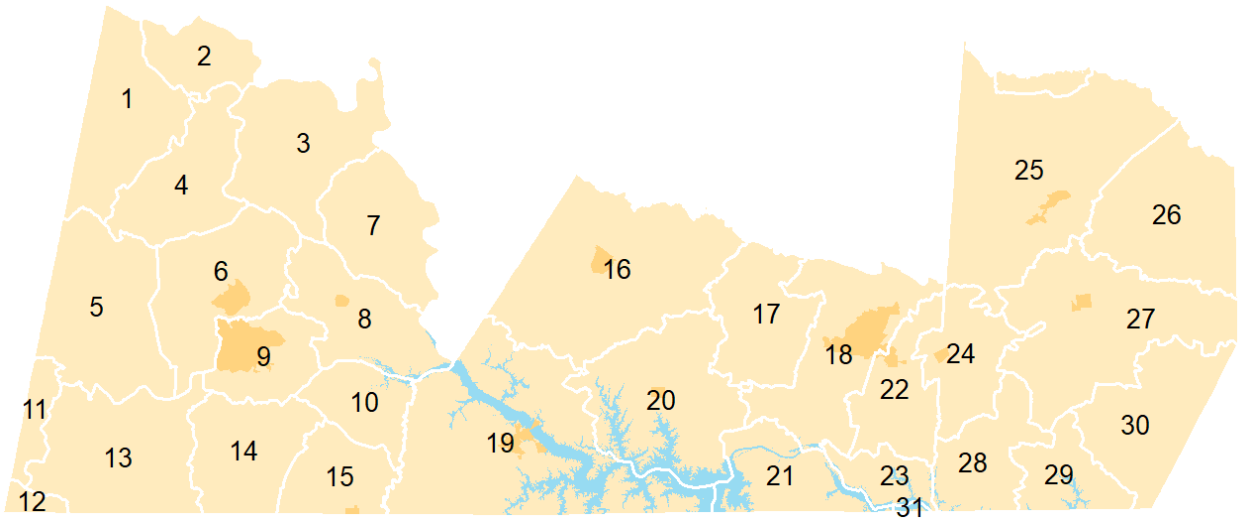
Halifax Correctional Unit (Town of South Boston)	248	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Halifax County Adult Detention Center (Town of Halifax)	107	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Baskerville Correctional Center (Mecklenburg County)	488	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Meherrin River Regional Jail – Satellite Facility (Mecklenburg County)	80	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

State Police

Facility	Med/High – High Risks
Area Office (Town of Halifax)	Wildfire, Drought, Hail, Tropical Cyclones, and Severe Winter Weather
Area 22 Office (Town of South Hill)	Drought, Extreme Heat, Hail, Tropical Cyclone, Severe Wind, and Severe Winter Weather

Fire Departments

The District is comprised of 27 fire departments. All fire departments in the Southside Planning District are considered volunteer, although some of the departments do have paid employees. Fire department coverage areas, referred to as fire districts, average just under 75 square miles. Fire districts range in size from 21 square miles to 177 square miles.



Fire Department Districts

1. North Halifax	**7. Clover**	**13. Turbeville**	**19. Clarksville**	**25. Alberta**	**31. Churchill-Five Forks***
2. Brookneal*	**8. Scottsburg**	**14. Cluster Springs**	**20. Boydton**	**26. Dolphin**	
3. Triangle	**9. South Boston**	**15. Virgilina**	**21. Palmer Springs**	**27. Lawrenceville**	
4. Liberty	**10. Midway**	**16. Chase City**	**22. La Crosse**	**28. Ebony**	
5. Oak Level	**11. Laurel Grove***	**17. Buckhorn**	**23. Lake Gaston**	**29. Gasburg**	
6. Halifax	**12. Semora***	**18. South Hill**	**24. Brodnax**	**30. Triplet**	

*Fire Department located outside the Southside Planning District.

Funding

The operations of fire departments are funded through a combination of state and local government funds, grants, loans and personal donations. Government funding is always lower than operating expenses, so department members make up the difference primarily through various fundraising events. Additionally, most fire departments are incorporated as non-profit organizations.

Brunswick County Fire Departments

Alberta Volunteer Fire & Rescue Department	
Year Station Built	2001
Estimated Value of Building	$458,300
Square Footage of Building	12,772 square feet
Area Covered	160 square miles
Population of Fire District	4,271
Housing Units Covered	2195
Schools Covered	Red Oak-Sturgeon Elementary School, SVCC – Christanna Campus, New Horizon Baptist School
Miles of State/Town Roads Covered	283 miles
Highways Covered	I-85, US 1, VA 46, VA 137
Other Notable Points Covered	
Towns	Alberta
Med/High – High Risks to Building	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Brodnax Volunteer Fire Department	
Year Station Built	1990
Estimated Value of Building	$451,900
Square Footage of Building	4,295 square feet
Area Covered	46 square miles
Population of Fire District	2,195
Housing Units Covered	1,079
Schools Covered	None
Miles of State/Town Roads Covered	68 miles
Highways Covered	US 1, US 58
Other Notable Points Covered	Brodnax Mills
Towns	Brodnax
Med/High – High Risks to Building	Drought, Extreme Heat, Tropical Cyclones, Severe Wind and Severe Winter Weather

Dolphin Volunteer Fire Department	
Year Station Built	1960
Estimated Value of Building	$92,643
Square Footage of Building	5,800 square feet
Area Covered	89 square miles
Population of Fire District	2,117
Housing Units Covered	1,066
Schools Covered	None
Miles of State/Town Roads Covered	120 miles
Highways Covered	None
Other Notable Points Covered	
Med/High – High Risks to Building	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Ebony Fire Department	
Year Station Built	1992
Estimated Value of Building	$739,171
Square Footage of Building	15,714 square feet
Area Covered	46 square miles
Population of Fire District	1,819
Housing Units Covered	1,096
Schools Covered	None
Miles of State/Town Roads Covered	66 miles
Highways Covered	None
Other Notable Points Covered	
Towns	None
Med/High – High Risks to Building	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Gasburg Volunteer Fire Department	
Year Station Built	1990
Estimated Value of Building	$384,787
Square Footage of Building	7,868 square feet
Area Covered	35 square miles
Population of Fire District	1,609
Housing Units Covered	1,245
Schools Covered	None
Miles of State/Town Roads Covered	67 miles
Highways Covered	VA 46
Other Notable Points Covered	
Towns	None
Med/High – High Risks to Building	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Lawrenceville Volunteer Fire Department	
Year Station Built	1975
Estimated Value of Building	$155,000
Square Footage of Building	3,000 square feet
Area Covered	119 square miles
Population of Fire District	8,142
Housing Units Covered	2,882
Schools Covered	Totaro Elementary School, James S. Russell Middle School, Brunswick High School, Brunswick Academy, St. Paul's College (closed)
Miles of State/Town Roads Covered	183 miles
Highways Covered	US 58, VA 46
Other Notable Points Covered	
Towns	Lawrenceville
Med/High – High Risks to Building	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Triplet Volunteer Fire Department	
Year Station Built	
Estimated Value of Building	$346,359
Square Footage of Building	5,624 square feet
Area Covered	71 square miles
Population of Fire District	1,252
Housing Units Covered	670
Schools Covered	Meherrin-Powellton Elementary School

Miles of State/Town Roads Covered	78 miles
Highways Covered	None
Other Notable Points Covered	
Towns	None
Med/High – High Risks to Building	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Halifax County Fire Departments

Clover Volunteer Fire Department	
Year Station Built	1985
Estimated Value of Building	$105,200
Square Footage of Building	4,800 square feet
Area Covered	61 square miles
Population of Fire District	2,580
Housing Units Covered	1,338
Schools Covered	None
Miles of State/Town Roads Covered	88 miles
Highways Covered	US 360, VA 92
Other Notable Points Covered	
Towns	None
Med/High – High Risks to Building	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Cluster Springs Volunteer Fire Department	
Year Station Built	1960
Estimated Value of Building	$144,119
Square Footage of Building	7,423 square feet
Area Covered	59 square miles
Population of Fire District	3,432
Housing Units Covered	1,649
Schools Covered	Cluster Springs Early Learning Center, Cluster Springs Elementary
Miles of State/Town Roads Covered	85 miles
Highways Covered	US 501, VA 96
Other Notable Points Covered	
Towns	None
Med/High – High Risks to Building	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Halifax Volunteer Fire Department	
Year Station Built	1990
Estimated Value of Building	$180,441
Square Footage of Building	4,800 square feet
Area Covered	78 square miles
Population of Fire District	7,380
Housing Units Covered	3,530
Schools Covered	Clays Mill Elementary School, Sinai Elementary School, Halifax County STEM Academy
Miles of State/Town Roads Covered	136 miles
Highways Covered	US 360, US 501, VA 57, VA 360
Other Notable Points Covered	
Towns	Halifax
Med/High – High Risks to Building	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Liberty Volunteer Fire Department	
Year Station Built	1958
Estimated Value of Building	$138,107

Square Footage of Building	6,062 square feet
Area Covered	61 square miles
Population of Fire District	2,924
Housing Units Covered	1,467
Schools Covered	Meadville Elementary School
Miles of State/Town Roads Covered	85 miles
Highways Covered	US 501, VA 57
Other Notable Points Covered	
Towns	None
Med/High – High Risks to Building	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Midway Volunteer Fire Department	
Year Station Built	1985
Estimated Value of Building	$85,636
Square Footage of Building	4,714 square feet
Area Covered	35 square miles
Population of Fire District	1,314
Housing Units Covered	669
Schools Covered	None
Miles of State/Town Roads Covered	54 miles
Highways Covered	US 58
Other Notable Points Covered	
Towns	None
Med/High – High Risks to Building	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

North Halifax Volunteer Fire & Rescue Department	
Year Station Built	1985/2009
Estimated Value of Building	$107,965/$587,466
Square Footage of Building	3,608/14,580 square feet
Area Covered	72 square miles
Population of Fire District	2,961
Housing Units Covered	1,568
Schools Covered	Sydnor Jennings Elementary School
Miles of State/Town Roads Covered	110 miles
Highways Covered	US 501, VA 40
Other Notable Points Covered	
Towns	None
Med/High – High Risks to Building	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Oak Level Volunteer Fire Department	
Year Station Built	1988
Estimated Value of Building	$252,321
Square Footage of Building	7,949 square feet
Area Covered	90 square miles
Population of Fire District	2,779
Housing Units Covered	1,394
Schools Covered	None
Miles of State/Town Roads Covered	118 miles
Highways Covered	VA 57, VA 360
Other Notable Points Covered	
Towns	None
Med/High – High Risks to Building	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Scottsburg Volunteer Fire Department	
Year Station Built	1970
Estimated Value of Building	$260,650
Square Footage of Building	16,740 square feet
Area Covered	61 square miles
Population of Fire District	2,515
Housing Units Covered	1,243
Schools Covered	Scottsburg Elementary School
Miles of State/Town Roads Covered	72 miles
Highways Covered	US 360, VA 344, VA 360
Other Notable Points Covered	
Towns	Scottsburg
Med/High – High Risks to Building	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

South Boston Fire Department	
Year Station Built	1974
Estimated Value of Building	$291,739
Square Footage of Building	9,487 square feet
Area Covered	42 square miles
Population of Fire District	11,947
Housing Units Covered	5,701
Schools Covered	South Boston Early Learning Center, South Boston Elementary School, Halifax County Middle School, Halifax County High School, Southern Virginia Higher Education Center
Miles of State/Town Roads Covered	153 miles
Highways Covered	US 58, US 360, US 501, VA 34, VA 129, VA 304
Other Notable Points Covered	
Towns	South Boston
Med/High – High Risks to Building	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Triangle Volunteer Fire Department	
Year Station Built	1988
Estimated Value of Building	$377,596
Square Footage of Building	9,300 square feet
Area Covered	83 square miles
Population of Fire District	1,894
Housing Units Covered	1,098
Schools Covered	None
Miles of State/Town Roads Covered	96 miles
Highways Covered	None
Other Notable Points Covered	
Towns	None
Med/High – High Risks to Building	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Turbeville Volunteer Fire & Rescue Department	
Year Station Built	1985
Estimated Value of Building	$75,695
Square Footage of Building	2,460 square feet
Area Covered	90 square miles
Population of Fire District	2,718
Housing Units Covered	1,377
Schools Covered	None
Miles of State/Town Roads Covered	125 miles
Highways Covered	US 58, VA 119
Other Notable Points Covered	

Towns	None
Med/High – High Risks to Building	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Virgilina Volunteer Fire Department	
Year Station Built	1970
Estimated Value of Building	$91,770
Square Footage of Building	5,040 square feet
Area Covered	39 square miles
Population of Fire District	1,447
Housing Units Covered	763
Schools Covered	None
Miles of State/Town Roads Covered	61 miles
Highways Covered	VA 49, VA 96
Other Notable Points Covered	
Towns	Virgilina
Med/High – High Risks to Building	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Mecklenburg County Fire Departments

Boydton Volunteer Fire Department	
Year Station Built	1995
Estimated Value of Building	$353,300
Square Footage of Building	7,140 square feet
Area Covered	99 square miles
Population of Fire District	3,496
Housing Units Covered	1,520
Schools Covered	None
Miles of State/Town Roads Covered	133 miles
Highways Covered	US 58, VA 4, VA 92, VA 386
Other Notable Points Covered	Kerr Reservoir, Buggs Island Lake, Regional Jail Annex
Towns	Boydton
Med/High – High Risks to Building	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Buckhorn Volunteer Fire Department	
Year Station Built	1965, 1998, 2003
Estimated Value of Building	$234,500
Square Footage of Building	8,106 square feet
Area Covered	57 square miles
Population of Fire District	2,427
Housing Units Covered	931
Schools Covered	None
Miles of State/Town Roads Covered	85 miles
Highways Covered	VA 47
Other Notable Points Covered	Vulcan Quarry, Baskerville Corrections
Towns	None
Med/High – High Risks to Building	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Chase City Volunteer Fire Department	
Year Station Built	1942, remodeled in 1980
Estimated Value of Building	$405,700
Square Footage of Building	11,612 square feet
Area Covered	141 square miles

Population of Fire District	6,920
Housing Units Covered	3,492
Schools Covered	Chase City Elementary School, Bluestone High School, SVCC – Estes Center
Miles of State/Town Roads Covered	216 miles
Highways Covered	VA 47, VA 49, VA 92
Other Notable Points Covered	
Towns	Chase City
Med/High – High Risks to Building	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Clarksville Volunteer Fire Department	
Year Station Built	1994
Estimated Value of Building	$390,900
Square Footage of Building	9,750 square feet
Area Covered	177 square miles
Population of Fire District	7,283
Housing Units Covered	4,972
Schools Covered	Clarksville Elementary School, Bluestone Middle School
Miles of State/Town Roads Covered	360 miles
Highways Covered	US 15, US 58, VA 49, VA 364
Other Notable Points Covered	Kerr Reservoir, Buggs Island Lake, Occoneechee State Park, Southern RR
Towns	Clarksville
Med/High – High Risks to Building	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

La Crosse Volunteer Fire Department	
Year Station Built	1950
Estimated Value of Building	$1,000,000
Square Footage of Building	4,680 square feet
Area Covered	46 square miles
Population of Fire District	3,809
Housing Units Covered	1,814
Elementary Schools Covered	La Crosse Elementary School
Miles of State/Town Roads Covered	85 miles
Highways Covered	I-85, US 58
Other Notable Points Covered	
Towns	La Crosse
Med/High – High Risks to Building	Drought, Extreme Heat, Tropical Cyclones, Severe Winter Weather

Lake Gaston Volunteer Fire Department	
Year Station Built	1991
Estimated Value of Building	$325,000
Square Footage of Building	6,500 square feet
Area Covered	21 square miles
Population of Fire District	2,760
Housing Units Covered	2,844
Schools Covered	None
Miles of State/Town Roads Covered	91 miles
Highways Covered	None
Other Notable Points Covered	A dive team is maintained.
Towns	None
Med/High – High Risks to Building	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Palmer Springs Volunteer Fire Department	
Year Station Built	2003
Estimated Value of Building	$398,500
Square Footage of Building	7,700 square feet
Area Covered	48 square miles
Population of Fire District	1,195
Housing Units Covered	814
Schools Covered	None
Miles of State/Town Roads Covered	68 miles
Highways Covered	US 1, VA 4
Other Notable Points Covered	Kerr Reservoir, Kerr Dam, Lake Gaston
Towns	None
Med/High – High Risks to Building	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

South Hill Volunteer Fire Department	
Year Station Built	1977
Estimated Value of Building	$2,240,000
Square Footage of Building	15,723 square feet
Area Covered	86 square miles
Population of Fire District	9,458
Housing Units Covered	4,479
Schools Covered	South Hill Elementary School, Park View Middle School, Park View High School, First Christian School, Lake Country Advanced Knowledge Center, Church of God School
Miles of State/Town Roads Covered	234 miles
Highways Covered	I-85, US 1, US 58, VA 47, VA 138
Other Notable Points Covered	
Towns	South Hill
Med/High – High Risks to Building	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Chase City Fire Training Facility

A training facility outside of Chase City was constructed to help area firefighters learn how to navigate through burning buildings and to fight fires. The facility simulates real fire conditions, and is stocked with furniture found in typical homes, acting as obstacles to fire fighters. The building was completed in 2001, using inmate labor and materials provided by the Town of Chase City.

Mecklenburg-Brunswick Fire Training Facility

In 2005 a fire training facility was constructed outside of La Crosse for the purpose of conducting fire fighter training. The facilities also include: a mayday simulator for bailing out of buildings, two newly renovated training classrooms (2019), bathrooms, and areas for storage.

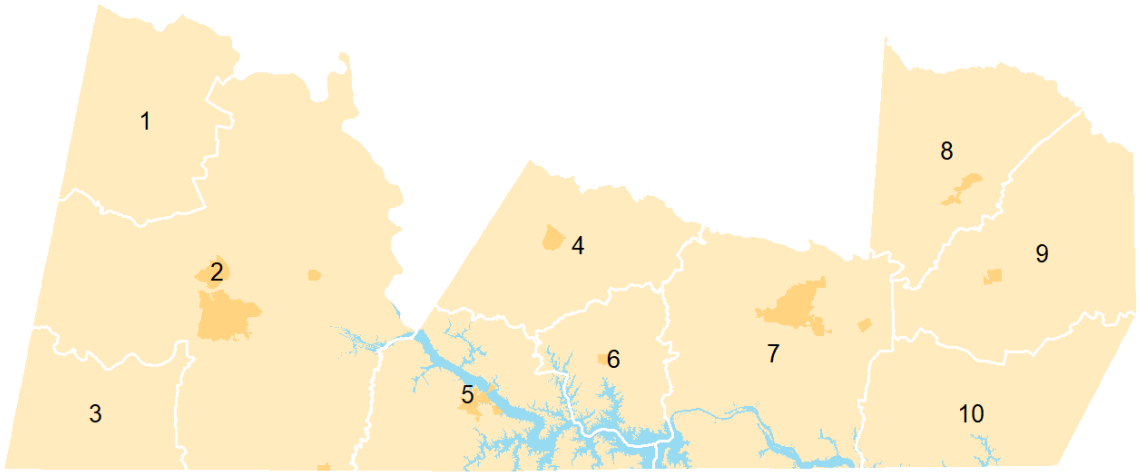
Emergency Medical Services

The District is comprised of 10 EMS departments. EMS department coverage areas, referred to as districts, average just under 206 square miles. Fire districts range in size from 90 square miles to 554 square miles.

Funding

The operations of EMS departments are funded through a combination of state and local government funds, grants, loans and personal donations. Government funding is always lower than operating

expenses, so department members make up the difference primarily through various fundraising events. Additionally, most EMS departments are incorporated as non-profit organizations.



EMS Districts

1. North Halifax	**3. Turbeville**	**5. Mecklenburg**	**7. South Hill**	**9. Brunswick**
2. South Boston	**4. Chase City**	**6. Boydton**	**8. Alberta**	**10. Central**

Brunswick County Emergency Medical Services

Alberta Volunteer Rescue Fire & Rescue Department	
Year Station Built	2001
Estimated Value of Building	$458,300
Square Footage of Building	12,772 square feet
Area Covered	169 square miles
Population of EMS District	4,208
Housing Units Covered	2,161
Schools Covered	Red Oak-Sturgeon Elementary School, SVCC – Christanna Campus
Miles of State/Town Roads Covered	298 miles
Highways Covered	I-85, US 1, VA 46, VA 137
Other Notable Points Covered	
Towns	Alberta
Med/High – High Risks to Building	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Brunswick Volunteer Rescue Squad	
Year Station Built	
Estimated Value of Building	$290,000
Square Footage of Building	
Area Covered	212 square miles
Population of EMS District	10,066
Housing Units Covered	3,848
Schools Covered	Totaro Elementary School, James S. Russell Middle School, Brunswick High School, Brunswick Academy, St. Paul's College (closed)
Miles of State/Town Roads Covered	313 miles
Highways Covered	US 58, VA 46
Other Notable Points Covered	
Towns	Lawrenceville

Med/High – High Risks to Building	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Central Rescue Squad	
Year Station Built	
Estimated Value of Building	$31,100/$196,500
Square Footage of Building	
Area Covered	168 square miles
Population of EMS District	4,100
Housing Units Covered	2,660
Schools Covered	Meherrin-Powellton Elementary School
Miles of State/Town Roads Covered	227 miles
Highways Covered	VA 46
Other Notable Points Covered	
Towns	None
Med/High – High Risks to Building	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Halifax County Emergency Medical Services

Halifax County Rescue Squad	
Year Station Built	1978
Estimated Value of Building	$472,853
Square Footage of Building	7,221
Area Covered	554 square miles
Population of EMS District	29,799
Housing Units Covered	14,690
Schools Covered	Cluster Springs Early Learning Center, South Boston Early Learning Center, Clays Mill Elementary School, Cluster Springs Elementary School, Scottsburg Elementary School, Sinai Elementary School, South Boston Elementary School, Halifax County Middle School, Halifax County High School, Halifax County STEM Academy, Southern Virginia Higher Education Center
Miles of State/Town Roads Covered	864 miles
Highways Covered	US 58, US 360, US 501, VA 34, VA 49, VA 57, VA 92, VA 96, VA 129, VA 304, VA 360
Other Notable Points Covered	
Towns	Halifax, Scottsburg, South Boston, and Virgilina
Med/High – High Risks to Building	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

North Halifax Volunteer Fire & Rescue Department	
Year Station Built	1985/2009
Estimated Value of Building	$107,965/$587,466
Square Footage of Building	3,608/14,580 square feet
Area Covered	160 square miles
Population of EMS District	5,769
Housing Units Covered	3,007
Schools Covered	Meadville Elementary School, Sydnor Jennings Elementary School
Miles of State/Town Roads Covered	238 miles
Highways Covered	US 501, VA 40, VA 57
Other Notable Points Covered	
Towns	None
Med/High – High Risks to Building	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Turbeville Fire & Rescue Department	
Year Station Built	1985
Estimated Value of Building	$75,695
Square Footage of Building	2,460 square feet
Area Covered	114 square miles
Population of EMS District	2,814
Housing Units Covered	1,416
Schools Covered	None
Miles of State/Town Roads Covered	142 miles
Highways Covered	US 58, VA 119
Other Notable Points Covered	
Towns	None
Med/High – High Risks to Building	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Mecklenburg County Emergency Medical Services

Boydton Life Station	
Year Station Built	2008
Estimated Value of Building	$397,000
Square Footage of Building	8,322 square feet
Area Covered	90 square miles
Population of EMS District	3,223
Housing Units Covered	1,358
Schools Covered	None
Miles of State/Town Roads Covered	122 miles
Highways Covered	US 58, VA 92, VA 386
Other Notable Points Covered	Regional Jail Annex, Microsoft
Towns	Boydton
Med/High – High Risks to Building	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Chase City Rescue Squad	
Year Station Built	1949, 1984
Estimated Value of Building	$354, 781
Square Footage of Building	16,230 square feet
Area Covered	153 square miles
Population of EMS District	7,235
Housing Units Covered	3,655
Schools Covered	Chase City Elementary School, Bluestone High School, Southside Virginia Community College – Estes Community Center
Miles of State/Town Roads Covered	232 miles
Highways Covered	VA 47, VA 49, VA 92
Other Notable Points Covered	Vulcan Quarry, Baskerville Corrections
Towns	Chase City
Med/High – High Risks to Building	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Mecklenburg County Lifesaving & Rescue Squad	
Year Station Built	1995
Estimated Value of Building	$882,570
Square Footage of Building	5,880 square feet
Area Covered	181 square miles
Population of EMS District	7,278
Housing Units Covered	4,955

Schools Covered	Clarksville Elementary School, Bluestone Middle School
Miles of State/Town Roads Covered	364 miles
Highways Covered	US 15, US 58, VA 49, VA 364
Other Notable Points Covered	Kerr Reservoir, Buggs Island Lake, Occoneechee State Park, Southern RR
Towns	Clarksville
Med/High – High Risks to Building	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Southside Volunteer Rescue Squad	
Year Station Built	1965, 1985
Estimated Value of Building	$1,125,000
Square Footage of Building	9,950 sq. feet
Area Covered	258 square miles
Population of EMS District	18,304
Housing Units Covered	10,302
Schools Covered	La Crosse Elementary School, South Hill Elementary School, Park View Middle School, Park View High School, First Christian School, Lake Country Advanced Knowledge Center, Church of God School
Miles of State/Town Roads Covered	562 miles
Highways Covered	I-85, US 1, US 58, VA 4, VA 47, VA 138
Other Notable Points Covered	Kerr, Gaston and Gordon Lakes, Regional Airport, I-85
Towns	Brodnax, La Crosse, and South Hill
Med/High – High Risks to Building	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Operations Centers/Headquarters/911 Centers

Facility & Jurisdiction	Medium/High – High Risks
Brunswick County 911 Center (Town of Lawrenceville)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Halifax County 911 Center (Town of Halifax)	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Mecklenburg County 911 Center (Town of Boydton)	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Halifax County Service Authority Operations Center (Town of South Boston)	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Hospitals

Facility & Jurisdiction	Medium/High – High Risks
Sentara Halifax Regional Hospital (Town of South Boston)	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
VCU Health Community Memorial Health Center (Town of South Hill)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Nursing Homes/Assisted Living/Rehab

Facility	Medium/High – High Risks
Pine View Rest Home (Town of South Hill)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Holly Haven #7 (Town of La Crosse)	Drought, Extreme Heat, Tropical Cyclones, Severe Winter Weather

Mecklenburg House (Mecklenburg County)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
North View Home for Adults (Mecklenburg County)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Palmer Springs Family Care & Retirement Center (Mecklenburg County)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Banister Residential Care Facility Inc. (Town of Halifax)	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Chastain Home for Gentlewomen (Town of Halifax)	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Boston Commons LTD (Town of South Boston)	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Commonwealth Assisted Living at South Boston (Town of South Boston)	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Lecel's Adult Home (Halifax County)	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Berry Hill Health & Rehab Center (Town of South Boston)	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Sentara Meadow View Terrace (Mecklenburg County)	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Chase City Health & Rehab Center (Mecklenburg County)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Envoy of Lawrenceville (Brunswick County)	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Government Administration Buildings

Facility	Medium/High – High Risks
Alberta Town Office	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Brodnax Town Office	Drought, Extreme Heat, Tropical Cyclones, Severe Wind and Severe Winter Weather
Lawrenceville Town Office	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Brunswick County Government Building (Town of Lawrenceville)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Boydton Town Office	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Chase City Town Office	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Clarksville Town Office	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
La Crosse Town Office	Drought, Extreme Heat, Tropical Cyclones and Severe Winter Weather
South Hill Town Office	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Mecklenburg County Government Building (Town of Boydton)	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Halifax Town Office	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Scottsburg Town Hall	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
South Boston Town Office	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Virgilina Town Hall	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Halifax County Government Building	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe

(Town of Halifax)	Winter Weather

Public Works/Town Shops

Facility	Medium/High – High Risks
South Boston Public Works	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Chase City Town Shop	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Clarksville Town Shop	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Boydton Town Shop	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Lawrenceville Town Shop	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
La Crosse Town Shop	Drought, Extreme Heat, Tropical Cyclones and Severe Winter Weather
Brodnax Town Shop	Drought, Extreme Heat, Tropical Cyclones, Severe Wind and Severe Winter Weather
South Hill Town Shop	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

VDOT

Facility	Medium/High – High Risks
South Hill Residency (Town of South Hill)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Halifax Residency (Town of Halifax)	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Lawrenceville Area Headquarters (Brunswick County)	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Sturgeonville Area Headquarters (Brunswick County)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Burnt Store Area Headquarters (Mecklenburg County)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Chase City Area Headquarters (Mecklenburg County)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Clarksville Area Headquarters (Town of Clarksville)	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Cluster Springs Area Headquarters (Halifax County)	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Bethel Area Headquarters (Halifax County)	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Volens Area Headquarters (Halifax County)	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
South Hill Equipment Shop (Town of South Hill)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Schools

Public – Elementary Schools	Medium/High – High Risks
Totaro Elementary (Brunswick County)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Meherrin-Powellton Elementary (Brunswick County)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Red Oak-Sturgeon Elementary	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter

(Brunswick County)	Weather
La Crosse Elementary (Mecklenburg County)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
South Hill Elementary (Town of South Hill)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Chase City Elementary (Mecklenburg County)	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe
Clarksville Elementary (Town of Clarksville)	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
South Boston Elementary (Town of South Boston)	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Clays Mill Elementary (Halifax County)	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Cluster Springs Elementary (Halifax County)	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Meadville Elementary (Halifax County)	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Scottsburg Elementary (Halifax County)	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Sinai Elementary (Halifax County)	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Sydnor Jennings Elementary (Halifax County)	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Public – Middle Schools	**Medium/High – High Risks**
James S. Russell Middle School (Brunswick County)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Park View Middle School (Mecklenburg County)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe
Bluestone Middle School (Mecklenburg County)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Halifax County Middle School (Town of South Boston)	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Public – High Schools	**Medium/High – High Risks**
Brunswick County High School (Brunswick County)	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Park View High School (Mecklenburg County)	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe
Bluestone High School (Mecklenburg County)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe
Halifax County High School (Town of South Boston)	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Public - Tech/STEM Schools	**Medium/High – High Risks**
Brunswick High School Tech Center (Brunswick County)	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Halifax County STEM Academy (Town of Halifax)	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
College	**Medium/High – High Risks**
Southside Virginia Community College (Town of Alberta)	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Lake Country Advanced Knowledge Center (Town of South Hill)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Estes Center (Town of Chase City)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Southern Virginia Higher Education Center	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

(Town of South Boston)	
Private Schools	**Medium/High – High Risks**
Brunswick Academy (Brunswick County)	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
First Christian School (Town of South Hill)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Bethel Baptist Academy (Mecklenburg County)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe
Halifax Christian School (Town of South Boston)	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Centerville Christian School (Town of South Boston)	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Ebenezer Mennonite School (Halifax County)	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
New Horizon Baptist School (Brunswick County)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Preschool/Learning Centers	**Medium/High – High Risks**
Centenary Preschool (Town of Chase City)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Thyne Memorial Headstart Center (Mecklenburg County)	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe
South Boston/Halifax Early Learning (Town of South Boston)	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Cluster Springs Early Learning Center (Halifax County)	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Alternative Programming	**Medium/High – High Risks**
Rivermont School Chase City (Town of Chase City)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Dams

Dam Classification – Hazard Potential

The Department of Conservation and Recreation classifies dams based upon the potential of loss of human life or property damage in the event that the subject dam was to fail. Classifications are not related to the physical condition or probability that a dam will fail, rather the potential for loss in the downstream inundation zone. Classifications can change over time based upon changes in a dam's inundation zone. For example, if houses are constructed downstream from a low hazard dam, the dam could be reclassified as a high hazard dam due to the increase potential for loss of life and/or property now present in the inundation zone.

Classification	Description
High	Dams that upon failure would cause probable loss of life or serious economic damage.
Significant	Dams that upon failure might cause loss of life or appreciable economic damage.
Low, Special	Dams that upon failure would cause economic damage only to property owner of the dam owner.
Low	Dams that upon failure would lead to no expected loss of life or significant economic damage.
Unknown	Requires study to be performed by dam owner/engineer and submitted, reviewed, and approved (confirmed) by DCR prior to assignment of final hazard potential classification.

Dam Inventory

DSIS ID Number	Dam Name	Hazard Class	Waterway	Normal Cap. (acres)	Top Cap. (acres)	Height (feet)	Drainage Area (sq. miles)	Completed
Brunswick County								
025002	Masons Mill Dam	Unknown	Waqua Crk	24	148	20	0	1/1/1940
025003	Epperson Dam	Unknown	Gum Br Of Roses Crk	28	67	22	0	
025004	L.M. Epperson Dam	Unknown	Roses Crk	20	72	13	0	
025005	Flatrock Pond Dam	Unknown	Flatrock Br. Of Reedy Crk	43	91	14	34.5	12/31/1899
025006	Harrisons Dam	Unknown	Tr – Nottoway Rvr	57	113	23	0	1/1/1900
025001	Brunswick County Dam	High	Reedy Crk	1311	2700	25	15.702	1/1/1955
025007	Great Creek Dam #6A	High	Great Crk	2317.55	29632	67.3	41.058	6/5/1989
Halifax County								
083054	Cloverdale Lumber Co Dam	Unknown		74	135	28.8	0	
083056	Ware Dam	Unknown		208	271	28	0	
083036	Twin Oak Farms Dam	Unknown		17	53	16	0	
083057	Edmunds Dam #1	Unknown		33	51	16	0	
083067	Bagwell Dam	Unknown		51	99	22	0	
083064	Edmunds Dam #3	Unknown		43	57	20	0	
083062	Founders Land Speculators Dam	Unknown		38	85	16	0	
083006	Whitt Dam	Unknown	Winns Crk	27	59	22	0	
083008	Wilkins Mill Dam	Unknown	Lawsons Crk	63	129	19	0	
083015	Wade Dam #1	Unknown	Chalmers Crk	30	54	17	0	
083016	Wade Dam #2	Unknown	Chalmers Crk	70	99	28	0	
083034	Williams Dam	Unknown	Tr – Lawsons Crk	65	95	26	0	
083035	Cage Dam	Unknown	Rock Br – Woods Crk	73	138	24	0.5	1/1/1959
083049	Poore Dam	Unknown		40	68	24	0	
083050	J E Edmunds	Unknown		31	54	18	0	

	Dam							
083002	Conner Dam	Low	Hunting Crk	860	1750	30	9	1/1/1958
083004	Horse Shoe Lake Dam	Low, Special	Tr – Double Crk	180	216	35.8	0.38	1/1/1972
083028	Duncan Dam	Unknown	Tr – Children Crk	38	92	23	0	
083030	Burton Dam	Unknown	Tr – Banister Rvr	35	67	28	0	
083038	Raw Water Storage Pond	Low	Near Roanoke Rvr	884	952	44	0.06	1/1/1993
083040	Joyce Dam	Unknown		24	55	20	0	
083014	Prevette Dam	Unknown	Tr – Dan Rvr	36	74	22	0	
083017	Wade Dam #3	Unknown	Tr – Chalmers Crk	48	92	18	0	
083032	Cliborne Dam	Unknown	Tr – Winn Crk	22	46	27	0	
083033	Claycomb Dam	Unknown	Tr – Rowie Br Stokes Crk	28	69	23	0	
083007	R.R. Jones Dam	Unknown	Tr – Long Br	19	39	30	0	
083009	Stump Pond Dam	Low, Special	Tr – Roanoke Rvr	39	108	15	0.1	
083022	West Temple Dam	Unknown	Tr – Birch Crk	36	76	25	0	
083025	Ragland Dam	Unknown	Miry Crk	33	79	21	0	
083027	Edmunds Dam	Unknown	Tr – Woods Crk	23	32	28	0	
083041	Rickman Dam	Unknown		39	65	29	0	
083043	Zastwony Dam	Unknown		71	119	21	0	
083023	Oakes Dam	Unknown	Tr – Ballous Crk	50	74	17	0	
083026	Wilsons Dam	Unknown	Tr – Perrin Crk	29	97	24	0	
083042	Strong Dam	Unknown		25	70	21	0	
083044	Dellaria Dam	Unknown		29	45	12.8	0	
083011	Blanes Mill Dam	Unknown	Butrum Crk	32	43	18	0	
083013	Anderson Dam	Unknown	Tr – Wolfe Crk	12	27	26	0	
083018	Bass Dam	Unknown	Tr – Locust Crk	25	36	30	0	
083020	Fye Dam	Low	Birch Crk	227	244	38.9	0.3	1/1/1975
083045	Solomon Dam	Unknown		56	70	18	0	
083047	James Solomon	Unknown		33	49	30	0	

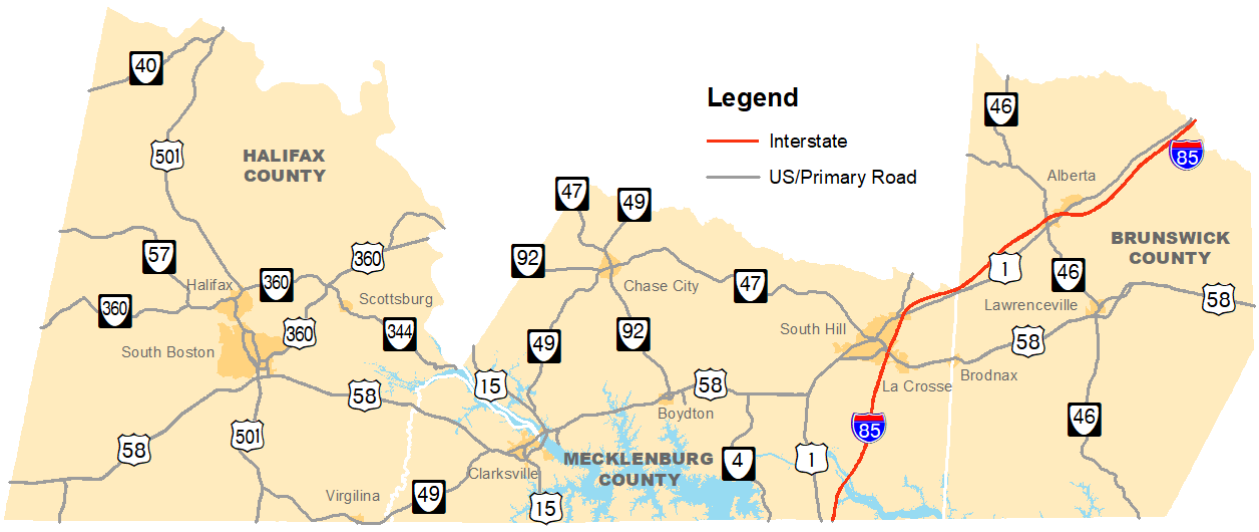
	Dam							
083058	Motorplex Dam #1	Unknown		67	110	29	0	
083060	Motorplex Dam #2	Unknown		47	71	22	0	
083065	Confroy Dam	Unknown		44	60	22	0	
083053	Wade Dam #2	Unknown		46	60	28	0	
083055	Whitlow Dam	Unknown		46	82	26	0	
083061	Motorplex Dam #3	Unknown		81	112	31.5	0	
083052	Overby Dam	Unknown		38	49	23	0	
083059	Edmunds Dam #2	Unknown		251	472	26	0	
083024	Reaves Dam	Low, Special		42	91	18	0	
083051	Jaloway Dam	Unknown		25	60	20	0	
083066	Burton Dam	Unknown		42	52	22	0	
083068	Reese Dam	Unknown		40	87	24	0	
083003	Temple Dam/Blue Ribbon Dairy Farm Dam	Unknown	Tr – Birch Crk	179	168	21	0	
083010	Heart Pond Dam	Low, Special	Tr – Roanoke Rvr	50	85	24	0	
083021	East Temple Dam	Unknown	Tr – Birch Crk	29	57	23	0	
083029	Powell Farm Dam	Unknown	Tr – Banister Rvr	32	95	27	0	
083037	McGhaulin & Mays Dam	Unknown	Tr – Miks Crk	81	179	23	0	
083048	Hall Dam	Unknown		28	53	21	0	
083069	McDannald Dam	Unknown		50	90	16	0	
083072	Tribble Dam	Unknown		30	54	23	0	
083070	Hughes Dam	Unknown		26	50	18	0	
083071	Staunton Rvr Corp Dam	Unknown		74	115	22	0	
083073	Powell Dam	Unknown	Tr – Reedy Crk	9	20	14	0.07	
083001	Banister Dam	Significant	Banister River	3960	6000	30.3	514	1/1/1921
083005	Gilliam Dam	Unknown	Tr – Lawsons Crk	95	95	43	0	1/1/1971
083012	Hughes Dam	Unknown	Tr – Terrible Crk	32	69	21	0	

083019	Wade Dam #4	Unknown	Tr – Chalmers Crk	33	63	27	0	
083031	J.T. Burton Dam	Unknown	Tr – Banister Rvr	19	46	27	0	
083039	Edmunds Lake	Low, Special	None	294	358	28	0	1/1/1981
083046	Talbot Dam	Unknown		36	73	22	0	
Mecklenburg County								
117028	Potts Landing Dam	Unknown		28	47	32	0	
117005	Kidwell Dam	Unknown	Tr – Cox Crk	43	97	23	0	1/1/1973
117016	Moore Dam	Unknown	Tr – Parham Crk	24	37	26	0	
117023	Pete Johnson Pond Dam	Unknown		0	0	0	0	
117007	River Ridge Assoc. Dam	Unknown	Tr – Roanoke Rvr	19	50	20	0	1/1/1971
117014	Raineys Dam	Unknown	Tr – Flat Crk	15	29	26	0	
117021	Clydes Pond Dam	Low, Special	Tr – Allen Crk	42	74	4	0.15	12/31/1899
117025	Lilly Pad Pond Dam	Unknown		0	0	0	0	
117003	Hundley Dam	Low, Special	Kettles Crk, Allen Crk, Cox Crk	49.4	186.6	11.86	5.31	1/1/1935
117004	Gordons Dam	High	Miles Crk	1749	2640	26	21.3	1/1/1949
117017	Copleys Dam	Unknown	Tr – Dockery Crk	12	23	26	0	
117018	Jeffreys Dam #1	Unknown	Tr – Little Miles Crk	0	40	15	0	
117010	Willis Dam	Unknown	Tr – Popes Crk	31	56	16	0	1/1/1955
117012	Morgans Dam	Unknown	Tr – Roanoke Rvr	29	41	29	0	
117027	Black Crk Camp Dam #2	Unknown		0	4.16	10	0	
117013	Winkle Dam	Unknown	Tr – Little Genito Crk	41	63	26	0	
117015	Overbys Dam	Unknown	Tr – Buffalo Crk	32	64	27	0	
117022	Allen Crk Pond Dam	Unknown		0	0	0	0	12/31/1899
117024	Power Line Pond Dam	Unknown		0	0	0	0	
117001	John H. Kerr Dam	Unknown	Roanoke Rvr, Kerr Reservoir, Eastland Crk	1576000	3364500	144	9580	1/1/1953
117002	Island Creek Dam	Unknown	Island Creek	1576000	3392000	92	0	1/1/1951

117019	Jeffreys Dam #2	Unknown	Tr – Little Miles Crk	0	30	15	0	
117009	Johnsons Dam	Unknown	Tr – Allens Crk	36	60	18	0	1/1/1956
117011	Butlers Dam	Unknown	Tr – Little Bluestone Crk	57	117	24	0	
117026	Black Crk Camp Dam #1	Unknown		0	10.4	17	0	
117032	Greenfield Farms Home Farm Pond #2	Unknown	Tr – Cox Crk	3.75	10	25	0.01	12/31/1899
117029	Buchanan Homeplace Farm Pond Dam	Unknown	Tr – Peckerwood Br	0	50	10	1.17	12/31/1899
117030	Reese Farm Pond Dam	Unknown	Tr – Little Bluestone Crk	0	7.5	15	0.03	12/31/1899
117031	Greenfield Farms Home Farm Pond #1	Unknown	Tr – Cox Crk	14.5	45	32	0.11	12/31/1899
117006	Whittles Mill Dam	Unknown	Meherrin Rvr	140	140	15	0	12/31/1899
117008	Blalock Dam	Unknown	Tr – Roanoke Rvr	46	59	24	0	1/1/1954

Roadways

Interstate 85 passes through the eastern part of the region, generally running in a north-south direction. Other north-south corridors within the Southside Planning District are US 1, US 15, and US 501. Primary east-west corridors include US 58 and US 360.

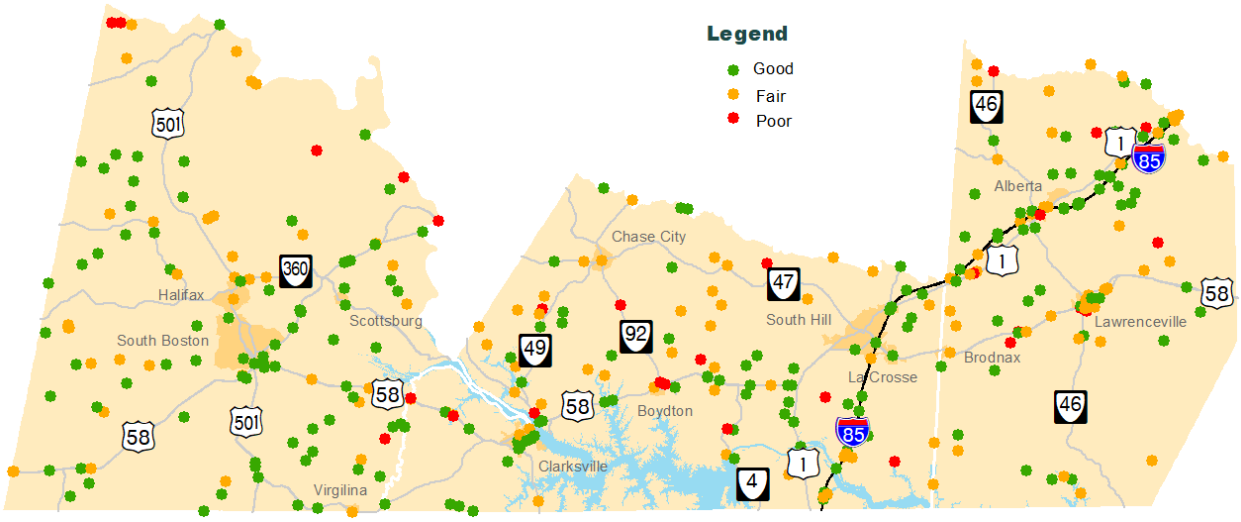


An effort was made to include a list of all repetitive flooded roadways that resulted in damage or closures. After speaking with several VDOT officials it was determined that such a list was not readily available at the time of the request.

Bridges and Culverts

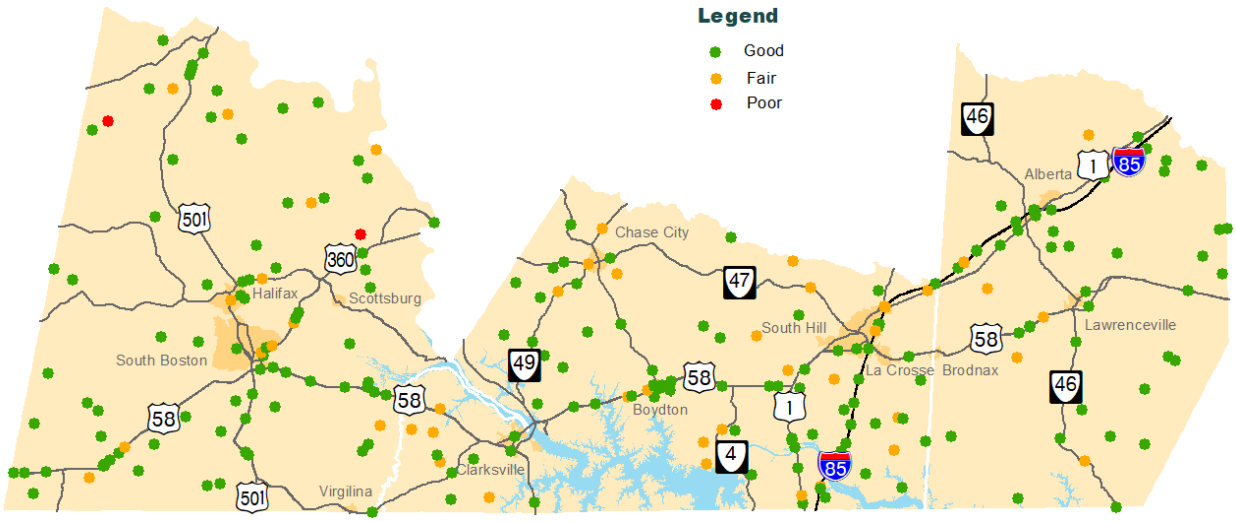
Bridges and culverts play a critical role within the transportation network, providing vital links across water features, roadways, railroads, and challenging topography. Based upon inspection grades provided in VDOT's Statewide Planning System, each bridge and culvert is assigned a grade of 1-9. Structures with a grade of 1-4 are considered poor, 5 are fair, and 6-9 are regarded as good. While the accompanying tables summarize the results, please note that improvements may have been completed to numerous bridges and culverts throughout the region since this data was last updated.

Locality/ Region	Bridges		
	Good	Fair	Poor
Brunswick	65	52	11
Halifax	84	38	6
Mecklenburg	76	44	12
SPDC	225	134	29



Bridge Ratings

Locality/ Region	Culverts		
	Good	Fair	Poor
Brunswick	56	9	0
Halifax	95	14	2
Mecklenburg	91	32	0
SPDC	242	55	2



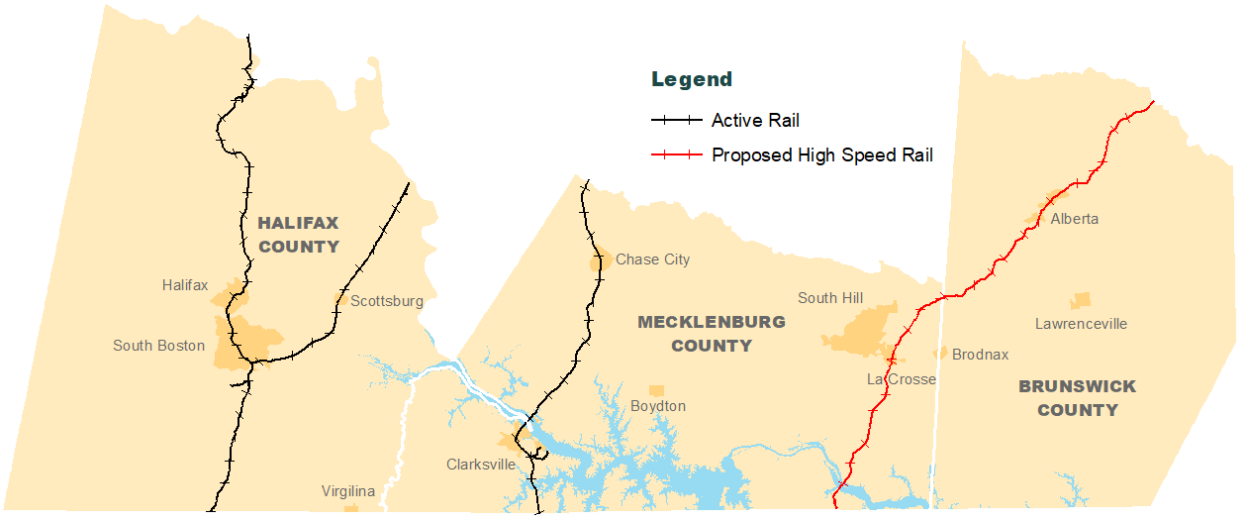
Culverts Ratings

Rail

Freight

Norfolk Southern Railway and Buckingham Branch Railroad remain active within the Southside Planning District. In Halifax County, Norfolk Southern (Class I) operates a line that runs parallel to the Crescent corridor located along US 29 west of the region. A spur of this line runs to the Clover Power Plant.

The Buckingham Branch is recognized as a short-line that traverses the western side of Mecklenburg County while connecting Burkeville, Virginia to Oxford, North Carolina.



Passenger

CSX owns the rail line adjacent to Interstate 85 and US 1 that is not currently in use. However, this rail segment is proposed to be utilized for the Southeast High Speed Rail project in the future. Stretching from Richmond, Virginia to Raleigh, North Carolina, this line would be dedicated to the movement of passengers while operating at speeds of up to 110 mph. This proposed line would pass through the towns of Alberta and La Crosse.

Regarding current passenger rail, Amtrak provides service to the east and west of the Southside Planning District. The closest stations are located in Petersburg and Danville respectively.

Airports

There are three regional general aviation airports and two local airports within the District. Lake Country Regional Airport (W63) and Mecklenburg-Brunswick Regional Airport (AVC), located in Mecklenburg County, and William M. Tuck Airport (W78) in Halifax County, are all classified as general aviation airports by the Virginia Department of Aviation. Chase City Municipal Airport (CXE) in Mecklenburg County and Lawrenceville-Brunswick Airport (LVL) in Brunswick County are classified as local airports.

The SPDC is also well positioned between two international airports. For those requiring a higher level of air accommodation, Richmond International Airport (RIC) is north of the region, while Raleigh-Durham International Airport (RDU) is located to the south.

Airport & Jurisdiction	Medium/High – High Risks
Mecklenburg-Brunswick Regional Airport (Mecklenburg County)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Lawrenceville-Brunswick Airport (Brunswick County)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Chase City Municipal Airport (Mecklenburg County)	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Lake Country Regional Airport (Mecklenburg County)	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
William M. Tuck Airport (Halifax County)	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather



Transit

Blackstone Area Bus System (BABS)

The only current fixed-route service is the Brunswick Express provided by the Blackstone Area Bus System. This is a flexible (deviated) fixed-route servicing Blackstone in Nottoway County, north of the SPDC, the Southside Virginia Community College (SVCC), and the Town of Lawrenceville in Brunswick County. If provided with at least 24 hour notice, the BABS will deviate up to ¾ of a mile from their scheduled route to accommodate those with disabilities.

Halifax Area Regional Transit (HART)

Halifax Area Regional Transit in the towns of South Boston and Halifax are coordinated by the Lake Country Area Agency on Aging (LCAAA). This demand-responsive service provides transportation for seniors to nutrition sites, medical care, service agencies, and recreational activities throughout the region.

Lake Area Bus (LAB)

Lake Area Bus (LAB) in Mecklenburg County operates within the corporate limits of Brodnax, La Crosse, and South Hill and is also administered by LCAAA. This demand-responsive service provides transportation for seniors to nutrition sites, medical care, service agencies, and recreational activities throughout the region.

Other Services

Several smaller organizations also provide transportation services: the Southside Community Services Board, Southside Training Employment and Placement Services, and LogistiCare.

The region is also served by two Greyhound Bus stops. The first is located in South Hill at the Slip N Food Mart, 1011 E. Atlantic Street. It is important to note that it is only a curbside stop, thus tickets need to be purchased either online or at a full-service terminal. The second location is a Pilot gas station in South Boston, at 2190 B Philpott Road.

Future Services/Plans

There are plans to implement another fixed route transit service in the region, specifically to run between the City of Danville and the Town of South Boston. This will provide greater access to jobs, education, shopping, medical and health appointments, and other opportunities for those who currently lack reliable transportation options.

The Statewide Public Transportation and Transportation Demand Management Plan, a product of the Virginia Department of Rail and Public Transportation (DRPT), is produced to identify long term transit enhancements. Among the plans recommendations are the expansion of the existing rural transit service in the Southside Planning District and new "rural village/small urban transit service" to serve the towns of Chase City, Clarksville, and Boydton by 2040.

Water/Sewer Facilities

Information included in this section is based upon input from participating localities, regional service authorities and/or existing databases.

Water Treatment Plants

Plant	Incorporated Areas Receiving Service	Vulnerabilities
Clarksville WTP (Town of Clarksville)	Clarksville	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Halifax County Service Authority (Town of South Boston)	Halifax and South Boston	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Lawrenceville WTP (Brunswick County)	Alberta and Lawrenceville	Flood, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Roanoke River Service Authority (Mecklenburg County)	Boydton, Brodnax, Chase City, La Crosse, and South Hill	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Water Tanks

Tank Name	Locality	Capacity	Type	Vulnerabilities
First Ave*	Alberta	100,000	Elevated	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
I-85/US 1	Alberta	200,000	Elevated	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Meherrin Jail	Alberta		Elevated	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Boydton	Boydton	300,000	Elevated	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Brodnax*	Brodnax	100,000	Elevated	Drought, Extreme Heat, Tropical Cyclones, Severe Wind and Severe Winter Weather
Boyd St	Chase City		Elevated	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Randolph St	Chase City		Elevated	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Ball Park	Clarksville		Elevated	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Lakeside	Clarksville		Elevated	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Russell Stover	Clarksville		Elevated	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones,

				Severe Wind and Severe Winter Weather
Clover	Clover		Elevated	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Halifax*	Halifax	60,000	Elevated	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Webb Park	HCSA	250,000	Elevated	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
VEPCO	HCSA	850,000	Ground	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
JPS	HCSA	500,000	Elevated	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Low Level	HCSA	1,000,000	Ground	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Presto	HCSA	500,000	Elevated	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Daystrom	HCSA	100,000	Elevated	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
VIR	HCSA	250,000	Elevated	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
La Crosse	La Crosse		Elevated	Drought, Extreme Heat, Tropical Cyclones, Severe Winter Weather
Mayfield	Lawrenceville	400,000	Elevated	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Across from Prison	Lawrenceville	100,000	Elevated	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Prison Ground Tank	Lawrenceville	300,000	Ground	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Filtration Plant	Lawrenceville		Ground	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Food Lion	Lawrenceville	500,000	Elevated	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
La Crosse	RRSA	500,000	Elevated	Drought, Extreme Heat, Tropical Cyclones, Severe Winter Weather
Big Fork	RRSA	500,000	Elevated	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Highway 92	RRSA	700,000	Ground	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Microsoft 1	Meck. Co.	500,000	Elevated	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Microsoft 2	Meck. Co.	1,000,000	Ground	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Microsoft 3	Meck. Co.	1,000,000	Ground	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Microsoft 4	Meck. Co.	1,000,000	Ground	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Scottsburg – School	Scottsburg		Ground	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Scottsburg – Allens Mill Rd	Scottsburg		Elevated	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Main St	South Hill	500,000	Elevated	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Plank Rd	South Hill	1,000,000	Elevated	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
North Side	South Hill	500,000	Elevated	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Baskerville Correctional			Ground	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Prison Rd			Elevated	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Virgilina	Virgilina	100,000	Elevated	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

*Water tank exists but is out of service.

Water Booster Stations

Station Name	Locality	Vulnerabilities
Alberta	Alberta	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Clarksville	Clarksville	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Industrial Park	HCSA	Flood, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Raw Water	HCSA	Flood, Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
North Main St	HCSA	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Vaughan	HCSA	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Route 501	HCSA	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Great Creek	Lawrenceville	Flood, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Meherrin River	Lawrenceville	Flood, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Prison	Lawrenceville	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Peebles St	RRSA	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Big Fork	RRSA	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Highway 92	RRSA	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Wells

Facility	Vulnerabilities
Clover Well #1	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Clover Well #2	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
VIR Well #4	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
VIR Well #5	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Waste Water Treatment Plants

Plant	Service Areas	Vulnerabilities
Boydton WWTP	Boydton	Flood, Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Chase City WWTP	Chase City	Flood, Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Clarksville WWTP	Clarksville	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Clover WWTP	Clover	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Halifax WWTP*	Halifax	Flood, Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
HCSA WWTP	Halifax and South Boston	Flood, Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Lawrenceville WWTP	Alberta and Lawrenceville	Flood, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

South Hill WWTP	Brodnax, La Crosse and South Hill	Flood, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Virgilina WWTP	Virgilina	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
I-85 Rest Area	Commonwealth of Virginia	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Scottsburg WWTP	Scottsburg	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

*WWTP being converted into pump station for Halifax County Service Authority

Waste Water Pump Stations

Station Name	Locality	Vulnerabilities
Alberta	Alberta	Flood, Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Bay 16	Alberta	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Church St	Alberta	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Samford St	Alberta	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Small Station	Boydton	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Regular Station	Boydton	Flood, Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Brodnax Rd	Brodnax	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Brodnax (North)	Brodnax	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Brodnax (P.S. 2)	Brodnax	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Brodnax	Brodnax	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Thyndale	Chase City	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Jonbil	Chase City	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Oakwood Ave	Chase City	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Butchers Creek	Chase City	Flood, Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Rose Hill	Clarksville	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Dan Circle	Clarksville	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Pine Valley	Clarksville	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Forest Hill	Clarksville	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Colleen's Cove	Clarksville	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
15/58	Clarksville	Flood, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Old Industrial Park	Clarksville	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Kinderton Tech Park*	Clarksville	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

KCC	Clarksville	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Springfield	Clarksville	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Marina	Clarksville	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Moorings	Clarksville	Flood, Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
4th St	Clarksville	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
7th St	Clarksville	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Circle K	Clarksville	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
New Industrial Park	Clarksville	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Cabin Dr Pump 1 (Occoneechee)	Clarksville	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Cabin Dr Pump 2 (Occoneechee)	Clarksville	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
VIR	HCSA	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Industrial Park	HCSA	Flood, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Perrin Creek	HCSA	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Hwy 129	HCSA	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Younger Ave	HCSA	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Shepherds Gate	HCSA	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Highland Hills	HCSA	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Webb Park	HCSA	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Westside	HCSA	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Lakeside	HCSA	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Canterbury	HCSA	Flood, Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Fordland	HCSA	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Route 501	HCSA	Flood, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Dairy Delight	HCSA	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Grubby Rd	HCSA	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Post 99	HCSA	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
E Pine/THT	La Crosse	Wildfire, Drought, Extreme Heat, Tropical Cyclones, Severe Winter Weather
Country Club	La Crosse	Wildfire, Drought, Extreme Heat, Tropical Cyclones, Severe Winter Weather
US 58/Freeman	La Crosse	Drought, Extreme Heat, Tropical Cyclones, Severe Winter Weather
Roanoke	La Crosse	Wildfire, Drought, Extreme Heat, Tropical Cyclones, Severe Winter Weather
Happy Hill	La Crosse	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

Green Acres	Lawrenceville	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Mayfield	Lawrenceville	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Pinecrest	Lawrenceville	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
VA/Carolina	Lawrenceville	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Brooks Crossing	Lawrenceville	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Dominion	Lawrenceville	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Filter Wash	Lawrenceville	Flood, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Alpine	South Hill	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
CMH VCU	South Hill	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Usemco 1	South Hill	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Usemco 2	South Hill	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Usemco 3	South Hill	Flood, Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Taylors Creek	South Hill	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Wedgewood	South Hill	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Cycle Lane	South Hill	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Betty Lane	South Hill	Flood, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Parker Park	South Hill	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Sporoco	South Hill	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Mountain Creek	South Hill	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Binford	South Hill	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Meadowbrook	South Hill	Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
RRRBP	South Hill	Flood, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
7th St	Virgilina	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
DOC	Lawrenceville	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
GEO	Lawrenceville	Wildfire, Drought, Extreme Heat, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Clover	Clover	Wildfire, Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather
Scottsburg	Scottsburg	Drought, Hail, Tropical Cyclones, Severe Wind and Severe Winter Weather

*Pump station not currently in use.

Data References

Blue Ridge Regional Jail Authority. Halifax County Adult Detention Center. Retrieved 11/08/18 from https://www.brrja.state.va.us/halifax-county-adult-detention-center/

DCR. Dam Classification. 05/09/17. Retrieved 10/25/18 from http://www.dcr.virginia.gov/dam-safety-and-floodplains/damclass

DCR. Spreadsheet of Impounding Structures – Southside Planning District Commission. 12/5/18.

Dean, C. J. Town of Lawrenceville, VA. 12/19/18.

Elliot, Richard. Town of Clarksville, VA. 12/19/18.

Estes, Mark. Halifax County Service Authority. 3/7/19 and 8/21/19

FEMA. Hazus 4.2. 2019.

Francisco, Bryant. Halifax County Service Authority. 8/21/19.

Funderburk, Michael. Roanoke River Service Authority. 1/15/19.

Hinkle, Jeff. Roanoke River Service Authority. 9/9/19.

Hudson, Wayne. Town of South Hill, VA. 12/20/18.

Johnson, Jason. Town of Virgilina, VA. 9/10/19.

Jones, Jeff. Town of Clarksville, VA. 12/19/18.

Kirkland, John M. Town of Boydton, VA. 1/10/19.

Meherrin River Regional Jail. Meherrin River Regional Jail. Retrieved 11/08/18 from http://mrrj.org/

Murray, Ralph. Town of Virgilina, VA. 9/10/19.

Novsak, Mark. Town of South Hill, VA. 12/20/18.

Park, R.H., III. Town of Boydton, VA. 1/10/19.

Prison Pro. Halifax Correctional Unit. Retrieved 11/08/18 from http://www.prisonpro.com/content/halifax-correctional-unit

Southside Planning District Commission. 2045 Regional Long Range Transportation Plan (Draft).

Stringer, Lew. Mecklenburg County, VA. Spreadsheets - Fire Departments, Rescue Squads, Police, and EOP. June 2019.

Tanner, Tom. Town of La Crosse, VA. 7/3/19.

Taylor, Jon. Mecklenburg County, VA. 1/30/19.

The Geo Group, Inc. Lawrenceville Correctional Center. Retrieved 11/08/18 from https://www.geogroup.com/FacilityDetail/FacilityID/60

U.S. Census Bureau. 2010 Census. Retrieved 06/03/19 from https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml

U.S. Census Bureau. 2012-2016 American Community Survey 5-Year Estimates, DP05 ACS Demographic and Housing Estimates. Retrieved 11/09/18 from https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_16_5YR_DP05&prodType=table

U.S. Census Bureau. 2013-2017 American Community Survey 5-Year Estimates. Retrieved 06/03/19 from https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml

Virginia DEQ. VPDES Individual Permits. May 2019. Retrieved 09/19/19 from https://deq.virginia.gov/programs/water/permittingcompliance/pollutiondischargeelimination/permitsfees.aspx

Virginia Employment Commission. Community Profile – Brunswick County. 05/18/19. Retrieved 06/03/19 from https://virginiawlmi/Portals/200/Local%20Area%20Profiles/5104000025.pdf

Virginia Employment Commission Community Profile – Halifax County. 05/18/19. Retrieved from https://virginiawlmi/Portals/200/Local%20Area%20Profiles/5104000083.pdf

Virginia Employment Commission. Community Profile – Mecklenburg County. 05/18/19. Retrieved from https://virginiawlmi/Portals/200/Local%20Area%20Profiles/5104000117.pdf

Wikipedia. List of Virginia State Prisons. Retrieved 11/08/18 from https://en.wikipedia.org/wiki/List_of_Virginia_state_prisons

Wilson, Bill. Town of South Hill, VA. 12/20/18.

Loss Estimation

Hazus Overview

The HMP update utilized a federal software product known as Hazus to calculate estimates for potential losses relating to flood and hurricane events. This software makes it possible for local, regional, and state officials to take planning level loss estimates into account during the decision making process. Hazus allows the user to generate loss estimates for various scenarios, such as 100-year flood events and historic hurricane storm tracks. By reviewing the Hazus estimates, officials are better positioned to anticipate future needs and develop plans and strategies to help reduce and/or eliminate risk.

Originally developed by the National Institute of Building Sciences for earthquake loss estimates on behalf of FEMA, Hazus has since been expanded to include other natural disasters, including: hurricanes, wind, flooding, and tsunami events. Hazus is geographic information system (GIS)-based software that allows the user to study various hazard event scenarios with varied population characteristics.

All loss estimation scenarios were run using FEMA's Hazus program. While the general housing stock within the database was utilized, SPDC staff coordinated with local officials and reviewed records in an effort to correct and update information on the region's essential facilities. All changes were made through the Hazus Comprehensive Data Management System (CDMS) that allows users to download spreadsheets, edit them as necessary, upload them back into the CDMS for review, and then finally push the changes into the Hazus database. Facilities reviewed and updated include: fire stations, police stations, hospitals, schools, emergency operation centers, airports, water treatment plants, water booster stations, water storage tanks, wastewater treatment plants, and sewer pump stations.

Exposure to Storm Events – Inventory of Vehicles and Buildings

Utilizing data from Hazus, what follows is an approximate inventory of buildings and vehicles that are considered exposed and vulnerable to damage from flooding and hurricane events.

Vehicle Dollar Exposure

	Cars	Light Trucks	Heavy Trucks	Total
Day	$561,191,630	$389,225,955	$122,897,876	**$1,073,315,461**
Night	$698,953,979	$485,195,386	$129,974,091	**$1,314,123,456**

Building Exposure by Occupancy Type

Occupancy	Exposure	Percent of Total
Agricultural	$79,051,000	0.88
Commercial	$1,068,864,000	11.88
Education	$130,700,000	1.45
Government	$76,091,000	0.85
Industrial	$404,159,000	4.49
Religion	$229,878,000	2.55
Residential	$7,011,199,000	77.90
Total	**$8,999,942,000**	**100.00**

Building Exposure by Building Type

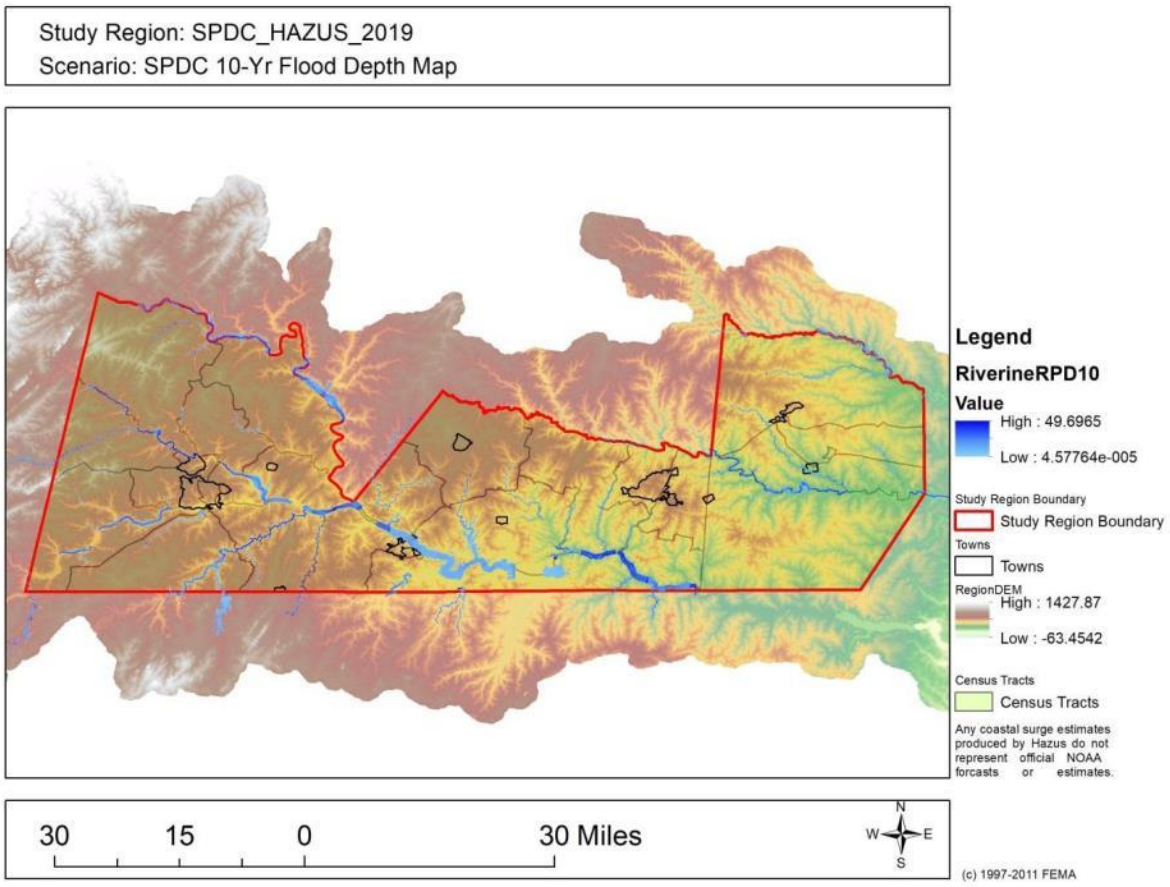
	Exposure	Percent of Total
Wood	$5,017,896,000	55.75
Steel	$925,800,000	10.29
Concrete	$305,170,000	3.39
Masonry	$2,212,535,000	24.58
MFH*	$539,246,000	5.99
Total	**$9,000,647,000**	**100.00**

*Manufactured Homes

Flooding

The Hazus software for flood events utilizes digital elevation models (DEMs) and calculates how high the floodwaters will reach in various flood events, such as 10-year, 100-year, and 500-year storms. However, it is very important to understand that the estimates found in this section should never be used for anything more than general planning purposes. This is not an engineering report, nor does it use site-gathered and confirmed data for each building. The simulation software estimates what types of buildings are in the calculated flood zone by using Census data that has been modified to include our local inventory of essential facilities.

Flood Scenario 1: 10-Year Flood Event (April 15th)



Building Damage Count by General Occupancy

Count of Buildings (#) by Range of Damage (%)

	<1%	1-10%	11-20%	21-30%	31-40%	41-50%	Substantial	Total
Agriculture	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0
Education	0	0	0	0	0	0	0	0
Government	0	0	0	0	0	0	0	0
Industrial	0	0	0	0	0	0	0	0
Religion	0	0	0	0	0	0	0	0
Residential	5	3	7	2	3	0	7	27
Total	**5**	**3**	**7**	**2**	**3**	**0**	**7**	**27**

Building Damage Count by General Building Type

Count of Buildings (#) by Range of Damage (%)

	<1%	1-10%	11-20%	21-30%	31-40%	41-50%	Substantial	Total
Concrete	0	0	0	0	0	0	0	0
MFH	2	0	0	0	0	0	5	7
Masonry	0	0	1	0	0	0	0	1
Steel	0	0	0	0	0	0	0	0
Wood	3	3	7	2	3	0	2	20
Total	**5**	**3**	**8**	**2**	**3**	**0**	**7**	**28**

Essential Facilities, Transportation, and Utilities

The 10-year flood simulated by Hazus predicts that no emergency operations centers, fire stations, police stations, hospitals, schools, potable water facilities or railroad bridges will be affected by flooding. Hazus did predict that one bridge in Mecklenburg County and two wastewater facilities in Halifax County could be impacted.

Bridge	Damage Pct.
Paschall Rd Bridge, VA 007163	0.05
Wastewater Pump Stations	**Damage Pct.**
Industrial Park PS	0.00
Canterbury PS	0.00

Debris

HAZUS predicts that 1,375 tons of debris will be generated by a 10-year flood event.

Shelter

County	# of Displaced People	# of People Needing Short Term Shelter
Brunswick	66	0
Halifax	187	0
Mecklenburg	153	0
Total	**406**	**0**

Direct Economic Annualized Losses for Buildings

Capital Stock Loss				Income Losses				
Building Loss	Contents Loss	Inventory Loss	Building Loss Ratio %	Relocation Loss	Capital Related Loss	Wages Losses	Rental Income Loss	Total Loss
$13,018,000	$11,041,000	$196,000	2.2%	$3,134,000	$2,279,000	$4,839,000	$944,000	$35,451,000

Direct Economic Losses for Vehicles

	Cars	Light Trucks	Heavy Trucks	Total Losses
Day	$2,725,026	$1,515,684	$163,328	$4,404,038
Night	$4,230,968	$2,301,799	$183,871	$6,716,639

Agricultural Losses

Brunswick County

Products	Damage Pct. – 3 days	Damage Pct. – 7 days	Damage Pct. – 14 days
Corn	11.25	15.00	15.00
Soybeans	0.00	0.00	0.00
Wheat	11.25	15.00	15.00

Halifax County

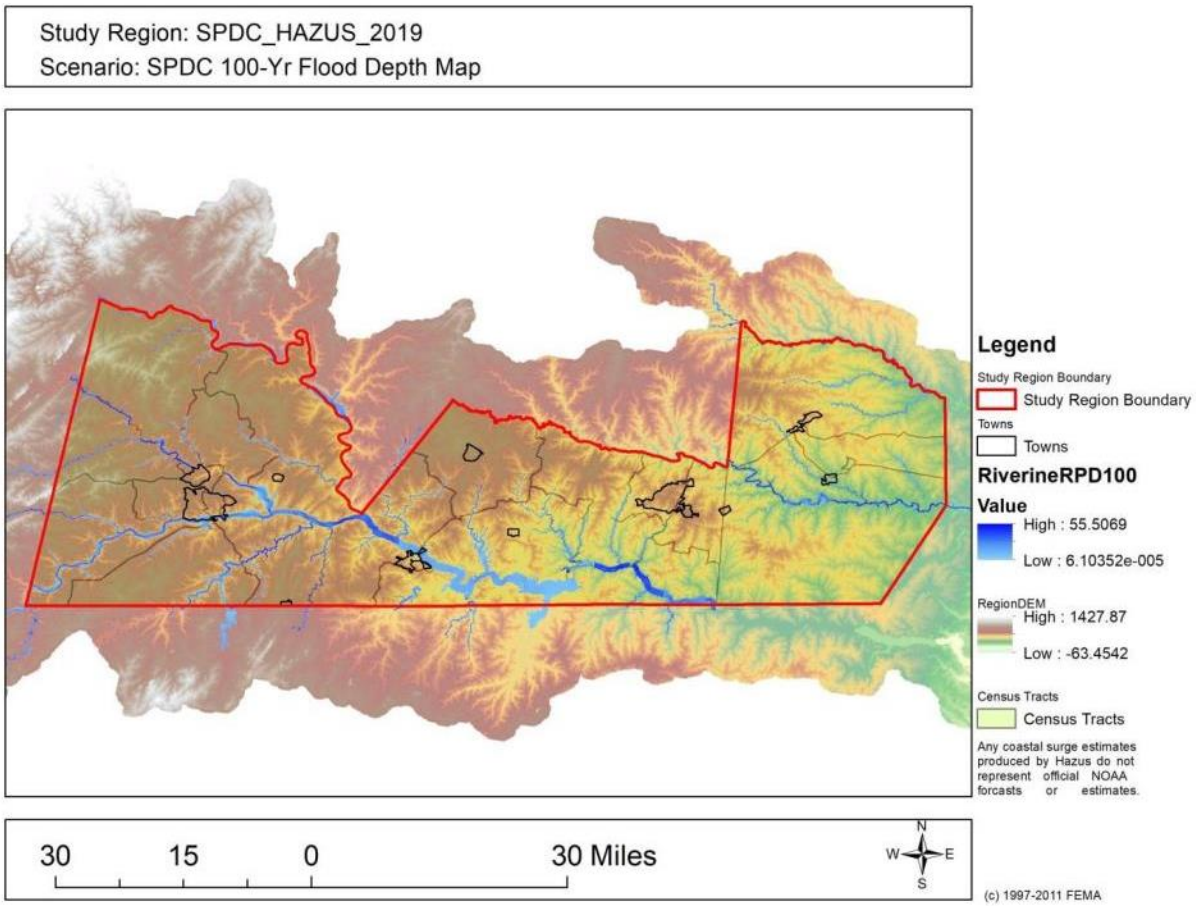
Products	Damage Pct. – 3 days	Damage Pct. – 7 days	Damage Pct. – 14 days
Corn	11.25	15.00	15.00
Corn Silage	9.00	12.00	12.00
Soybeans	0.00	0.00	0.00
Wheat	11.25	15.00	15.00

Mecklenburg County

Products	Damage Pct. – 3 days	Damage Pct. – 7 days	Damage Pct. – 14 days
Corn	11.25	15.00	15.00
Oats	11.25	15.00	15.00
Soybeans	0.00	0.00	0.00
Wheat	11.25	15.00	15.00

*A flood scenario was also calculated for October 1st, it returned the same results as above for agricultural losses.

Flood Scenario 2: 100-Year Flood Event (April 15th)



Building Damage Count by General Occupancy

Count of Buildings (#) by Range of Damage (%)

	<1%	1-10%	11-20%	21-30%	31-40%	41-50%	Substantial	Total
Agriculture	0	0	0	0	0	0	0	0
Commercial	0	0	3	0	0	0	0	3
Education	0	0	0	0	0	0	0	0
Government	0	0	0	0	0	0	0	0
Industrial	0	0	0	0	0	0	0	0
Religion	0	0	0	0	0	0	0	0
Residential	3	3	10	5	6	5	24	56
Total	**3**	**3**	**13**	**5**	**6**	**5**	**24**	**59**

Building Damage Count by General Building Type

Count of Buildings (#) by Range of Damage (%)

	<1%	1-10%	11-20%	21-30%	31-40%	41-50%	Substantial	Total
Concrete	0	0	0	0	0	0	0	0
MFH	1	0	0	0	0	0	11	12
Masonry	0	0	1	1	1	0	2	5
Steel	0	0	2	0	0	0	0	2
Wood	2	3	10	5	6	5	11	42
Total	**3**	**3**	**13**	**6**	**7**	**5**	**24**	**61**

Essential Facilities, Transportation, and Utilities

The 100-year flood simulated by Hazus predicts that no emergency operations centers, fire stations, police stations, hospitals, schools, potable water facilities or railroad bridges will be affected by flooding. Hazus did predict that one bridge in Mecklenburg County and four wastewater pump stations could be impacted.

Bridge	Damage Pct.
Paschall Rd Bridge, VA 007163	0.50
Wastewater Pump Stations	**Damage Pct.**
Perrin Creek PS	0.00
Industrial Park PS	29.26
Route 501 PS	(non-functional) 40.00
Canterbury PS	(non-functional) 40.00

Debris

HAZUS predicts that 3,456 tons of debris will be generated by a 100-year flood event.

Shelter

County	# of Displaced People	# of People Needing Short Term Shelter
Brunswick	93	0
Halifax	370	2
Mecklenburg	263	0
Total	**726**	**2**

Direct Economic Annualized Losses for Buildings

Capital Stock Loss				Income Losses				
Building Loss	Contents Loss	Inventory Loss	Building Loss Ratio %	Relocation Loss	Capital Related Loss	Wages Losses	Rental Income Loss	Total Loss
$37,724,000	$47,850,000	$2,019,000	5.5%	$10,173,000	$14,281,000	$21,696,000	$5,640,000	$139,383,000

Direct Economic Losses for Vehicles

	Cars	Light Trucks	Heavy Trucks	Total Losses
Day	$12,170,963	$7,461,851	$1,376,685	$21,009,499
Night	$10,536,452	$6,431,258	$1,463,918	$18,431,628

Agricultural Losses

Brunswick County

Products	Damage Pct. – 3 days	Damage Pct. – 7 days	Damage Pct. – 14 days
Corn	11.25	15.00	15.00
Soybeans	0.00	0.00	0.00
Wheat	11.25	15.00	15.00

Halifax County

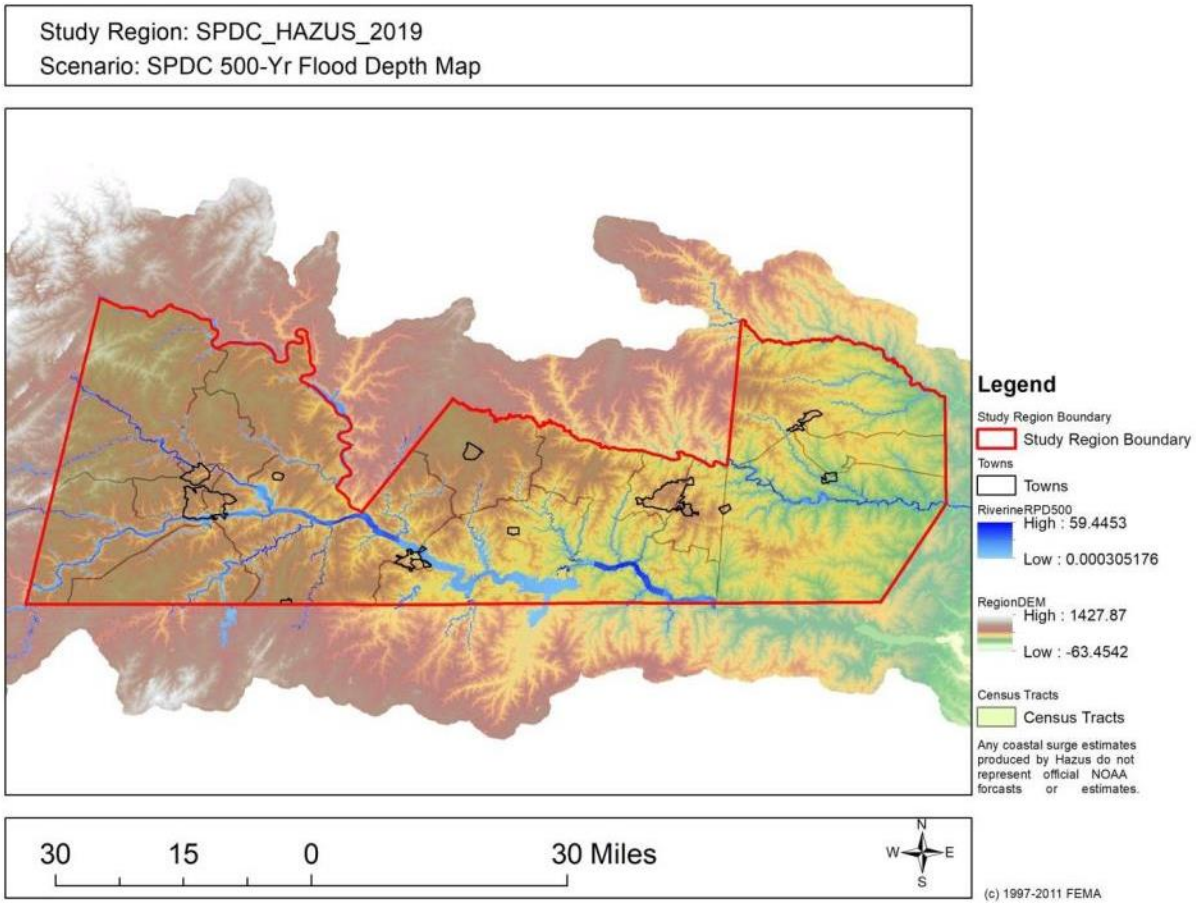
Products	Damage Pct. – 3 days	Damage Pct. – 7 days	Damage Pct. – 14 days
Corn	11.25	15.00	15.00
Corn Silage	9.00	12.00	12.00
Soybeans	0.00	0.00	0.00
Wheat	11.25	15.00	15.00

Mecklenburg County

Products	Damage Pct. – 3 days	Damage Pct. – 7 days	Damage Pct. – 14 days
Corn	11.25	15.00	15.00
Oats	11.25	15.00	15.00
Soybeans	0.00	0.00	0.00
Wheat	11.25	15.00	15.00

*A flood scenario was also calculated for October 1st, it returned the same results as above for agricultural losses.

Flood Scenario 3: 500-Year Flood Event (April 15th)



Building Damage Count by General Occupancy

Count of Buildings (#) by Range of Damage (%)

	<1%	1-10%	11-20%	21-30%	31-40%	41-50%	Substantial	Total
Agriculture	0	0	0	0	0	0	0	0
Commercial	0	0	2	1	0	0	0	3
Education	0	0	0	0	0	0	0	0
Government	0	0	0	0	0	0	0	0
Industrial	0	0	0	0	0	0	0	0
Religion	0	0	0	0	0	0	0	0
Residential	2	1	14	7	5	4	34	67
Total	**2**	**1**	**16**	**8**	**5**	**4**	**34**	**70**

Building Damage Count by General Building Type

Count of Buildings (#) by Range of Damage (%)

	<1%	1-10%	11-20%	21-30%	31-40%	41-50%	Substantial	Total
Concrete	0	0	0	0	0	0	0	0
MFH	1	0	0	0	0	0	16	17
Masonry	0	0	2	0	0	0	3	5
Steel	0	0	2	0	0	0	0	2
Wood	1	1	14	7	5	4	16	48
Total	**2**	**1**	**18**	**7**	**5**	**4**	**35**	**72**

Essential Facilities, Transportation, and Utilities

The 500-year flood simulated by Hazus predicts that no emergency operations centers, fire stations, police stations, hospitals, schools, potable water facilities or railroad bridges will be affected by flooding. Hazus did predict that one bridge in Mecklenburg County and four wastewater pump stations could be impacted.

Bridge	Damage Pct.
Paschall Rd Bridge, VA 007163	1.00
Wastewater Pump Stations	**Damage Pct.**
Perrin Creek PS	0.00
Industrial Park PS	(non-functional) 40.00
Route 501 PS	(non-functional) 40.00
Canterbury PS	(non-functional) 40.00

Debris

HAZUS predicts that 5,441 tons of debris will be generated by a 500-year flood event.

Shelter

County	# of Displaced People	# of People Needing Short Term Shelter
Brunswick	107	0
Halifax	445	2
Mecklenburg	326	1
Total	**878**	**3**

Direct Economic Annualized Losses for Buildings (Values are in dollars.)

Capital Stock Loss				Income Losses				
Building Loss	Contents Loss	Inventory Loss	Building Loss Ratio %	Relocation Loss	Capital Related Loss	Wages Losses	Rental Income Loss	Total Loss
$52,338,000	$61,934,000	$2,556,000	7.7%	$11,892,000	$16,396,000	$25,525,000	$6,571,000	$177,212,000

Direct Economic Losses for Vehicles (Values are in dollars.)

	Cars	Light Trucks	Heavy Trucks	Total Losses
Day	$14,228,190	$9,139,002	$2,298,144	$25,665,336
Night	$12,836,260	$8,150,996	$2,439,735	$23,426,991

Agricultural Losses

Brunswick County

Products	Damage Pct. – 3 days	Damage Pct. – 7 days	Damage Pct. – 14 days
Corn	11.25	15.00	15.00
Soybeans	0.00	0.00	0.00
Wheat	11.25	15.00	15.00

Halifax County

Products	Damage Pct. – 3 days	Damage Pct. – 7 days	Damage Pct. – 14 days
Corn	11.25	15.00	15.00
Corn Silage	9.00	12.00	12.00
Soybeans	0.00	0.00	0.00
Wheat	11.25	15.00	15.00

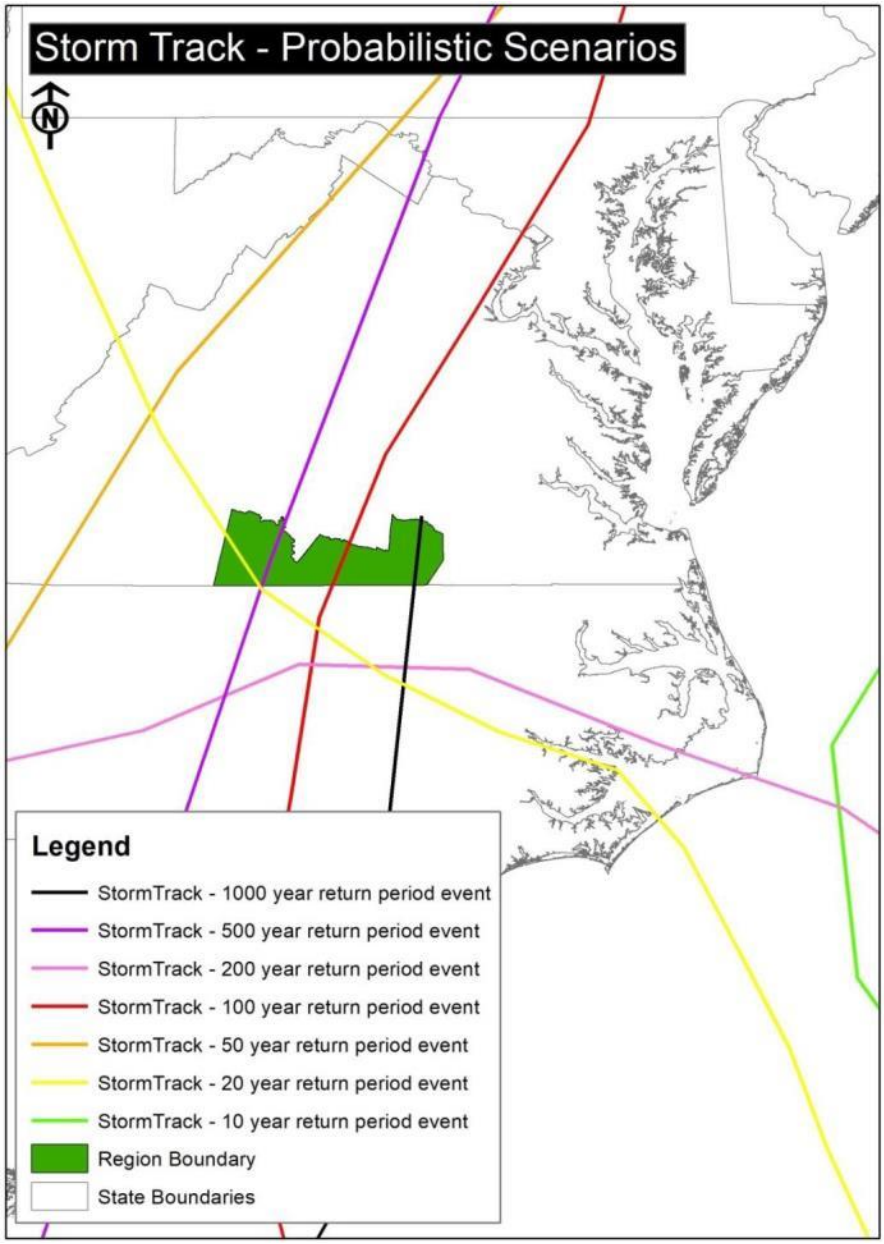
Mecklenburg County

Products	Damage Pct. – 3 days	Damage Pct. – 7 days	Damage Pct. – 14 days
Corn	11.25	15.00	15.00
Oats	11.25	15.00	15.00
Soybeans	0.00	0.00	0.00
Wheat	11.25	15.00	15.00

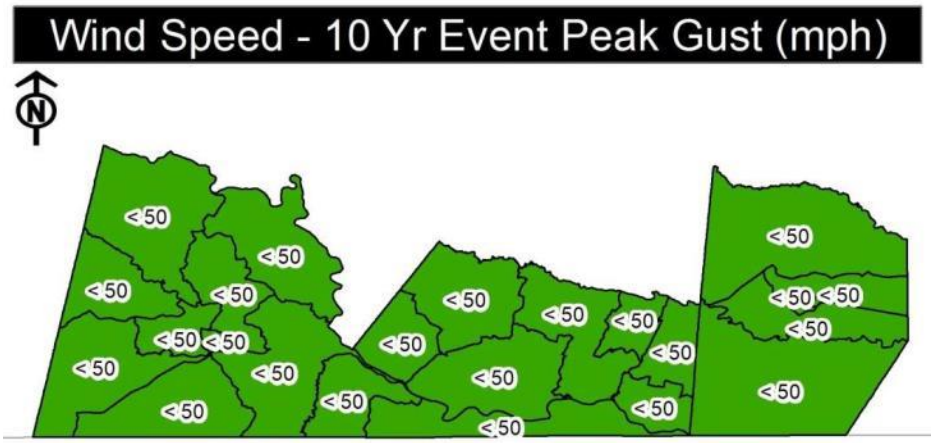
*A flood scenario was also calculated for October 1st, it returned the same results as above for agricultural losses.

Hurricanes

The Hazus software for hurricane events provides users with estimates relating to economic and social losses from wind damage. Storm tracks for 10, 20, 50, 100, 200, 500, and 1,000 year probabilistic scenarios were conducted. Additionally, the storm track for Hurricane Hazel from 1954 was utilized to learn what damages could be expected if that same storm struck the region in 2019. However, it is very important to understand that estimates found in this section should never be used for anything more than general planning purposes. This is not an engineering report, nor does it use site-gathered or confirmed data for each building. The simulation software estimates what types of buildings are in the calculated hurricane storm track by using Census data that has been modified to include our local inventory of essential facilities.



Hurricane Scenario 1: 10-Year Historical Hurricane Scenario



Building Damage Count by General Occupancy

	None	Minor	Moderate	Severe	Destruction	Total
Agriculture	301	0	0	0	0	301
Commercial	2,045	0	0	0	0	2,045
Education	92	0	0	0	0	92
Government	100	0	0	0	0	100
Industrial	613	0	0	0	0	613
Religion	410	0	0	0	0	410
Residential	43,146	0	0	0	0	43,146
Total	**46,707**	**0**	**0**	**0**	**0**	**46,707**

Building Damage Count by General Building Type

Count of Buildings (#) by Range of Damage (%)

	None	Minor	Moderate	Severe	Destruction	Total
Concrete	348	0	0	0	0	348
MFH	10,514	0	0	0	0	10,514
Masonry	9,198	0	0	0	0	9,198
Steel	1,547	0	0	0	0	1,547
Wood	25,098	0	0	0	0	25,098
Total	**46,705**	**0**	**0**	**0**	**0**	**46,705**

Essential Facilities

The 10-year hurricane event simulated by Hazus predicts that the following facilities will remain 100% functional: emergency response, hospitals, schools, police stations and fire stations.

Debris

Hazus predicts that no debris will be generated by a 10-year hurricane event.

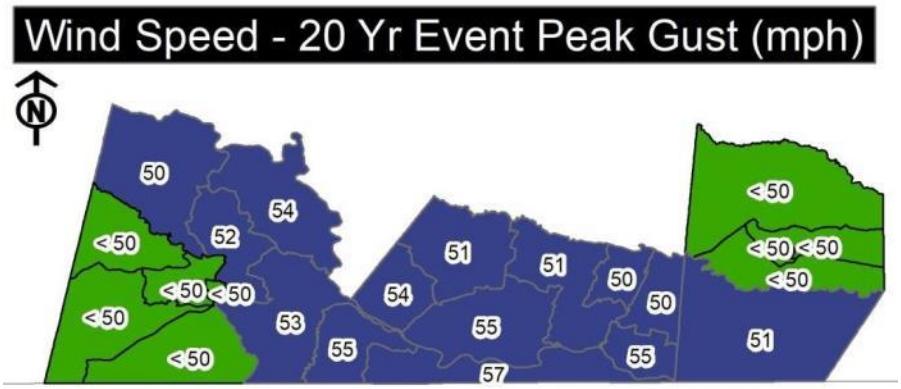
Shelter

County	# of Displaced People	# of People Needing Short Term Shelter
Brunswick	0	0
Halifax	0	0
Mecklenburg	0	0
Total	**0**	**0**

Direct Economic Annualized Losses for Buildings (Values are in dollars.)

Capital Stock Loss				Income Losses				
Building Loss	Contents Loss	Inventory Loss	Building Loss Ratio %	Relocation Loss	Capital Related Loss	Wages Losses	Rental Income Loss	Total Loss
$0	$0	$0	0.0%	$0	$0	$0	$0	$0

Hurricane Scenario 2: 20-Year Historical Hurricane Scenario



Building Damage Count by General Occupancy

	None	Minor	Moderate	Severe	Destruction	Total
Agriculture	301	0	0	0	0	301
Commercial	2,042	3	0	0	0	2,045
Education	92	0	0	0	0	92
Government	100	0	0	0	0	100
Industrial	612	1	0	0	0	613
Religion	410	0	0	0	0	410
Residential	43,143	3	0	0	0	43,146
Total	**46,700**	**7**	**0**	**0**	**0**	**46,707**

Building Damage Count by General Building Type

	None	Minor	Moderate	Severe	Destruction	Total
Concrete	348	0	0	0	0	348
MFH	10,514	0	0	0	0	10,514
Masonry	9,193	5	0	0	0	9,198
Steel	1,544	3	0	0	0	1,547
Wood	25,098	0	0	0	0	25,098
Total	**46,697**	**8**	**0**	**0**	**0**	**46,705**

Essential Facilities

The 20-year hurricane event simulated by Hazus predicts that the following facilities will remain 100% functional: emergency response, hospitals, schools, police stations and fire stations.

Debris (All values are in tons.)

	Brick, Wood, Other	Reinf. Concrete and Steel	Eligible Tree Debris	Other Tree Debris	Total (tons)
Brunswick	0	0	0	0	0
Halifax	0	0	493	7,562	8,055
Mecklenburg	0	0	1,388	15,747	17,135
Total	**0**	**0**	**1,881**	**23,309**	**25,190**

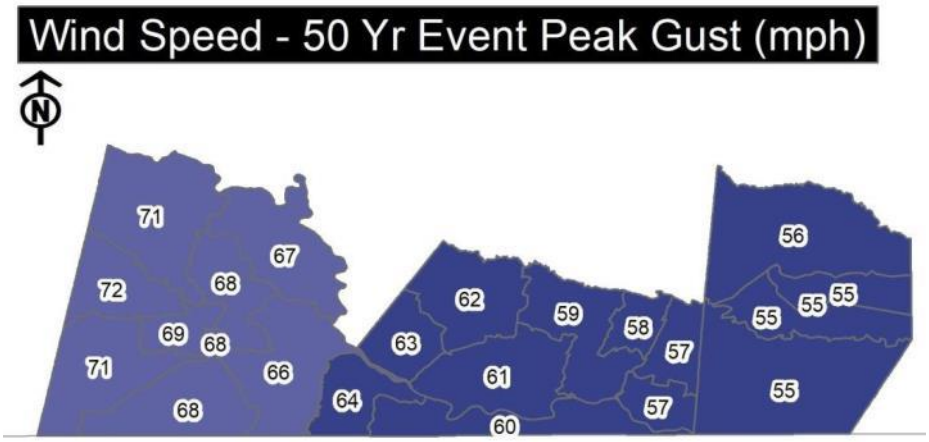
Shelter

County	# of Displaced People	# of People Needing Short Term Shelter
Brunswick	0	0
Halifax	0	0
Mecklenburg	0	0
Total	**0**	**0**

Direct Economic Annualized Losses for Buildings (Values are in dollars.)

Capital Stock Loss				Income Losses				
Building Loss	Contents Loss	Inventory Loss	Building Loss Ratio %	Relocation Loss	Capital Related Loss	Wages Losses	Rental Income Loss	Total Loss
$495,000	$609,000	$0	0.01%	$0	$0	$0	$0	$1,104,000

Hurricane Scenario 3: 50-Year Historical Hurricane Scenario



Building Damage Count by General Occupancy

	None	Minor	Moderate	Severe	Destruction	Total
Agriculture	301	0	0	0	0	301
Commercial	2,038	7	0	0	0	2,045
Education	92	0	0	0	0	92
Government	100	0	0	0	0	100
Industrial	611	2	0	0	0	613
Religion	409	1	0	0	0	410
Residential	43,112	34	0	0	0	43,146
Total	**46,663**	**44**	**0**	**0**	**0**	**46,707**

Building Damage Count by General Building Type

	None	Minor	Moderate	Severe	Destruction	Total
Concrete	346	2	0	0	0	348
MFH	10,514	0	0	0	0	10,514
Masonry	9,179	18	0	0	0	9,197
Steel	1,541	6	0	0	0	1,547
Wood	25,081	17	0	0	0	25,098
Total	**46,661**	**43**	**0**	**0**	**0**	**46,705**

Essential Facilities

The 50-year hurricane event simulated by Hazus predicts that the following facilities will remain 100% functional: emergency response, hospitals, schools, police stations and fire stations.

Debris (All values are in tons.)

	Brick, Wood, Other	Reinf. Concrete and Steel	Eligible Tree Debris	Other Tree Debris	Total (tons)
Brunswick	0	0	1,168	17,017	18,185
Halifax	116	0	3,054	41,823	44,993
Mecklenburg	9	0	1,727	19,999	21,735
Total	**125**	**0**	**5,949**	**78,839**	**84,913**

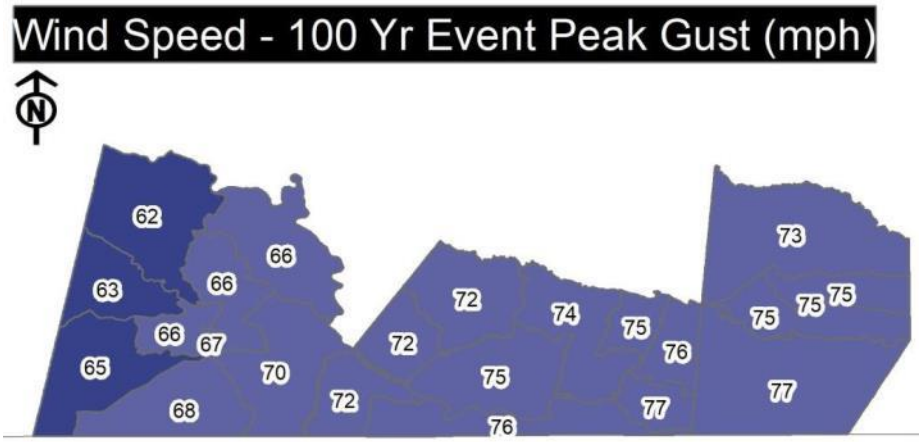
Shelter

County	# of Displaced People	# of People Needing Short Term Shelter
Brunswick	0	0
Halifax	0	0
Mecklenburg	0	0
Total	**0**	**0**

Direct Economic Annualized Losses for Buildings (Values are in dollars.)

Capital Stock Loss				Income Losses				
Building Loss	Contents Loss	Inventory Loss	Building Loss Ratio %	Relocation Loss	Capital Related Loss	Wages Losses	Rental Income Loss	Total Loss
$5,130,000	$2,490,000	$0	0.06%	$1,000	$0	$0	$1,000	$7,622,000

Hurricane Scenario 4: 100-Year Historical Hurricane Scenario



Building Damage Count by General Occupancy

	None	Minor	Moderate	Severe	Destruction	Total
Agriculture	300	1	0	0	0	301
Commercial	2,033	11	0	0	0	2,045
Education	92	0	0	0	0	92
Government	100	0	0	0	0	100
Industrial	609	4	0	0	0	613
Religion	408	2	0	0	0	410
Residential	42,994	149	3	0	0	43,146
Total	**46,536**	**167**	**3**	**0**	**0**	**46,707**

Building Damage Count by General Building Type

	None	Minor	Moderate	Severe	Destruction	Total
Concrete	344	4	0	0	0	348
MFH	10,513	1	1	0	0	10,515
Masonry	9,145	51	1	0	0	9,197
Steel	1,537	10	0	0	0	1,547
Wood	25,008	90	1	0	0	25,099
Total	**46,547**	**156**	**3**	**0**	**0**	**46,706**

Essential Facilities

The 100-year hurricane event simulated by Hazus predicts that the following facilities will remain 100% functional: emergency response, hospitals, schools, police stations and fire stations.

Debris (All values are in tons.)

	Brick, Wood, Other	Reinf. Concrete and Steel	Eligible Tree Debris	Other Tree Debris	Total (tons)
Brunswick	150	0	3,996	58,027	62,173
Halifax	72	0	2,311	31,923	34,306
Mecklenburg	367	0	6,336	71,149	77,852
Total	**589**	**0**	**12,643**	**161,099**	**174,331**

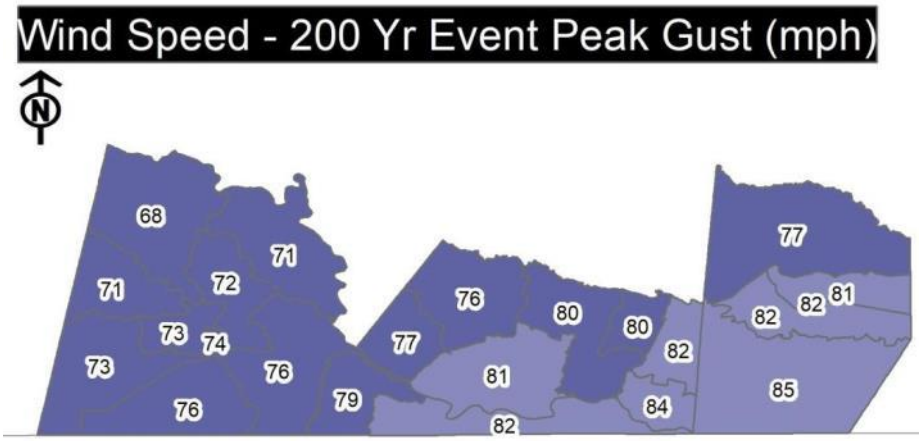
Shelter

County	# of Displaced People	# of People Needing Short Term Shelter
Brunswick	0	0
Halifax	0	0
Mecklenburg	0	0
Total	**0**	**0**

Direct Economic Annualized Losses for Buildings (Values are in dollars.)

Capital Stock Loss				Income Losses				
Building Loss	Contents Loss	Inventory Loss	Building Loss Ratio %	Relocation Loss	Capital Related Loss	Wages Losses	Rental Income Loss	Total Loss
$13,060,000	$5,608,000	$0	0.15%	$75,000	$0	$0	$18,000	$18,760,000

Hurricane Scenario 5: 200-Year Historical Hurricane Scenario



Building Damage Count by General Occupancy

	None	Minor	Moderate	Severe	Destruction	Total
Agriculture	297	3	0	0	0	300
Commercial	2,022	22	1	0	0	2,045
Education	92	0	0	0	0	92
Government	99	1	0	0	0	100
Industrial	605	8	0	0	0	613
Religion	406	4	0	0	0	410
Residential	42,649	483	14	0	0	43,146
Total	**46,170**	**521**	**15**	**0**	**0**	**43,706**

Building Damage Count by General Building Type

	None	Minor	Moderate	Severe	Destruction	Total
Concrete	343	5	0	0	0	348
MFH	10,504	7	2	0	0	10,513
Masonry	9,058	132	7	0	0	9,197
Steel	1,528	18	1	0	0	1,547
Wood	24,782	310	7	0	0	25,099
Total	**46,215**	**472**	**17**	**0**	**0**	**46,704**

Essential Facilities

The 200-year hurricane event simulated by Hazus predicts that the following facilities will remain 100% functional: emergency response, hospitals, schools, police stations and fire stations.

Debris (All values are in tons.)

	Brick, Wood, Other	Reinf. Concrete and Steel	Eligible Tree Debris	Other Tree Debris	Total (tons)
Brunswick	398	0	8,570	122,356	131,324
Halifax	283	0	5,242	70,804	76,329
Mecklenburg	771	0	11,894	129,737	142,402
Total	**1,452**	**0**	**25,706**	**322,897**	**350,055**

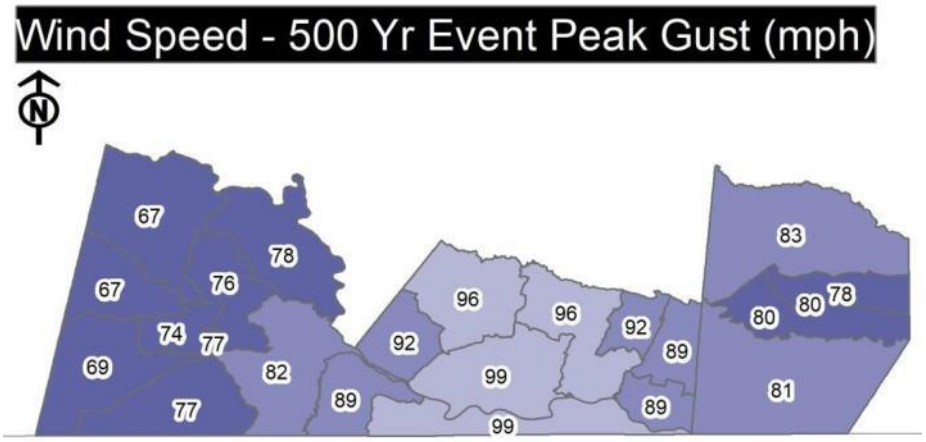
Shelter

County	# of Displaced People	# of People Needing Short Term Shelter
Brunswick	0	0
Halifax	0	0
Mecklenburg	0	0
Total	**0**	**0**

Direct Economic Annualized Losses for Buildings (Values are in dollars.)

Capital Stock Loss				Income Losses				
Building Loss	Contents Loss	Inventory Loss	Building Loss Ratio %	Relocation Loss	Capital Related Loss	Wages Losses	Rental Income Loss	Total Loss
$24,783,000	$10,139,000	$5,000	0.28%	$543,000	$0	$0	$166,000	$35,637,000

Hurricane Scenario 6: 500-Year Historical Hurricane Scenario



Building Damage Count by General Occupancy

	None	Minor	Moderate	Severe	Destruction	Total
Agriculture	288	11	2	1	0	302
Commercial	1,968	65	10	1	0	2,044
Education	90	2	0	0	0	92
Government	97	2	0	0	0	99
Industrial	589	20	3	1	0	613
Religion	396	13	1	0	0	410
Residential	41,166	1,807	161	2	10	43,146
Total	**44,594**	**1,920**	**177**	**5**	**10**	**46,706**

Building Damage Count by General Building Type

	None	Minor	Moderate	Severe	Destruction	Total
Concrete	332	14	2	0	0	348
MFH	10,413	70	22	0	8	10,513
Masonry	8,707	435	52	4	1	9,199
Steel	1,491	47	8	1	0	1,547
Wood	23,800	1,212	82	1	2	25,097
Total	**44,743**	**1,778**	**166**	**6**	**11**	**46,704**

Essential Facilities

The 500-year hurricane event simulated by Hazus predicts that the following facilities will remain 100% functional: emergency response, hospitals, schools, police stations and fire stations.

Debris (All values are in tons.)

	Brick, Wood, Other	Reinf. Concrete and Steel	Eligible Tree Debris	Other Tree Debris	Total (tons)
Brunswick	315	0	7,199	105,083	112,597
Halifax	403	0	7,126	97,653	105,182
Mecklenburg	3,484	15	35,311	417,489	456,299
Total	**4,202**	**15**	**49,637**	**620,224**	**674,078**

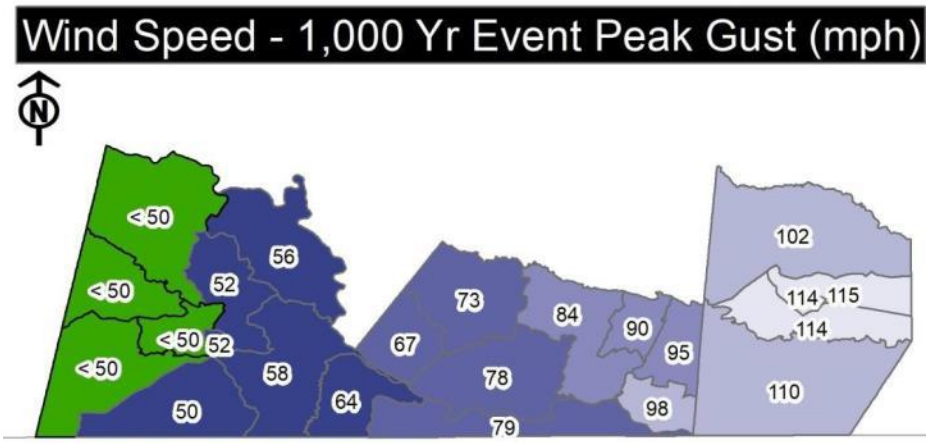
Shelter

County	# of Displaced People	# of People Needing Short Term Shelter
Brunswick	0	0
Halifax	0	0
Mecklenburg	18	15
Total	**18**	**15**

Direct Economic Annualized Losses for Buildings (Values are in dollars.)

Capital Stock Loss				Income Losses				
Building Loss	Contents Loss	Inventory Loss	Building Loss Ratio %	Relocation Loss	Capital Related Loss	Wages Losses	Rental Income Loss	Total Loss
$47,807,000	$20,192,000	$58,000	0.53%	$1,794,000	$181,000	$415,000	$593,000	$71,040,000

Hurricane Scenario 6: 1,000-Year Historical Hurricane Scenario



Building Damage Count by General Occupancy

	None	Minor	Moderate	Severe	Destruction	Total
Agriculture	280	14	5	2	0	301
Commercial	1,912	92	34	7	0	2,045
Education	85	4	2	0	0	91
Government	91	6	3	1	0	101
Industrial	566	29	13	5	1	614
Religion	380	23	6	1	0	410
Residential	39,791	2,634	599	46	76	43,146
Total	**43,105**	**2,802**	**662**	**62**	**77**	**46,708**

Building Damage Count by General Building Type

	None	Minor	Moderate	Severe	Destruction	Total
Concrete	320	18	9	1	0	348
MFH	10,119	208	130	7	50	10,514
Masonry	8,414	587	157	30	9	9,197
Steel	1,442	68	31	6	0	1,547
Wood	23,003	1,733	308	27	27	25,098
Total	**43,298**	**2,614**	**635**	**71**	**86**	**46,704**

Essential Facilities

The 1,000-year hurricane event simulated by Hazus predicts that the following facilities will remain 100% functional: emergency response, hospitals, police stations and fire stations. The schools in Brunswick County are projected to not be functional.

Debris (All values are in tons.)

	Brick, Wood, Other	Reinf. Concrete and Steel	Eligible Tree Debris	Other Tree Debris	Total (tons)
Brunswick	7,291	164	38,863	555,827	602,145
Halifax	0	0	666	9,744	10,410
Mecklenburg	1,623	4	15,262	160,177	177,066
Total	**8,914**	**168**	**54,792**	**725,747**	**789,621**

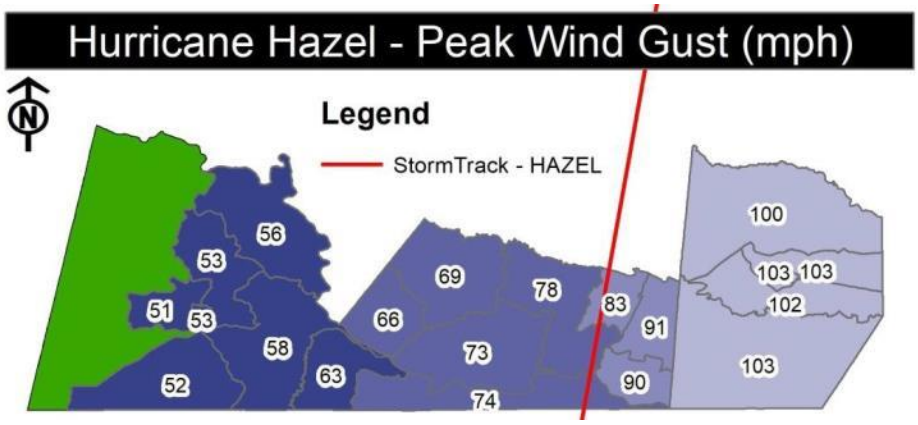
Shelter

County	# of Displaced People	# of People Needing Short Term Shelter
Brunswick	70	54
Halifax	0	0
Mecklenburg	7	5
Total	**77**	**59**

Direct Economic Annualized Losses for Buildings (Values are in dollars.)

Capital Stock Loss				Income Losses				
Building Loss	Contents Loss	Inventory Loss	Building Loss Ratio %	Relocation Loss	Capital Related Loss	Wages Losses	Rental Income Loss	Total Loss
$73,143,000	$29,463,000$	530,000	0.81%	$7,406,000	$340,000	$1,335,000	$2,334,000	$114,550,000

Hurricane Scenario 7: Hurricane Hazel (1954)



Building Damage Count by General Occupancy

	None	Minor	Moderate	Severe	Destruction	Total
Agriculture	289	9	2	1	0	301
Commercial	1,983	50	11	1	0	2,045
Education	90	2	0	0	0	92
Government	95	4	1	0	0	100
Industrial	589	18	4	2	0	613
Religion	396	13	2	0	0	411
Residential	41,393	1,529	202	6	16	43,146
Total	**44,835**	**1,625**	**222**	**10**	**16**	**46,708**

Building Damage Count by General Building Type

	None	Minor	Moderate	Severe	Destruction	Total
Concrete	334	11	3	0	0	348
MFH	10,370	91	39	1	14	10,515
Masonry	8,775	355	58	8	2	9,198
Steel	1,498	39	9	1	0	1,547
Wood	23,983	1,003	105	4	4	25,099
Total	**44,960**	**1,499**	**214**	**14**	**20**	**46,707**

Essential Facilities

The Hazel hurricane event simulated by Hazus predicts that the following facilities will remain 100% functional: emergency response, hospitals, police stations, fire stations and schools in Mecklenburg and Halifax counties. Brunswick County schools are projected to be 36.3% functional.

Debris (All values are in tons.)

	Brick, Wood, Other	Reinf. Concrete and Steel	Eligible Tree Debris	Other Tree Debris	Total (tons)
Brunswick	2,996	25	23,249	337,166	363,436
Halifax	0	0	666	9,744	10,410
Mecklenburg	782	0	10,342	105,068	116,192
Total	**3,778**	**25**	**34,257**	**451,978**	**490,038**

Shelter

County	# of Displaced People	# of People Needing Short Term Shelter
Brunswick	17	13
Halifax	0	0
Mecklenburg	1	1
Total	**18**	**14**

Direct Economic Annualized Losses for Buildings (Values are in dollars.)

Capital Stock Loss				Income Losses				
Building Loss	Contents Loss	Inventory Loss	Building Loss Ratio %	Relocation Loss	Capital Related Loss	Wages Losses	Rental Income Loss	Total Loss
$35,639,000	$13,533,000	$139,000	0.40%	$1,965,000	$153,000	$578,000	$609,000	$52,617,000

Public Survey

A public survey was developed and conducted as part of the planning process for the Hazard Mitigation Plan update. The intent of the survey was to gather public input and opinions as they relate to the various hazards that can impact the region. The survey was limited to ten questions so that it would only take a few minutes for participates to complete. While drafting potential survey questions, the sample questions found in FEMA's Local Mitigation Planning Handbook were consulted, as well as the 2018 Central Shenandoah Natural Hazard Survey created by the Central Shenandoah Planning District Commission. All proposed survey questions were reviewed by the Hazard Mitigation Steering Committee at their August 5, 2019 meeting.

The survey was created and conducted online through SurveyMonkey.com. A link to the survey was provided to each jurisdiction through email, as well as the request that they share it on any online platform that they may have. It was also noted that the survey would be made available in other formats as well (hard copies) should anyone request it.

The known locations and methods used to share the survey online include, but may not be limited to:

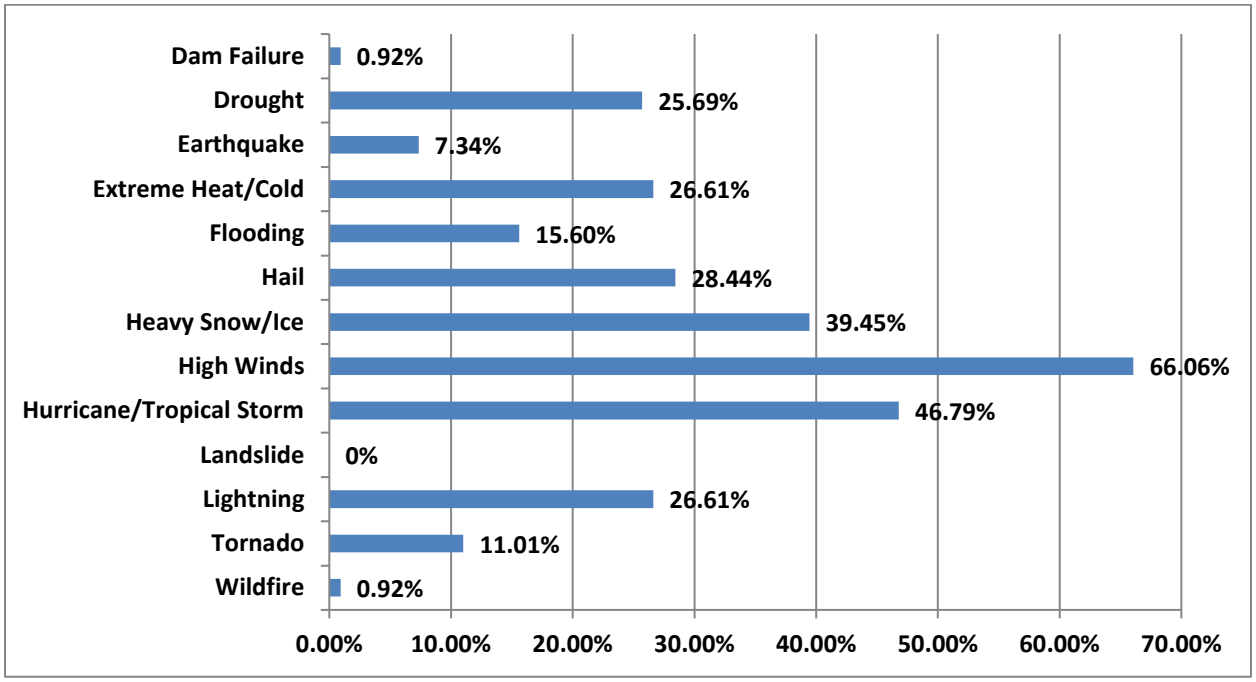
- Southside Planning District Commission – Website, Email, and Facebook
- Town of Halifax – Email
- Town of South Hill – Facebook
- Town of Clarksville – Website
- Clarksville Lake Country Chamber of Commerce – Facebook
- Virgilina Volunteer Fire Department – Facebook
- Chase City Chamber of Commerce - Facebook

The survey was made available from August 30th, 2019 through September 30th, 2019. A total of 112 people from 11 different jurisdictions participated.

The results of the survey will be addressed in this section on the regional level. Survey results for specific jurisdictions will be included in the Jurisdiction Executive Summaries in Section 8 of this Plan.

Question 1

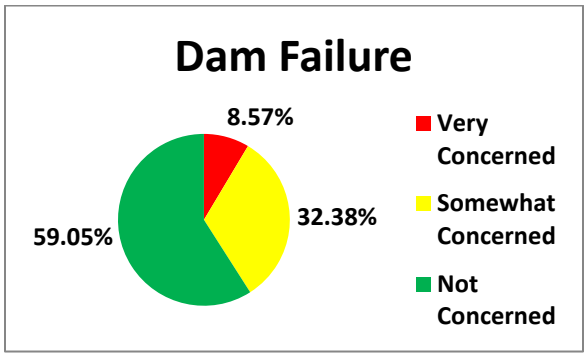
Which of the following hazards have directly impacted you, your household, or your property?



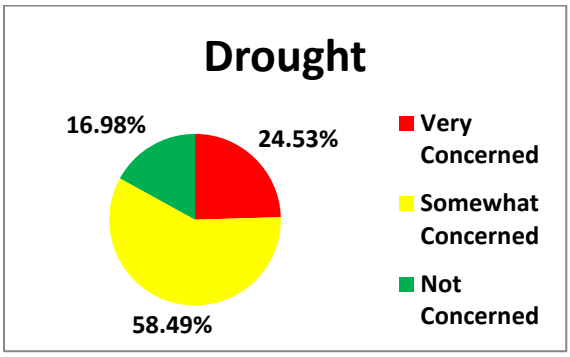
Responses: 109 of 112

Question 2

How concerned are you about the following hazards affecting our region?



Responses: 105 of 112



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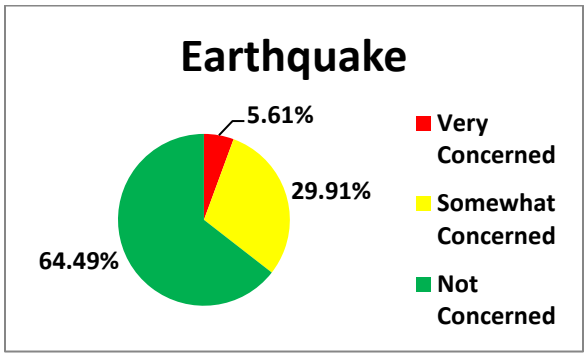

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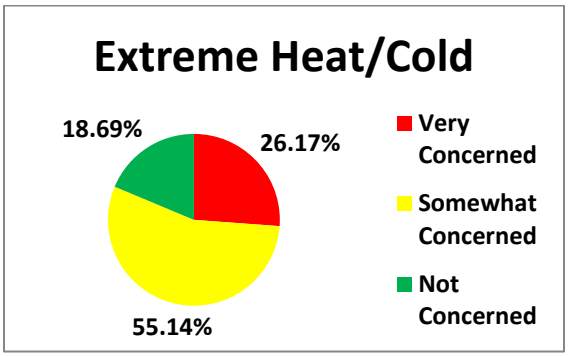

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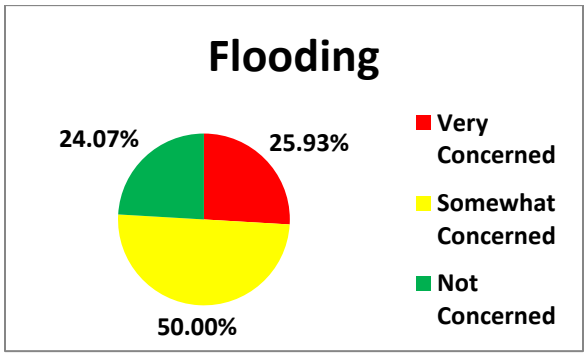

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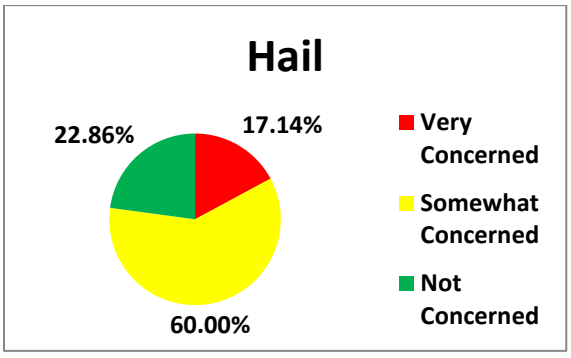

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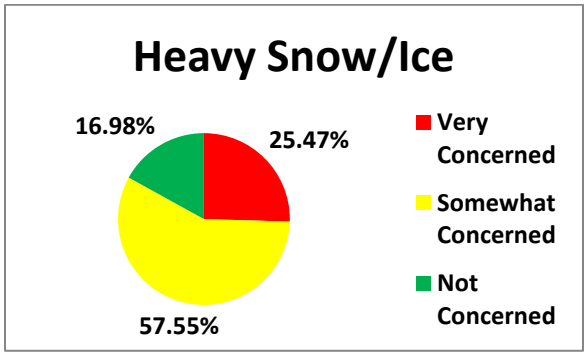

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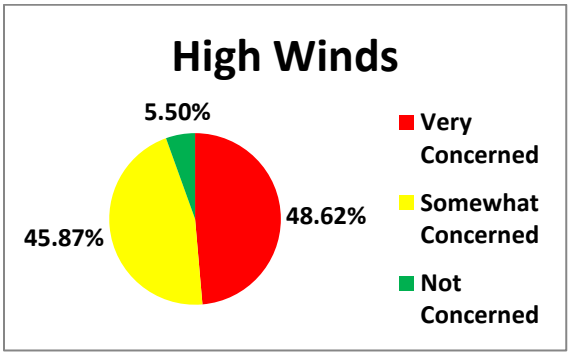

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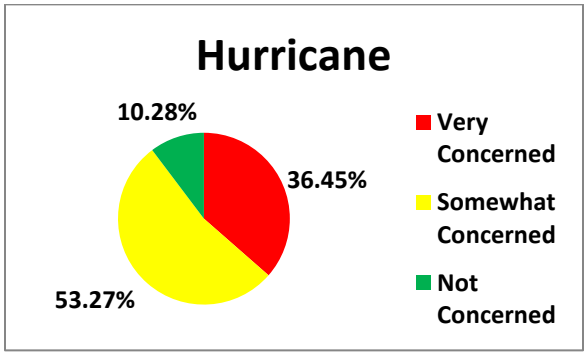

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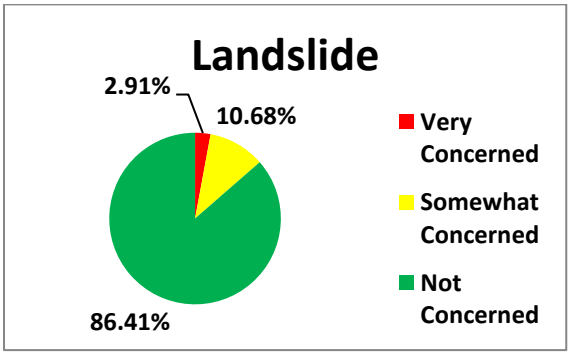

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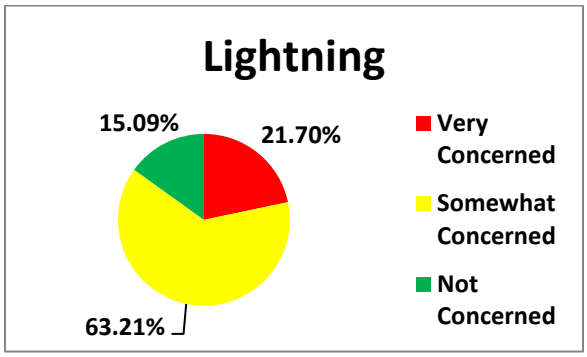

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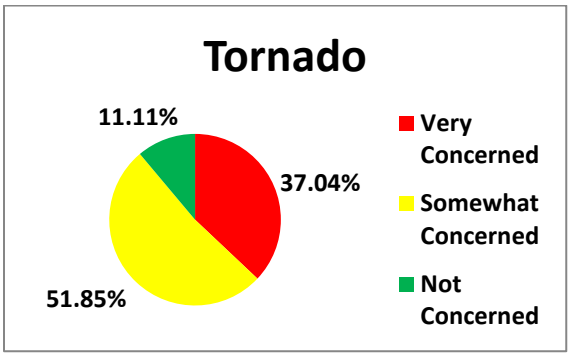

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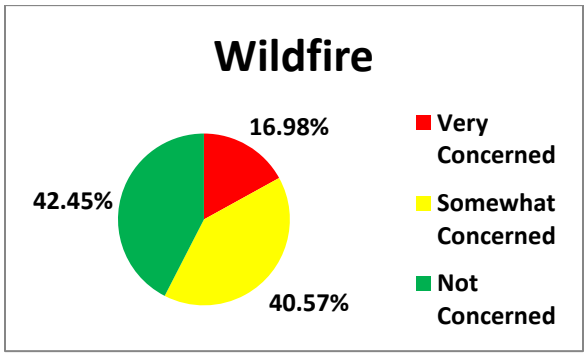
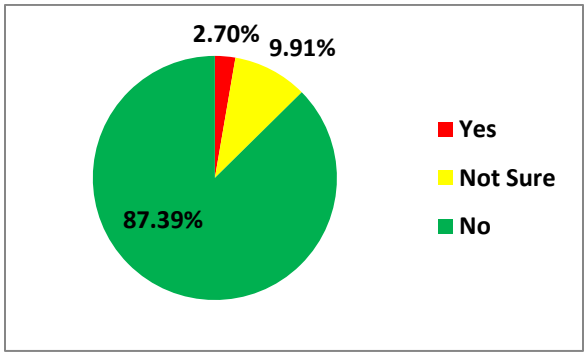


Responses: 106 of 112

Question 3

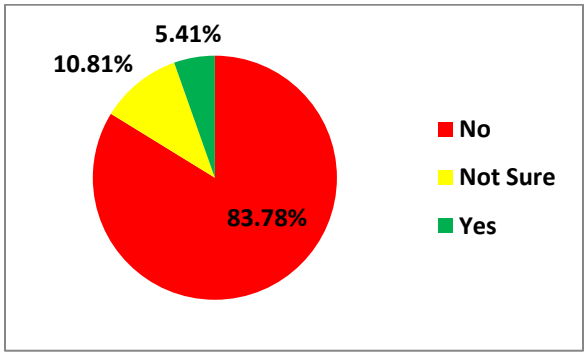
Is your home located in a floodplain?



Responses: 111 of 112

Question 4

Does your household have flood insurance?

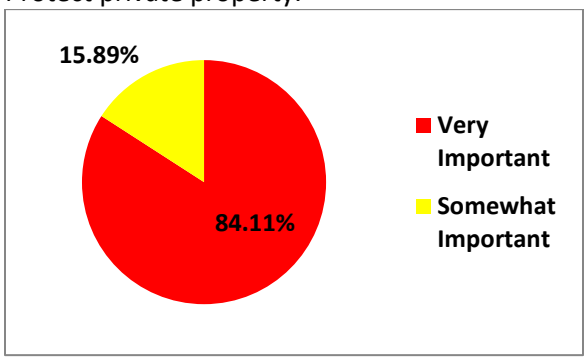


Responses: 111 of 112

Question 5

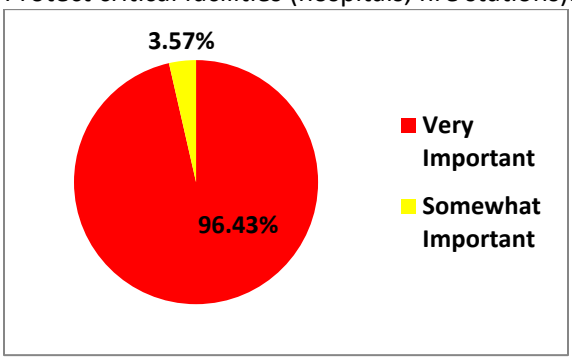
The following statements will help determine citizen priorities regarding planning for natural hazards. Please tell us how important each one is to you.

Protect private property.



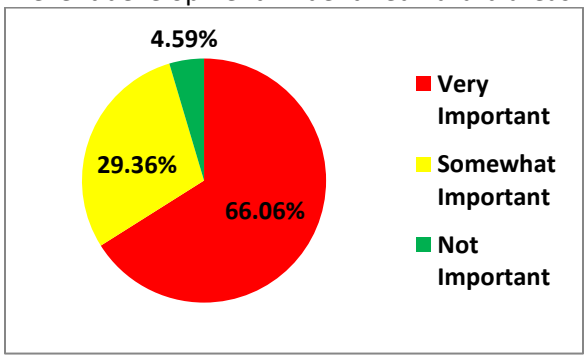
Responses: 107 of 112

Protect critical facilities (hospitals, fire stations).



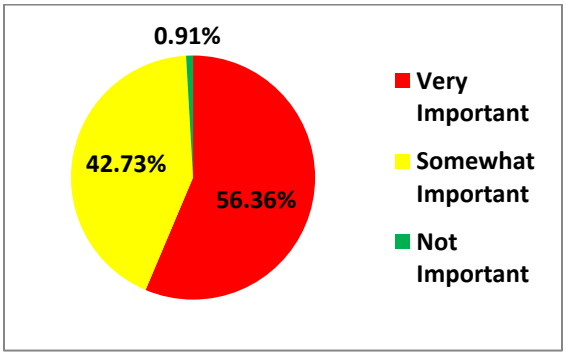
Responses: 112 of 112

Prevent development in identified hazard areas.



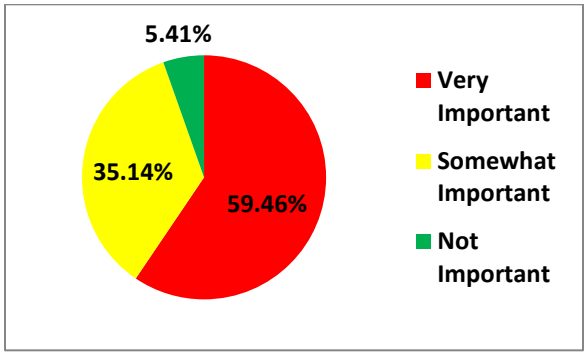
Responses: 109 of 112

Enhance the function of natural areas.



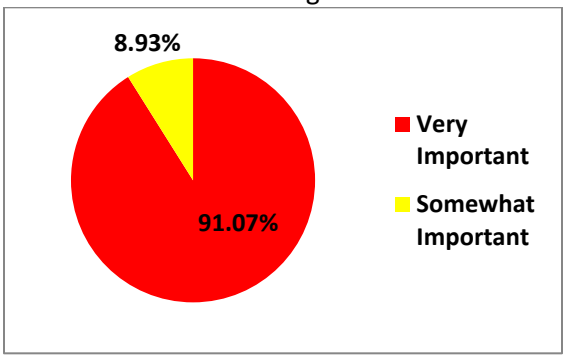
Responses: 110 of 112

Protect historical and cultural landmarks.



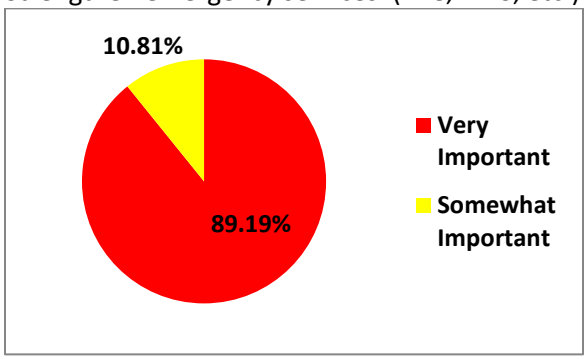
Responses: 111 of 112

Protect and reduce damage to utilities.



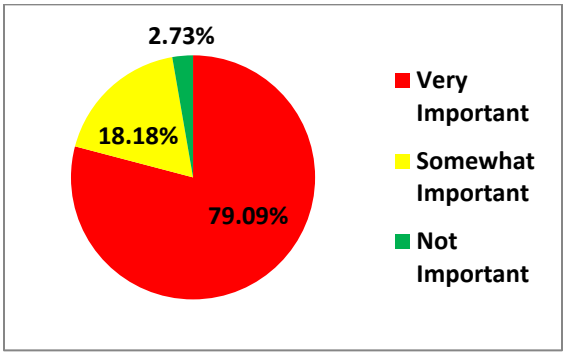
Responses: 112 of 112

Strengthen emergency services. (Fire, EMS, etc.)



Responses: 111 of 112

Promote cooperation among public agencies, citizens, non-profit organizations, and businesses.

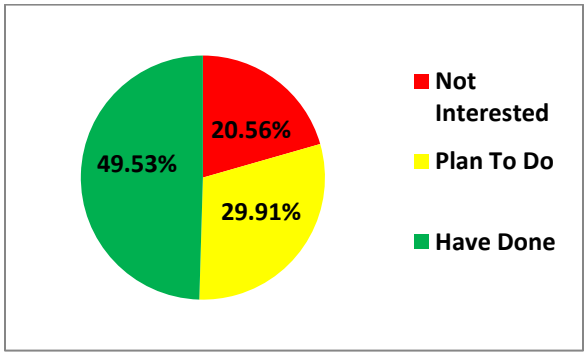


Responses: 110 of 112

Question 6

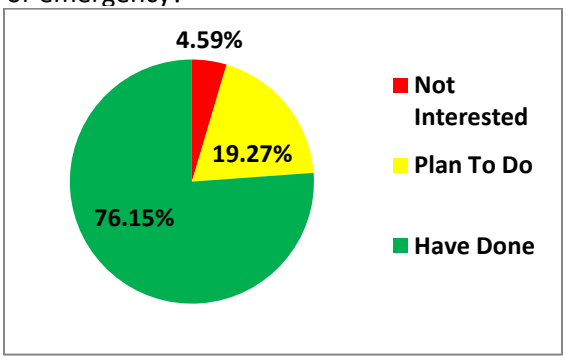
Have you or someone in your household:

Attended meetings or received information on natural disasters or emergency preparedness?



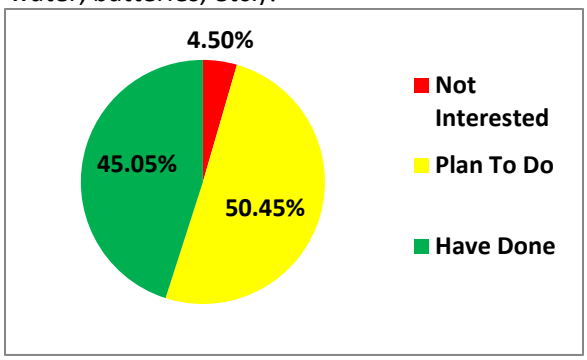
Responses: 107 of 112

Talked with members in your household about what to do in case of a natural disaster or emergency?



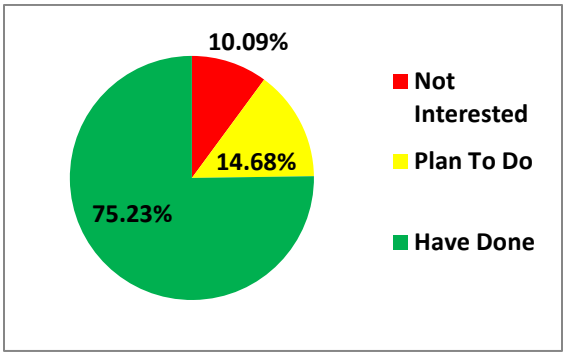
Responses: 109 of 112

Prepared a "Disaster Supply Kit" (stored food, water, batteries, etc.)?



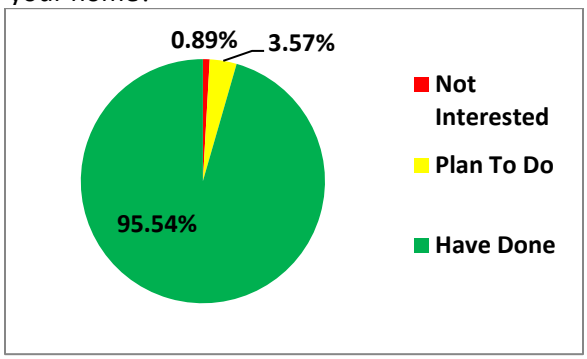
Responses: 111 of 112

Has anyone in your household been trained in First Aid or CPR?



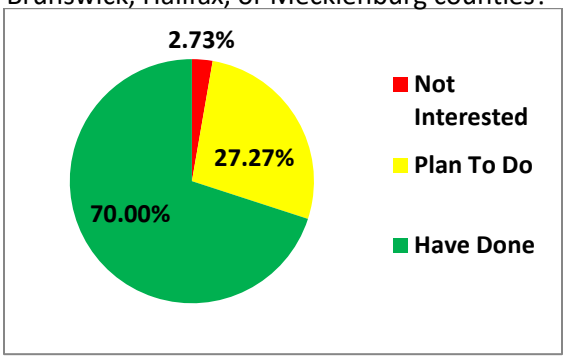
Responses: 109 of 112

Installed smoke detectors on each level of your home?



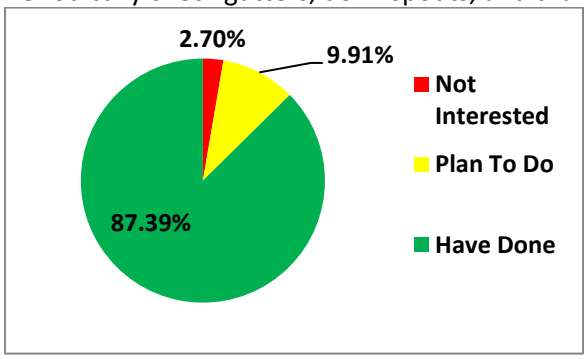
Responses: 112 of 112

Signed up to receive emergency alerts from Brunswick, Halifax, or Mecklenburg counties?



Responses: 110 of 112

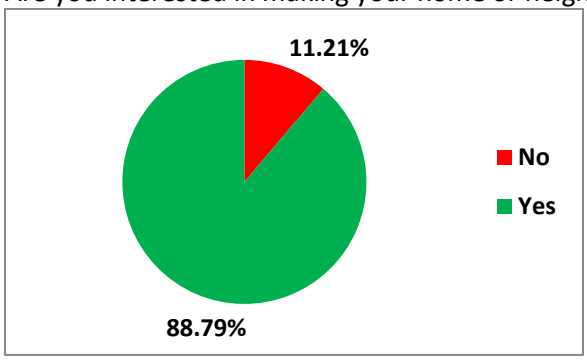
Periodically check gutters, downspouts, and drain pipes on your property?



Responses: 111 of 112

Question 7

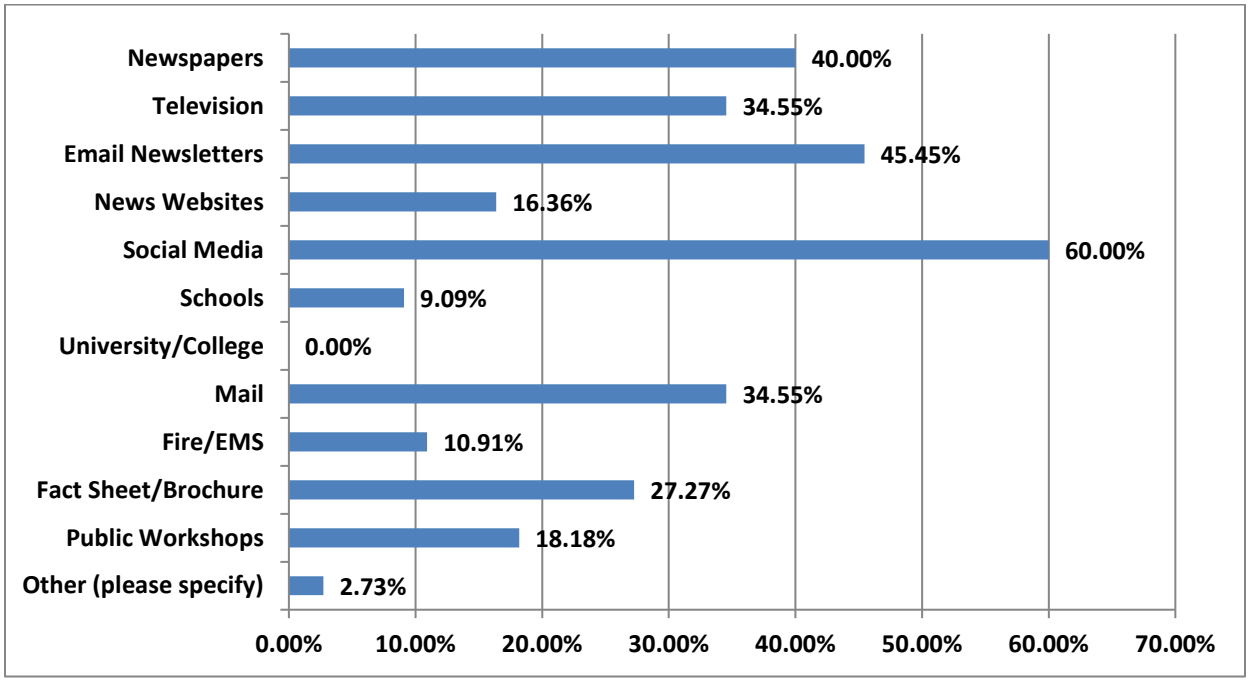
Are you interested in making your home or neighborhood more resistant to natural hazards?



Responses: 107 of 112

Question 8

What is the most effective way for you to receive information about how to make your household and home safer from natural disasters? (Select up to three)

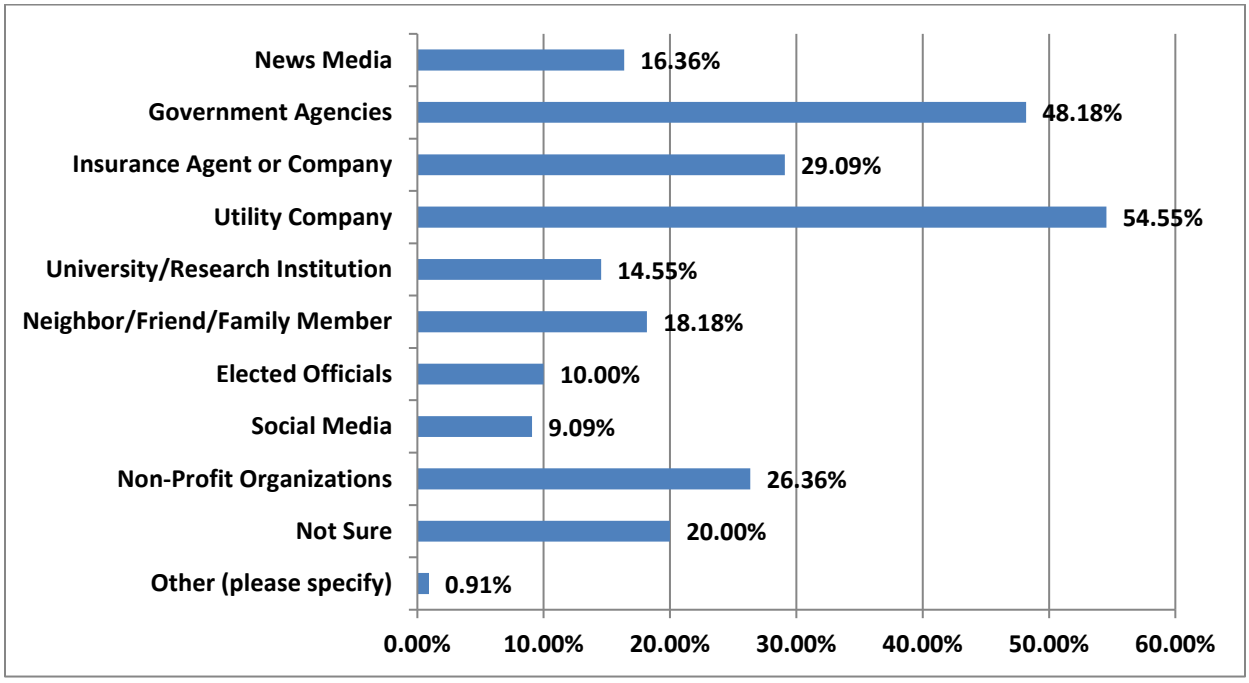


Responses: 110 of 112

*Other answers included: house and cell phone warnings, direct information from FEMA sites and publications, and text.

Question 9

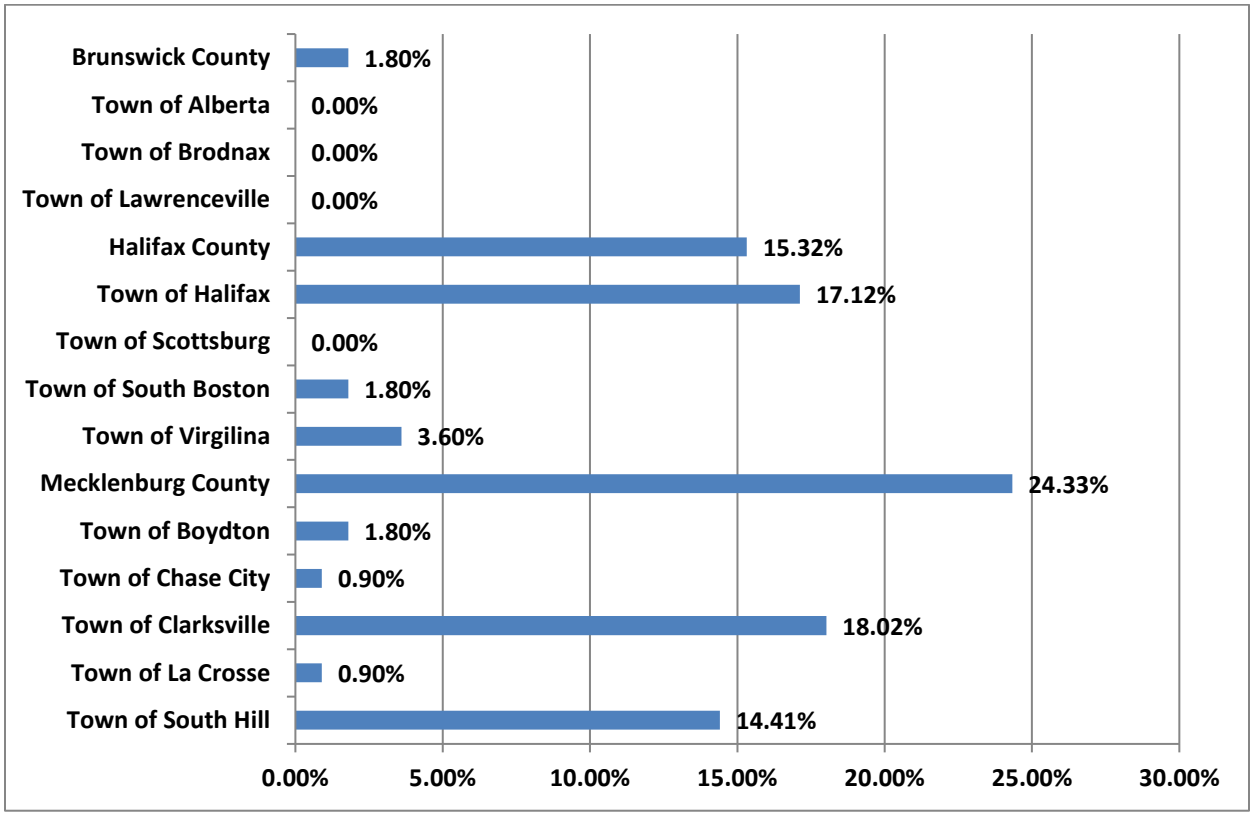
Whom would you most trust to provide you with information about how to make your household and home safer from natural hazards? (Select up to three)



Responses: 110 of 112

Question 10

In what locality do you live?



Responses: 111 of 112

Data References

Central Shenandoah Planning District Commission. *2018 Central Shenandoah Natural Hazard Survey*. 2018.

FEMA. *Local Mitigation Planning Handbook*. 2013.

Survey Monkey. 2019.

Section

6

Capability Assessment

In order to gain a better understanding of what each jurisdiction's capabilities are as it relates to implementing mitigation actions, a capability assessment was conducted. The assessment includes an inventory of existing plans, ordinances, staff, funding and other programs. Careful examination of local capabilities will help identify any existing gaps, shortfalls, or other weaknesses with on-going governmental activities and how they might be addressed through mitigation actions. It must be noted that the assessment will also highlight the positive measures already in place and being implemented by the local jurisdiction. As each jurisdiction is unique, so too are its capabilities. The types of capabilities to be inventoried and reviewed are broken into four sections: Administrative and Technical, Planning and Regulatory, Financial, and Education and Outreach.

In order to collect information from each jurisdiction in a consistent manner, capability assessment worksheets were created. The worksheets were the product of reviewing information and responses from the 2011 Natural Hazard Mitigation Plan, suggestions found in FEMA's Local Mitigation Planning Handbook, and feedback from VDEM staff. They were distributed to each jurisdiction within the Southside Planning District for completion.

Capability Assessment Findings

The findings of the capability assessment are summarized herein. They provide valuable insight into each jurisdictions capabilities and all information is based upon the input by relevant local government officials.

Administrative and Technical

The ability of a local government to develop and implement mitigation actions, be they projects, policies, or programs, is directly tied to its ability to direct staff time and resources for that purpose. Administrative and Technical capabilities are evaluated by determining how mitigation related activities are assigned to local departments and if there are adequate personnel to complete these activities. The degree of intergovernmental coordination among various departments will also affect administrative capabilities.

The Southside Planning District is comprised of three counties and twelve towns. Each county (Brunswick, Halifax and Mecklenburg) operates under a Board of Supervisors – County Administrator system. This form of government is comprised of an elected Board of Supervisors who appoints a County Administrator to oversee the day-to-day operations of the county. Each county has additional departments and boards that are responsible for various functions of the county government.

Each of the twelve towns has a Mayor and Town Council that are elected, with several having a Town Manager to oversee day-to-day operations of the town. They also generally contain additional departments and boards that are responsible for various functions of the town government.

	Brunswick County	Town of Alberta	Town of Brodnax	Town of Lawrenceville	Halifax County	Town of Halifax	Town of Scottsburg	Town of South Boston	Town of Virgilina	Mecklenburg County	Town of Boydton	Town of Chase City	Town of Clarksville	Town of La Crosse	Town of South Hill
Administration															
Planning Commission	Y		Y	Y	Y	Y		Y	N	Y		Y	Y	Y	Y
Mitigation Planning Committee	N		N	N	N	N		N	N	N		N	N	N	N
Maintenance Programs	N		N	N	Y	N		Y	N	N		Y	Y	N	Y
Mutual Aid Agreements	Y		Y	N		Y		N	N	Y		Y	Y	Y	Y
Staff															
Building Official	Y		N	N	Y	N		N	N	Y		N	N	N	Y
Floodplain Administrator	Y		N	Y	Y	Y		Y	N	Y		Y	Y	N	N
Emergency Manager	Y		N	N	Y	N		Y	Y	Y		Y	N	N	N
Town/County Planner	Y		N	N	Y	Y		Y	N	N		N	N	N	N
Zoning Administrator	Y		N	Y	Y	Y		Y	N	Y		Y	Y	N	Y
GIS Coordinator	Y		N	N	N	N		Y	N	Y		N	N	N	N
Technical															
Warning Systems/Services	Y		N	Y	Y	Y		Y	Y	Y			N	Y	Y
Hazard Data and Information	Y		N	Y	Y	Y		Y	N	Y			Y	N	Y
Grant Writing	Y		N	N	Y	Y		Y	N	Y		Y	N	N	Y

Planning and Regulatory

Planning and regulatory capability is based on the implementation of plans, ordinances, and programs that demonstrate a jurisdictions commitment to guiding and managing growth, development, and redevelopment in a responsible manner, while maintaining the general welfare of the community. It includes emergency operations and mitigation planning, comprehensive land use planning, transportation planning, enforcement of zoning and subdivision ordinances, and building codes that regulate how land is developed and structures are built, as well as protecting environmental, historic, and cultural resources in the community. Although conflicts can arise, these planning initiatives generally present significant opportunities to integrate hazard mitigation principles and practices into the local decision making process.

This portion of the capability assessment is designed to provide a general overview of the key planning and regulatory tools or programs in place or under development, along with their potential effect on loss reduction. This information helps identify opportunities to address existing planning and programming gaps, weaknesses, or conflicts with other initiatives, in addition to integrating the implementation of the Plan with existing planning mechanisms where appropriate.

	Brunswick County	Town of Alberta	Town of Brodnax	Town of Lawrenceville	Halifax County	Town of Halifax	Town of Scottsburg	Town of South Boston	Town of Virgilina	Mecklenburg County	Town of Boydton	Town of Chase City	Town of Clarksville	Town of La Crosse	Town of South Hill
Plans															
Comprehensive Plan	Y		N	Y	Y	Y		Y	N	Y		Y	Y	Y	Y
Capital Improvements Plan	N		N	N	Y	N		Y	N			N	Y	N	Y
Economic Development Plan	N		N	Y	Y			N	N	Y		N	N	N	N
Emergency Operations Plan	Y		N	Y	Y	N		Y	N	Y			Y	N	Y
Continuity of Operations Plan	N		N	N	N	N		N	N	N		N	N	N	Y
Transportation Plan	N		N	Y	Y	Y		Y	N	Y		N	N	N	N
Stormwater Management Plan	N		N	Y	N	N		Y	N	N		N	N	N	Y
Hazardous Materials Plan	N		N	N	N	N		N	N	N		N	Y	N	N
Debris Management Plan	N		N	N	N	N		N	N	N		N	N	N	N
Building Code, Permitting, and Inspections															
Building Code	Y		N	Y	Y	Y		Y	N	Y		Y	Y	Y	Y
Fire Department ISO Rating	Y			Y				Y	Y				Y	Y	Y
Site Plan Review Requirements	Y		N	Y		Y		Y	N			N	Y	N	Y
Land Use Planning and Ordinances															
Zoning Ordinance	Y		Y	Y	Y	Y		Y	N	Y		Y	Y	Y	Y
Subdivision Ordinance	Y		N	N	Y	Y		Y	N	Y		N	Y	N	Y
Floodplain Ordinance	Y		N	Y	Y	Y		Y	N	Y			Y	N	N
Natural Hazard Specific Ordinances	N		N	N				N	N	N			N	N	Y
Flood Insurance Rate Maps	Y		N	Y	Y	Y		Y	N	Y			Y	N	Y

Financial

The region's counties and towns receive most of their revenue through State and local taxes, local services, and through restricted intergovernmental contributions (Federal and State pass through dollars). The required match for hazard mitigation grant programs may prove difficult for some localities depending upon the cost of the project.

	Brunswick County	Town of Alberta	Town of Brodnax	Town of Lawrenceville	Halifax County	Town of Halifax	Town of Scottsburg	Town of South Boston	Town of Virgilina	Mecklenburg County	Town of Boydton	Town of Chase City	Town of Clarksville	Town of La Crosse	Town of South Hill
Funding Resource															
Capital Improvements Plan	N		N	N		N		Y	N			Y	Y	Y	Y
Authority to Levy Taxes for Specific Purposes	Y		Y	N	N	Y		M	Y			N	Y	Y	Y
Utility Fees	N		Y	Y	N	Y		N	Y			Y	Y	Y	Y
Impact Fees for New Development	N		N	N	N	N		M	N			N	Y	Y	N
Stormwater Utility Fee	N		N	N		N		N	N			N	N	Y	N
Incur Debt Through General Obligation Bonds	Y		Y	Y	Y	Y		Y	N				Y	Y	Y
Community Development Block	Y		Y	Y	Y	Y		Y	N			Y	Y	Y	Y

Grant															

Education and Outreach

Education and outreach programs may already be in place that could be utilized to help implement mitigation activities and communicate hazard-related information.

	Brunswick County	Town of Alberta	Town of Brodnax	Town of Lawrenceville	Halifax County	Town of Halifax	Town of Scottsburg	Town of South Boston	Town of Virgilina	Mecklenburg County	Town of Boydton	Town of Chase City	Town of Clarksville	Town of La Crosse	Town of South Hill
Program/Organization															
Local Citizen group/non-profit focused on environmental protection, emergency preparedness, etc.	Y		N	N	Y	Y		Y	N	N		N	Y	N	Y
Public education program	Y		N	Y	N	Y		Y	Y	Y		N	Y	N	Y
Natural disaster or safety related school program	Y		N	N	N			Y	N	N			Y	N	Y
StormReady certification	N		N	N	N	N		N	N	N		N	N	N	N
Firewise Communities certification	N		N	N	N	N		N	N	N		N	N	N	N

Section

7

Regional Mitigation Goals & Strategies

In reviewing and formulating the various mitigation goals and strategies, a wide range of activities were considered in order to lessen the overall vulnerability of the area to the effects of natural hazards. The Hazard Mitigation Planning Team participated in the review of existing regional goals and strategies and provided guidance on their update.

Regional Mitigation Goals

The Southside Planning District's mitigation goals were originally crafted during the planning process of the 2006 version of the Hazard Mitigation Plan. After review and discussion by the Planning Team they will continue to remain the same. Local government officials should consider the following goals before making community development decisions for their respective jurisdictions.

Goal 1 Ensure hazard awareness and risk reduction principles are institutionalized into each local jurisdiction's daily activities, processes, and functions by incorporating them into policy documents and initiatives.

Goal 2 Reduce natural hazard losses by studying, funding, and implementing non-physical mitigation measures including laws, education, training, and public outreach.

Because mitigation is an investment to reduce future damages, it is important to select measures for which the reduced damages over the life of the measures are likely to be greater than the project cost. For structural measures, the level of cost effectiveness is primarily based on the likelihood of damages occurring in the future, the severity of the damages when they occur, and the level of effectiveness of the selected measure. For those measures that do not result in quantifiable reduction of damages, such as public education and outreach, the relationship of the probable future benefits and the cost of each measure was considered when developing actions.

Mitigation Action Overview

A. Category: Identify mitigation technique.

Prevention

Activities intended to prevent potential hazard problems from getting worse, typically administered through governmental programs or regulatory actions which influence land development or community development. Examples include: planning and zoning, hazard mapping, floodplain regulations, stormwater management, drainage system maintenance, and capital improvements program.

Property Protection
Activities that enable existing structures to withstand hazard events. Examples include: acquisition, relocation, building elevation, critical facilities protection, retrofitting, insurance, and safety room construction.

Natural Resource Protection
Activities that reduce the impact of hazards by preserving or restoring the function of natural systems. Examples include: floodplain protection, watershed management, riparian buffers, forest and vegetation management, erosion and sediment control, wetland preservation and restoration, habitat preservation, and slope stabilization.

Structural Projects
Activities intended to lessen the impact of hazards by modifying the environment or hardening structures, usually designed by engineers and managed or maintained by public works staff. Examples include: reservoirs, levees, dikes, floodwalls, detention and retention basins, channel modification, storm sewer construction.

Emergency Services
Activities to minimize the impact of hazards on property and people through actions taken immediately prior to, during, or in response to a hazard event. Examples include: warning systems, search and rescue, evacuation planning and management, and flood fighting techniques.

Public Education and Awareness
Activities designed to advise residents, business owners, property investors, and visitors of hazards and mitigation techniques used to protect themselves and their property. Examples include: outreach and education, training, speaker series, demonstration events, real estate disclosures, and hazard expositions.

B. Hazard(s) Addressed: List applicable hazards.

C. Priority: Indicate whether the action is a 1) High priority, short-term and immediate reducing of overall risk to life and property; 2) Moderate priority, an action that should be implemented in the near future due to political or community support or ease of implementation; or 3) Low priority, an action that should be implemented over the long-term that may depend on the availability of funds. Prioritization of mitigation actions are based on the following factors;

1. Effect on overall risk to life and property;
2. Ease of implementation;
3. Political and community support;

4. Consideration of the potential economic cost/benefit; and,
5. Funding availability.

D. Estimated Cost: If known, indicate the dollar amount necessary to accomplish the mitigation actions. Cost may be estimated until a final dollar amount can be determined.

E. Funding Method: Indicate how the cost to complete the action will be funded (general fund, contingency/bonds, grants, etc.)

F. Lead Agency/Department Responsible: Identify the local agency, department or organization that is best suited to accomplish this action.

G. Implementation Schedule: Indicate when the action will begin and when the action is expected to be completed, if known.

H. Status Update: Has an action been taken or started? If so, how far along is it? If not, why not? Should the action be removed? If so, why?

Regional Mitigation Actions

Mitigation actions are listed in order of priority.

Mitigation Action 1	**Encourage local media outlets to share emergency warning messages on all their available platforms (radio, social media, webpage, print, etc.) as applicable.**
Category	Emergency Services/Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	County budget – Staff time
Lead Agency/Department Responsible	County Emergency Service Coordinators
Implementation Schedule	Ongoing
Status Update	Ongoing

Mitigation Action 2	**Pursue mitigation projects that will result in protection of public and private property from natural hazards. Eligible projects include, but are not limited to: Acquisition of hazard prone properties, elevation of flood prone structures, minor structural flood control projects, relocation of structures from hazard prone areas, retrofitting of existing buildings and facilities, demolition and reconstruction, infrastructure protection measures, stormwater management, advanced warning systems and hazard gauging systems, targeted hazard education, wastewater and stormwater management improvements, and wildfire mitigation projects.**
Category	Property Protection
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Varies – Project dependent
Potential Funding Sources	Federal/State grants, County budget
Lead Agency/Department Responsible	County Emergency Services, SPDC, or other appropriate agency based upon project
Implementation Schedule	Ongoing
Status Update	Ongoing – Mitigation grants are being pursued and/or explored by several

	jurisdictions

Mitigation Action 3	**Participate and maintain compliance with the NFIP (where applicable), including: 1) floodplain identification and mapping risk, 2) responsible floodplain management, and 3) flood insurance.**
Category	Property Protection/Prevention/Natural Resource Protection
Hazard(s) Addressed	Flooding
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	Federal/State grants, Jurisdictions budgets
Lead Agency/Department Responsible	Planning & Zoning Departments, Local Administration
Implementation Schedule	Ongoing
Status Update	Ongoing

Mitigation Action 4	**Provide feedback to FEMA to have outdated and inaccurate FIRM and DFIRM maps updated.**
Category	Prevention/Property Protection/Natural Resource Protection
Hazard(s) Addressed	Flooding
Priority	High
Estimated Cost	Minimal – Staff time
Potential Funding Sources	Federal/State grants, Jurisdiction budgets
Lead Agency/Department Responsible	Planning & Zoning Departments, Local Administration
Implementation Schedule	Ongoing
Status Update	Ongoing – Jurisdictions are participating with FEMA's Discovery Mapping efforts

Mitigation Action 5	**Include a natural hazard mitigation component into Emergency Operation Plans.**
Category	Prevention
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	Jurisdiction budgets
Lead Agency/Department Responsible	Emergency Services, Local Administration
Implementation Schedule	Near term
Status Update	Ongoing

Mitigation Action 6	**Continue acquiring and producing GIS data to support natural hazard mitigation planning.**
Category	Prevention/Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Varies
Potential Funding Sources	Jurisdiction budgets
Lead Agency/Department Responsible	SPDC Staff, Local Administrators
Implementation Schedule	Ongoing
Status Update	Ongoing

Mitigation Action 7	**Conduct or participate in public education opportunities across the region to better inform residents on various hazards.**
Category	Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	Medium

Estimated Cost	Varies, but anticipated to be minimal
Potential Funding Sources	County budget, VDOF, VDEM
Lead Agency/Department Responsible	County Emergency Services
Implementation Schedule	Dependent upon available staff time
Status Update	Ongoing – looking for additional opportunities

Mitigation Action 8	**In areas in which falling trees and branches are a threat to knock out the power to large numbers of people, the feasibility of relocating the power lines underground or having the trees removed/cut should be examined.**
Category	Property Protection
Hazard(s) Addressed	Multiple
Priority	Medium
Estimated Cost	Varies greatly based on location and action pursued
Potential Funding Sources	Electric companies, VDEM, VDOT, Local budgets
Lead Agency/Department Responsible	Local Administrators, Public Works, VDOT
Implementation Schedule	Ongoing
Status Update	Ongoing

Regional Service Authority Mitigation Actions

Mitigation Action 1	**Install stationary generator backup units at critical Roanoke River Service Authority (RRSA) and Halifax County Service Authority (HCSA) facilities that are currently lacking a secondary system. Where stationary generators are not practical, make the necessary electrical upgrades to accommodate a quick-connect scenario where a portable generator can be utilized. Aging generators will be replaced as necessary.**
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Varies by each site
Potential Funding Sources	Federal/State grants, Authority budgets
Lead Agency/Department Responsible	RRSA, HCSA
Implementation Schedule	Dependent upon funding
Status Update	Locations have been identified for generators by each Service Authority. Opportunities for funding need to be explored.

Mitigation Action 2	**Encourage water/sewer customers to sign up for the county emergency notification system.**
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	Authority budget
Lead Agency/Department Responsible	HCSA
Implementation Schedule	Near term
Status Update	As the HCSA handles water/sewer billings, information on the Halifax County Emergency Notification System can be provided on the HCSA website and/or included with water bills sent to customers.

Mitigation Action 3	Routinely inspect and test the functioning of fire hydrants, making sure to share any relevant data with the local fire departments and/or emergency services coordinators.
Category	Emergency Services
Hazard(s) Addressed	Wildfire
Priority	Medium
Estimated Cost	Minimal – Staff time
Potential Funding Sources	Authority budget
Lead Agency/Department Responsible	HCSA, RRSA
Implementation Schedule	Ongoing
Status Update	The Authorities are making the effort to inspect fire hydrants; however, due to limited staff they may not be in a position to inspect every fire hydrant within their system during a given year.

Mitigation Action 4	Elevate critical systems at facilities to keep them above any type of flooding event.
Category	Prevention
Hazard(s) Addressed	Flooding
Priority	Medium
Estimated Cost	Varies by site
Potential Funding Sources	Federal/State grants, Authority budget
Lead Agency/Department Responsible	HCSA
Implementation Schedule	Long-term
Status Update	Continue to monitor the conditions present at the HCSA raw water intake and a water booster station for potential improvements.

Section

8

Jurisdiction Executive Summaries & Mitigation Actions

This section of the Hazard Mitigation Plan provides information for each jurisdiction represented within the Southside Planning District. Each jurisdiction's executive summaries includes: hazard rankings, status of mitigation actions, maps of various hazards, future land use maps, public survey results, and National Flood Insurance Program (NFIP) survey results, as applicable. The layout of each jurisdictions mitigation actions follows the criteria established in Section 7 "Regional Mitigation Strategies" on page 7-1.

The following jurisdictions are represented in this section:

- Brunswick County
- Town of Alberta
- Town of Brodnax
- Town of Lawrenceville
- Halifax County
- Town of Halifax
- Town of Scottsburg
- Town of South Boston
- Town of Virgilina
- Mecklenburg County
- Town of Boydton
- Town of Chase City
- Town of Clarksville
- Town of La Crosse
- Town of South Hill

Brunswick County

Hazard Rankings

The methodology for the hazard rankings can be found in Section 5, "Risk Assessment", of this Plan. The hazard rankings included in this section are specific to Brunswick County, not the region as a whole.

Hazard	Location (Geographic Area Affected)	Maximum Probable Extent (Magnitude/Strength)	Probability of Future Events	Overall Hazard Ranking
Dam Failure	Negligible (1)	Extreme (4)	Unlikely (1)	Low/Medium (6)
Drought	Extensive (4)	Extreme (4)	Occasional (2)	Medium/High (10)
Earthquake	Extensive (4)	Weak (1)	Unlikely (1)	Low/Medium (6)
Extreme Cold	Extensive (4)	Moderate (2)	Unlikely (1)	Medium (7)
Extreme Heat	Extensive (4)	Moderate (2)	Likely (3)	Medium/High (9)
Flood	Negligible (1)	Severe (3)	Highly Likely (4)	Medium (8)
Hail	Significant (3)	Severe (3)	Likely (3)	Medium/High (9)
Tropical Cyclone	Extensive (4)	Severe (3)	Likely (3)	Medium/High (10)
Landslide	Negligible (1)	Weak (1)	Unlikely (1)	Low (3)
Lightning	Negligible (1)	Moderate (2)	Highly Likely (4)	Medium (7)
Severe Wind	Extensive (4)	Moderate (2)	Highly Likely (4)	Medium/High (10)
Severe Winter Weather	Extensive (4)	Moderate (2)	Highly Likely (4)	Medium/High (10)
Tornado	Negligible (1)	Severe (3)	Likely (3)	Medium (7)
Wildfire	Limited (2)	Moderate (2)	Highly Likely (4)	Medium (7)

Mitigation Actions

The County's mitigation actions were reviewed, updated, and ranked based on discussions with Brunswick County officials. Among the factors considered when prioritizing the mitigation actions were: effect on overall risk to life and property, ease of implementation, political and community support, consideration of cost/benefit, and funding availability.

Mitigation Action 1	Encourage the use of emergency warning systems, including: 1) residents signing up for Brunswick Alert to receive time-sensitive messages through their phone, email or texts; and 2) examine the feasibility of having patterned sirens at each local fire department for emergency warnings.
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	County Budget
Lead Agency/Department	Brunswick County Emergency Services
Implementation Schedule	Ongoing
Status Update	Ongoing – Promoted on County website

Mitigation Action 2	Prohibit or limit floodplain development through regulatory and/or incentive-based measures. Continue to enforce building code regulations that serve to protect property during inclement weather.
Category	Prevention/Property Protection
Hazard(s) Addressed	Flooding
Priority	High
Estimated Cost	Minimal

Potential Funding Sources	County Budget
Lead Agency/Department	Brunswick County Planning & Zoning, Building Inspection
Implementation Schedule	Ongoing
Status Update	Ongoing – County ordinances restrict building in floodplain

Mitigation Action 3 (NEW)	**Incorporate additional stormwater measures at the Alberta Fire Department to prevent and/or eliminate flooding on the property.**
Category	Prevention/Property Protection/Structural Projects
Hazard(s) Addressed	Flooding
Priority	High
Estimated Cost	TBD
Potential Funding Sources	Federal/State grants, Alberta Fire Department, Town of Alberta
Lead Agency/Department	Brunswick County Emergency Services, Alberta Fire Department, Town of Alberta
Implementation Schedule	Dependent upon the availability of funds
Status Update	The Alberta Fire Department and Brunswick County Emergency Services have expressed an interest in pursuing grant funds through VDEM to address a stormwater/flooding issue.

Mitigation Action 4	**Have new mobile homes secured with standard tie-downs to reduce their vulnerability to high winds.**
Category	Prevention/Property Protection
Hazard(s) Addressed	Tropical Cyclones, Tornadoes, and High Winds
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	County Budget
Lead Agency/Department	Building Inspector
Implementation Schedule	Ongoing
Status Update	Ongoing

Mitigation Action 5	**Install stationary generator backup units at critical facilities that are lacking a secondary system. Where stationary generators are not feasible, consider a quick-connect scenario where rotating or shared generators can be used. Electrical upgrades may be required to accomplish this. Aging generators will be replaced as warranted.**
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Varies by location/generator type
Potential Funding Sources	Federal/State grants, County Budget
Lead Agency/Department	Brunswick County Emergency Services
Implementation Schedule	Ongoing
Status Update	Fire/EMS/Law Enforcement complete – Replace as necessary. The County's radio system upgrade was recently completed with generators being installed at each.

Mitigation Action 6	**When new homes are constructed, provide information to encourage clearing of trees, brush, and other flammable natural materials a safe distance from the home creating a "Green Zone" between the forest and structure.**
Category	Prevention
Hazard(s) Addressed	Wildfire
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	VDOF
Lead Agency/Department	VDOF, Brunswick County Emergency Services, Building Inspection
Implementation Schedule	Near term
Status Update	Make brochures available to the public, coordinate with VDOF.

Mitigation Action 7 (NEW)	Review existing fire hydrant locations in the Town of Alberta and determine if any areas are underserved or lacking. Coordinate with the Town of Lawrenceville (W/S provider) on any new proposed fire hydrant locations or repairs.
Category	Prevention
Hazard(s) Addressed	Wildfire
Priority	High
Estimated Cost	Minimal to review systems, costs dependent upon findings.
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Brunswick County Emergency Services, Alberta Fire Department
Implementation Schedule	Near term
Status Update	No action taken – New mitigation action and process needs to be developed.

Mitigation Action 8 (NEW)	Increase awareness of existing storm shelters to Brunswick County residents, especially those residing in mobile home parks.
Category	Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	County Budget, Federal/State grants
Lead Agency/Department	Brunswick County Emergency Services
Implementation Schedule	Mid term
Status Update	Outreach options need to be explored

Mitigation Action 9	Continue to improve firefighter education and training through the funding of training resources such as the Mecklenburg-Brunswick Fire Training Center located in La Crosse.
Category	Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	County Budget
Lead Agency/Department	Brunswick County Emergency Services
Implementation Schedule	Ongoing
Status Update	Ongoing – New classrooms recently opened at Training Center.

Mitigation Action 10	Provide recommended methods of reducing risk and vulnerability on the County's website.
Category	Emergency Services/Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	Medium
Estimated Cost	Minimal – Staff time
Potential Funding Sources	County Budget
Lead Agency/Department	Brunswick County Emergency Services
Implementation Schedule	Mid-term
Status Update	Exploring options for inclusion

Mitigation Action 11	Coordinate with VDOT officials ensure that stormwater structures are cleaned and maintained to prevent yard and street flooding.
Category	Prevention
Hazard(s) Addressed	Flooding
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	VDOT
Lead Agency/Department	VDOT, Brunswick County Emergency Services
Implementation Schedule	Ongoing
Status Update	Ongoing – Problem areas are reported when identified

Mitigation Action 12	For critical and highly significant county facilities examine large glass windows, full glass doors and metal siding for vulnerabilities. Install storm shutters, window clips for mounting plywood or pursue other protective measures when warranted.
Category	Prevention/Property Protection/Structural Projects
Hazard(s) Addressed	Tropical Cyclone, Severe Wind, Tornado
Priority	Medium
Estimated Cost	$750,000
Potential Funding Sources	County Budget, Federal/State grants
Lead Agency/Department	Brunswick County Emergency Services, Building Inspection
Implementation Schedule	Mid-term
Status Update	No action taken; insufficient funds

Mitigation Action 13	Elevate HVAC, electrical, and telecommunications systems at critical facilities to keep them above any type of flooding.
Category	Prevention
Hazard(s) Addressed	Flooding
Priority	Low
Estimated Cost	Varies site to site
Potential Funding Sources	County Budget, Federal/State grants
Lead Agency/Department	Brunswick County Emergency Services
Implementation Schedule	Dependent on availability of funding and systems being at risk
Status Update	No action taken; at risk systems are elevated.

Mitigation Action 14	Consider participation in StormReady and SKYWARN programs. StormReady encourages participation with fire departments to include benefits such as early warning systems, weather spotters, shelter set-up and storm radio deployment. SKYWARN works with the National Weather Service and spotters to disseminate information on warnings and threats. The NWS provides training around the country.
Category	Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	Low
Estimated Cost	Minimal
Potential Funding Sources	County Budget
Lead Agency/Department	Brunswick County Emergency Services
Implementation Schedule	Long-term
Status Update	No action taken; to be further explored for feasibility and local effectiveness

Mitigation Action 15	Encourage proper pasture management for livestock to avoid overgrazing and encourage experimentation with drought-resistant crops.
Category	Public Education an d Awareness
Hazard(s) Addressed	Drought
Priority	Low
Estimated Cost	Varies
Potential Funding Sources	Federal/State grants
Lead Agency/Department	Brunswick County Extension Office, Farm Bureau
Implementation Schedule	Near term
Status Update	Coordinate with County Extension Office

Mitigation Action 16	Place storm shelters at large mobile home parks.
Category	Structural Project
Hazard(s) Addressed	Multiple
Priority	Low
Estimated Cost	Varies based on size
Potential Funding Sources	Federal/State grants, County Budget

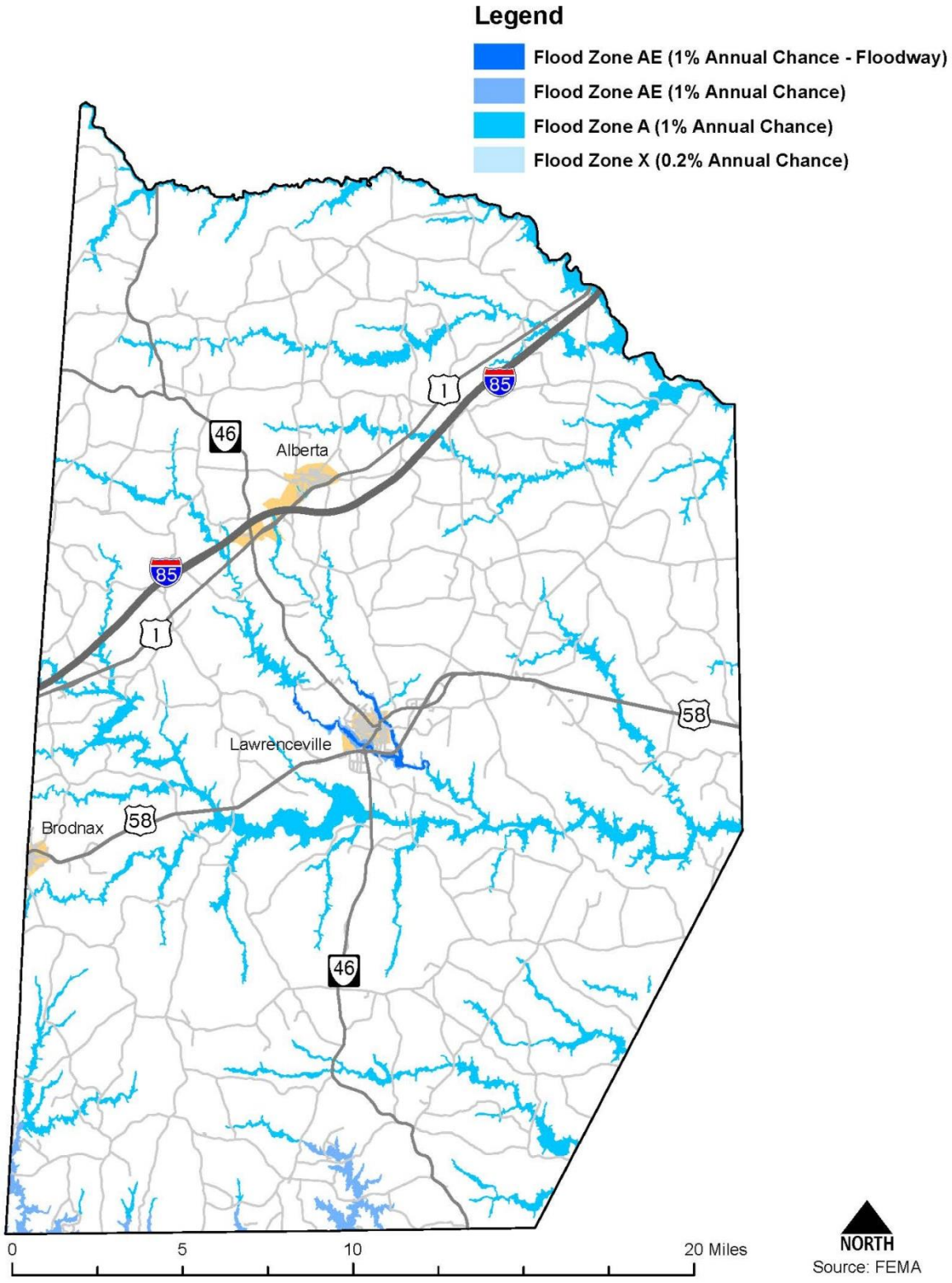
Lead Agency/Department	Brunswick County Emergency Services
Implementation Schedule	Long-term
Status Update	No action; insufficient funds

Removed Mitigation Action:

Action	Reason
Routinely inspect and test the functioning and classification/color of fire hydrants, including hydrants in rural areas. Make sure the information is shared with area fire departments, with maps.	Brunswick County does not inspect fire hydrants, the towns do.

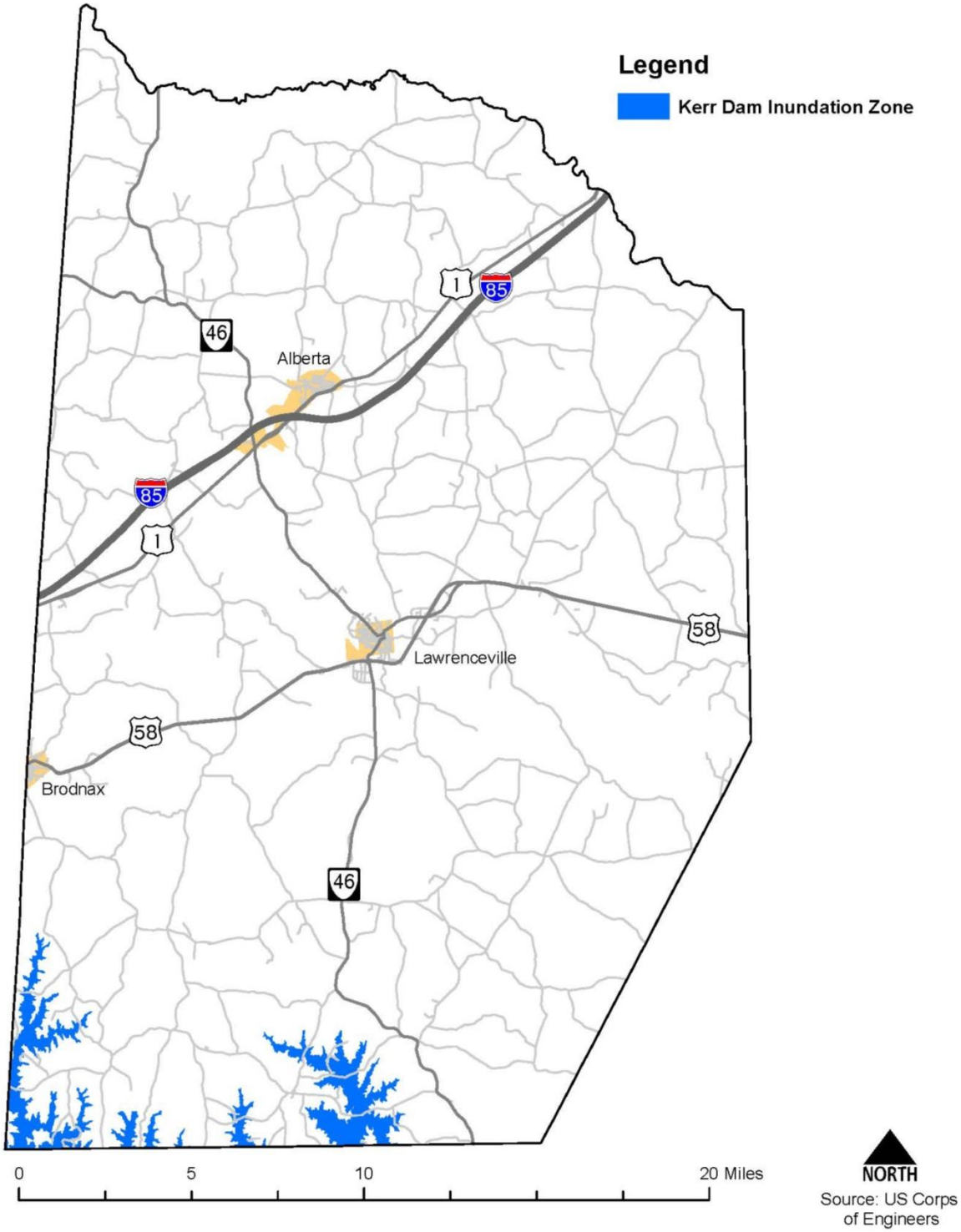
Flood Map

The flood zones shown below are for planning purposes and only include flood zones A, AE, and a portion of flood zone X. Full details can be found on FEMA's Flood Map Service Center webpage.



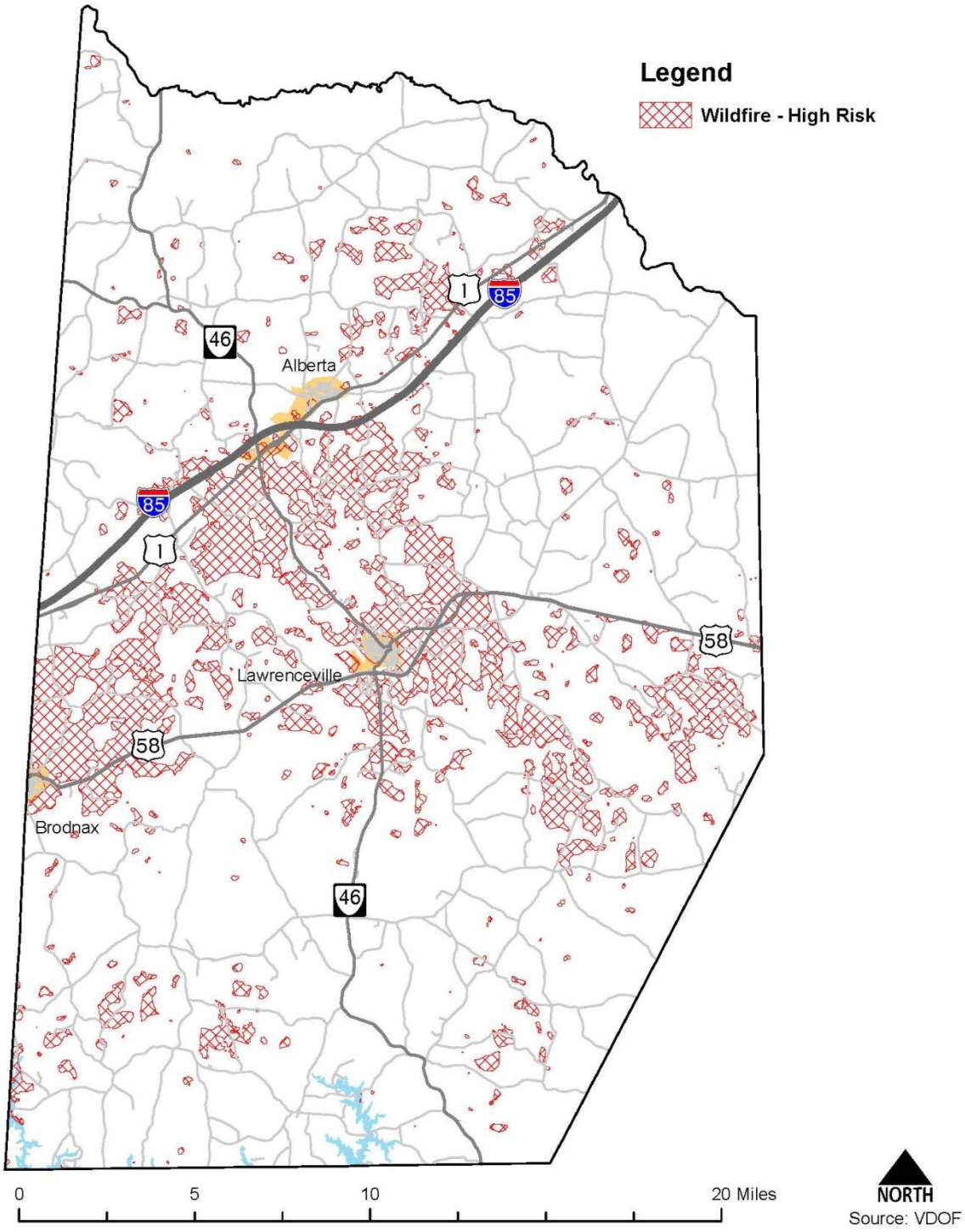
Kerr Dam Inundation Zone Map

Additional details relating to dam failure can be found in Section 4 “Hazard Identification” of this plan.



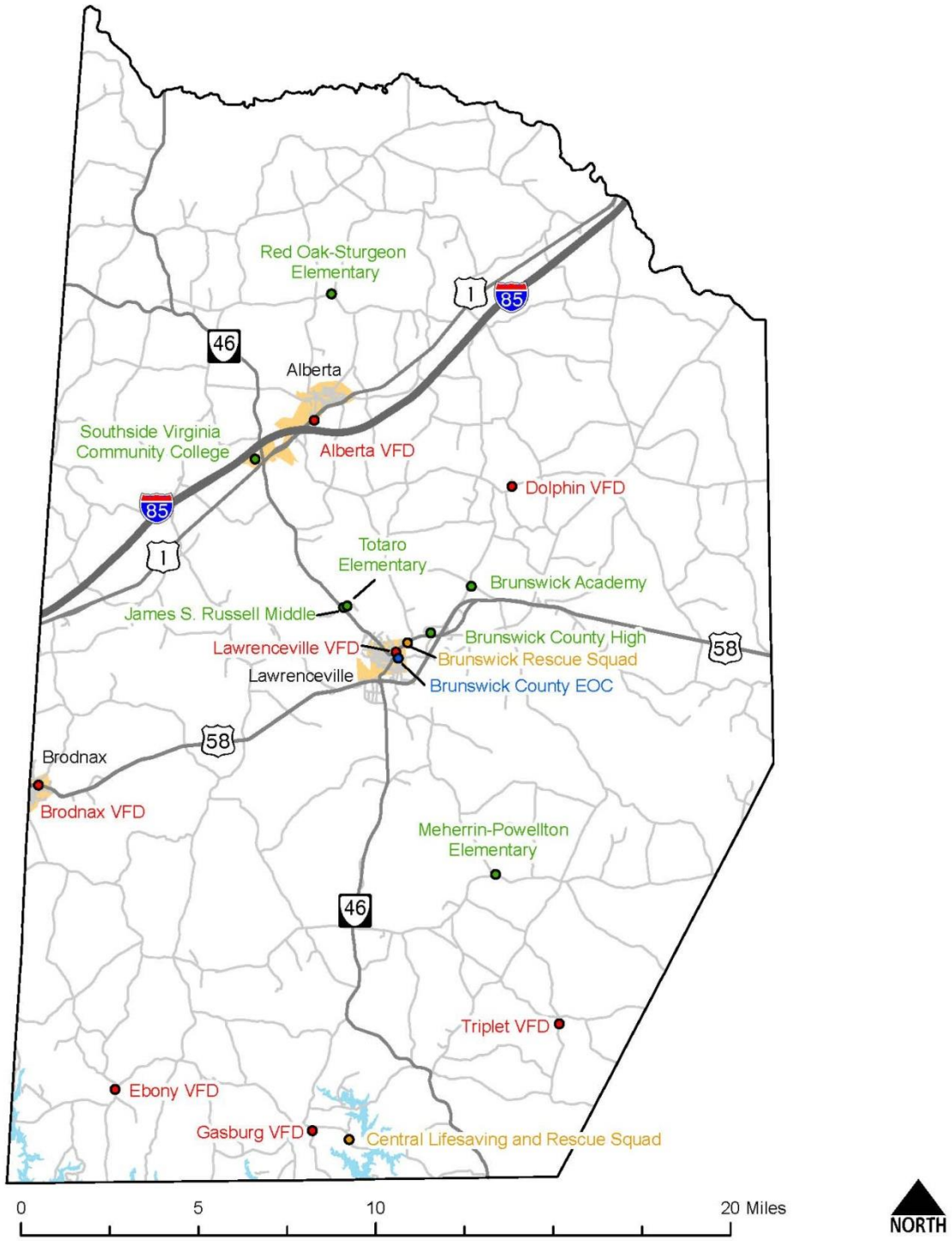
Wildfire Map

Additional details relating to wildfires can be found in Section 4 of this plan. Please note that only high risk areas from a 2003 Wildfire Risk Assessment Map have been included on the following map.



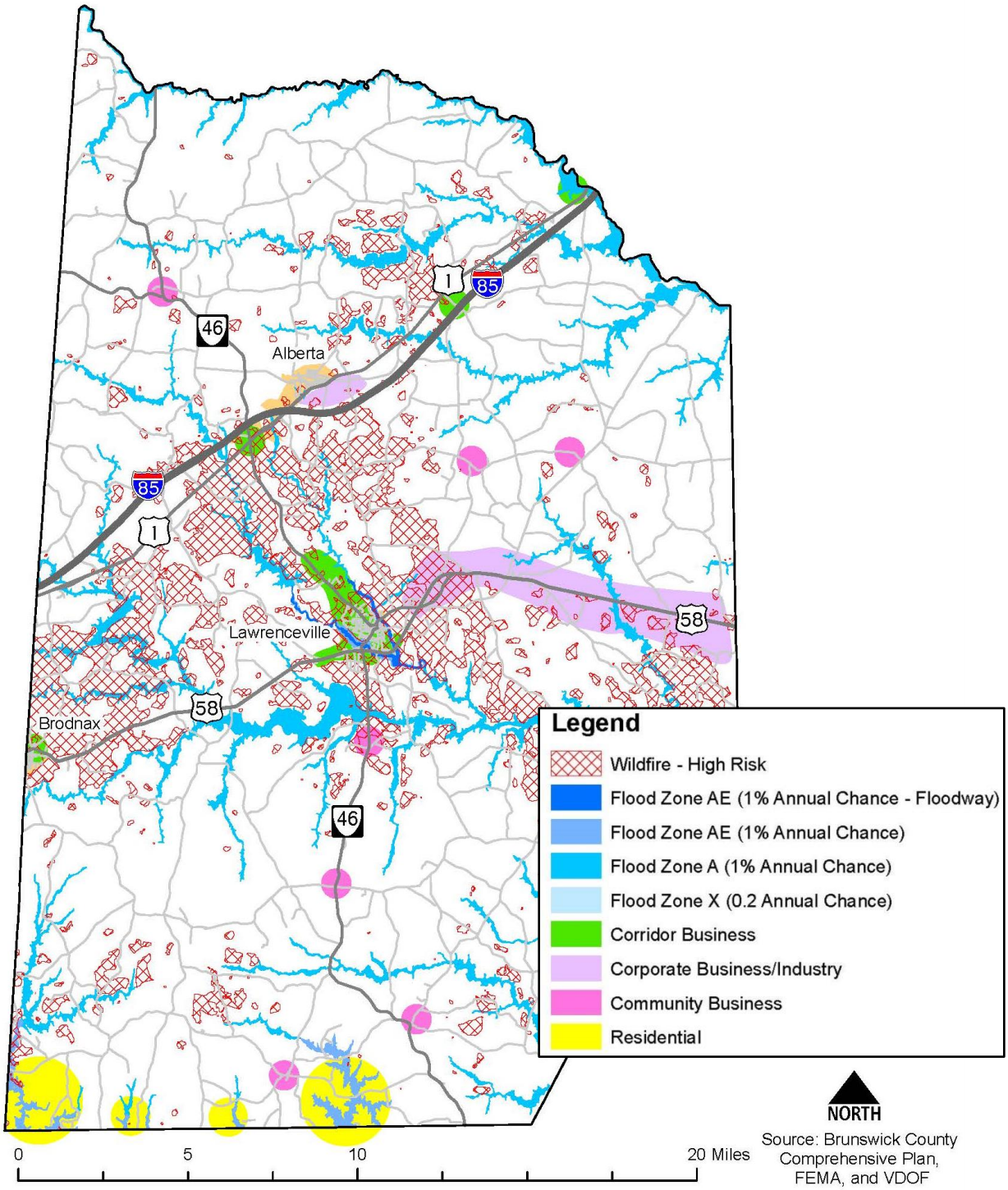
Critical Facilities Map

While additional facilities can be considered critical, the following map only includes fire stations, EMS stations, schools and the Brunswick County Emergency Operations Center. A full listing of critical facilities can be found in Section 5 of this plan.



Future Land Use Risks (Flood, Dam Inundation, Wildfire)

Adopted in 2017, the Brunswick County Comprehensive Plan includes a Future Land Map. That map has been recreated with flood, Kerr Dam inundation zone, and wildfire overlays on it. This map is intended to help identify natural hazards and their risk levels within future growth areas.



Public Survey

The public survey asked each participate in which local jurisdiction that they lived. The results from those who identified as living in Brunswick County are as follows:

Question 1

Which of the following hazards have directly impacted you, your household, or your property?

Hazard	Pct.	Hazard	Pct.
Dam Failure	0.00	High Winds	100.00
Drought	50.00	Hurricane/Tropical Cyclone	50.00
Earthquake	0.00	Landslide	0.00
Extreme Heat/Cold	0.00	Lightning	50.00
Flooding	0.00	Tornado	0.00
Hail	0.00	Wildfire	0.00
Heavy Snow/Ice	50.00		

Responses: 2 of 2

Questions 2

How concerned are you about the following hazards affecting our region?

Hazard	Very Concerned	Somewhat Concerned	Not Concerned	Responses
Dam Failure	0.00	100.00	0.00	2/2
Drought	50.00	0.00	50.00	2/2
Earthquake	50.00	0.00	50.00	2/2
Extreme Heat/Cold	0.00	100.00	0.00	2/2
Flooding	50.00	50.00	0.00	2/2
Hail	0.00	100.00	0.00	2/2
Heavy Snow/Ice	50.00	50.00	0.00	2/2
High Winds	50.00	50.00	0.00	2/2
Hurricane/Tropical Cyclone	50.00	50.00	0.00	2/2
Landslide	0.00	50.00	50.00	2/2
Lightning	50.00	50.00	0.00	2/2
Tornado	50.00	50.00	0.00	2/2
Wildfire	50.00	0.00	50.00	2/2

Question 3

Is your home located in a floodplain?

Yes	No	Not Sure	Responses
0.00	50.00	50.00	2/2

Question 4

Does your household have flood insurance?

Yes	No	Not Sure	Responses
0.00	50.00	50.00	2/2

Question 5

The following statements will help determine citizen priorities regarding planning for natural hazards. Please tell us how important each one is to you.

Priorities	Very Important	Somewhat Important	Not Important	Responses
Protect private property	100.00	0.00	0.00	2/2
Protect critical facilities (hospitals, fire stations, etc.)	100.00	0.00	0.00	2/2
Prevent development in identified hazard areas	100.00	0.00	0.00	2/2
Enhance the function of natural areas (streams, wetlands)	100.00	0.00	0.00	2/2
Protect historical and cultural landmarks	50.00	50.00	0.00	2/2
Protect and reduce damage to utilities	100.00	0.00	0.00	2/2
Strengthen emergency services (Fire, EMS, Police)	100.00	0.00	0.00	2/2
Promote cooperation among public agencies, citizens, non-profit organizations, and business	100.00	0.00	0.00	2/2

Question 6

Have you or someone in your household:

Actions	Have Done	Plan To Do	Not Interested	Responses
Attended meetings or received information on natural disasters or emergency preparedness?	100.00	0.00	0.00	2/2
Talked with members in your household about what to do in case of a natural disaster or emergency?	100.00	0.00	0.00	2/2
Prepared a “Disaster Supply Kit” (stored food, water batteries, etc.)?	50.00	50.00	0.00	2/2
Has anyone in your household been trained in First Aid or CPR?	100.00	0.00	0.00	2/2
Installed smoke detectors on each level of your home?	100.00	0.00	0.00	2/2
Signed up to receive emergency alerts from Brunswick, Halifax, or Mecklenburg counties?	100.00	0.00	0.00	2/2
Periodically check gutters, downspouts, and drain pipes on your property?	100.00	0.00	0.00	2/2

Question 7

Are you interested in making your home or neighborhood more resistant to natural hazards?

Yes	No	Responses
100.00	0.00	2/2

Question 8

What is the most effective way for you to receive information about how to make your household and home safer from natural disasters? (Select up to three)

Communication	Pct.	Communication	Pct.
Newspapers	0.00	University/College	0.00
Television	0.00	Mail	0.00
Email Newsletters	50.00	Fire/EMS	0.00
News Website	0.00	Face Sheet/Brochure	0.00
Social Media	100.00	Public Workshops	0.00
Schools	0.00	Other (please specify)	0.00

Responses: 2 of 2

Question 9

Whom would you most trust to provide you with information about how to make your household and home safer from natural hazards? (Select up to three)

Trusted Source	Pct.	Trusted Source	Pct.
News Media	0.00	Elected Officials	0.00
Government Agencies	50.00	Social Media	0.00
Insurance Agent or Company	0.00	Non-Profit Organizations	100.00
Utility Company	50.00	Not Sure	50.00
University/Research Institution	50.00	Other (please specify)	0.00
Neighbor/Friend/Family Member	0.00		

Responses: 2 of 2

Town of Alberta

Hazard Rankings

The methodology for the hazard rankings can be found in Section 5, "Risk Assessment", of this Plan. The hazard rankings included in this section are specific to the Town of Alberta, not the region as a whole.

Hazard	Location (Geographic Area Affected)	Maximum Probable Extent (Magnitude/Strength)	Probability of Future Events	Overall Hazard Ranking
Dam Failure	Negligible (1)	Weak (1)	Unlikely (1)	Low (1)
Drought	Extensive (4)	Extreme (4)	Occasional (2)	Medium/High (10)
Earthquake	Extensive (4)	Weak (1)	Unlikely (1)	Low/Medium (6)
Extreme Cold	Extensive (4)	Moderate (2)	Unlikely (1)	Medium (7)
Extreme Heat	Extensive (4)	Moderate (2)	Likely (3)	Medium/High (9)
Flood	Negligible (1)	Weak (1)	Highly Likely (4)	Low/Medium (6)
Hail	Extensive (4)	Severe (3)	Occasional (2)	Medium/High (9)
Tropical Cyclone	Extensive (4)	Severe (3)	Likely (3)	Medium/High (10)
Landslide	Negligible (1)	Weak (1)	Unlikely (1)	Low (3)
Lightning	Negligible (1)	Moderate (2)	Highly Likely (4)	Medium (7)
Severe Wind	Extensive (4)	Moderate (2)	Likely (3)	Medium/High (9)
Severe Winter Weather	Extensive (4)	Moderate (2)	Highly Likely (4)	Medium/High (8)
Tornado	Negligible (1)	Severe (3)	Occasional (2)	Low/Medium (6)
Wildfire	Limited (2)	Weak (1)	Likely (3)	Low/Medium (6)

Mitigation Actions

The Town's mitigation actions were reviewed, updated, and ranked based on SPDC staff's best guess regarding the needs of the Town. Additional input was provided from Brunswick County. Among the factors considered when prioritizing the mitigation actions were: effect on overall risk to life and property, ease of implementation, political and community support, consideration of cost/benefit, and funding availability.

Mitigation Action 1	Encourage the use of emergency warning systems, including: 1) residents signing up for Brunswick Alert to receive time-sensitive messages through their phone, email or texts; and 2) examine the feasibility of having a patterned sirens at the fire department to alert those within the town limits of impending hazardous weather conditions.
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Town of Alberta, Fire Department, Brunswick County Emergency Services
Implementation Schedule	Near term
Status Update	No action taken; insufficient funds/staff

Mitigation Action 2 (NEW)	Incorporate additional stormwater measures at the Alberta Fire Department to prevent and/or eliminate flooding on the property.
Category	Prevention/Property Protection/Structural Projects
Hazard(s) Addressed	Flooding
Priority	High
Estimated Cost	TBD

Potential Funding Sources	Federal/State grants, Town budget, Fire Department
Lead Agency/Department	Town of Alberta, Fire Department, Brunswick County Emergency Services
Implementation Schedule	Dependent upon the availability of funds
Status Update	The Alberta Fire Department and Brunswick County Emergency Services have expressed an interest in pursuing grant funds through VDEM to address a stormwater/flooding issue.

Mitigation Action 3	**Install stationary generators at critical facilities as warranted. Where stationary generators are not feasible at critical facilities, make the necessary electrical upgrades to accommodate a quick-hookup scenario where a portable generator can be utilized. Aging generators will be replaced as necessary.**
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Varies by location/generator type
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Town of Alberta
Implementation Schedule	Dependent upon funding availability
Status Update	No action taken; insufficient funds/staff.

Mitigation Action 4	**Continue to support the efforts of the Alberta Volunteer Fire Department (education, training, equipment, etc.).**
Category	Emergency Services/Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	Town budget
Lead Agency/Department	Town of Alberta
Implementation Schedule	Ongoing
Status Update	Ongoing

Mitigation Action 5	**Brochures that encourage clearing trees, brush, and other flammable natural materials a safe distance to create a "Green Zone" between the forest and structures will be made available to the public in various locations around town.**
Category	Prevention/Public Education and Awareness
Hazard(s) Addressed	Wildfire
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	VDOF
Lead Agency/Department	Town of Alberta, Fire Department, VDOF
Implementation Schedule	Near term
Status Update	Need to coordinate with VDOF

Mitigation Action 6	**Consider participating in the StormReady and SKYWARN programs.**
Category	Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	Town budget, Fire Department, Brunswick County Emergency Services
Lead Agency/Department	Town of Alberta, Fire Department, Brunswick County Emergency Services
Implementation Schedule	Near term
Status Update	No action taken; insufficient staff

Mitigation Action 7	Coordinate with VDOT to clean and maintain stormwater infrastructure to prevent yard and street flooding.
Category	Prevention
Hazard(s) Addressed	Flooding
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	VDOT
Lead Agency/Department	VDOT, Town of Alberta
Implementation Schedule	Ongoing
Status Update	Ongoing

Mitigation Action 8	Prohibit or limit floodplain development through regulatory and/or incentive-based measures.
Category	Prevention/Property Protection
Hazard(s) Addressed	Flooding
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	Town budget
Lead Agency/Department	Town of Alberta
Implementation Schedule	Short term
Status Update	No action taken; insufficient funds/staff

Mitigation Action 9	For critical and highly significant town facilities, examine windows for vulnerabilities. Install storm shutters or window clips for mounting plywood.
Category	Prevention/Property Protection/Structural Projects
Hazard(s) Addressed	Multiple
Priority	Low
Estimated Cost	$750,000
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Town of Alberta
Implementation Schedule	Long-term
Status Update	No action taken; insufficient funds/staff

Mitigation Action 10	Prohibit or limit floodplain development through regulatory and/or incentive-based measures.
Category	Prevention
Hazard(s) Addressed	Flooding
Priority	Low
Estimated Cost	$50,000
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Town of Alberta
Implementation Schedule	Dependent on availability of funding
Status Update	No action taken, insufficient funds/staff

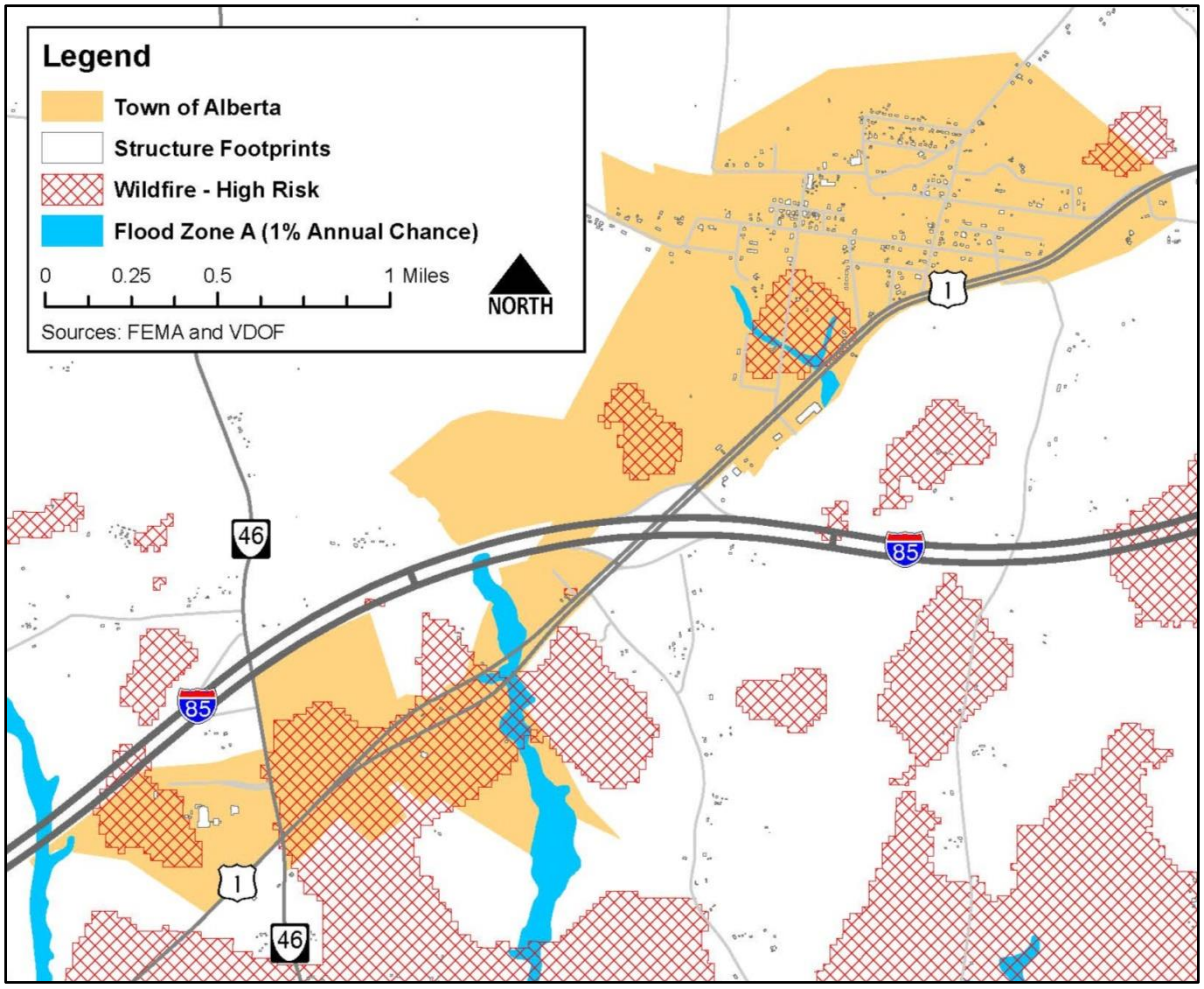
Removed Mitigation Action:

Action	Reason
Place storm shelters at large mobile home parks. Secure new mobile homes with standard tie-downs to reduce their vulnerability to high winds.	Alberta does not have any large mobile home parks. Building inspections/ enforcement handled by Brunswick County.
Routinely inspect and test the functioning and classification/color of fire hydrants, including hydrants in rural areas. Make sure the information is shared with area fire departments, with maps	Water/sewer service is provided by the Town of Lawrenceville and they handle fire hydrant inspections.

Flood and Wildfire Map

The flood zones shown below are for planning purposes and only include flood zones A, AE, and a portion of flood zone X. Full details can be found on FEMA's Flood Map Service Center webpage.

Additional details relating to wildfires can be found in Section 4 of this plan. Please note that only high risk areas from a 2003 Wildfire Risk Assessment Map have been included on the following map.



Town of Brodnax

Hazard Rankings

The methodology for the hazard rankings can be found in Section 5, "Risk Assessment", of this Plan. The hazard rankings included in this section are specific to the Town of Brodnax, not the region as a whole.

Hazard	Location (Geographic Area Affected)	Maximum Probable Extent (Magnitude/Strength)	Probability of Future Events	Overall Hazard Ranking
Dam Failure	Negligible (1)	Weak (1)	Unlikely (1)	Low (3)
Drought	Extensive (4)	Extreme (4)	Occasional (2)	Medium/High (10)
Earthquake	Extensive (4)	Weak (1)	Unlikely (1)	Low/Medium (6)
Extreme Cold	Extensive (4)	Moderate (2)	Unlikely (1)	Medium (7)
Extreme Heat	Extensive (4)	Moderate (2)	Likely (3)	Medium/High (9)
Flood	Negligible (1)	Weak (1)	Unlikely (1)	Low (3)
Hail	Extensive (4)	Moderate (2)	Occasional (2)	Medium (8)
Tropical Cyclone	Extensive (4)	Severe (3)	Likely (3)	Medium/High (10)
Landslide	Negligible (1)	Weak (1)	Unlikely (1)	Low (3)
Lightning	Negligible (1)	Moderate (2)	Highly Likely (4)	Medium (7)
Severe Wind	Extensive (4)	Moderate (2)	Likely (3)	Medium/High (9)
Severe Winter Weather	Extensive (4)	Moderate (2)	Highly Likely (4)	Medium/High (10)
Tornado	Negligible (1)	Severe (3)	Occasional (2)	Low/Medium (6)
Wildfire	Significant (3)	Weak (1)	Unlikely (1)	Low/Medium (5)

Mitigation Actions

The Town's mitigation actions were reviewed, updated, and ranked based on discussions with Town of Brodnax officials. Among the factors considered when prioritizing the mitigation actions were: effect on overall risk to life and property, ease of implementation, political and community support, consideration of cost/benefit, and funding availability.

Mitigation Action 1	Install stationary generators at critical facilities as warranted. Where stationary generators are not feasible at critical facilities, make the necessary electrical upgrades to accommodate a quick-hookup scenario where a portable generator can be utilized. Aging generators will be replaced as necessary.
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	$10,000 per site/generator, $10,000-$12,000 per site for electrical upgrades
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Town of Brodnax
Implementation Schedule	Dependent upon funding availability
Status Update	The Town continues to maintain their existing generators while exploring options for possible replacements and electrical upgrades. The sanitary sewer pump stations have been identified as a priority, although other critical facilities may be considered as well.

Mitigation Action 2	Continue to support the efforts of the Brodnax Volunteer Fire Department (education, training, equipment, etc.).
Category	Emergency Services/Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	$19,000 +/- annually

Potential Funding Sources	Town budget
Lead Agency/Department	Town of Brodnax
Implementation Schedule	Ongoing
Status Update	The Town provides annual financial support to the Fire Department.

Mitigation Action 3	**The Town will encourage residents to sign up for emergency alert systems offered by Brunswick and Mecklenburg counties that provide time-sensitive messages through telephone, text and email notifications.**
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	Town budget
Lead Agency/Department	Town of Brodnax
Implementation Schedule	Near term
Status Update	The Town plans to utilize their existing flyer/newsletter program to encourage residents and businesses to sign up to receive the alerts.

Mitigation Action 4	**Routinely inspect and test the functioning and classification/color of fire hydrants. Make sure any relevant information is shared with the local fire departments.**
Category	Emergency Services
Hazard(s) Addressed	Wildfire
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	Town budget
Lead Agency/Department	Public Works Department
Implementation Schedule	Ongoing
Status Update	On an annual basis the Town flows their hydrants, conducts any necessary maintenance, repaints as necessary, and ensures that access is unencumbered.

Mitigation Action 5	**Look into coordinating with Brunswick County Emergency Services to participate in StormReady and/or SKYWARN programs and opportunities.**
Category	Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	Town budget, Fire Department, Brunswick County Emergency Services
Lead Agency/Department	Town of Brodnax, Fire Department, Brunswick County Emergency Services
Implementation Schedule	Ongoing
Status Update	Continue to coordinate with Brunswick County Emergency Services on programs.

Mitigation Action 6	**When new homes are constructed, provide information to encourage clearing trees, brush, and other flammable natural materials a safe distance from the home creating a "Green Zone" between the forest and the structure.**
Category	Prevention
Hazard(s) Addressed	Wildfire
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	VDOF
Lead Agency/Department	VDOF, Town of Brodnax
Implementation Schedule	Ongoing
Status Update	The Town has brochures available at the town office, they will coordinate with VDOF for additional brochures as needed.

Mitigation Action 7	Coordinate with VDOT to clean and maintain stormwater infrastructure to prevent yard and street flooding.
Category	Prevention
Hazard(s) Addressed	Flooding
Priority	Low
Estimated Cost	Minimal
Potential Funding Sources	VDOT
Lead Agency/Department	VDOT, Town of Brodnax
Implementation Schedule	Ongoing
Status Update	The will report stormwater issues to VDOT as they are identified.

Mitigation Action 8	Elevate HVAC, electrical, and telecommunications systems at critical facilities, to keep them above any type of flooding event.
Category	Prevention
Hazard(s) Addressed	Flooding
Priority	Low
Estimated Cost	TBD
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Town of Brodnax
Implementation Schedule	Dependent upon need and availability of funds
Status Update	No action taken, systems that have not been raised are in low-risk situations.

Removed Mitigation Action:

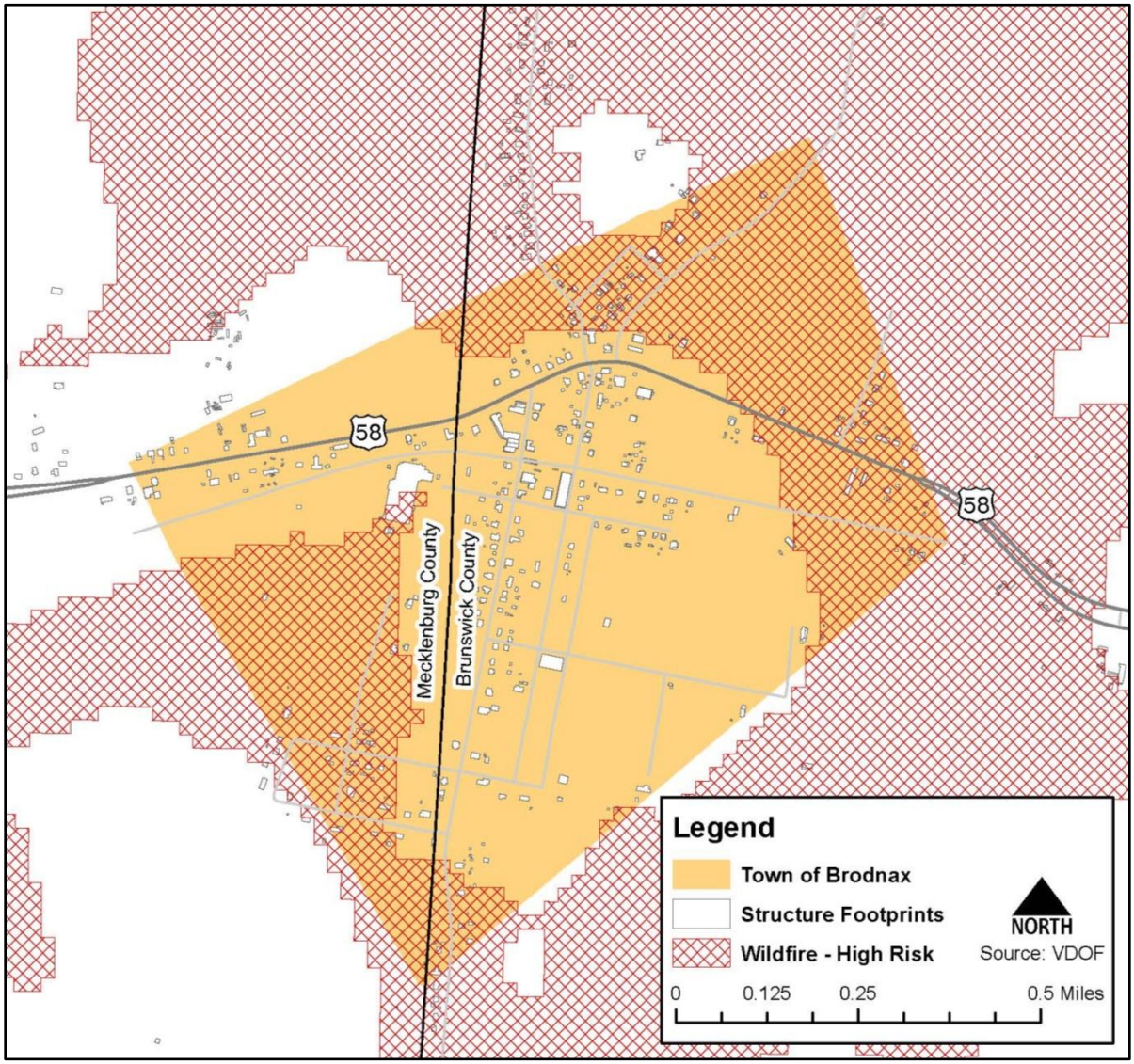
Action	Reason
Place storm shelters at large mobile home parks. Secure new mobile homes with standard tie-downs to reduce their vulnerability to high winds.	Brodnax does not have any large mobile home parks, building code enforced by County.
Prohibit or limit floodplain development through regulatory and/or incentive-based measures. Continue to enforce building regulations that serve to protect property during inclement weather.	Brodnax does not have any identified floodplain within the town limits, building code enforced by County.
For critical and highly significant county and town facilities, examine windows for vulnerabilities. Install storm shutters or window clips for mounting plywood.	Town noted lack of critical/highly significant facilities with windows and the town office will be moving into a newly renovated structure in the near future.
The water treatment plant, intake, and main storage tank of the Roanoke River Service Authority need an electrical backup system. In the event of a power failure, water distribution would be cut to the towns of Boydton, Brodnax, La Crosse, and South Hill, as well as portions of Mecklenburg County and one state prison. Currently the three facilities do not share the same electrical feeds, and the wiring is mostly aerial as opposed to underground. A backup generator would have to be put at all three facilities.	Addressed in the Regional Mitigation Actions section under Regional Service Authorities.
Consider relocating power lines that feed the RRSA facilities. Most of these lines are overhead, and are vulnerable to falling branches and trees, as well as the weight of ice. Some or all of these lines should be located underground to avoid the risk from natural hazards.	Addressed in the Regional Mitigation Actions section.

Flood Map

As there are no identified areas of Brodnax within Zone A (1% Annual Chance) on the Federal Insurance Rate Maps (FIRM) produced by FEMA, a flood map of the Town has not been included.

Wildfire Map

Additional details relating to wildfires can be found in Section 4 of this plan. Please note that only high risk areas from a 2003 Wildfire Assessment Map have been included on the following map.



Town of Lawrenceville

Hazard Rankings

The methodology for the hazard rankings can be found in Section 5, "Risk Assessment", of this Plan. The hazard rankings included in this section are specific to the Town of Lawrenceville, not the region as a whole.

Hazard	Location (Geographic Area Affected)	Maximum Probable Extent (Magnitude/Strength)	Probability of Future Events	Overall Hazard Ranking
Dam Failure	Negligible (1)	Extreme (4)	Unlikely (1)	Low/Medium (6)
Drought	Extensive (4)	Extreme (4)	Occasional (2)	Medium/High (10)
Earthquake	Extensive (4)	Weak (1)	Unlikely (1)	Low/Medium (6)
Extreme Cold	Extensive (4)	Moderate (2)	Unlikely (1)	Medium (7)
Extreme Heat	Extensive (4)	Moderate (2)	Likely (3)	Medium/High (9)
Flood	Limited (2)	Moderate (2)	Highly Likely (4)	Medium (8)
Hail	Extensive (4)	Severe (3)	Likely (3)	Medium/High (10)
Tropical Cyclone	Extensive (4)	Severe (3)	Likely (3)	Medium/High (10)
Landslide	Negligible (1)	Weak (1)	Unlikely (1)	Low (3)
Lightning	Negligible (1)	Moderate (2)	Highly Likely (4)	Medium (7)
Severe Wind	Extensive (4)	Moderate (2)	Likely (3)	Medium/High (9)
Severe Winter Weather	Extensive (4)	Moderate (2)	Highly Likely (4)	Medium/High (10)
Tornado	Negligible (1)	Severe (3)	Unlikely (1)	Low/Medium (5)
Wildfire	Limited (2)	Weak (1)	Unlikely (1)	Low (4)

Mitigation Actions

The Town's mitigation actions were reviewed, updated, and ranked based on discussions with the Town of Lawrenceville. Among the factors considered when prioritizing the mitigation actions were: effect on overall risk to life and property, ease of implementation, political and community support, consideration of cost/benefit, and funding availability.

Mitigation Action 1	Install stationary generator backup units at critical facilities (Fire, Police, Water/Sewer facilities, Public Works facilities, etc.) that are lacking a secondary system. Where stationary generators are not feasible at critical facilities, make the necessary electrical upgrades to accommodate a quick-hookup scenario where a portable generator can be utilized. Aging generators will be replaced as necessary.
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Varies by site
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Town Administration, Public Works Department
Implementation Schedule	Ongoing
Status Update	Most critical facilities have a generator in place or have been wired to accommodate portable generators. New generators will be pursued as conditions warrant.

Mitigation Action 2	Encourage residents to sign up for Brunswick Alert to receive time-sensitive messages through their phone, email or texts and have patterned sirens via the fire department to alert residents of hazardous events.
Category	Emergency Services/Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	Town budget
Lead Agency/Department	Town Administration, Lawrenceville Fire Department
Implementation Schedule	Ongoing
Status Update	Ongoing – Siren installed for fire and tornado events. For more information or to sign up for Brunswick Alert, please visit brunswickco.com.

Mitigation Action 3	Continue to support the efforts of the Lawrenceville Fire Department (education, training, equipment, etc.).
Category	Emergency Services/Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Varies based on Town budget
Potential Funding Sources	Town budget
Lead Agency/Department	Town Administration
Implementation Schedule	Ongoing
Status Update	Ongoing – Financial support provided on an annual basis.

Mitigation Action 4 (NEW)	Continue to follow, review and update the Town's hurricane preparedness checklist.
Category	Prevention
Hazard(s) Addressed	Tropical Cyclones, Flooding
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	Town budget
Lead Agency/Department	Public Works Department
Implementation Schedule	Ongoing
Status Update	Ongoing – Preparations for storm events are made in advance based on weather reports.

Mitigation Action 5	Coordinate with VDOT when storm sewers require cleaning or other maintenance work to prevent yard and street flooding issues.
Category	Prevention
Hazard(s) Addressed	Flooding
Priority	Medium
Estimated Cost	Minimal – Staff time
Potential Funding Sources	VDOT
Lead Agency/Department	VDOT, Public Works Department
Implementation Schedule	Ongoing
Status Update	Ongoing – Issues are reported as they are encountered.

Mitigation Action 6	Prohibit or limit floodplain development through regulatory and/or incentive-based measures.
Category	Prevention/Property Protection/Natural Resource Protection
Hazard(s) Addressed	Flooding
Priority	Medium
Estimated Cost	Minimal – Staff time
Potential Funding Sources	Town budget
Lead Agency/Department	Town Administration
Implementation Schedule	Ongoing

Status Update	Ongoing – The floodplain ordinance has been updated and is enforced by the Town.

Mitigation Action 7	**Routinely inspect and test the functioning and classification/color of fire hydrants in Lawrenceville, Alberta and the two IDA areas served by town utilities. Make sure the information and flow data is shared with local fire departments and supplemented with maps as necessary.**
Category	Emergency Services
Hazard(s) Addressed	Wildfire
Priority	Medium
Estimated Cost	Minimal – Staff time
Potential Funding Sources	Town budget
Lead Agency/Department	Public Works Department
Implementation Schedule	Ongoing
Status Update	Ongoing

Mitigation Action 8	**Elevate the UV building at the WWTP and any other critical facilities as needed to keep them above any type of flooding issues.**
Category	Prevention
Hazard(s) Addressed	Flooding
Priority	Low
Estimated Cost	$100,000 +/-
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Town Administration, Public Works Departments
Implementation Schedule	Dependent upon available funding
Status Update	This may be included in future updates to the WWTP.

Mitigation Action 9	**When new homes are constructed, provide information to encourage clearing trees, brush, and other flammable natural materials a safe distance from the home creating a "Green Zone" between the forest and the structure.**
Category	Prevention/Public Education and Awareness
Hazard(s) Addressed	Wildfire
Priority	Low
Estimated Cost	Minimal
Potential Funding Sources	VDOF
Lead Agency/Department	Town Administration
Implementation Schedule	Ongoing
Status Update	Ongoing – Coordinate with VDOF when additional brochures are needed.

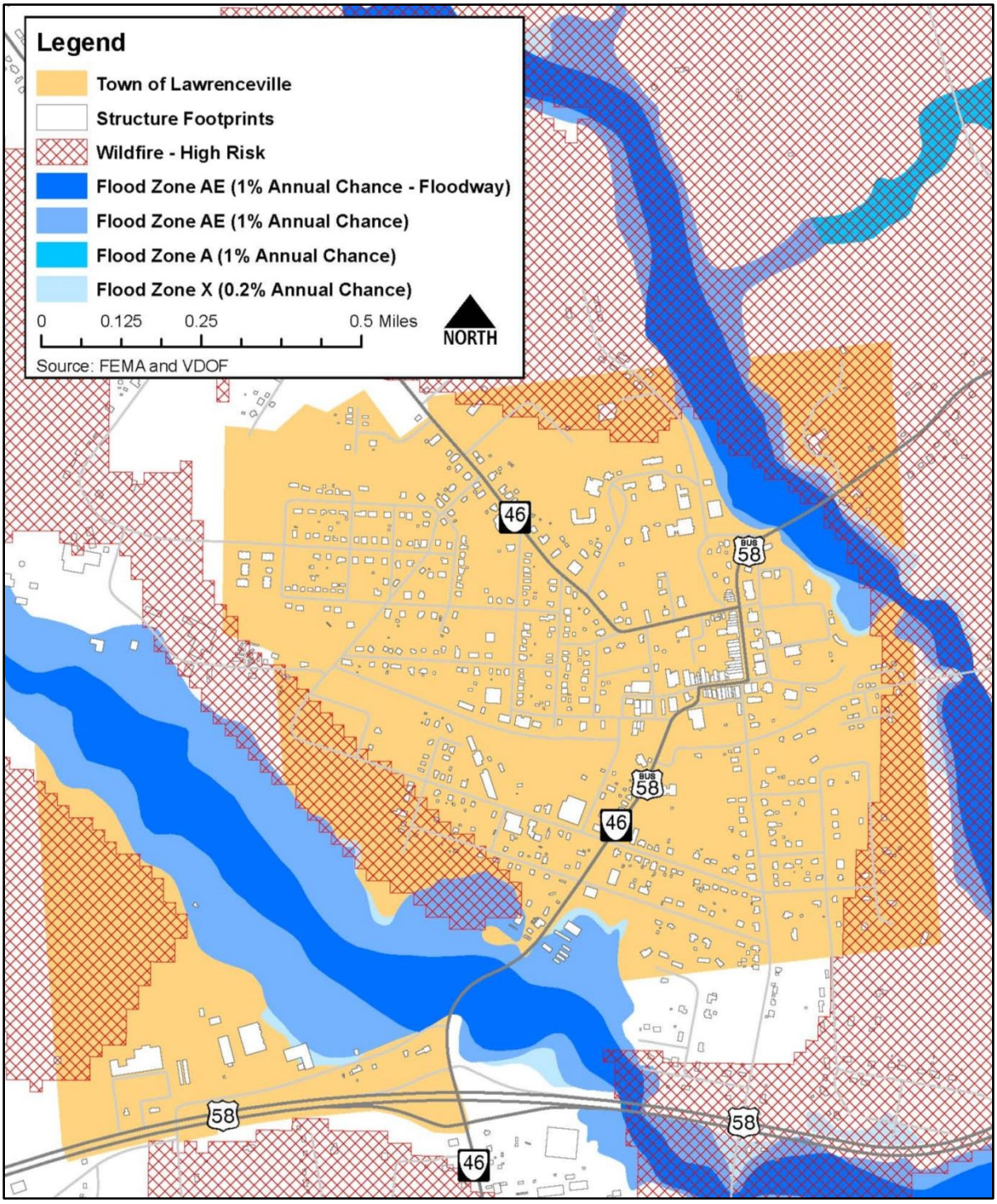
Removed Mitigation Actions:

Action	Reason
Place storm shelters at large mobile home parks. Secure new mobile homes with standard tie-downs to reduce their vulnerability to high winds.	Lawrenceville does not have any large mobile home parks, building code enforced by County.
For critical and highly significant county and town facilities, examine windows for vulnerabilities. Install storm shutters or window clips for mounting plywood.	Town will continue to monitor their facilities and address vulnerabilities as warranted, but they are not currently interested in installing storm shutters and window clips on all their structures.
Participate in Storm Ready Program, which encourages participation with fire departments to include benefits such as, early warning systems, weather spotters, shelter set-up and storm radio deployment. Consider participation in SkyWarn. SkyWarn works with the National Weather Service and spotters to disseminate information on warnings and threats. The NWS provides training around the country.	The Town has other mitigation actions listed to address their support of education and training efforts of the fire department. The Town has also established an emergency hurricane checklist that is utilized when storms are forecast to impact the area. It is updated based on new information and/or previous experiences/issues encountered.

Flood and Wildfire Map

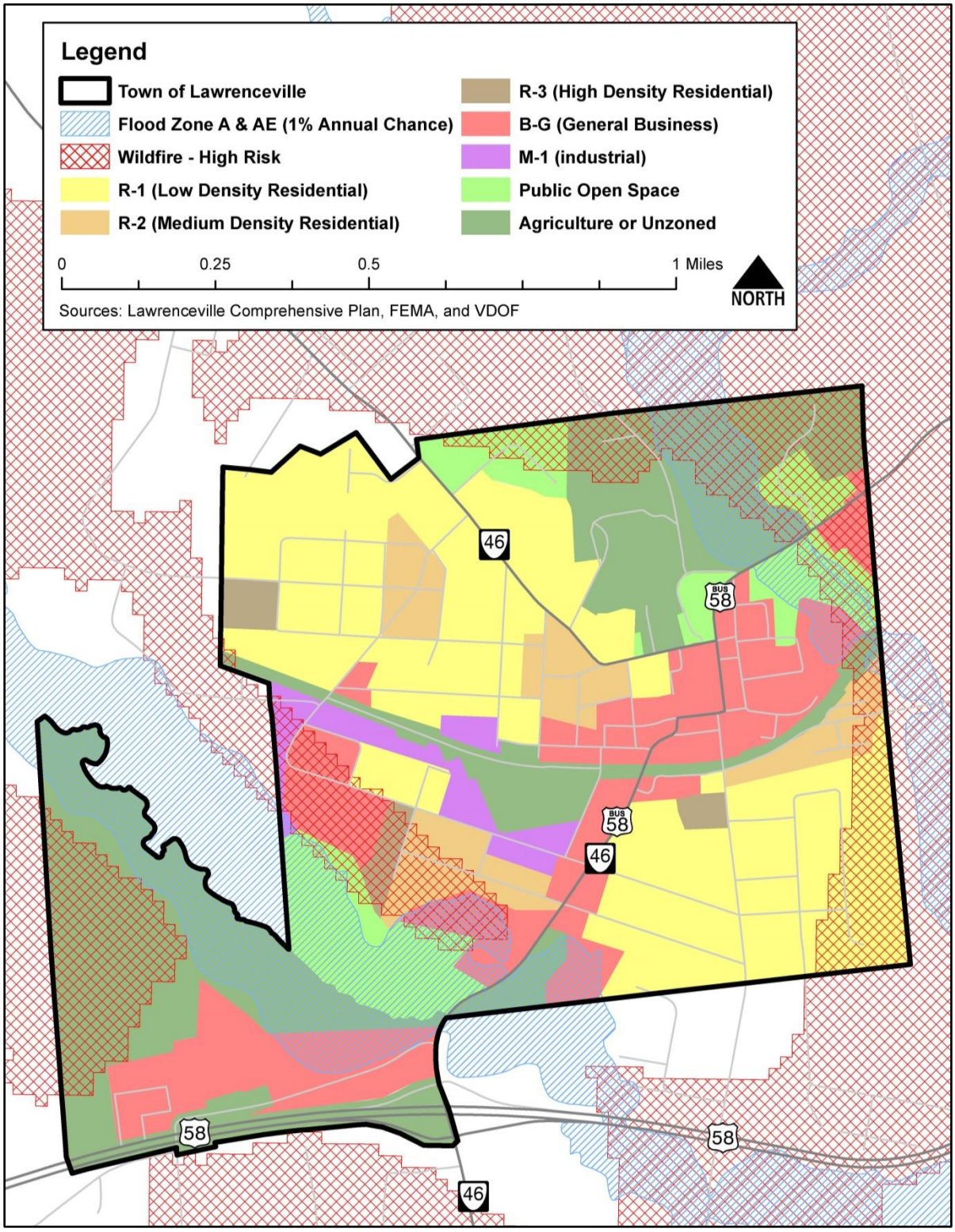
The flood zones shown below are for planning purposes and only include flood zones A, AE, and a portion of flood zone X. Full details can be found on FEMA's Flood Map Service Center webpage.

Additional details relating to wildfires can be found in Section 4 of this plan. Please note that only high risk areas from a 2003 Wildfire Risk Assessment Map have been included on the following map.



Future Land Use Risks (Flood and Wildfire)

Adopted in 2017, the Lawrenceville Comprehensive Plan includes a Future Land Map. That map has been recreated with flood and wildfire overlays to show potential risks.



National Flood Insurance Program Survey

NATIONAL FLOOD INSURANCE PROGRAM SURVEY

NATIONAL FLOOD INSURANCE PROGRAM (NFIP) SURVEY

MUNICIPALITY: Lawrenceville

1. FLOODPLAIN IDENTIFICATION AND MAPPING			
Requirement	*Recommended Action*	*Yes/No*	*Comments*
a. Does the municipality maintain accessible copies of an effective Flood Insurance Rate Map (FIRM)/Digital Flood Insurance Rate Map (DFIRM)? Does the municipality maintain accessible copies of the most recent Flood Insurance Study (FIS)?	Place these documents in the local libraries or make available publicly.	yes	
b. Has the municipality adopted the most current DFIRM/FIRM and FIS?	State the date of adoption, if approved.	yes	
c. Does the municipality support request for map updates?	If yes, state how.	yes	Would but none requested at this time
d. Does the municipality share with Federal Emergency Management Agency (FEMA) any new technical or scientific data that could result in map revisions within 6 months of creation or identification of new data?	If yes, specify how.	yes	would but none thus far
e. Does the municipality provide assistance with local floodplain determinations?	If yes, specify how.	yes	give most recent FIRM to Client.
f. Does the municipality maintain a record of approved Letters of Map Change?	If yes, specify the responsible office.	yes	Lawrenceville Zoning

NATIONAL FLOOD INSURANCE PROGRAM SURVEY

2. FLOODPLAIN MANAGEMENT			
Requirement	*Recommended Action*	*Yes/No*	*Comments*
a. Has the municipality adopted a compliant floodplain management ordinance that, at a minimum, regulates the following:	If yes, answer questions (1) through (4) below.	yes	
(1) Does the municipality issue permits for all proposed development in the Special Flood Hazard Areas (SFHAs)?	If yes, specify the office responsible.	yes	Lawrenceville Zoning
(2) Does the municipality obtain, review, and utilize any Base Flood Elevation (BFE) and floodway data, and/or require BFE data for subdivision proposals and other development proposals larger than 50 lots or 5 acres?	If yes, specify the office responsible.	NO	
(3) Does the municipality identify measures to keep all new and substantially improved construction reasonably safe from flooding to or above the BFE, including anchoring, using flood-resistant materials, and designing or locating utilities and service facilities to prevent water damage?	If yes, specify the office responsible.	yes	Lawrenceville Zoning
(4) Does the municipality document and maintain records of elevation data that document lowest floor elevation for new or substantially improved structures?	If yes, specify the office responsible.	yes	Lawrenceville Zoning
b. If a compliant floodplain ordinance was adopted, does the municipality enforce the ordinance by monitoring compliance and taking remedial action to correct violations?	If yes, specify how.	yes	No violations at this time

NATIONAL FLOOD INSURANCE PROGRAM SURVEY

2. FLOODPLAIN MANAGEMENT			
Requirement	*Recommended Action*	*Yes/No*	*Comments*
c. Has the municipality considered adopting activities that extend beyond the minimum requirements? Examples include: • Participation in the Community Rating System • Prohibition of production or storage of chemicals in SFHA • Prohibition of certain types of structures, such as hospitals, nursing homes, and jails in SFHA • Prohibition of certain types of residential housing (manufactured homes) in SFHA • Floodplain ordinances that prohibit any new residential or nonresidential structures in SFHA	If yes, specify activities.	Yes	Restricted development in Floodplain Town owns majority of Floodplain within municipal boundaries

3. FLOOD INSURANCE			
Requirement	*Recommended Action*	*Yes/No*	*Comments*
a. Does the municipality educate community members about the availability and value of flood insurance?	If yes, specify how.	No	
b. Does the municipality inform community property owners about changes to the DFIRM/FIRM that would impact their insurance rates?	If yes, specify how.	No	
c. Does the municipality provide general assistance to community members regarding insurance issues?	If yes, specify how.	Yes	upon request

Halifax County

Hazard Rankings

The methodology for the hazard rankings can be found in Section 5, "Risk Assessment", of this Plan. The hazard rankings included in this section are specific to the Halifax County, not the region as a whole.

Hazard	Location (Geographic Area Affected)	Maximum Probable Extent (Magnitude/Strength)	Probability of Future Events	Overall Hazard Ranking
Dam Failure	Negligible (1)	Extreme (4)	Occasional (2)	Medium (7)
Drought	Extensive (4)	Extreme (4)	Occasional (2)	Medium/High (10)
Earthquake	Extensive (4)	Weak (1)	Unlikely (1)	Low/Medium (6)
Extreme Cold	Extensive (4)	Moderate (2)	Occasional (2)	Medium (8)
Extreme Heat	Extensive (4)	Moderate (2)	Occasional (2)	Medium (8)
Flood	Negligible (1)	Severe (3)	Highly Likely (4)	Medium (8)
Hail	Extensive (4)	Severe (3)	Highly Likely (4)	High (11)
Tropical Cyclone	Extensive (4)	Severe (3)	Likely (3)	Medium/High (10)
Landslide	Negligible (1)	Weak (1)	Unlikely (1)	Low (3)
Lightning	Negligible (1)	Moderate (2)	Highly Likely (4)	Medium (7)
Severe Wind	Extensive (4)	Severe (3)	Highly Likely (4)	High (11)
Severe Winter Weather	Extensive (4)	Moderate (2)	Highly Likely (4)	Medium/High (10)
Tornado	Negligible (1)	Severe (3)	Likely (3)	Medium (7)
Wildfire	Limited (2)	Weak (1)	Highly Likely (4)	Medium (7)

Mitigation Actions

The County's mitigation actions were reviewed, updated, and ranked based on discussions with the Halifax County officials. Among the factors considered when prioritizing the mitigation actions were: effect on overall risk to life and property, ease of implementation, political and community support, consideration of cost/benefit, and funding availability.

Mitigation Action 1	Upgrade radio towers used for emergency communications.
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	$2,945,910
Potential Funding Sources	Federal/State grants, County budget
Lead Agency/Department	Halifax County Emergency Services
Implementation Schedule	Near term
Status Update	Upgrades have been approved.

Mitigation Action 2	Install generators at critical facilities that are currently lacking a secondary system, including various Fire/EMS locations. Where stationary generators are not feasible, consider a quick-connect scenario where rotating or shared generators can be used. Replace aging generators as warranted.
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Varies by location
Potential Funding Sources	Federal/State grants, County budget
Lead Agency/Department	Halifax County Emergency Services

Implementation Schedule	Ongoing
Status Update	Ongoing

Mitigation Action 3 (NEW)	**Update and adopt a more robust Emergency Operations Plan**
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal – Staff time
Potential Funding Sources	County budget
Lead Agency/Department	Halifax County Emergency Services
Implementation Schedule	Near term
Status Update	Ongoing – An update EOP is a top priority for the Emergency Services Department and is actively being pursued.

Mitigation Action 4 (NEW)	**Encourage the use of emergency warning systems, including: 1) residents signing up for Halifax County's mass notification system to receive time-sensitive messages through their phone, email or texts; and 2) examine the feasibility of having patterned sirens at each local fire department for emergency warnings.**
Category	Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	$10,000 +/- annually
Potential Funding Sources	County budget
Lead Agency/Department	Halifax County Emergency Services
Implementation Schedule	Ongoing
Status Update	Ongoing – Halifax County switched notification service providers in 2019 to expanded capabilities. To learn more about the service or to sign up, visit halifaxcountyva.gov.

Mitigation Action 5	**Prohibit or limit floodplain development through regulatory and/or incentive-based measures. Continue to enforce building code regulations that serve to protect property during inclement weather.**
Category	Prevention/Property Protection/Natural Resource Protection
Hazard(s) Addressed	Flooding
Priority	High
Estimated Cost	Minimal – Staff time
Potential Funding Sources	County budget
Lead Agency/Department	County Planning & Zoning, Building Inspections
Implementation Schedule	Ongoing
Status Update	County ordinances restrict building in floodplains, enforcement is ongoing.

Mitigation Action 6	**Ensure that new mobile homes are secured with standard tie-downs to reduce their vulnerability to high winds.**
Category	Prevention/Property Protection
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal – Staff time
Potential Funding Sources	County budget
Lead Agency/Department	County Building Inspections
Implementation Schedule	Ongoing
Status Update	Building codes are in place, enforcement is ongoing.

Mitigation Action 7	**Continue to improve firefighter education and training through the funding of resources such as the Fire Training Center in South Boston.**
Category	Public Education and Awareness

Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	County budget
Lead Agency/Department	Halifax County Emergency Services
Implementation Schedule	Ongoing
Status Update	Ongoing – Education and training are always evolving.

Mitigation Action 8	**Participate in the StormReady and SKYWARN programs.**
Category	Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal – Staff time
Potential Funding Sources	County budget
Lead Agency/Department	Halifax County Emergency Services
Implementation Schedule	Near term
Status Update	Ongoing – Currently working towards participation in StormReady and a SKYWARN class was held in early 2019.

Mitigation Action 9 (NEW)	**Coordinate with localities and the HCSA to ensure all fire hydrant locations are included on Halifax County's GIS website.**
Category	Emergency Services
Hazard(s) Addressed	Wildfire
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	County budget
Lead Agency/Department	Halifax County Emergency Services, HCSA, Local Jurisdictions
Implementation Schedule	Near Term
Status Update	Ongoing – Hydrant locations are included on GIS website

Mitigation Action 10	**When new homes are constructed, provide information to encourage the clearing of trees, brush, and other flammable natural materials a safe distance from the home creating a "green zone" between the forest and the structure.**
Category	Prevention
Hazard(s) Addressed	Wildfire
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	VDOF
Lead Agency/Department	Halifax County Emergency Services, VDOF, Building Inspections
Implementation Schedule	Near Term
Status Update	Coordinate with the VDOF for additional brochures as needed.

Mitigation Action 11	**Provide recommended methods of reducing risk and vulnerability on the County's website**
Category	Emergency Services, Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	County budget
Lead Agency/Department	Halifax County Emergency Services
Implementation Schedule	Mid term
Status Update	No action – Needs to be explored

Mitigation Action 12 (NEW)	Participate in public outreach efforts and provide materials that encourage residents to take steps to be more prepared for future hazard events.
Category	Prevention/Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	County budget, Materials supplied from other sources/agencies
Lead Agency/Department	Halifax County Emergency Services
Implementation Schedule	Ongoing
Status Update	Ongoing – Calendars, tote bags, etc. are being distributed.

Mitigation Action 13	Elevate HVAC, electrical, and telecommunications systems at critical facilities to keep them above any type of flooding.
Category	Prevention
Hazard(s) Addressed	Flooding
Priority	Low
Estimated Cost	Varies
Potential Funding Sources	Federal/State grants, County budget
Lead Agency/Department	Halifax County Emergency Services, Building Inspection
Implementation Schedule	Dependent upon availability of funding
Status Update	Systems that have not already been raised are in low-risk situations

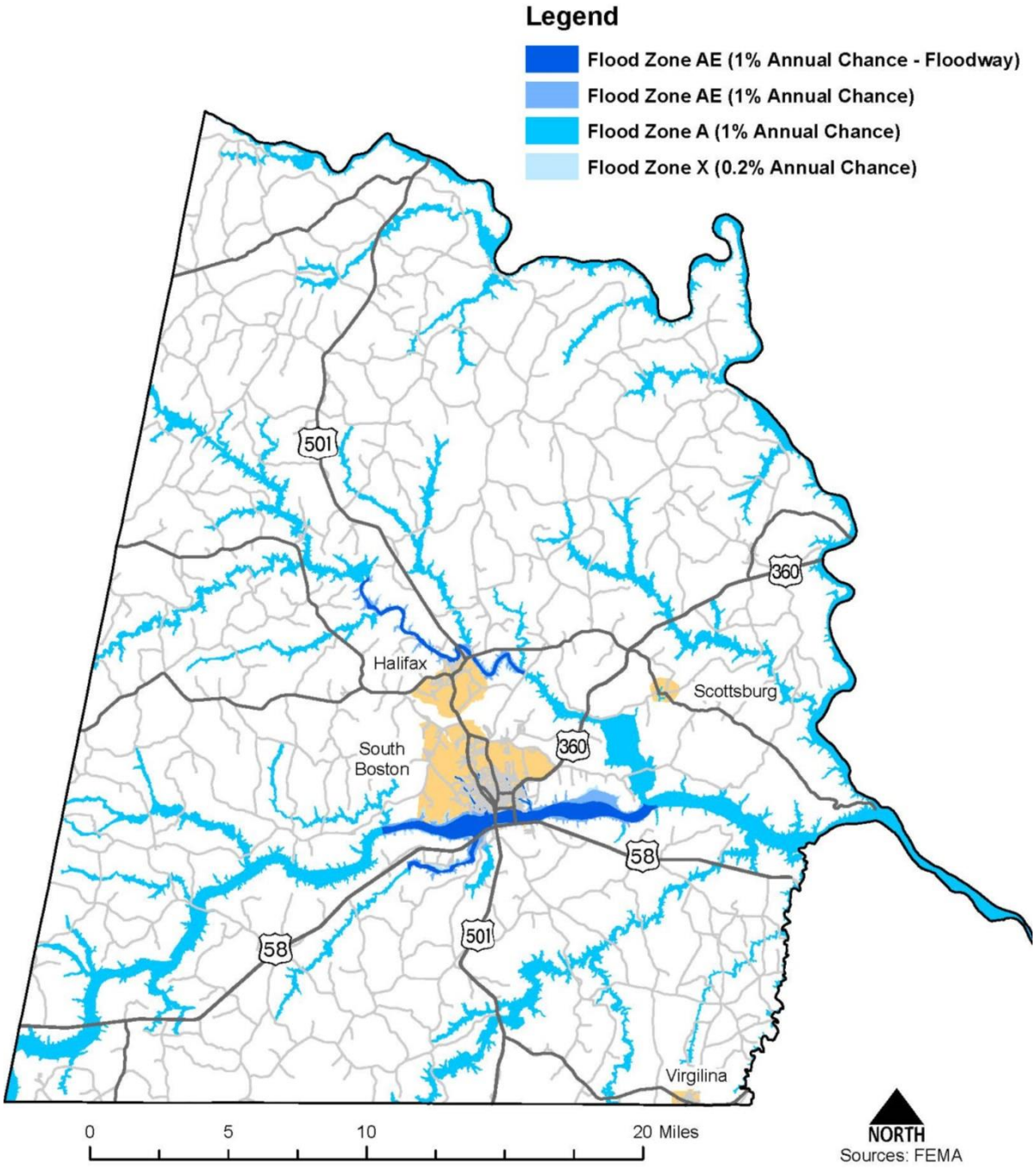
Mitigation Action 14	Encourage proper pasture management for livestock to avoid overgrazing and encourage experimentation with drought-resistant crops.
Category	Public Education an d Awareness
Hazard(s) Addressed	Drought
Priority	Low
Estimated Cost	Varies
Potential Funding Sources	Explore grant funding options
Lead Agency/Department	Halifax County Extension Office, Farm Bureau
Implementation Schedule	Mid term
Status Update	Coordinate with County Extension Office

Removed Mitigation Actions:

Action	Reason
For critical and highly significant county and town facilities, examine windows for vulnerabilities. Install storm shutters or window clips for mounting plywood.	This action was deemed to be of such low priority at this point that it was removed from the list.
Clean and maintain storm sewers to prevent yard and street flooding. If not currently undertaking this activity, begin a program of regularly scheduled inspections and cleanings if needed.	The County does not have a public works department.
Continue to maintain the flood barrier that surrounds the sewage treatment plant in South Boston.	The sewage treatment plant is actually maintained by the Halifax County Service Authority.
Prepare for flooding by having storage containers or boxes readily available and inventory lists up to date.	County was not sure what the actual intent of this mitigation action concerned, specifically the scope and process in which it would need to be carried out.

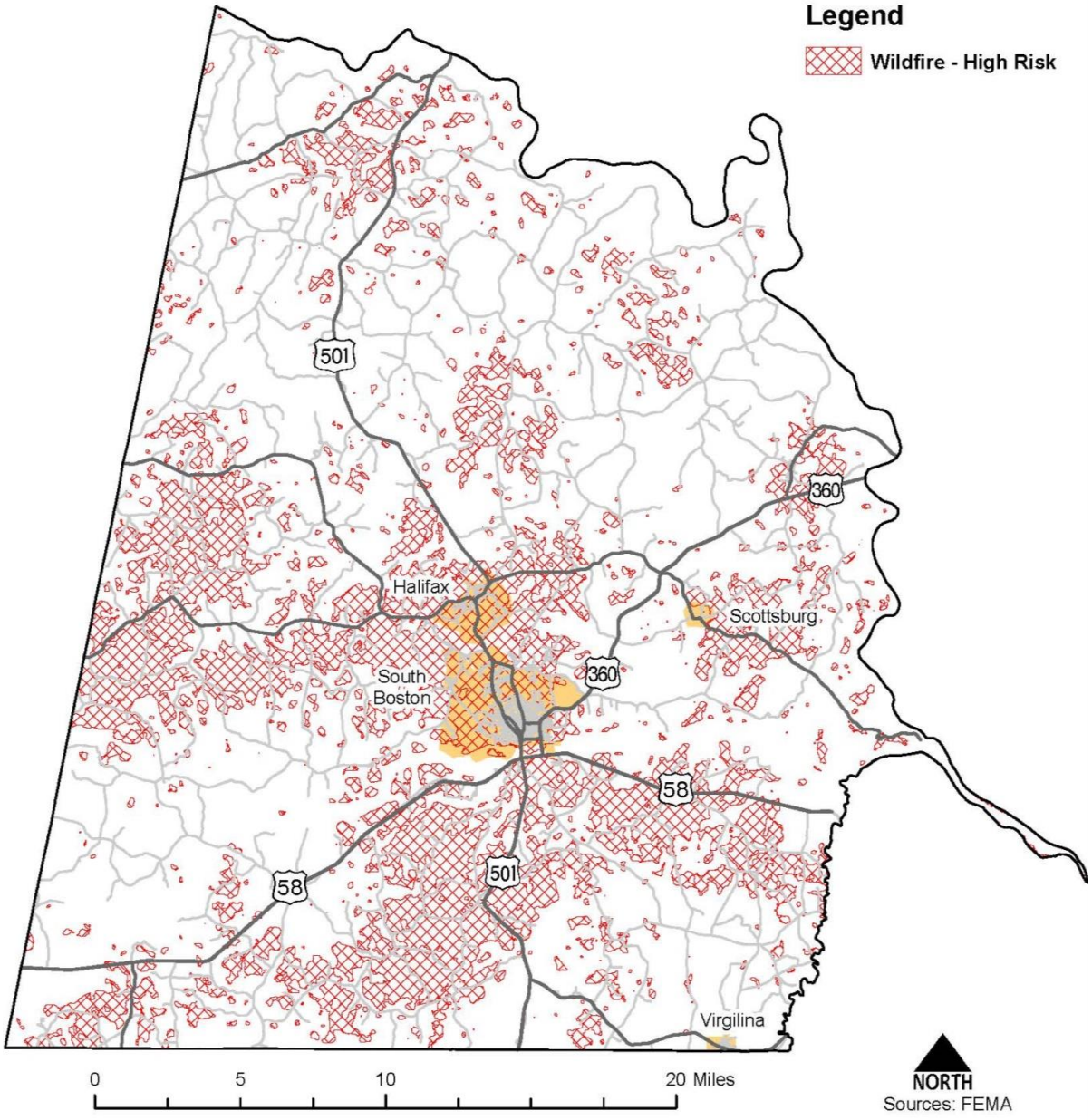
Flood Map

The flood zones shown below are for planning purposes and only include flood zones A, AE, and a portion of flood zone X. Full details can be found on FEMA's Flood Map Service Center webpage.



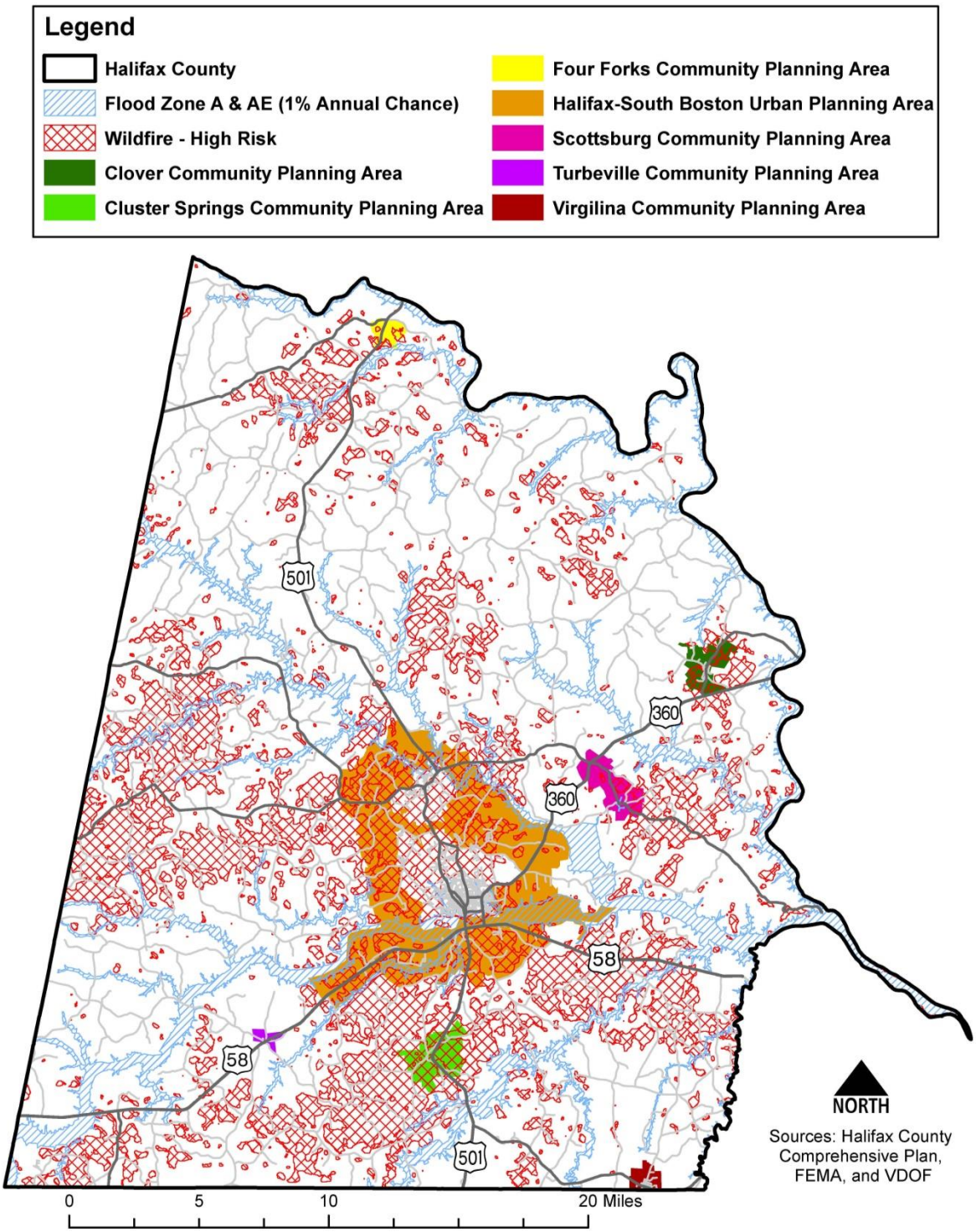
Wildfire Map

Additional details relating to wildfires can be found in Section 4 of this plan. Please note that only high risk areas from a 2003 Wildfire Risk Assessment Map have been included on the following map.



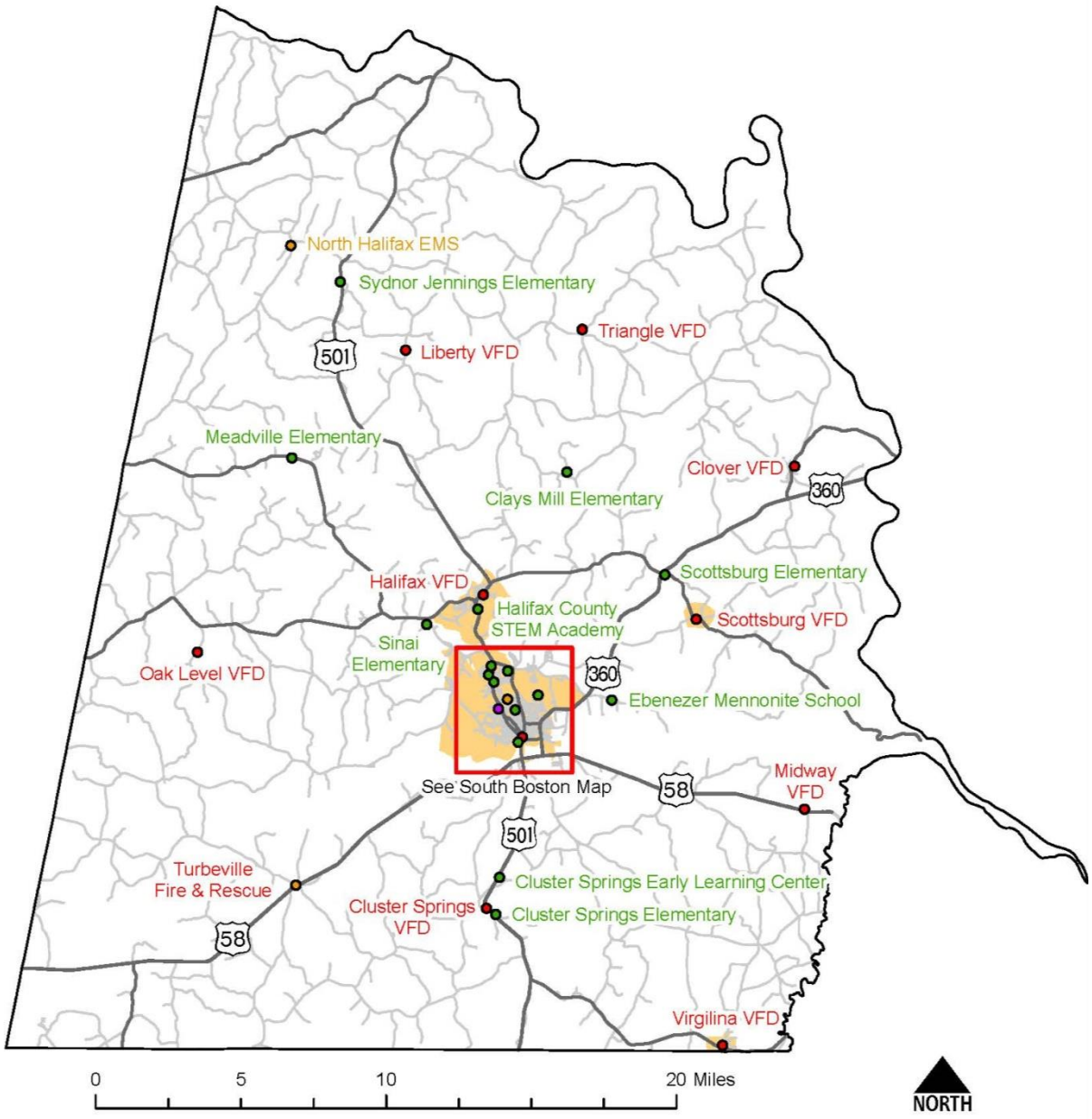
Planning Areas Risk Map (Flood and Wildfire)

Adopted in 2017, the Halifax County Comprehensive Plan includes a Planning Areas Map. That map has been recreated with flood and wildfire overlays to show potential risks.

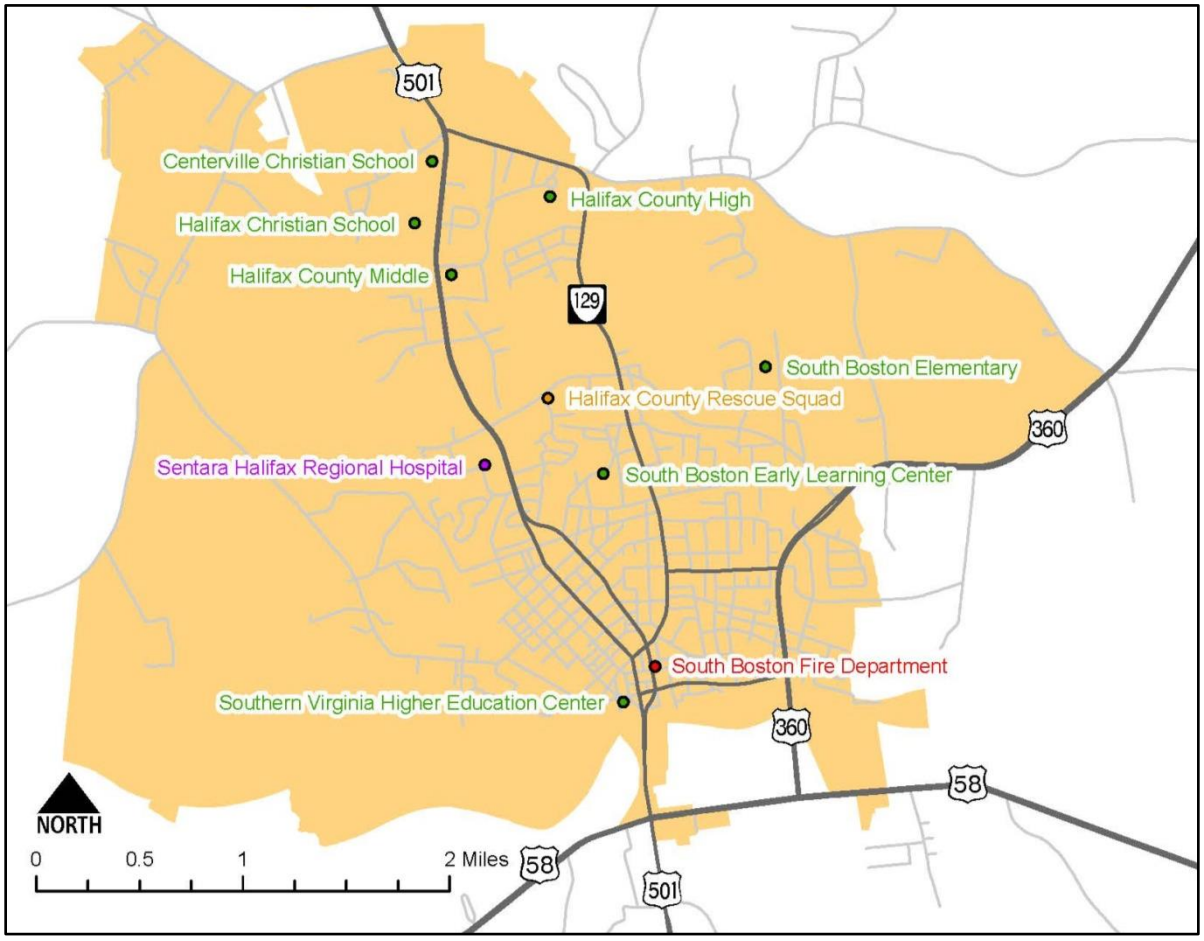


Critical Facilities Map

While additional facilities can be considered critical, the following map only includes fire stations, EMS stations, schools, hospitals, and the Halifax County Emergency Operations Center. The inset map for critical facilities located within the Town of South Boston can be found on the following page. A full listing of critical facilities can be found in Section 5 of this plan.



Critical Facilities Map – Within the Town of South Boston



Public Survey

The public survey asked each participate in which local jurisdiction that they lived. The results from those who identified as living in Halifax County are as follows:

Question 1

Which of the following hazards have directly impacted you, your household, or your property?

Hazard	Pct.	Hazard	Pct.
Dam Failure	0.00	High Winds	64.71
Drought	29.41	Hurricane/Tropical Cyclone	29.41
Earthquake	5.88	Landslide	0.00
Extreme Heat/Cold	23.53	Lightning	17.65
Flooding	29.41	Tornado	23.53
Hail	17.65	Wildfire	0.00
Heavy Snow/Ice	35.29		

Responses: 17 of 17

Questions 2

How concerned are you about the following hazards affecting our region?

Hazard	Very Concerned	Somewhat Concerned	Not Concerned	Responses
Dam Failure	0.00	26.67	73.33	15/17
Drought	25.00	68.75	6.25	16/17
Earthquake	0.00	20.00	80.00	15/17
Extreme Heat/Cold	31.25	37.50	31.25	16/17
Flooding	43.75	43.75	12.50	16/17
Hail	13.33	33.33	33.33	15/17
Heavy Snow/Ice	6.25	56.25	37.50	16/17
High Winds	31.25	50.00	18.75	16/17
Hurricane/Tropical Cyclone	12.50	62.50	25.00	16/17
Landslide	0.00	20.00	80.00	15/17
Lightning	18.75	43.75	37.50	16/17
Tornado	41.18	32.29	25.53	17/17
Wildfire	6.25	25.00	68.75	16/17

Question 3

Is your home located in a floodplain?

Yes	No	Not Sure	Responses
5.88	94.12	0.00	17/17

Question 4

Does your household have flood insurance?

Yes	No	Not Sure	Responses
23.53	58.82	17.65	17/17

Question 5

The following statements will help determine citizen priorities regarding planning for natural hazards. Please tell us how important each one is to you.

Priorities	Very Important	Somewhat Important	Not Important	Responses
Protect private property	75.00	25.00	0.00	16/17
Protect critical facilities (hospitals, fire stations, etc.)	94.12	5.88	0.00	17/17
Prevent development in identified hazard areas	62.50	25.00	12.50	16/17
Enhance the function of natural areas (streams, wetlands)	75.00	25.00	0.00	16/17
Protect historical and cultural landmarks	56.25	31.25	12.50	16/17
Protect and reduce damage to utilities	82.35	17.65	0.00	17/17
Strengthen emergency services (Fire, EMS, Police)	76.47	23.53	0.00	17/17
Promote cooperation among public agencies, citizens, non-profit organizations, and business	75.00	18.75	6.25	16/17

Question 6

Have you or someone in your household:

Actions	Have Done	Plan To Do	Not Interested	Responses
Attended meetings or received information on natural disasters or emergency preparedness?	62.50	12.50	25.00	16/17
Talked with members in your household about what to do in case of a natural disaster or emergency?	81.25	12.25	6.25	16/17
Prepared a "Disaster Supply Kit" (stored food, water batteries, etc.)?	62.50	31.25	6.25	16/17
Has anyone in your household been trained in First Aid or CPR?	93.75	6.25	0.00	16/17
Installed smoke detectors on each level of your home?	94.12	5.88	0.00	17/17
Signed up to receive emergency alerts from Brunswick, Halifax, or Mecklenburg counties?	87.50	12.50	0.00	16/17
Periodically check gutters, downspouts, and drain pipes on your property?	82.36	11.76	5.88	17/17

Question 7

Are you interested in making your home or neighborhood more resistant to natural hazards?

Yes	No	Responses
81.25	18.75	16/17

Question 8

What is the most effective way for you to receive information about how to make your household and home safer from natural disasters? (Select up to three)

Communication	Pct.	Communication	Pct.
Newspapers	41.18	University/College	0.00
Television	29.41	Mail	17.65
Email Newsletters	35.29	Fire/EMS	5.88
News Website	11.76	Face Sheet/Brochure	29.41
Social Media	52.94	Public Workshops	11.76
Schools	17.65	Other (please specify)	5.88

Responses: 17 of 17

Question 9

Whom would you most trust to provide you with information about how to make your household and home safer from natural hazards? (Select up to three)

Trusted Source	Pct.	Trusted Source	Pct.
News Media	5.88	Elected Officials	5.88
Government Agencies	64.71	Social Media	17.65
Insurance Agent or Company	29.41	Non-Profit Organizations	29.41
Utility Company	58.82	Not Sure	17.65
University/Research Institution	11.76	Other (please specify)	5.88
Neighbor/Friend/Family Member	23.53		

Responses: 17 of 17

National Flood Insurance Program Survey

NATIONAL FLOOD INSURANCE PROGRAM SURVEY

NATIONAL FLOOD INSURANCE PROGRAM (NFIP) SURVEY

MUNICIPALITY: Halifax County

1. FLOODPLAIN IDENTIFICATION AND MAPPING			
Requirement	*Recommended Action*	*Yes/No*	*Comments*
a. Does the municipality maintain accessible copies of an effective Flood Insurance Rate Map (FIRM)/Digital Flood Insurance Rate Map (DFIRM)? Does the municipality maintain accessible copies of the most recent Flood Insurance Study (FIS)?	Place these documents in the local librarles or make available publicly.	NO	
b. Has the municipality adopted the most current DFIRM/FIRM and FIS?	State the date of adoption, if approved.	NO	
c. Does the municipality support request for map updates?	If yes, state how.	yes	
d. Does the municipality share with Federal Emergency Management Agency (FEMA) any new technical or scientific data that could result in map revisions within 6 months of creation or identification of new data?	If yes, specify how.	NO	
e. Does the municipality provide assistance with local floodplain determinations?	If yes, specify how.	NO	
f. Does the municipality maintain a record of approved Letters of Map Change?	If yes, specify the responsible office.	NO	

NATIONAL FLOOD INSURANCE PROGRAM SURVEY

2. FLOODPLAIN MANAGEMENT			
Requirement	*Recommended Action*	*Yes/No*	*Comments*
a. Has the municipality adopted a compliant floodplain management ordinance that, at a minimum, regulates the following:	If yes, answer questions (1) through (4) below.	NO	
(1) Does the municipality issue permits for all proposed development in the Special Flood Hazard Areas (SFHAs)?	If yes, specify the office responsible.	NO	
(2) Does the municipality obtain, review, and utilize any Base Flood Elevation (BFE) and floodway data, and/or require BFE data for subdivision proposals and other development proposals larger than 50 lots or 5 acres?	If yes, specify the office responsible.	NO	
(3) Does the municipality identify measures to keep all new and substantially improved construction reasonably safe from flooding to or above the BFE, including anchoring, using flood-resistant materials, and designing or locating utilities and service facilities to prevent water damage?	If yes, specify the office responsible.	NO	
(4) Does the municipality document and maintain records of elevation data that document lowest floor elevation for new or substantially improved structures?	If yes, specify the office responsible.	yes	Planning/ Zoning office
b. If a compliant floodplain ordinance was adopted, does the municipality enforce the ordinance by monitoring compliance and taking remedial action to correct violations?	If yes, specify how.	yes	

NATIONAL FLOOD INSURANCE PROGRAM SURVEY

2. FLOODPLAIN MANAGEMENT			
Requirement	*Recommended Action*	*Yes/No*	*Comments*
c. Has the municipality considered adopting activities that extend beyond the minimum requirements? Examples include: • Participation in the Community Rating System • Prohibition of production or storage of chemicals in SFHA • Prohibition of certain types of structures, such as hospitals, nursing homes, and jails in SFHA • Prohibition of certain types of residential housing (manufactured homes) in SFHA • Floodplain ordinances that prohibit any new residential or nonresidential structures in SFHA	If yes, specify activities.	NO	

3. FLOOD INSURANCE			
Requirement	*Recommended Action*	*Yes/No*	*Comments*
a. Does the municipality educate community members about the availability and value of flood insurance?	If yes, specify how.	NO	
b. Does the municipality inform community property owners about changes to the DFIRM/FIRM that would impact their insurance rates?	If yes, specify how.	NO	
c. Does the municipality provide general assistance to community members regarding insurance issues?	If yes, specify how.	NO	

Town of Halifax

Hazard Rankings

The methodology for the hazard rankings can be found in Section 5, "Risk Assessment", of this Plan. The hazard rankings included in this section are specific to the Town of Halifax, not the region as a whole.

Hazard	Location (Geographic Area Affected)	Maximum Probable Extent (Magnitude/Strength)	Probability of Future Events	Overall Hazard Ranking
Dam Failure	Negligible (1)	Extreme (4)	Occasional (2)	Medium (8)*
Drought	Extensive (4)	Extreme (4)	Occasional (2)	Medium/High (10)
Earthquake	Extensive (4)	Weak (1)	Unlikely (1)	Low/Medium (6)
Extreme Cold	Extensive (4)	Moderate (2)	Occasional (2)	Medium (8)
Extreme Heat	Extensive (4)	Moderate (2)	Occasional (2)	Medium (8)
Flood	Negligible (1)	Moderate (2)	Highly Likely (4)	Medium (7)
Hail	Extensive (4)	Moderate (2)	Likely (3)	Medium/High (9)
Tropical Cyclone	Extensive (4)	Severe (3)	Likely (3)	Medium/High (10)
Landslide	Negligible (1)	Weak (1)	Unlikely (1)	Low (3)
Lightning	Negligible (1)	Moderate (2)	Highly Likely (4)	Medium (7)
Severe Wind	Extensive (4)	Severe (3)	Highly Likely (4)	High (11)
Severe Winter Weather	Extensive (4)	Moderate (2)	Highly Likely (4)	Medium/High (10)
Tornado	Negligible (1)	Severe (3)	Unlikely (1)	Low/Medium (5)
Wildfire	Extensive (4)	Weak (1)	Likely (3)	Medium (8)

*Based on recent discussions between the Town of Halifax and FERC (12/8/2019) the Town believes that the Overall Hazard Ranking for Dam Failure might be more accurate if included in the "Medium/High" range.

Mitigation Actions

The Town's mitigation actions were reviewed, updated, and ranked based on discussions with local officials. Among the factors considered when prioritizing the mitigation actions were: effect on overall risk to life and property, ease of implementation, political and community support, consideration of cost/benefit, and funding availability.

Mitigation Action 1	Address vulnerabilities at critical and highly significant town facilities, including storm proof roofs/windows and other needed improvements at the Town Office, farmers market, and the water tower being utilized as a co-location facility.
Category	Prevention/Property Protection/Structural Projects
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	$50,000-$75,000 at Town Office, Farmers Market $150,000+, Water Tower $50,000+
Potential Funding Sources	Federal/State grants, Town Budget
Lead Agency/Department	Town Administration
Implementation Schedule	Near term
Status Update	Insufficient funds, exploring grant opportunities

Mitigation Action 2	Maintain redundancy in communication system for back-up purposes and install stationary generators at critical facilities, such as the Town Office, Police Department, Public Works building, etc., that are lacking a secondary system. When stationary generators are not feasible consider a quick-hookup scenario where rotating or shared generators can be used. Electrical upgrades may be required to accomplish this. Aging generators will be replaced as warranted.
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Costs will vary from site to site
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Town Administration
Implementation Schedule	Near term
Status Update	Insufficient funds, exploring grant opportunities

Mitigation Action 3 (NEW)	Coordinate with the Federal Energy Regulatory Commission (FERC), Banister Dam owner KEI (USA) Power Management, Inc. (FERC Project #P-9028), FEMA, DCR, VDEM, SPDC and various agencies (including Halifax Emergency Services) on matters relating to the Banister Dam.
Category	Emergency Services/Prevention/Property Protection/Natural Resource Protection
Hazard(s) Addressed	Flooding
Priority	High
Estimated Cost	Unknown at this time – Staff time, SPDC, FERC, FEMA, DCR, dam owner
Potential Funding Sources	FERC, FEMA, DCR, dam owner
Lead Agency/Department	Town Administration, FERC, VDEM, FEMA, DCR, SPDC, Halifax Emergency Services
Implementation Schedule	Ongoing
Status Update	KEI Emergency Action Plan (EAP) exercise September 2020; coordinate FERC re-licensing, FEMA FIRM map updates with owner, town administration, VDEM, DCR, SPDC and other agencies on impact to property and nature (recreational) resources.

Mitigation Action 4	Continue to support the efforts of the Halifax Volunteer Fire Department (education, training, equipment, etc.).
Category	Public Education and Awareness, Prevention
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	$55,000 +/-
Potential Funding Sources	Town budget
Lead Agency/Department	Town Administration
Implementation Schedule	Ongoing
Status Update	Ongoing – Financial support is provided on an annual basis

Mitigation Action 5	Look into participating in the StormReady and SKYWARN programs and/or coordinating with Halifax County on related activities and workshops.
Category	Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal – Staff time
Potential Funding Sources	Town budget
Lead Agency/Department	Town Administration
Implementation Schedule	Near term
Status Update	Ongoing – need to learn more about the programs and how best to coordinate with Halifax County on activities, if possible.

Mitigation Action 6	Encourage residents to sign up for mass notification services, including: 1) Halifax County's emergency mass notification service that provides time-sensitive messages by telephone, text and email; and 2) the Town of Halifax's email blast program that also delivers pertinent information to residents.
Category	Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal – Staff time
Potential Funding Sources	Town budget
Lead Agency/Department	Town Administration
Implementation Schedule	Ongoing
Status Update	Ongoing – Residents will continue to be encouraged to sign up for both services. Please visit halifaxcountyva.gov and townofhalifax.com to learn more. The Town and County has previously worked together on the installation of an early warning siren several years ago.

Mitigation Action 7	Town to coordinate with VDOT to clean, maintain, and upgrade stormwater infrastructure, particularly in the Houston Street and Blue Ridge Lane area downtown, to prevent yard and street flooding.
Category	Prevention
Hazard(s) Addressed	Flooding
Priority	Medium
Estimated Cost	Minimal – Clean/Maintain, Varies for upgrades
Potential Funding Sources	VDOT, Federal/State grants, Town budget
Lead Agency/Department	Town Administration, Public Works Department, VDOT
Implementation Schedule	Ongoing
Status Update	Problem areas are reported, upgrades are explored as warranted.

Mitigation Action 8	Continue to prohibit and limit floodplain development through regulatory and/or incentive based measures. Report other issues that may arise within the floodplain, such as silting, to appropriate agencies for guidance.
Category	Prevention/Property Protection
Hazard(s) Addressed	Flooding
Priority	Medium
Estimated Cost	Minimal – Staff time
Potential Funding Sources	Town budget
Lead Agency/Department	Town Administration, DCR
Implementation Schedule	Ongoing
Status Update	Enforcement is ongoing.

Mitigation Action 9 (NEW)	Review existing fire hydrant locations to determine any areas within the town that are underserved or lacking. Coordinate with the Halifax County Service Authority (HCSA) and Halifax Volunteer Fire Department on any new proposed fire hydrant locations and installation. Locations may correspond with HCSA capital improvement plan to expand water and sewer facilities.
Category	Prevention
Hazard(s) Addressed	Wildfire
Priority	Medium
Estimated Cost	Creation of map should be minimal. Cost of hydrants is not known at this time.
Potential Funding Sources	Town budget, HCSA budget
Lead Agency/Department	Town Administration, HVFD, HCSA
Implementation Schedule	Near term
Status Update	Town Administration to coordinate with HVFD and HCSA to begin a review of fire hydrant locations and implement recommendations from the process.

Mitigation Action 10	When new homes are constructed, provide information to encourage the clearing of trees, brush, and other flammable natural materials a safe distance from the home creating a "Green Zone" between the forest and structure.
Category	Prevention/Public Education and Awareness
Hazard(s) Addressed	Wildfire
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	VDOF
Lead Agency/Department	VDOF, Town Administration
Implementation Schedule	Ongoing
Status Update	Ongoing – Coordinate with VDOF when additional brochures are needed.

Mitigation Action 11 (NEW)	Provide recommended methods of reducing risk, vulnerability and increasing public safety in a digital format for residents.
Category	Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	Medium
Estimated Cost	Minimal – Staff time
Potential Funding Sources	Town budget
Lead Agency/Department	Town Administration
Implementation Schedule	Near term
Status Update	No action; options are being explored (email blast, town website, etc.)

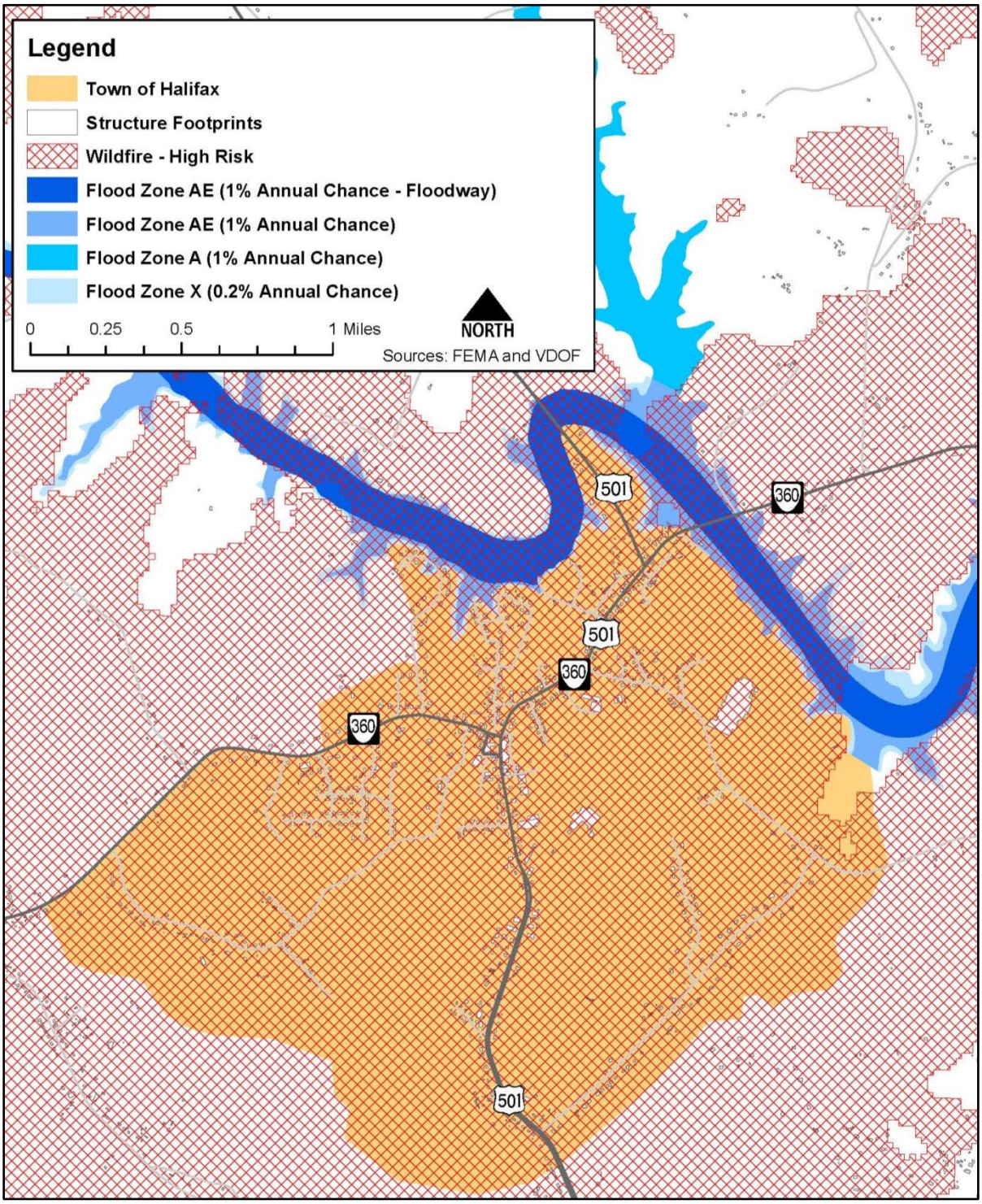
Mitigation Action 12 (NEW)	Encourage low impact development elements in new construction projects and retrofits when applicable.
Category	Prevention/Structural Project
Hazard(s) Addressed	Flooding
Priority	Medium
Estimated Cost	Minimal – Staff time
Potential Funding Sources	Town budget
Lead Agency/Department	Town Administration, SWCD, DCR, DEQ
Implementation Schedule	Ongoing
Status Update	Ongoing

Removed Mitigation Actions:

Action	Reason
Elevate HVAC, electrical, and telecommunications systems at critical facilities, to keep them above any type of flooding, even minor flooding	Town does not believe any of these systems are currently at risk of flooding at any of their critical facility locations.
Place storm shelters at large mobile home parks. Secure new mobile homes with standard tie-downs to reduce their vulnerability to high winds.	Town does not have a large mobile home park and the County addresses issues relating to building codes and inspections.
Routinely inspect and test the functioning and classification/color of fire hydrants, including hydrants in rural areas. Make sure the information is shared with area fire departments, with maps.	The inspections and testing of fire hydrants is the responsibility of the Halifax County Service Authority.

Flood and Wildfire Map

The flood zones shown below are for planning purposes and only include flood zones A, AE, and a portion of flood zone X. Full details can be found on FEMA's Flood Map Service Center webpage. Additional details relating to wildfires can be found in Section 4 of this plan. Please note that only high risk areas from a 2003 Wildfire Risk Assessment Map have been included on the following map.



Public Survey

The public survey asked each participate in which local jurisdiction that they lived. The results from those who identified as living in the Town of Halifax are as follows:

Question 1

Which of the following hazards have directly impacted you, your household, or your property?

Hazard	Pct.	Hazard	Pct.
Dam Failure	0.00	High Winds	72.22
Drought	38.89	Hurricane/Tropical Cyclone	27.78
Earthquake	5.56	Landslide	0.00
Extreme Heat/Cold	27.78	Lightning	5.56
Flooding	22.22	Tornado	5.56
Hail	27.78	Wildfire	0.00
Heavy Snow/Ice	38.89		

Responses: 18 of 19

Questions 2

How concerned are you about the following hazards affecting our region?

Hazard	Very Concerned	Somewhat Concerned	Not Concerned	Responses
Dam Failure	14.29	28.57	57.14	14/19
Drought	31.25	37.50	31.25	16/19
Earthquake	6.25	62.50	31.25	16/19
Extreme Heat/Cold	18.75	75.00	6.25	16/19
Flooding	47.06	35.29	17.65	17/19
Hail	37.50	50.00	12.50	16/19
Heavy Snow/Ice	43.75	37.50	18.75	16/19
High Winds	66.67	33.33	0.00	18/19
Hurricane/Tropical Cyclone	43.75	37.50	18.75	16/19
Landslide	7.14	7.14	85.71	14/19
Lightning	18.75	75.00	6.25	16/19
Tornado	56.25	37.50	6.25	16/19
Wildfire	33.33	46.67	20.00	15/19

Question 3

Is your home located in a floodplain?

Yes	No	Not Sure	Responses
0.00	100.00	0.00	18/19

Question 4

Does your household have flood insurance?

Yes	No	Not Sure	Responses
0.00	94.44	5.56	18/19

Question 5

The following statements will help determine citizen priorities regarding planning for natural hazards. Please tell us how important each one is to you.

Priorities	Very Important	Somewhat Important	Not Important	Responses
Protect private property	94.12	5.88	0.00	17/19
Protect critical facilities (hospitals, fire stations, etc.)	100.00	0.00	0.00	19/19
Prevent development in identified hazard areas	88.24	11.76	0.00	17/19
Enhance the function of natural areas (streams, wetlands)	50.00	44.44	5.56	18/19
Protect historical and cultural landmarks	63.16	26.32	10.53	19/19
Protect and reduce damage to utilities	94.74	5.26	0.00	19/19
Strengthen emergency services (Fire, EMS, Police)	94.44	5.56	0.00	18/19
Promote cooperation among public agencies, citizens, non-profit organizations, and business	88.89	11.11	0.00	18/19

Question 6

Have you or someone in your household:

Actions	Have Done	Plan To Do	Not Interested	Responses
Attended meetings or received information on natural disasters or emergency preparedness?	55.56	16.67	31.25	18/19
Talked with members in your household about what to do in case of a natural disaster or emergency?	66.67	27.78	5.56	18/19
Prepared a “Disaster Supply Kit” (stored food, water batteries, etc.)?	47.37	52.63	0.00	19/19
Has anyone in your household been trained in First Aid or CPR?	63.16	21.05	15.79	19/19
Installed smoke detectors on each level of your home?	100.00	0.00	0.00	19/19
Signed up to receive emergency alerts from Brunswick, Halifax, or Mecklenburg counties?	84.21	15.79	0.00	19/19
Periodically check gutters, downspouts, and drain pipes on your property?	84.21	15.79	0.00	19/19

Question 7

Are you interested in making your home or neighborhood more resistant to natural hazards?

Yes	No	Responses
93.33	6.67	15/19

Question 8

What is the most effective way for you to receive information about how to make your household and home safer from natural disasters? (Select up to three)

Communication	Pct.	Communication	Pct.
Newspapers	38.89	University/College	0.00
Television	50.00	Mail	22.22
Email Newsletters	61.11	Fire/EMS	0.00
News Website	11.11	Face Sheet/Brochure	38.89
Social Media	33.33	Public Workshops	27.78
Schools	0.00	Other (please specify)	5.56

Responses: 18 of 19

Question 9

Whom would you most trust to provide you with information about how to make your household and home safer from natural hazards? (Select up to three)

Trusted Source	Pct.	Trusted Source	Pct.
News Media	52.94	Elected Officials	5.88
Government Agencies	52.94	Social Media	5.88
Insurance Agent or Company	41.18	Non-Profit Organizations	41.18
Utility Company	58.82	Not Sure	17.65
University/Research Institution	17.65	Other (please specify)	0.00
Neighbor/Friend/Family Member	11.76		

Responses: 17 of 19

National Flood Insurance Program Survey

NATIONAL FLOOD INSURANCE PROGRAM (NFIP) SURVEY

MUNICIPALITY: TOWN OF HALIFAX

1. FLOODPLAIN IDENTIFICATION AND MAPPING			
Requirement	*Recommended Action*	*Yes/No*	*Comments*
a. Does the municipality maintain accessible copies of an effective Flood Insurance Rate Map (FIRM)/Digital Flood Insurance Rate Map (DFIRM)? Does the municipality maintain accessible copies of the most recent Flood Insurance Study (FIS)?	Place these documents in the local libraries or make available publicly.	yes	
b. Has the municipality adopted the most current DFIRM/FIRM and FIS?	State the date of adoption, if approved.	yes	June 2009 ?
c. Does the municipality support request for map updates?	If yes, state how.	yes	FEMA Surging meeting MAP change questionnaire
d. Does the municipality share with Federal Emergency Management Agency (FEMA) any new technical or scientific data that could result in map revisions within 6 months of creation or identification of new data?	If yes, specify how.	no	
e. Does the municipality provide assistance with local floodplain determinations?	If yes, specify how.	yes	Zoning Permit review: approval
f. Does the municipality maintain a record of approved Letters of Map Change?	If yes, specify the responsible office.	no	

2. FLOODPLAIN MANAGEMENT			
Requirement	*Recommended Action*	*Yes/No*	*Comments*
a. Has the municipality adopted a compliant floodplain management ordinance that, at a minimum, regulates the following:	If yes, answer questions (1) through (4) below.	yes	
(1) Does the municipality issue permits for all proposed development in the Special Flood Hazard Areas (SFHAs)?	If yes, specify the office responsible.	yes	Town of Halifax Zoning Administrator Halifax County Building Inspectors Office
(2) Does the municipality obtain, review, and utilize any Base Flood Elevation (BFE) and floodway data, and/or require BFE data for subdivision proposals and other development proposals larger than 50 lots or 5 acres?	If yes, specify the office responsible.	yes	same as above
(3) Does the municipality identify measures to keep all new and substantially improved construction reasonably safe from flooding to or above the BFE, including anchoring, using flood-resistant materials, and designing or locating utilities and service facilities to prevent water damage?	If yes, specify the office responsible.	yes	same as above
(4) Does the municipality document and maintain records of elevation data that document lowest floor elevation for new or substantially improved structures?	If yes, specify the office responsible.	yes	above
b. If a compliant floodplain ordinance was adopted, does the municipality enforce the ordinance by monitoring compliance and taking remedial action to correct violations?	If yes, specify how.	yes	Notify any property owner of non-compliance; remedy

2. FLOODPLAIN MANAGEMENT			
Requirement	*Recommended Action*	*Yes/No*	*Comments*
c. Has the municipality considered adopting activities that extend beyond the minimum requirements? Examples include: • Participation in the Community Rating System • Prohibition of production or storage of chemicals in SFHA • Prohibition of certain types of structures, such as hospitals, nursing homes, and jails in SFHA • Prohibition of certain types of residential housing (manufactured homes) in SFHA • Floodplain ordinances that prohibit any new residential or nonresidential structures in SFHA	If yes, specify activities.	no	

3. FLOOD INSURANCE			
Requirement	*Recommended Action*	*Yes/No*	*Comments*
a. Does the municipality educate community members about the availability and value of flood insurance?	If yes, specify how.	yes	email blasts; brochures at Halifax Town Hall
b. Does the municipality inform community property owners about changes to the DFIRM/FIRM that would impact their insurance rates?	If yes, specify how.	yes	future updates from FEMA
c. Does the municipality provide general assistance to community members regarding insurance issues?	If yes, specify how.	no	

Town of Scottsburg

Hazard Rankings

The methodology for the hazard rankings can be found in Section 5, "Risk Assessment", of this Plan. The hazard rankings included in this section are specific to the Town of Scottsburg, not the region as a whole.

Hazard	Location (Geographic Area Affected)	Maximum Probable Extent (Magnitude/Strength)	Probability of Future Events	Overall Hazard Ranking
Dam Failure	Negligible (1)	Weak (1)	Unlikely (1)	Low (3)
Drought	Extensive (4)	Extreme (4)	Occasional (2)	Medium/High (10)
Earthquake	Extensive (4)	Weak (1)	Unlikely (1)	Low/Medium (6)
Extreme Cold	Extensive (4)	Moderate (2)	Occasional (2)	Medium (8)
Extreme Heat	Extensive (4)	Moderate (2)	Occasional (2)	Medium (8)
Flood	Negligible (1)	Weak (1)	Highly Likely (4)	Low/Medium (6)
Hail	Extensive (4)	Severe (3)	Likely (3)	Medium/High (10)
Tropical Cyclone	Extensive (4)	Severe (3)	Likely (3)	Medium/High (10)
Landslide	Negligible (1)	Weak (1)	Unlikely (1)	Low (3)
Lightning	Negligible (1)	Moderate (2)	Highly Likely (4)	Medium (7)
Severe Wind	Extensive (4)	Severe (3)	Likely (3)	Medium/High (10)
Severe Winter Weather	Extensive (4)	Moderate (2)	Highly Likely (4)	Medium/High (10)
Tornado	Negligible (1)	Severe (3)	Unlikely (1)	Low/Medium (5)
Wildfire	Limited (2)	Weak (1)	Occasional (2)	Low/Medium (5)

Mitigation Actions

The Town's mitigation actions were reviewed, updated, and ranked based on SPDC staff's best guess regarding the needs of the Town. Among the factors considered when prioritizing the mitigation actions were: effect on overall risk to life and property, ease of implementation, political and community support, consideration of cost/benefit, and funding availability.

Mitigation Action 1	Install stationary generators at critical facilities that are lacking a secondary system. Where stationary generators are not feasible, consider a quick-connect scenario where rotating or sharing portable generators can be utilized. Aging generators will be replaced as warranted.
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Varies based on site
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Town of Scottsburg
Implementation Schedule	Unknown
Status Update	Unknown

Mitigation Action 2	Encourage the use of emergency warning systems, including: 1) residents signing up for Halifax County's mass notification system to receive time-sensitive messages through telephone, text, and email formats; and 2) examine the feasibility of having a patterned siren to sound when hazardous weather conditions are imminent.
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	Town budget, Fire Department
Lead Agency/Department	Town of Scottsburg, Fire Department
Implementation Schedule	Unknown
Status Update	Unknown

Mitigation Action 3	The Town of Scottsburg contains a FEMA recognized Special Flood Hazard Area and should consider participating in the National Flood Insurance Program (NFIP). The Town needs to study the benefits of the program, the costs, and other relevant matters. This is action is to include ordinances to prohibit or limit development in identified floodplains.
Category	Prevention
Hazard(s) Addressed	Flooding
Priority	High
Estimated Cost	Adoption of local ordinances
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Town of Scottsburg
Implementation Schedule	Unknown
Status Update	Unknown

Mitigation Action 4	Elevate or otherwise floodproof vulnerable infrastructure to keep them above any type of flooding events.
Category	Prevention
Hazard(s) Addressed	Flooding
Priority	Medium
Estimated Cost	Varies by site
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Town of Scottsburg
Implementation Schedule	Unknown
Status Update	Unknown

Mitigation Action 5	Coordinate with VDOT to clean and maintain stormwater infrastructure to prevent yard and street flooding.
Category	Prevention
Hazard(s) Addressed	Flooding
Priority	Medium
Estimated Cost	Minimal – Staff time
Potential Funding Sources	VDOT
Lead Agency/Department	VDOT, Town of Scottsburg
Implementation Schedule	Unknown
Status Update	Unknown

Mitigation Action 6	Brochures that encourage clearing trees, brush, and other flammable natural materials a safe distance to create a "Green Zone" between the forest and structures will be made available to the public.
Category	Prevention/Public Education and Awareness
Hazard(s) Addressed	Wildfire
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	VDOF
Lead Agency/Department	Town of Scottsburg, VDOF
Implementation Schedule	Unknown
Status Update	Unknown

Mitigation Action 7	Support the efforts of the local fire department, including education and training, as the Town is able.
Category	Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Town of Scottsburg, Fire Department, Halifax County Emergency Services
Implementation Schedule	Unknown
Status Update	Unknown

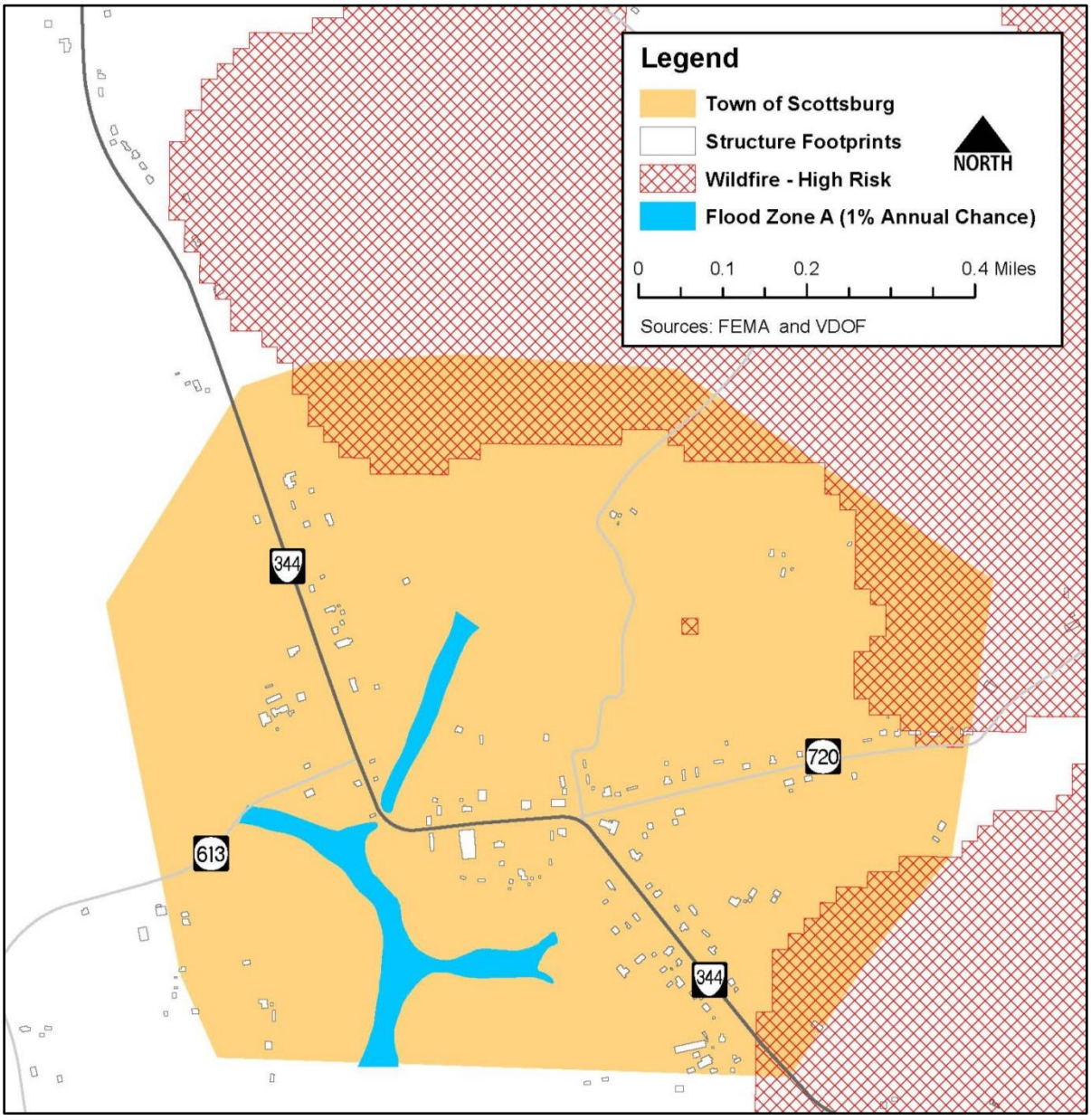
Mitigation Action 8	The Town and/or Fire Department could coordinate with Halifax County to participate in StormReady and SKYWARN programs and events.
Category	Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	Town budget, Fire Department, Halifax County Emergency Services
Lead Agency/Department	Town of Scottsburg, Fire Department, Halifax County Emergency Services
Implementation Schedule	Unknown
Status Update	Unknown

Mitigation Action 9	Routinely inspect and test the functioning and classification/color of fire hydrants. Make sure the information is shared with the area fire departments.
Category	Emergency Services
Hazard(s) Addressed	Wildfire
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	Town budget, Fire Department
Lead Agency/Department	Town of Scottsburg, Fire Department
Implementation Schedule	Unknown
Status Update	Unknown

Flood and Wildfire Map

The flood zones shown below are for planning purposes and only include flood zone A. Full details can be found on FEMA's Flood Map Service Center webpage.

Additional details relating to wildfires can be found in Section 4 of this plan. Please note that only high risk areas from a 2003 Wildfire Risk Assessment Map have been included on the following map.



Town of South Boston

Hazard Rankings

The methodology for the hazard rankings can be found in Section 5, "Risk Assessment", of this Plan. The hazard rankings included in this section are specific to the Town of South Boston, not the region as a whole.

Hazard	Location (Geographic Area Affected)	Maximum Probable Extent (Magnitude/Strength)	Probability of Future Events	Overall Hazard Ranking
Dam Failure	Negligible (1)	Weak (1)	Unlikely (1)	Low (3)
Drought	Extensive (4)	Extreme (4)	Occasional (2)	Medium/High (10)
Earthquake	Extensive (4)	Weak (1)	Unlikely (1)	Low/Medium (6)
Extreme Cold	Extensive (4)	Moderate (2)	Occasional (2)	Medium (8)
Extreme Heat	Extensive (4)	Moderate (2)	Occasional (2)	Medium (8)
Flood	Limited (2)	Severe (3)	Highly Likely (4)	Medium/High (9)
Hail	Extensive (4)	Severe (3)	Likely (3)	Medium/High (10)
Tropical Cyclone	Extensive (4)	Severe (3)	Likely (3)	Medium/High (10)
Landslide	Negligible (1)	Weak (1)	Unlikely (1)	Low (3)
Lightning	Negligible (1)	Moderate (2)	Highly Likely (4)	Medium (7)
Severe Wind	Extensive (4)	Severe (3)	Highly Likely (4)	High (11)
Severe Winter Weather	Extensive (4)	Moderate (2)	Highly Likely (4)	Medium/High (10)
Tornado	Negligible (1)	Severe (3)	Occasional (2)	Low/Medium (6)
Wildfire	Significant (3)	Weak (1)	Likely (3)	Medium (7)

Mitigation Actions

The Town's mitigation actions were reviewed, updated, and ranked based on discussions with local officials. Among the factors considered when prioritizing the mitigation actions were: effect on overall risk to life and property, ease of implementation, political and community support, consideration of cost/benefit, and funding availability.

Mitigation Action 1	Acquire, demolish, and convert frequently flooded properties into green space within the Riverdale area of South Boston.
Category	Prevention/Property Protection/Natural Resource Protection
Hazard(s) Addressed	Flooding
Priority	High
Estimated Cost	$3,000,000 +/-
Potential Funding Sources	Federal/State grants, Town Budget
Lead Agency/Department	Town Administration, SPDC, VDEM
Implementation Schedule	Near term
Status Update	Currently pursuing grant funds through VDEM/FEMA.

Mitigation Action 2	South Boston has numerous stormwater and flooding issues throughout town needing to be addressed. Current areas of concern include: Hupp's Mill Plaza, Sutfin Road, Edmunds Street, Railroad Street, and Eastover Drive. Water features contributing to the issues include: Poplar Creek tributaries and Rocky Branch. Additional areas will be addressed as they are identified and conditions warrant it.
Category	Prevention/Property Protection/Structural Projects
Hazard(s) Addressed	Flooding
Priority	High

Estimated Cost	Varies, but can be $750,000 - $1,000,000 per site
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	VDEM, VDOT, Public Works Department
Implementation Schedule	Ongoing
Status Update	Ongoing – South Boston has utilized Revenue Sharing funds to address stormwater and urban flooding issues in the past and will continue to do so.

Mitigation Action 3 (NEW)	**Review existing fire hydrant locations to determine any areas within the town that are underserved or lacking. Coordinate with the Halifax County Service Authority on any new proposed fire hydrant locations and installation. One area to review in detail is along US 501 from the Halifax Square Shopping Center to Maid Marion Rd.**
Category	Prevention
Hazard(s) Addressed	Wildfire
Priority	High
Estimated Cost	Creation of map should be minimal. Cost of hydrants is not known at this time.
Potential Funding Sources	Town budget, HCSA budget
Lead Agency/Department	Fire Department, HCSA
Implementation Schedule	Near term
Status Update	Fire Department will begin review and coordinate with HCSA.

Mitigation Action 4	**Maintain and enhance redundant communication's system components to back-up primary communications systems.**
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	TBD
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Fire Department
Implementation Schedule	Ongoing
Status Update	Ongoing

Mitigation Action 5	**Ensure that generators located at critical facilities are in good working order, with aging generators being replaced when warranted. Any new critical facilities constructed should include generators when deemed advisable. Where stationary generators are not feasible, consider a quick-connect scenario where rotating or shared generators can be used.**
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Varies by site
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Town Administration, Public Works Department, Fire Department
Implementation Schedule	Ongoing
Status Update	The Town of South Boston has generators in place and in good working order at critical facilities.

Mitigation Action 6	**Continue to coordinate with the NWS regarding necessary actions when impending flooding of the Riverdale area will occur. The Town will also look to partner with Halifax County on events and opportunities related to the StormReady and SKYWARN programs.**
Category	Public Education and Awareness/Prevention/Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal – Staff time
Potential Funding Sources	Town budget

Lead Agency/Department	Fire Department, Public Works
Implementation Schedule	Ongoing
Status Update	Actions are taken as warranted in the Riverdale area. Fire Department staff will continue to work with Halifax County on programs related to StormReady and SKYWARN.

Mitigation Action 7	**Continue to utilize and upgrade the existing Emergency Warning System. A collection of six sirens are used to alert those within the town limits of impending hazardous weather conditions. Additionally, the Town will encourage residents to sign up for Halifax County's mass notification system that provides time-sensitive messages through telephone, text and email alerts.**
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal – Staff time
Potential Funding Sources	Town budget
Lead Agency/Department	Town Administration, Fire Department
Implementation Schedule	Ongoing
Status Update	Sirens have been tested and are sufficient. Upgrades will occur when warranted. Town will look into outreach opportunities (website, social media platforms, etc.) to help promote Halifax County's mass notification system.

Mitigation Action 8	**Ensure access to all fire hydrants is unencumbered. Coordinate with HCSA to have fire hydrants routinely inspected, with any updated maps and/or flow data being shared with South Boston Fire Department.**
Category	Emergency Services
Hazard(s) Addressed	Wildfire
Priority	High
Estimated Cost	Minimal – Staff time
Potential Funding Sources	Town budget
Lead Agency/Department	Fire Department, Public Works, HCSA
Implementation Schedule	Ongoing
Status Update	Efforts are made to clear away any overgrowth and/or debris blocking fire hydrants when identified. HCSA is testing fire hydrants throughout their system as time and staffing allows.

Mitigation Action 9	**Clean and maintain stormwater infrastructure to prevent yard and street flooding.**
Category	Prevention
Hazard(s) Addressed	Flooding
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	Town budget
Lead Agency/Department	Public Works Department
Implementation Schedule	Ongoing
Status Update	Cleaning and maintenance is carried out by the Public Works Department as conditions warrant.

Mitigation Action 10	**Continue to prohibit and limit floodplain development through regulatory and/or incentive based measures. Report other issues that may arise within the floodplain, such as silting, to appropriate agencies for guidance.**
Category	Prevention/Property Protection
Hazard(s) Addressed	Flooding
Priority	Medium
Estimated Cost	Minimal – Staff time
Potential Funding Sources	Town budget

Lead Agency/Department	Planning & Zoning Department
Implementation Schedule	Ongoing
Status Update	Enforcement of floodplain regulations is ongoing.

Mitigation Action 11	**When new homes are constructed, provide information to encourage clearing trees, brush, and other flammable natural materials a safe distance from the home creating a "Green Zone" between the forest and the structure.**
Category	Prevention
Hazard(s) Addressed	Wildfire
Priority	Low
Estimated Cost	Minimal
Potential Funding Sources	VDOF
Lead Agency/Department	Planning & Zoning Department, Fire Department, VDOF
Implementation Schedule	Ongoing
Status Update	South Boston has made VDOF brochure available, will coordinate with VDOF when additional brochures are needed.

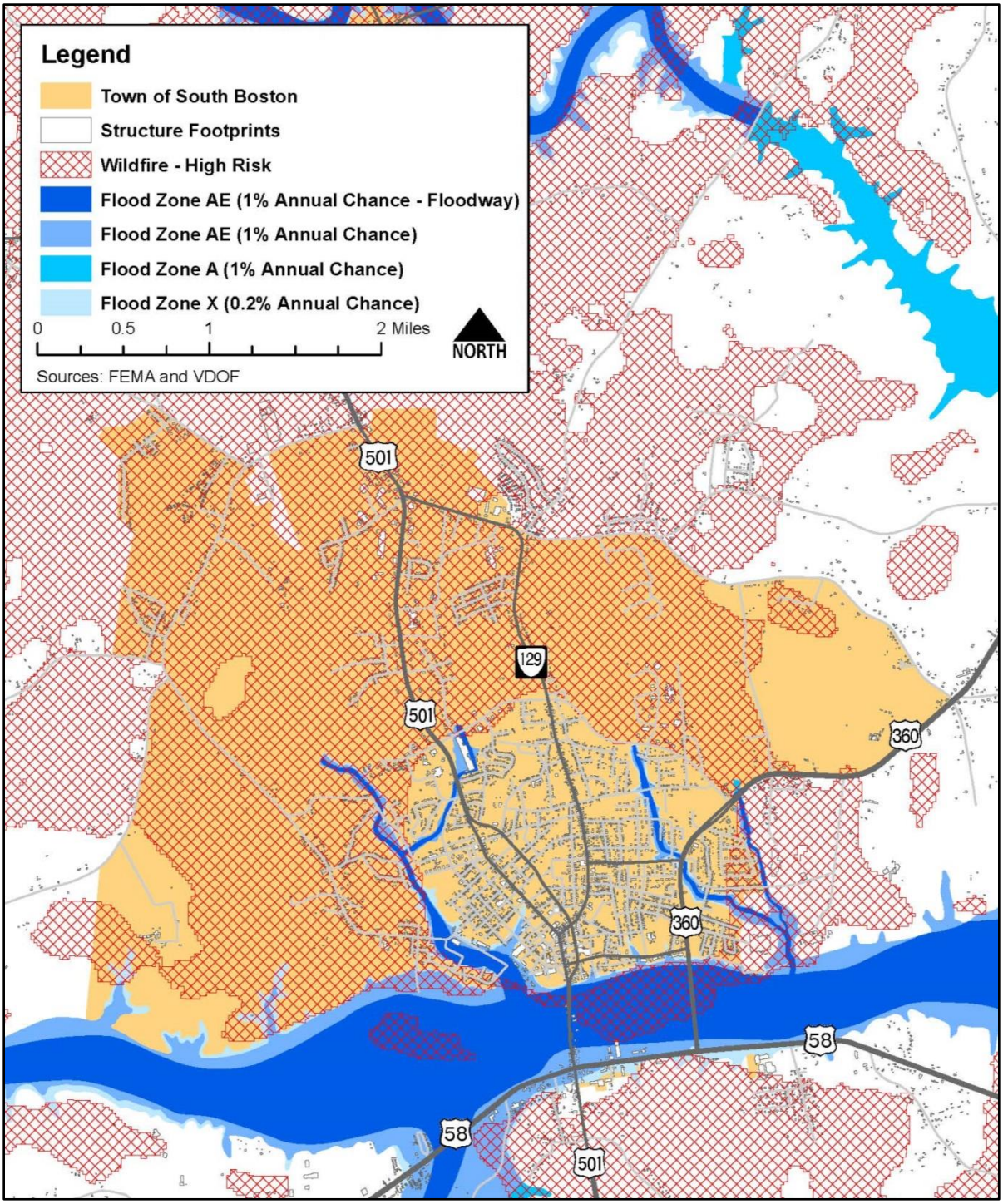
Removed Mitigation Actions:

Action	Reason
For critical and highly significant county and town facilities, examine windows for vulnerabilities. Install storm shutters or window clips for mounting plywood.	This action was deemed to be of such low priority at this point that it was removed from the list.
Elevate HVAC, electrical, and telecommunications systems at critical facilities, to keep them above any type of flooding, even minor flooding.	The Town does not believe any of its systems at critical facilities are subject to flooding. Water/sewer infrastructure is the responsibility of the Halifax County Service Authority.
Place storm shelters at large mobile home parks. Secure new mobile homes with standard tie-downs to reduce their vulnerability to high winds.	The Town does not have large mobile home parks and the County addresses matters related to building codes and inspections.
Continue to improve firefighter education and training through the funding of training resources such as the firehouse in Chase City, the training facility near La Crosse, and the Fire Training Center in South Boston.	Improvements for firefighter education and training are already integrated into the normal operating functions of the fire department and are always ongoing.

Flood and Wildfire Map

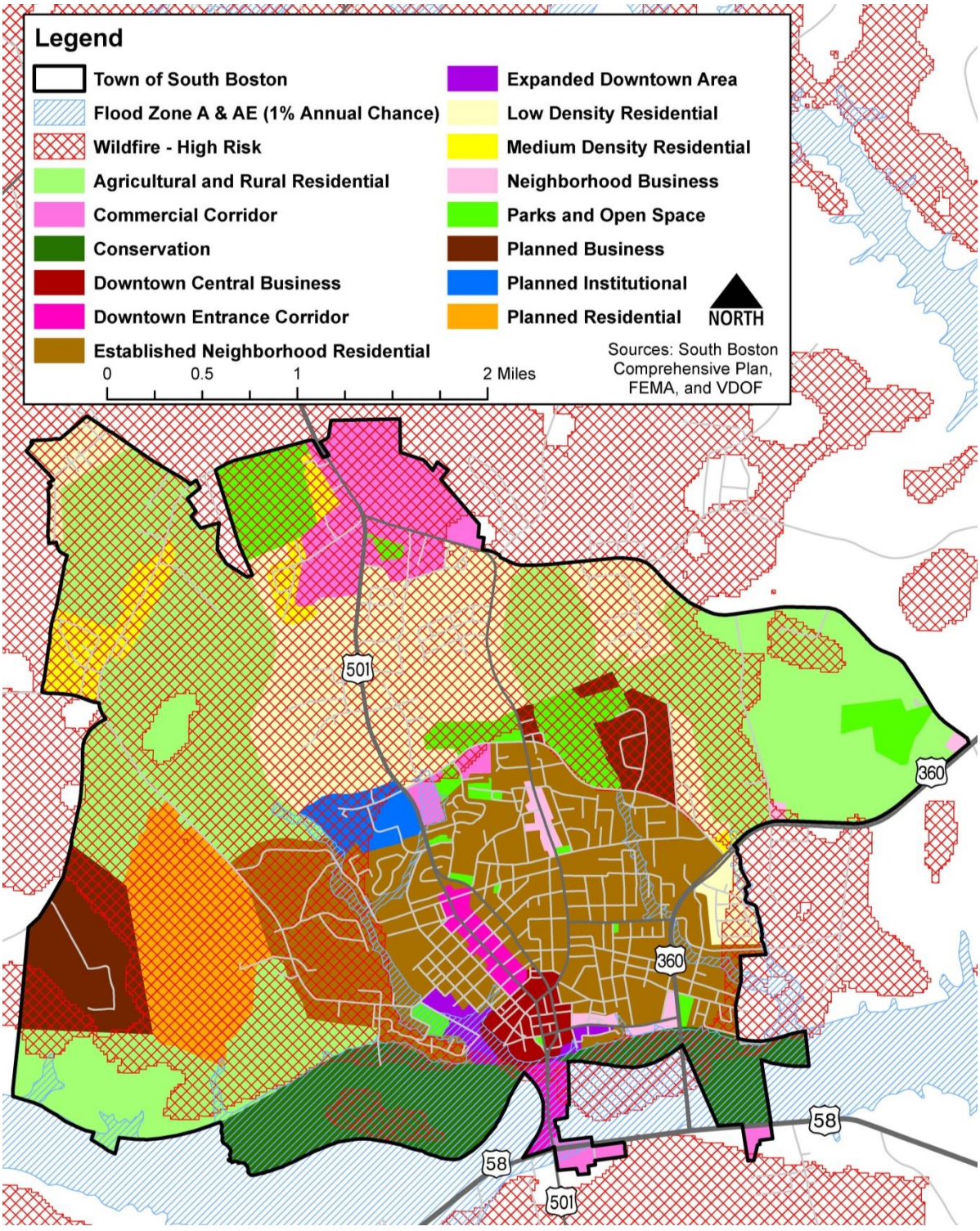
The flood zones shown below are for planning purposes and only include flood zones A, AE, and a portion of flood zone X. Full details can be found on FEMA's Flood Map Service Center webpage.

Additional details relating to wildfires can be found in Section 4 of this plan. Please note that only high risk areas from a 2003 Wildfire Risk Assessment Map have been included on the following map.



Future Land Use Risks (Flood and Wildfire)

The 2030 Town of South Boston Comprehensive Plan includes a Future Land Map. That map has been recreated with flood and wildfire overlays to show potential risks to those hazards.



Public Survey

The public survey asked each participate in which local jurisdiction that they lived. The results from those who identified as living in the Town of South Boston are as follows:

Question 1

Which of the following hazards have directly impacted you, your household, or your property?

Hazard	Pct.	Hazard	Pct.
Dam Failure	50.00	High Winds	0.00
Drought	50.00	Hurricane/Tropical Cyclone	0.00
Earthquake	0.00	Landslide	0.00
Extreme Heat/Cold	0.00	Lightning	50.00
Flooding	50.00	Tornado	0.00
Hail	0.00	Wildfire	0.00
Heavy Snow/Ice	0.00		

Responses: 2 of 2

Questions 2

How concerned are you about the following hazards affecting our region?

Hazard	Very Concerned	Somewhat Concerned	Not Concerned	Responses
Dam Failure	50.00	0.00	50.00	2/2
Drought	50.00	50.00	0.00	2/2
Earthquake	50.00	0.00	50.00	2/2
Extreme Heat/Cold	50.00	50.00	0.00	2/2
Flooding	50.00	50.00	0.00	2/2
Hail	50.00	0.00	50.00	2/2
Heavy Snow/Ice	50.00	50.00	0.00	2/2
High Winds	100.00	0.00	0.00	2/2
Hurricane/Tropical Cyclone	0.00	50.00	50.00	2/2
Landslide	0.00	50.00	50.00	2/2
Lightning	50.00	0.00	50.00	2/2
Tornado	0.00	50.00	50.00	2/2
Wildfire	0.00	50.00	50.00	2/2

Question 3

Is your home located in a floodplain?

Yes	No	Not Sure	Responses
0.00	100.00	0.00	2/2

Question 4

Does your household have flood insurance?

Yes	No	Not Sure	Responses
0.00	50.00	50.00	2/2

Question 5

The following statements will help determine citizen priorities regarding planning for natural hazards. Please tell us how important each one is to you.

Priorities	Very Important	Somewhat Important	Not Important	Responses
Protect private property	100.00	0.00	0.00	2/2
Protect critical facilities (hospitals, fire stations, etc.)	100.00	0.00	0.00	2/2
Prevent development in identified hazard areas	100.00	0.00	0.00	2/2
Enhance the function of natural areas (streams, wetlands)	50.00	50.00	0.00	2/2
Protect historical and cultural landmarks	100.00	0.00	0.00	2/2
Protect and reduce damage to utilities	100.00	0.00	0.00	2/2
Strengthen emergency services (Fire, EMS, Police)	100.00	0.00	0.00	2/2
Promote cooperation among public agencies, citizens, non-profit organizations, and business	100.00	0.00	0.00	2/2

Question 6

Have you or someone in your household:

Actions	Have Done	Plan To Do	Not Interested	Responses
Attended meetings or received information on natural disasters or emergency preparedness?	0.00	100.00	0.00	2/2
Talked with members in your household about what to do in case of a natural disaster or emergency?	50.00	50.00	0.00	2/2
Prepared a “Disaster Supply Kit” (stored food, water batteries, etc.)?	50.00	50.00	0.00	2/2
Has anyone in your household been trained in First Aid or CPR?	0.00	50.00	50.00	2/2
Installed smoke detectors on each level of your home?	100.00	0.00	0.00	2/2
Signed up to receive emergency alerts from Brunswick, Halifax, or Mecklenburg counties?	50.00	50.00	0.00	2/2
Periodically check gutters, downspouts, and drain pipes on your property?	50.00	50.00	0.00	2/2

Question 7

Are you interested in making your home or neighborhood more resistant to natural hazards?

Yes	No	Responses
100.00	0.00	2/2

Question 8

What is the most effective way for you to receive information about how to make your household and home safer from natural disasters? (Select up to three)

Communication	Pct.	Communication	Pct.
Newspapers	0.00	University/College	0.00
Television	50.00	Mail	0.00
Email Newsletters	50.00	Fire/EMS	0.00
News Website	100.00	Face Sheet/Brochure	0.00
Social Media	0.00	Public Workshops	0.00
Schools	0.00	Other (please specify)	0.00

Responses: 2 of 2

Question 9

Whom would you most trust to provide you with information about how to make your household and home safer from natural hazards? (Select up to three)

Trusted Source	Pct.	Trusted Source	Pct.
News Media	50.00	Elected Officials	0.00
Government Agencies	0.00	Social Media	50.00
Insurance Agent or Company	0.00	Non-Profit Organizations	0.00
Utility Company	0.00	Not Sure	0.00
University/Research Institution	0.00	Other (please specify)	0.00
Neighbor/Friend/Family Member	0.00		

Responses: 2 of 2

National Flood Insurance Program Survey

NATIONAL FLOOD INSURANCE PROGRAM SURVEY

NATIONAL FLOOD INSURANCE PROGRAM (NFIP) SURVEY

MUNICIPALITY: South Boston

1. FLOODPLAIN IDENTIFICATION AND MAPPING

Requirement	*Recommended Action*	*Yes/No*	*Comments*
a. Does the municipality maintain accessible copies of an effective Flood Insurance Rate Map (FIRM)/Digital Flood Insurance Rate Map (DFIRM)? Does the municipality maintain accessible copies of the most recent Flood Insurance Study (FIS)?	Place these documents in the local libraries or make available publicly.	yes	Oct 16 2009 firms and FIS are in our office for review.
b. Has the municipality adopted the most current DFIRM/FIRM and FIS?	State the date of adoption, if approved.	yes	8-24-09
c. Does the municipality support request for map updates?	If yes, state how.	yes	sign the request for FEMA letter of map change
d. Does the municipality share with Federal Emergency Management Agency (FEMA) any new technical or scientific data that could result in map revisions within 6 months of creation or identification of new data?	If yes, specify how.	no	we do not have any
e. Does the municipality provide assistance with local floodplain determinations?	If yes, specify how.	no	we only give the public a copy of the firm
f. Does the municipality maintain a record of approved Letters of Map Change?	If yes, specify the responsible office.	yes	Zoning has copies of the letters

NATIONAL FLOOD INSURANCE PROGRAM SURVEY

2. FLOODPLAIN MANAGEMENT			
Requirement	*Recommended Action*	*Yes/No*	*Comments*
a. Has the municipality adopted a compliant floodplain management ordinance that, at a minimum, regulates the following:	If yes, answer questions (1) through (4) below.	yes	South Boston Code Sec 114-117 to 114-119
(1) Does the municipality issue permits for all proposed development in the Special Flood Hazard Areas (SFHAs)?	If yes, specify the office responsible.	yes / no	Zoning Town of South Boston Building Halifax County
(2) Does the municipality obtain, review, and utilize any Base Flood Elevation (BFE) and floodway data, and/or require BFE data for subdivision proposals and other development proposals larger than 50 lots or 5 acres?	If yes, specify the office responsible.	no	The Dan River District does not permit residential development. Sec 114-64 to 114-66
(3) Does the municipality identify measures to keep all new and substantially improved construction reasonably safe from flooding to or above the BFE, including anchoring, using flood-resistant materials, and designing or locating utilities and service facilities to prevent water damage?	If yes, specify the office responsible.	no	I would say Halifax Co Building Official.
(4) Does the municipality document and maintain records of elevation data that document lowest floor elevation for new or substantially improved structures?	If yes, specify the office responsible.	no	Halifax Co Building Off.
b. If a compliant floodplain ordinance was adopted, does the municipality enforce the ordinance by monitoring compliance and taking remedial action to correct violations?	If yes, specify how.	yes	monitoring the area

NATIONAL FLOOD INSURANCE PROGRAM SURVEY

2. FLOODPLAIN MANAGEMENT			
Requirement	*Recommended Action*	*Yes/No*	*Comments*
c. Has the municipality considered adopting activities that extend beyond the minimum requirements? Examples include: • Participation in the Community Rating System • Prohibition of production or storage of chemicals in SFHA • Prohibition of certain types of structures, such as hospitals, nursing homes, and jails in SFHA • Prohibition of certain types of residential housing (manufactured homes) in SFHA • Floodplain ordinances that prohibit any new residential or nonresidential structures in SFHA	If yes, specify activities.	yes	We have a Dan River District with Minimal uses permitted. Code Sec. 114-64 to 114-66

3. FLOOD INSURANCE			
Requirement	*Recommended Action*	*Yes/No*	*Comments*
a. Does the municipality educate community members about the availability and value of flood insurance?	If yes, specify how.	no	
b. Does the municipality inform community property owners about changes to the DFIRM/FIRM that would impact their insurance rates?	If yes, specify how.	no	
c. Does the municipality provide general assistance to community members regarding insurance issues?	If yes, specify how.	yes	copies of firms if requested

Town of Virgilina

Hazard Rankings

The methodology for the hazard rankings can be found in Section 5, "Risk Assessment", of this Plan. The hazard rankings included in this section are specific to the Town of Virgilina, not the region as a whole.

Hazard	Location (Geographic Area Affected)	Maximum Probable Extent (Magnitude/Strength)	Probability of Future Events	Overall Hazard Ranking
Dam Failure	Negligible (1)	Weak (1)	Unlikely (1)	Low (3)
Drought	Extensive (4)	Extreme (4)	Occasional (2)	Medium/High (10)
Earthquake	Extensive (4)	Weak (1)	Unlikely (1)	Low/Medium (6)
Extreme Cold	Extensive (4)	Moderate (2)	Occasional (2)	Medium (8)
Extreme Heat	Extensive (4)	Moderate (2)	Occasional (2)	Medium (8)
Flood	Negligible (1)	Weak (1)	Unlikely (1)	Low (3)
Hail	Extensive (4)	Severe (3)	Likely (3)	Medium/High (10)
Tropical Cyclone	Extensive (4)	Severe (3)	Likely (3)	Medium/High (10)
Landslide	Negligible (1)	Weak (1)	Unlikely (1)	Low (3)
Lightning	Negligible (1)	Moderate (2)	Highly Likely (4)	Medium (7)
Severe Wind	Extensive (4)	Severe (3)	Likely (3)	Medium/High (10)
Severe Winter Weather	Extensive (4)	Moderate (2)	Highly Likely (4)	Medium/High (10)
Tornado	Negligible (1)	Severe (3)	Occasional (2)	Low/Medium (6)
Wildfire	Negligible (1)	Weak (1)	Occasional (2)	Low (4)

Mitigation Actions

The Town's mitigation actions were reviewed, updated, and ranked based on discussions with local officials. Among the factors considered when prioritizing the mitigation actions were: effect on overall risk to life and property, ease of implementation, political and community support, consideration of cost/benefit, and funding availability.

Mitigation Action 1	Install generators at critical facilities, such as one of their higher producing wells and the new sewer pump station. When stationary generators are not feasible, consider a quick-connect scenario where rotating or shared generators can be used.
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Varies by site
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Town of Virgilina
Implementation Schedule	Near term
Status Update	No action taken, need to explore funding opportunities.

Mitigation Action (NEW)	Electric service in Virgilina is frequently knocked out due to a weak power line located on Route 49. High wind events in particular can easily knock out the power for days at a time due to falling trees and limbs. The Town will continue to report outages to Dominion Power and stress the need for them to replace the power line and address any known problem areas with trees or overhanging branches between Clarksville and Virgilina.
Category	Prevention/Property Protection
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal for reporting, TBD for Dominion Power
Potential Funding Sources	Town budget for reporting purposes
Lead Agency/Department	Town of Virgilina, Dominion Power
Implementation Schedule	Ongoing
Status Update	Ongoing – Town officials continue to report issues to Dominion Power. Additionally, the Town used their water bills as a method of reminding residents to report power outages to Dominion Power and included contact information.

Mitigation Action 3	Examine the feasibility of converting the Virgilina Volunteer Fire Department siren from manual operation locally to automatic alerts that run through Halifax County 911. The siren would still operate for emergency calls and to alert the community to impending hazardous weather conditions.
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	$3,000 +/-
Potential Funding Sources	Fire Department
Lead Agency/Department	Fire Department
Implementation Schedule	Near term
Status Update	Options are currently being discussed/explored with Emergency Services staff.

Mitigation Action 4	Brochures that encourage clearing trees, brush, and other flammable natural materials a safe distance to create a "Green Zone" between the forest and structures will be made available to the public in various locations around town.
Category	Prevention/Public Education and Awareness
Hazard(s) Addressed	Wildfire
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	VDOF
Lead Agency/Department	Town of Virgilina, Fire Department, VDOF
Implementation Schedule	Ongoing
Status Update	The Town of Virgilina will coordinate with the VDOF when additional brochures are needed.

Mitigation Action 5	The Town and Fire Department will continue to coordinate with the NWS on alerts relevant to the community and support StormReady and SKYWARN programs.
Category	Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	Town budget, Fire Department
Lead Agency/Department	Town of Virgilina, Fire Department, Halifax County Emergency Services
Implementation Schedule	Ongoing
Status Update	SKYWARN programs have been offered at the Fire Department in the past and the Town and Fire Department are in communication with the NWS for alerts.

Mitigation Action 6	The Town will continue to support the efforts of the Virgilina Volunteer Fire Department.
Category	Emergency Services/Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal to the Town
Potential Funding Sources	Virginia Fire Fund – Aid to Localities (ATL)
Lead Agency/Department	Town of Virgilina
Implementation Schedule	Ongoing
Status Update	Ongoing – ATL funds are utilized to assist and support the efforts of the Fire Department.

Mitigation Action 7	Annually inspect and test the functionality and classification/color of fire hydrants.
Category	Emergency Services
Hazard(s) Addressed	Wildfire
Priority	High
Estimated Cost	Minimal – Volunteer
Potential Funding Sources	Volunteer
Lead Agency/Department	Fire Department
Implementation Schedule	Ongoing
Status Update	Ongoing – Fire hydrants are checked on an annual basis.

Mitigation Action 8	The Town will encourage residents to sign up for Halifax County's mass notification system that provides time-sensitive messages through telephone, text and email alerts.
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	Town budget
Lead Agency/Department	Town of Virgilina
Implementation Schedule	Near term
Status Update	The Town plans to include information on the service and how to sign up in a future mailing in conjunction with their water bills.

Mitigation Action 9	Coordinate with VDOT to clean and maintain stormwater infrastructure to prevent yard and street flooding.
Category	Prevention
Hazard(s) Addressed	Flooding
Priority	Medium
Estimated Cost	Minimal – Staff time
Potential Funding Sources	VDOT
Lead Agency/Department	VDOT, Town of Virgilina
Implementation Schedule	Ongoing
Status Update	The Town reports stormwater issues to VDOT as they are identified.

Removed Mitigation Actions:

Action	Reason
For critical and highly significant county and town facilities, examine windows for vulnerabilities. Install storm shutters or window clips for mounting plywood.	This action was deemed to be of such low priority at this point that it was removed from the list.
Elevate HVAC, electrical, and telecommunications systems at critical facilities, to keep them above any type of flooding, even minor flooding.	There are no identified floodplains within Virgilina. A new sewer pump station has been installed above what locals consider to have

	flooding potential based on their observations.
Place storm shelters at large mobile home parks. Secure new mobile homes with standard tie-downs to reduce their vulnerability to high winds.	Virgilina does not contain large mobile home parks and the County addresses matters relating to building codes and inspections.
Prohibit or limit floodplain development through regulatory and/or incentive-based measures. Continue to enforce building code regulations that serve to protect property during inclement weather.	FEMA does not identify any area within Virgilina of being located within Zone A (1% annual chance of flooding) on the most recent FIRM.

Flood Map

As there are no identified areas of Virgilina within Zone A (1% Annual Chance) on the Federal Insurance Rate Maps (FIRM) produced by FEMA, a flood map of the Town has not been included.

Wildfire Map

As there are no identified portions of Virgilina within the High Risk area for wildfire on maps produced by the Virginia Department of Forestry, a wildfire map of the Town has not been included.

Public Survey

The public survey asked each participate in which local jurisdiction that they lived. The results from those who identified as living in the Town of Virgilina are as follows:

Question 1

Which of the following hazards have directly impacted you, your household, or your property?

Hazard	Pct.	Hazard	Pct.
Dam Failure	0.00	High Winds	100.00
Drought	25.00	Hurricane/Tropical Cyclone	25.00
Earthquake	0.00	Landslide	0.00
Extreme Heat/Cold	0.00	Lightning	50.00
Flooding	0.00	Tornado	50.00
Hail	25.00	Wildfire	0.00
Heavy Snow/Ice	25.00		

Responses: 4 of 4

Questions 2

How concerned are you about the following hazards affecting our region?

Hazard	Very Concerned	Somewhat Concerned	Not Concerned	Responses
Dam Failure	0.00	25.00	75.00	4/4
Drought	0.00	100.00	0.00	4/4
Earthquake	0.00	25.00	75.00	4/4
Extreme Heat/Cold	50.00	25.00	25.00	4/4
Flooding	0.00	25.00	75.00	4/4
Hail	25.00	75.00	0.00	4/4
Heavy Snow/Ice	0.00	50.00	50.00	4/4
High Winds	75.00	25.00	0.00	4/4
Hurricane/Tropical Cyclone	0.00	100.00	0.00	4/4
Landslide	0.00	0.00	100.00	4/4
Lightning	50.00	50.00	0.00	4/4
Tornado	75.00	25.00	0.00	4/4

Wildfire	25.00	75.00	0.00	4/4

Question 3

Is your home located in a floodplain?

Yes	No	Not Sure	Responses
0.00	100.00	0.00	4/4

Question 4

Does your household have flood insurance?

Yes	No	Not Sure	Responses
0.00	100.00	0.00	4/4

Question 5

The following statements will help determine citizen priorities regarding planning for natural hazards. Please tell us how important each one is to you.

Priorities	Very Important	Somewhat Important	Not Important	Responses
Protect private property	100.00	0.00	0.00	4/4
Protect critical facilities (hospitals, fire stations, etc.)	100.00	0.00	0.00	4/4
Prevent development in identified hazard areas	75.00	0.00	25.00	4/4
Enhance the function of natural areas (streams, wetlands)	75.00	25.00	0.00	4/4
Protect historical and cultural landmarks	100.00	0.00	0.00	4/4
Protect and reduce damage to utilities	100.00	0.00	0.00	4/4
Strengthen emergency services (Fire, EMS, Police)	100.00	0.00	0.00	4/4
Promote cooperation among public agencies, citizens, non-profit organizations, and business	100.00	0.00	0.00	4/4

Question 6

Have you or someone in your household:

Actions	Have Done	Plan To Do	Not Interested	Responses
Attended meetings or received information on natural disasters or emergency preparedness?	75.00	25.00	0.00	4/4
Talked with members in your household about what to do in case of a natural disaster or emergency?	75.00	25.00	0.00	4/4
Prepared a “Disaster Supply Kit” (stored food, water batteries, etc.)?	50.00	50.00	0.00	4/4
Has anyone in your household been trained in First Aid or CPR?	100.00	0.00	0.00	4/4
Installed smoke detectors on each level of your home?	100.00	0.00	0.00	4/4
Signed up to receive emergency alerts from Brunswick, Halifax, or Mecklenburg counties?	100.00	0.00	0.00	4/4
Periodically check gutters, downspouts, and drain pipes on your property?	100.00	0.00	0.00	4/4

Question 7

Are you interested in making your home or neighborhood more resistant to natural hazards?

Yes	No	Responses
75.00	25.00	4/4

Question 8

What is the most effective way for you to receive information about how to make your household and home safer from natural disasters? (Select up to three)

Communication	Pct.	Communication	Pct.
Newspapers	100.00	University/College	0.00
Television	100.00	Mail	25.00
Email Newsletters	25.00	Fire/EMS	50.00
News Website	0.00	Face Sheet/Brochure	0.00
Social Media	75.00	Public Workshops	25.00
Schools	25.00	Other (please specify)	0.00

Responses: 4 of 4

Question 9

Whom would you most trust to provide you with information about how to make your household and home safer from natural hazards? (Select up to three)

Trusted Source	Pct.	Trusted Source	Pct.
News Media	50.00	Elected Officials	25.00
Government Agencies	0.00	Social Media	0.00
Insurance Agent or Company	50.00	Non-Profit Organizations	0.00
Utility Company	50.00	Not Sure	0.00
University/Research Institution	0.00	Other (please specify)	0.00
Neighbor/Friend/Family Member	25.00		

Responses: 4 of 4

Mecklenburg County

Hazard Rankings

The methodology for the hazard rankings can be found in Section 5, "Risk Assessment", of this Plan. The hazard rankings included in this section are specific to Mecklenburg County, not the region as a whole.

Hazard	Location (Geographic Area Affected)	Maximum Probable Extent (Magnitude/Strength)	Probability of Future Events	Overall Hazard Ranking
Dam Failure	Negligible (1)	Extreme (4)	Unlikely (1)	Low/Medium (6)
Drought	Extensive (4)	Extreme (4)	Occasional (2)	Medium/High (10)
Earthquake	Extensive (4)	Weak (1)	Unlikely (1)	Low/Medium (6)
Extreme Cold	Extensive (4)	Moderate (2)	Unlikely (1)	Medium (7)
Extreme Heat	Extensive (4)	Moderate (2)	Likely (3)	Medium/High (9)
Flood	Limited (2)	Severe (3)	Highly Likely (4)	Medium/High (9)
Hail	Significant (3)	Severe (3)	Likely (3)	Medium/High (9)
Tropical Cyclone	Extensive (4)	Severe (3)	Likely (3)	Medium/High (10)
Landslide	Negligible (1)	Weak (1)	Unlikely (1)	Low (3)
Lightning	Negligible (1)	Moderate (2)	Highly Likely (4)	Medium (7)
Severe Wind	Extensive (4)	Moderate (2)	Highly Likely (4)	Medium/High (10)
Severe Winter Weather	Extensive (4)	Moderate (2)	Highly Likely (4)	Medium/High (10)
Tornado	Negligible (1)	Severe (3)	Likely (3)	Medium (7)
Wildfire	Limited (2)	Weak (1)	Highly Likely (4)	Medium (7)

Mitigation Actions

The County's mitigation actions were reviewed, updated, and ranked based on discussions with local officials. Among the factors considered when prioritizing the mitigation actions were: effect on overall risk to life and property, ease of implementation, political and community support, consideration of cost/benefit, and funding availability.

Mitigation Action 1	Install stationary generator backup units at critical facilities (Fire, EMS, shelters, etc.) that are lacking a secondary system. Where stationary generators are not feasible consider a quick-connect scenario where rotating or sharing generators can be utilized. Aging generators will be replaced as warranted.
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Varies by site
Potential Funding Sources	Federal/State grants, County budget
Lead Agency/Department	Mecklenburg County Emergency Services
Implementation Schedule	Ongoing
Status Update	Ongoing – Applied for grant funding to cover 4 new units during 2019 HMGP cycle

Mitigation Action 2	Ensure that communication centers have redundant connectivity, service and backup power at each radio site.
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Varies
Potential Funding Sources	Federal/State grants, County budget

Lead Agency/Department	Mecklenburg County Emergency Services
Implementation Schedule	Ongoing
Status Update	Ongoing – All facilities have redundancy, will monitor to ensure they remain operational and in good working order.

Mitigation Action 3 (NEW)	**Encourage the use of emergency warning systems, including: 1) residents signing up for Alert Mecklenburg to receive time-sensitive messages through their phone, email or texts; and 2) examine the feasibility of having patterned sirens at each local fire department for emergency warnings.**
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	County budget
Lead Agency/Department	Brunswick County Emergency Services
Implementation Schedule	Ongoing
Status Update	Ongoing – Information on Alert Mecklenburg can be found on the County's website.

Mitigation Action 4	**Continue to improve firefighter education and training through the funding of training resources such as the Mecklenburg-Brunswick Fire Training Center in La Crosse.**
Category	Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	County budget, Virginia Department of Fire Programs
Lead Agency/Department	Mecklenburg County Emergency Services
Implementation Schedule	Ongoing
Status Update	Ongoing – New classrooms were opened in 2019.

Mitigation Action 5	**When new homes are constructed, provide information to encourage the clearing of trees, brush, and other flammable natural materials a safe distance from the home creating a "Green Zone" between the forest and the structure.**
Category	Prevention
Hazard(s) Addressed	Wildfire
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	VDOF
Lead Agency/Department	VDOF, Mecklenburg County Building Inspection
Implementation Schedule	Near term
Status Update	Ongoing – VDOF has been contacted for brochures to be made available at the Goode Building, additional brochures will be requested as needed.

Mitigation Action 6	**Secure new mobile homes with standard tie-downs to reduce their vulnerability to high winds.**
Category	Prevention/Structural Projects
Hazard(s) Addressed	Tropical Cyclones, Tornadoes, and Severe Wind
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	County budget
Lead Agency/Department	Mecklenburg County Building Inspection Office
Implementation Schedule	Ongoing
Status Update	Ongoing

Mitigation Action 7	Prohibit or limit floodplain development through regulatory and/or incentive based measures. Continue to enforce building code regulations that serve to protect property during inclement weather events.
Category	Prevention/Property Protection/Natural Resource Protection
Hazard(s) Addressed	Flooding
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	County budget
Lead Agency/Department	Mecklenburg County Zoning Department, Building Inspection Office
Implementation Schedule	Ongoing
Status Update	Ongoing – Ordinances currently restrict building in the floodplain

Mitigation Action 8	Provide recommended methods of reducing risk and vulnerability on the County's website.
Category	Emergency Services/Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	County budget
Lead Agency/Department	Mecklenburg County Emergency Services
Implementation Schedule	Mid-term
Status Update	Need to explore materials for inclusion and rework webpage

Mitigation Action 9	Coordinate with localities and the RRSA to ensure all fire hydrant locations are included on Mecklenburg County's GIS website. Updated flow data will be included as it become available.
Category	Emergency Services
Hazard(s) Addressed	Wildfire
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	County budget
Lead Agency/Department	Southside Planning District Commission, Mecklenburg County Emergency Services
Implementation Schedule	Near term
Status Update	Ongoing

Mitigation Action 10	Elevate HVAC, electrical, and telecommunications systems at critical facilities to keep them above any type of flooding.
Category	Prevention
Hazard(s) Addressed	Flooding
Priority	Low
Estimated Cost	Varies site by site
Potential Funding Sources	Federal/State grants, County budget
Lead Agency/Department	Mecklenburg County Emergency Services
Implementation Schedule	Dependent on availability of funding and system being at risk
Status Update	No action taken; any known at risk systems are elevated

Mitigation Action 11	Consider participation in StormReady and SKYWARN programs. (StormReady encourages participation with fire departments to include benefits such as early warning systems, weather spotters, shelter set-up and storm radio deployment. SKYWARN works with the National Weather Service and spotters to disseminate information on warnings and threats. The NWS provides training around the country.)
Category	Public Education and Awareness
Hazard(s) Addressed	Multiple

Priority	Low
Estimated Cost	Minimal
Potential Funding Sources	County budget
Lead Agency/Department	Mecklenburg County Emergency Services
Implementation Schedule	Long-term
Status Update	No action taken; to be further explored for feasibility and local effectiveness

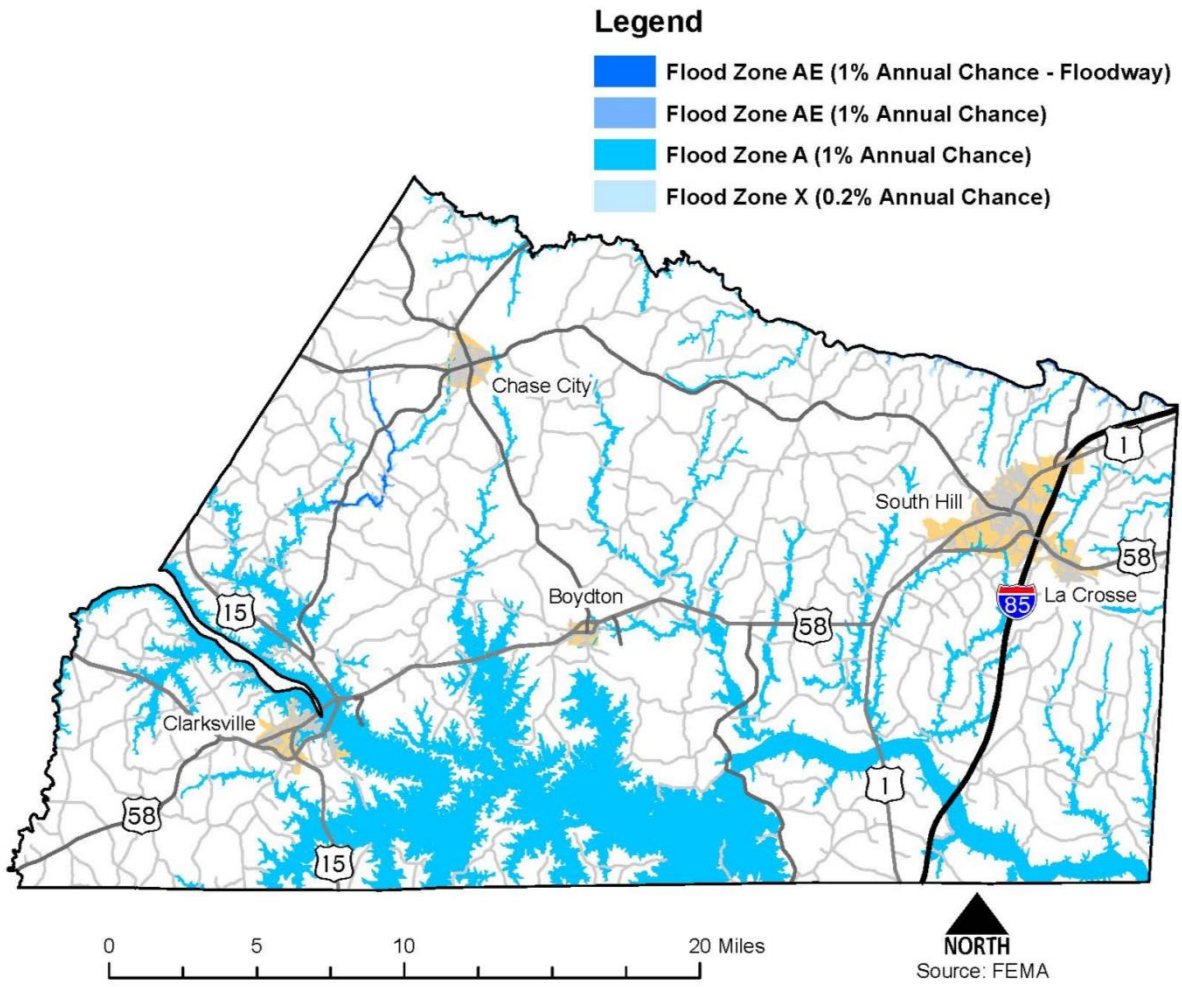
Mitigation Action 12	**Encourage proper pasture management for livestock to avoid overgrazing and encourage experimentation with drought-resistant crops.**
Category	Public Education an d Awareness
Hazard(s) Addressed	Drought
Priority	Low
Estimated Cost	Varies
Potential Funding Sources	Explore grant funding options
Lead Agency/Department	Mecklenburg County Extension Office, Farm Bureau
Implementation Schedule	Mid term
Status Update	Coordinate with County Extension Office

Removed Mitigation Actions:

Action	Reason
For critical and highly significant county and town facilities, examine windows for vulnerabilities. Install storm shutters or window clips for mounting plywood.	This action was deemed to be of such low priority at this point that it was removed from the list.
Clean and maintain storm sewers to prevent yard and street flooding. If not currently undertaking this activity, begin a program of regularly scheduled inspections and cleanings if needed.	This mitigation action can better be addressed by the towns and VDOT than the County.
Place storm shelters at large mobile home parks.	The County was not confident that this mitigation action would be pursued or achieved during the next five years.
The water treatment plant, intake, and main storage tank of the Roanoke River Service Authority need an electrical backup system. In the event of a power failure, water distribution would be cut to the towns of Boydton, Brodnax, La Crosse, and South Hill, as well as portions of Mecklenburg County and one state prison. Currently the three facilities do not share the same electrical feeds, and the wiring is mostly aerial as opposed to underground. A backup generator would have to be put at all three facilities.	Addressed in the Regional Mitigation Actions section under Regional Service Authorities.
Consider relocating power lines that feed the RRSA facilities. Most of these lines are overhead, and are vulnerable to falling branches and trees, as well as the weight of ice. Some or all of these lines should be located underground to avoid the risk from natural hazards.	Addressed in the Regional Mitigation Actions section.

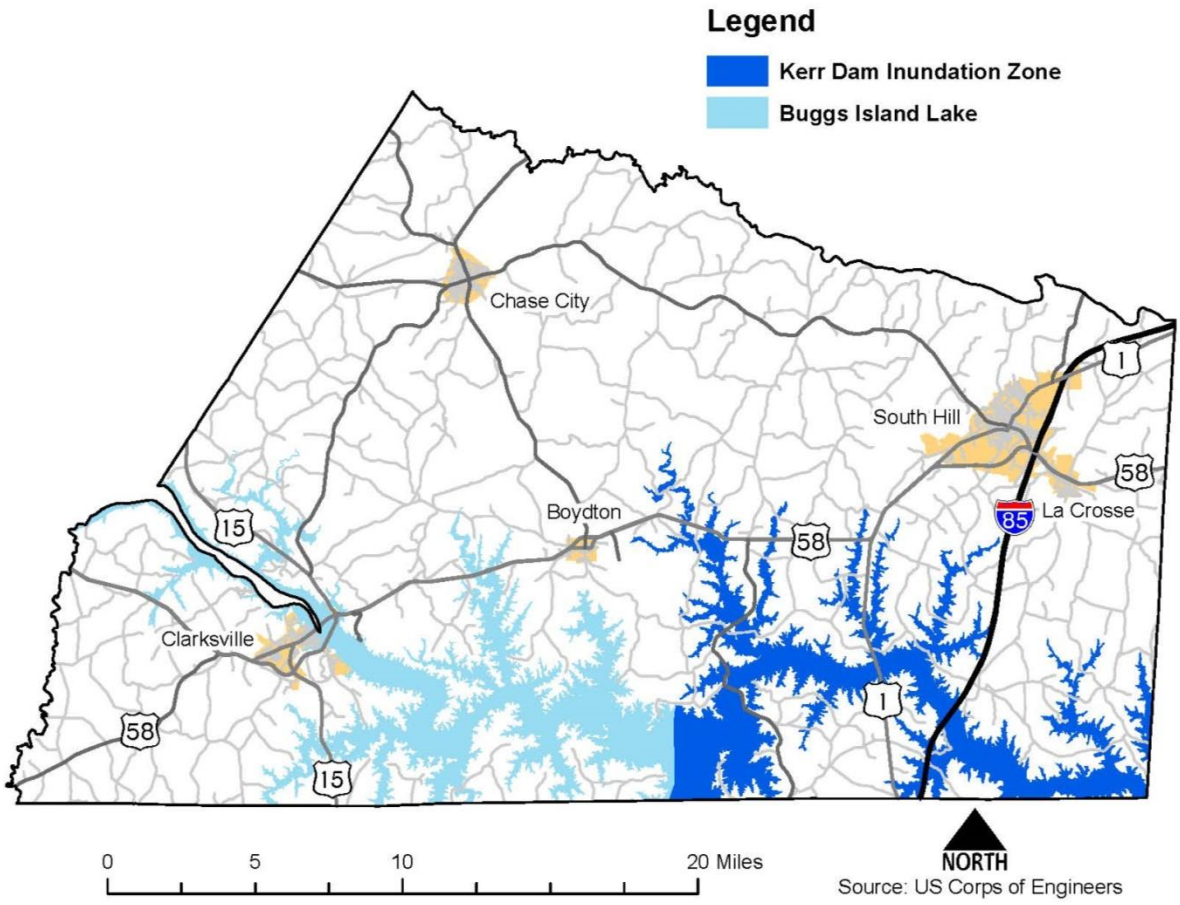
Flood Map

The flood zones shown below are for planning purposes and only include flood zones A, AE, and a portion of flood zone X. Full details can be found on FEMA's Flood Map Service Center webpage.



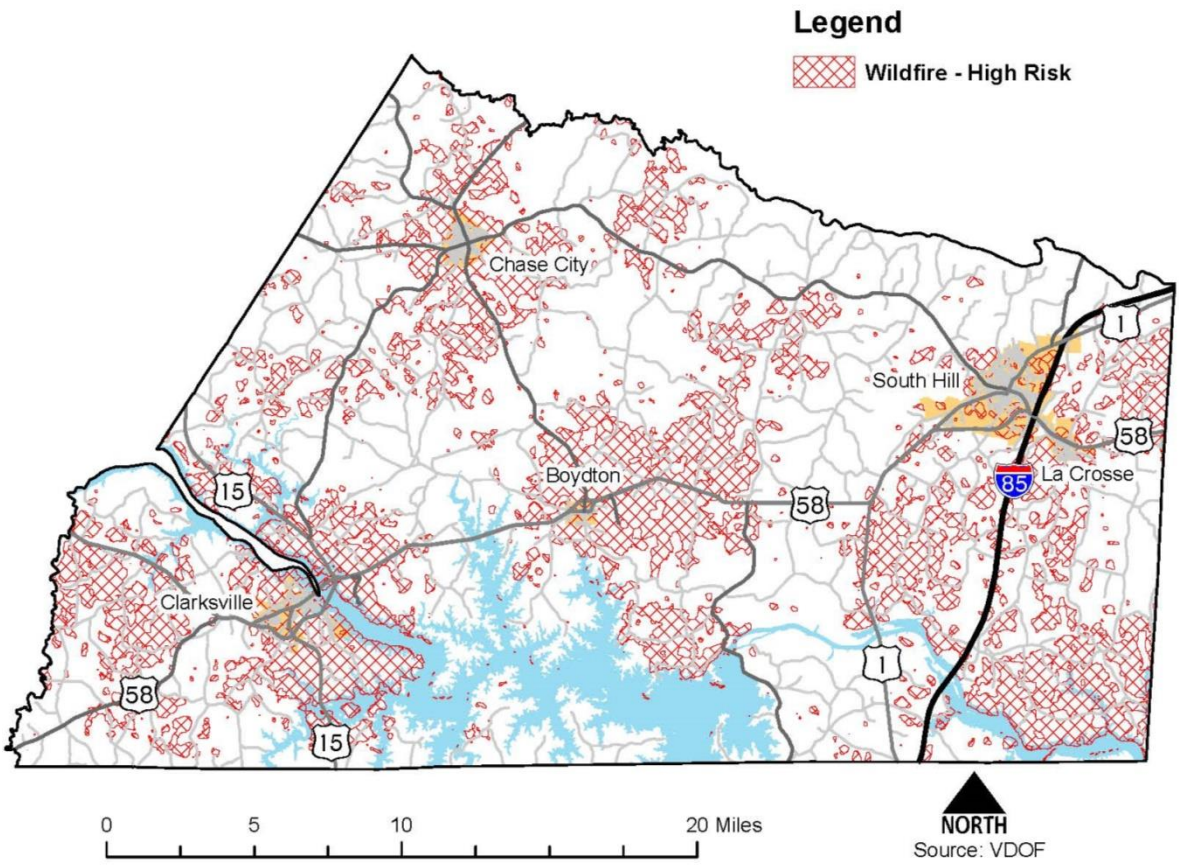
Kerr Dam Inundation Zone Map

Additional details relating to dam failure can be found in Section 4 of this plan.



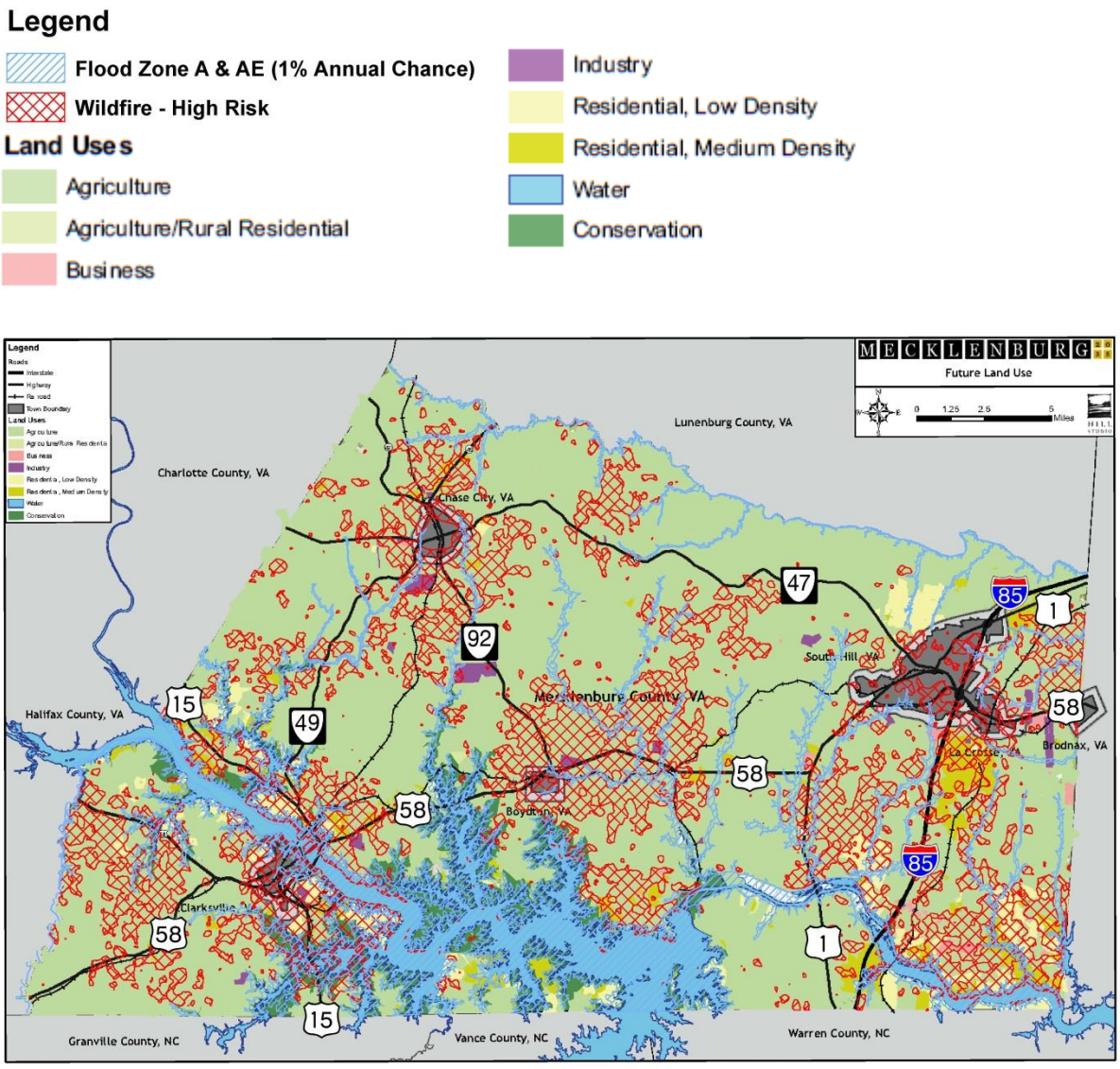
Wildfire Map

Additional details relating to wildfires can be found in Section 4 of this plan. Please note that only high risk areas from a 2003 Wildfire Risk Assessment Map have been included on the following map.



Future Land Use Risk Map (Flood and Wildfire)

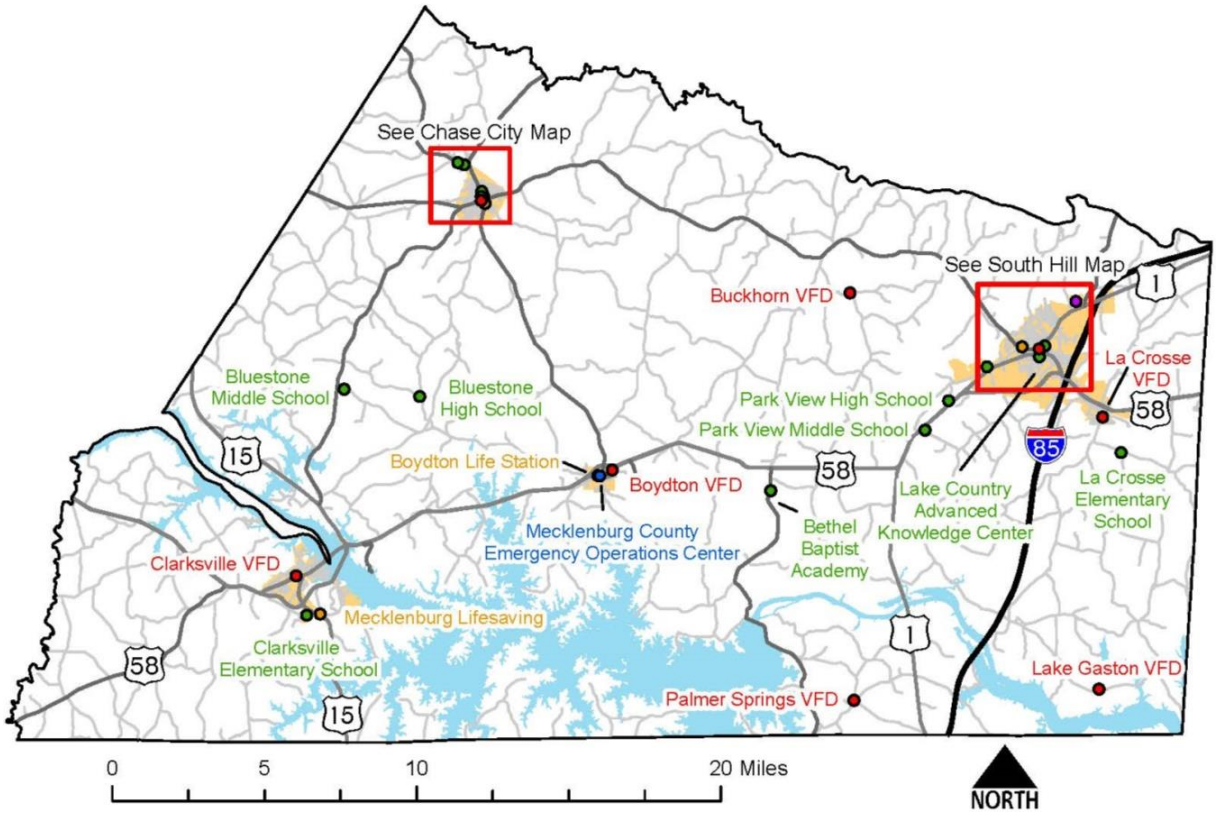
Created by Hill Studio and included in the Mecklenburg 2035 Long-Range Plan, the Mecklenburg County Future Land Map is included to help show how flooding and wildfire may present potential risks within future land use areas.



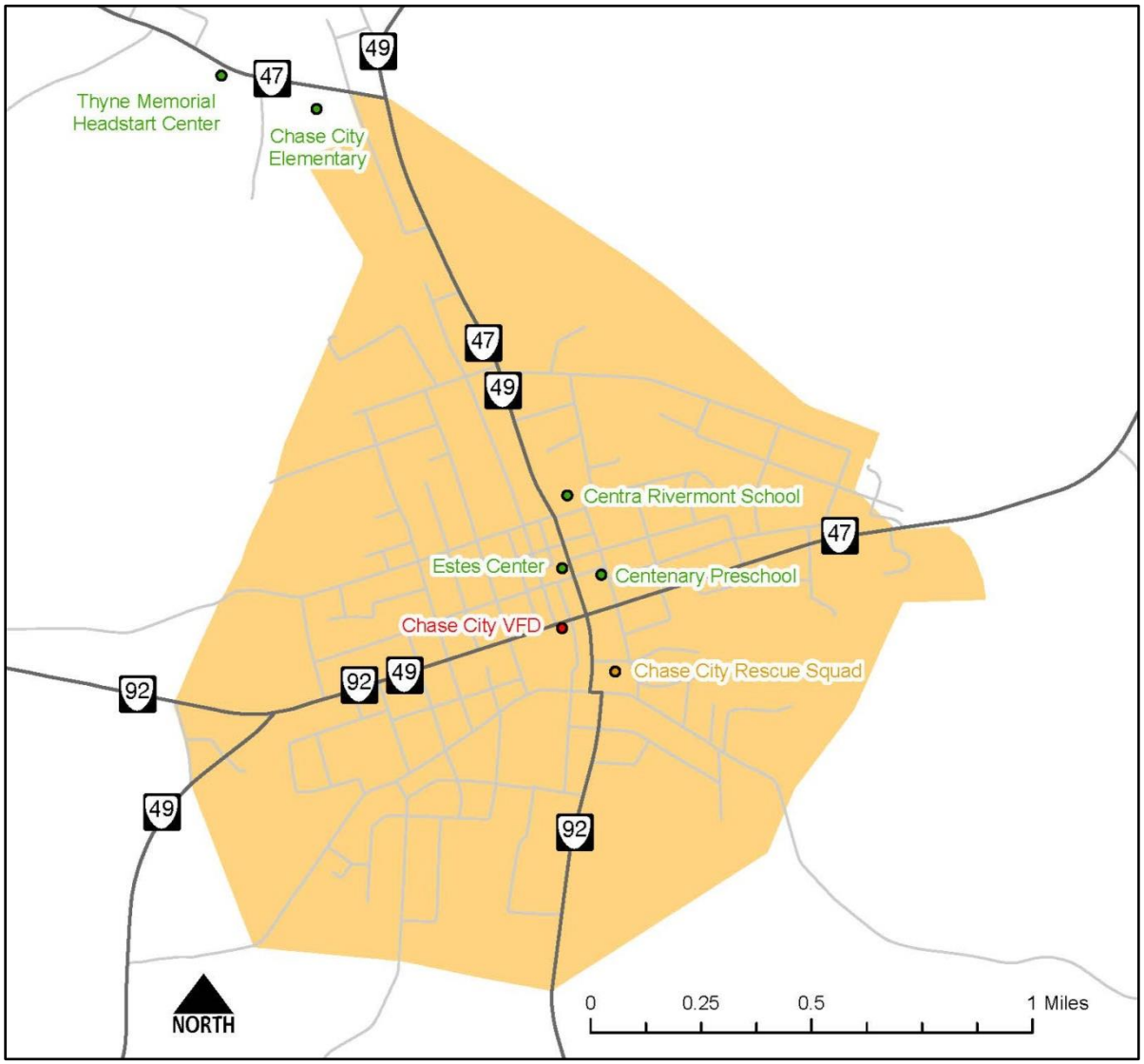
Sources: Mecklenburg County 2035 Long- Range Plan, FEMA, and VDOF

Critical Facilities Map

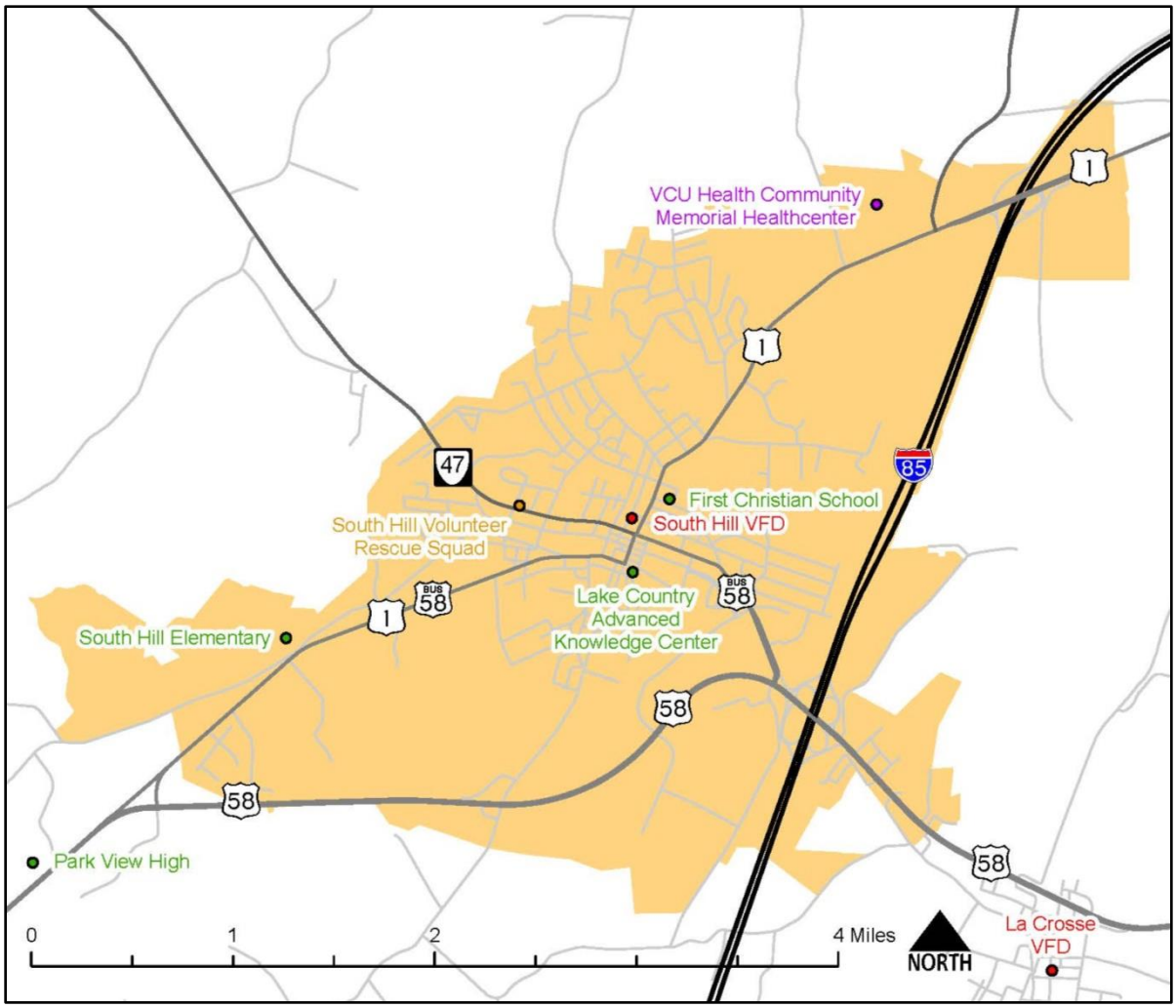
While additional facilities can be considered critical, the following maps only includes fire stations, EMS stations, schools, hospitals, and the Mecklenburg County Emergency Operations Center. A full listing of critical facilities can be found in Section 5 of this plan.



Critical Facilities Map – Chase City Area



Critical Facilities Map – South Hill Area



Public Survey

The public survey asked each participate in which local jurisdiction that they lived. The results from those who identified as living in Mecklenburg County are as follows:

Question 1

Which of the following hazards have directly impacted you, your household, or your property?

Hazard	Pct.	Hazard	Pct.
Dam Failure	0.00	High Winds	60.00
Drought	28.00	Hurricane/Tropical Cyclone	68.00
Earthquake	16.00	Landslide	0.00
Extreme Heat/Cold	24.00	Lightning	44.00
Flooding	8.00	Tornado	8.00
Hail	40.00	Wildfire	4.00
Heavy Snow/Ice	48.00		

Responses: 25 of 27

Questions 2

How concerned are you about the following hazards affecting our region?

Hazard	Very Concerned	Somewhat Concerned	Not Concerned	Responses
Dam Failure	7.41	33.33	59.26	27/27
Drought	19.23	61.54	19.23	26/27
Earthquake	7.41	22.22	70.37	27/27
Extreme Heat/Cold	11.11	62.96	25.93	27/27
Flooding	14.81	51.85	33.33	27/27
Hail	7.41	62.96	29.63	27/27
Heavy Snow/Ice	14.81	74.07	11.11	27/27
High Winds	33.33	59.26	7.41	27/27
Hurricane/Tropical Cyclone	29.63	66.67	3.70	27/27
Landslide	0.00	14.81	85.19	27/27
Lightning	18.52	62.96	18.52	27/27
Tornado	18.52	66.67	14.81	27/27
Wildfire	18.52	33.33	48.15	27/27

Question 3

Is your home located in a floodplain?

Yes	No	Not Sure	Responses
0.00	77.78	22.22	27/27

Question 4

Does your household have flood insurance?

Yes	No	Not Sure	Responses
3.70	85.19	11.11	27/27

Question 5

The following statements will help determine citizen priorities regarding planning for natural hazards. Please tell us how important each one is to you.

Priorities	Very Important	Somewhat Important	Not Important	Responses
Protect private property	76.92	23.08	0.00	26/27
Protect critical facilities (hospitals, fire stations, etc.)	92.59	7.41	0.00	27/27
Prevent development in identified hazard areas	55.56	37.04	7.41	27/27
Enhance the function of natural areas (streams, wetlands)	44.44	55.56	0.00	27/27
Protect historical and cultural landmarks	62.96	33.33	3.70	27/27
Protect and reduce damage to utilities	96.30	3.70	0.00	27/27
Strengthen emergency services (Fire, EMS, Police)	88.89	11.11	0.00	27/27
Promote cooperation among public agencies, citizens, non-profit organizations, and business	70.37	22.22	7.41	27/27

Question 6

Have you or someone in your household:

Actions	Have Done	Plan To Do	Not Interested	Responses
Attended meetings or received information on natural disasters or emergency preparedness?	48.00	36.00	16.00	25/27
Talked with members in your household about what to do in case of a natural disaster or emergency?	61.54	30.77	7.69	26/27
Prepared a "Disaster Supply Kit" (stored food, water batteries, etc.)?	25.93	66.67	7.41	27/27
Has anyone in your household been trained in First Aid or CPR?	80.77	11.54	7.69	26/27
Installed smoke detectors on each level of your home?	92.59	7.41	0.00	27/27
Signed up to receive emergency alerts from Brunswick, Halifax, or Mecklenburg counties?	65.38	30.77	3.85	26/27
Periodically check gutters, downspouts, and drain pipes on your property?	88.46	11.54	0.00	26/27

Question 7

Are you interested in making your home or neighborhood more resistant to natural hazards?

Yes	No	Responses
81.48	18.52	27/27

Question 8

What is the most effective way for you to receive information about how to make your household and home safer from natural disasters? (Select up to three)

Communication	Pct.	Communication	Pct.
Newspapers	50.00	University/College	0.00
Television	26.92	Mail	50.00
Email Newsletters	42.31	Fire/EMS	15.38
News Website	30.77	Face Sheet/Brochure	23.08
Social Media	65.38	Public Workshops	15.38
Schools	11.54	Other (please specify)	0.00

Responses: 26 of 27

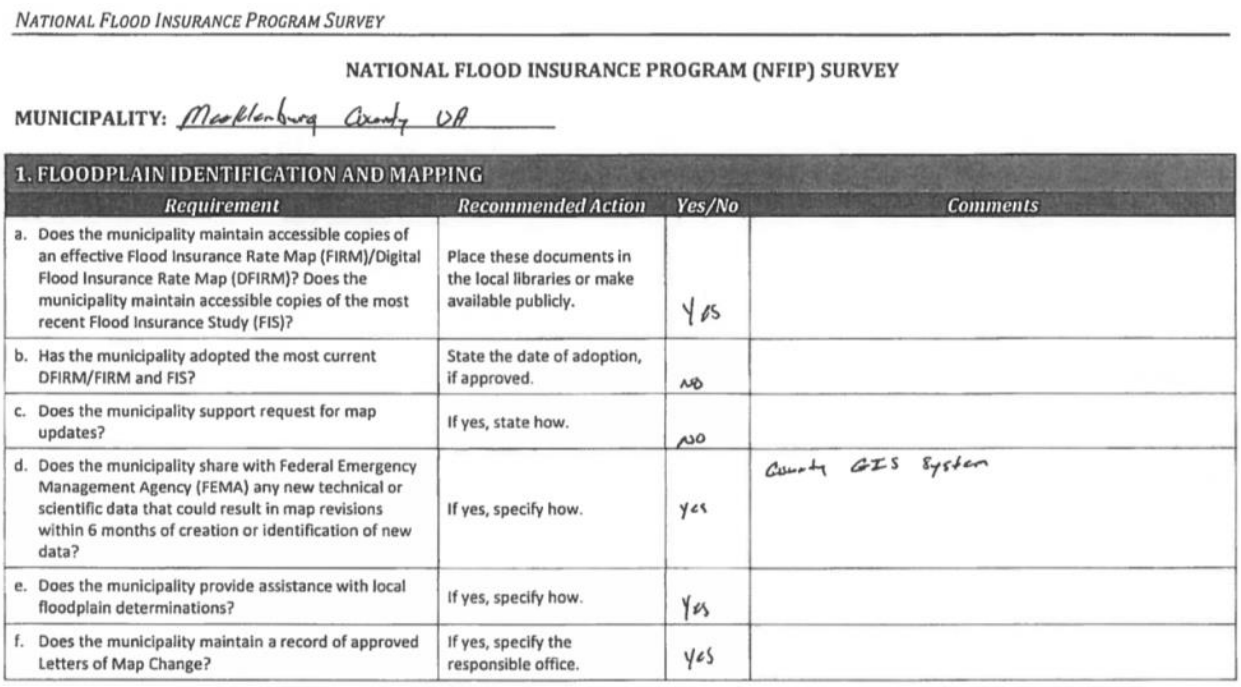
Question 9

Whom would you most trust to provide you with information about how to make your household and home safer from natural hazards? (Select up to three)

Trusted Source	Pct.	Trusted Source	Pct.
News Media	3.70	Elected Officials	3.70
Government Agencies	51.85	Social Media	7.41
Insurance Agent or Company	29.63	Non-Profit Organizations	18.52
Utility Company	55.56	Not Sure	25.93
University/Research Institution	18.52	Other (please specify)	0.00
Neighbor/Friend/Family Member	14.81		

Responses: 27 of 27

National Flood Insurance Program Survey



NATIONAL FLOOD INSURANCE PROGRAM SURVEY

NATIONAL FLOOD INSURANCE PROGRAM (NFIP) SURVEY

MUNICIPALITY: Mecklenburg County VA

1. FLOODPLAIN IDENTIFICATION AND MAPPING			
Requirement	*Recommended Action*	*Yes/No*	*Comments*
a. Does the municipality maintain accessible copies of an effective Flood Insurance Rate Map (FIRM)/Digital Flood Insurance Rate Map (DFIRM)? Does the municipality maintain accessible copies of the most recent Flood Insurance Study (FIS)?	Place these documents in the local libraries or make available publicly.	Yes	
b. Has the municipality adopted the most current DFIRM/FIRM and FIS?	State the date of adoption, if approved.	no	
c. Does the municipality support request for map updates?	If yes, state how.	no	
d. Does the municipality share with Federal Emergency Management Agency (FEMA) any new technical or scientific data that could result in map revisions within 6 months of creation or identification of new data?	If yes, specify how.	yes	County GIS System
e. Does the municipality provide assistance with local floodplain determinations?	If yes, specify how.	Yes	
f. Does the municipality maintain a record of approved Letters of Map Change?	If yes, specify the responsible office.	yes	

NATIONAL FLOOD INSURANCE PROGRAM SURVEY

2. FLOODPLAIN MANAGEMENT			
Requirement	*Recommended Action*	*Yes/No*	*Comments*
a. Has the municipality adopted a compliant floodplain management ordinance that, at a minimum, regulates the following:	If yes, answer questions (1) through (4) below.	Yes	
(1) Does the municipality issue permits for all proposed development in the Special Flood Hazard Areas (SFHAs)?	If yes, specify the office responsible.	NO	
(2) Does the municipality obtain, review, and utilize any Base Flood Elevation (BFE) and floodway data, and/or require BFE data for subdivision proposals and other development proposals larger than 50 lots or 5 acres?	If yes, specify the office responsible.	Yes	will be shown on the plat
(3) Does the municipality identify measures to keep all new and substantially improved construction reasonably safe from flooding to or above the BFE, including anchoring, using flood-resistant materials, and designing or locating utilities and service facilities to prevent water damage?	If yes, specify the office responsible.	Yes	Zoning / Planning office
(4) Does the municipality document and maintain records of elevation data that document lowest floor elevation for new or substantially improved structures?	If yes, specify the office responsible.	Yes	Zoning / Planning office
b. If a compliant floodplain ordinance was adopted, does the municipality enforce the ordinance by monitoring compliance and taking remedial action to correct violations?	If yes, specify how.	Yes	usually do not allow construction in flood areas

NATIONAL FLOOD INSURANCE PROGRAM SURVEY

2. FLOODPLAIN MANAGEMENT			
Requirement	*Recommended Action*	*Yes/No*	*Comments*
c. Has the municipality considered adopting activities that extend beyond the minimum requirements? Examples include: • Participation in the Community Rating System • Prohibition of production or storage of chemicals in SFHA • Prohibition of certain types of structures, such as hospitals, nursing homes, and jails in SFHA • Prohibition of certain types of residential housing (manufactured homes) in SFHA • Floodplain ordinances that prohibit any new residential or nonresidential structures in SFHA	If yes, specify activities.	Yes	By county ordinance

3. FLOOD INSURANCE			
Requirement	*Recommended Action*	*Yes/No*	*Comments*
a. Does the municipality educate community members about the availability and value of flood insurance?	If yes, specify how.	NO	
b. Does the municipality inform community property owners about changes to the DFIRM/FIRM that would impact their insurance rates?	If yes, specify how.	NO	
c. Does the municipality provide general assistance to community members regarding insurance issues?	If yes, specify how.	NO	

Town of Boydton

Hazard Rankings

The methodology for the hazard rankings can be found in Section 5, "Risk Assessment", of this Plan. The hazard rankings included in this section are specific to the Town of Boydton, not the region as a whole.

Hazard	Location (Geographic Area Affected)	Maximum Probable Extent (Magnitude/Strength)	Probability of Future Events	Overall Hazard Ranking
Dam Failure	Negligible (1)	Weak (1)	Unlikely (1)	Low (3)
Drought	Extensive (4)	Extreme (4)	Occasional (2)	Medium/High (10)
Earthquake	Extensive (4)	Weak (1)	Unlikely (1)	Low/Medium (6)
Extreme Cold	Extensive (4)	Moderate (2)	Unlikely (1)	Medium (7)
Extreme Heat	Extensive (4)	Moderate (2)	Likely (3)	Medium/High (9)
Flood	Negligible (1)	Moderate (2)	Highly Likely (4)	Medium (7)
Hail	Extensive (4)	Severe (3)	Likely (3)	Medium/High (10)
Tropical Cyclone	Extensive (4)	Severe (3)	Likely (3)	Medium/High (10)
Landslide	Negligible (1)	Weak (1)	Unlikely (1)	Low (3)
Lightning	Negligible (1)	Moderate (2)	Highly Likely (4)	Medium (7)
Severe Wind	Extensive (4)	Moderate (2)	Likely (3)	Medium/High (9)
Severe Winter Weather	Extensive (4)	Moderate (2)	Highly Likely (4)	Medium/High (10)
Tornado	Negligible (1)	Severe (3)	Unlikely (1)	Low/Medium (5)
Wildfire	Extensive (4)	Weak (1)	Unlikely (1)	Low/Medium (6)

Mitigation Actions

The Town's mitigation actions were reviewed, updated, and ranked based on discussions with local officials and SPDC staff's best guess. Among the factors considered when prioritizing the mitigation actions were: effect on overall risk to life and property, ease of implementation, political and community support, consideration of cost/benefit, and funding availability.

Mitigation Action 1	Install stationary generators at critical facilities as warranted. Where stationary generators are not feasible at critical facilities, obtain a portable generator and make the necessary electrical upgrades to accommodate a quick-hookup scenario. Aging generators will be replaced as necessary.
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Varies by site
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Town of Boydton, Mecklenburg County Emergency Services
Implementation Schedule	Near term
Status Update	No action taken; awaiting funds

Mitigation Action 2	The Town will encourage residents to sign up for Mecklenburg County's "Alert Mecklenburg" emergency notification program that provides time-sensitive messages through telephone, text and email formats.
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	Town budget
Lead Agency/Department	Town of Boydton
Implementation Schedule	Near term
Status Update	The Town could utilize their website, social media platform(s), or include information in their water bills as outreach methods. For additional information or to sign up for Alert Mecklenburg, please visit mecklenburgva.com.

Mitigation Action 3	When new homes are constructed, provide information to encourage trees, brush, and other flammable natural materials a safe distance from the home creating a "Green Zone" between the forest and the structure.
Category	Prevention
Hazard(s) Addressed	Wildfire
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	VDOF
Lead Agency/Department	VDOF, Town of Boydton
Implementation Schedule	Ongoing
Status Update	Coordinate with VDOF when additional brochures are needed.

Mitigation Action 4	Participate in the StormReady program which encourages participation with fire departments to include benefits such as: early warning systems, weather spotters, shelter, and storm radio deployment. Consider participation in SKYWARN. SKYWARN works with the National Weather Service and spotters to disseminate information on warnings and threats. The NWS provides training around the country.
Category	Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	Town budget, Boydton Fire Department
Lead Agency/Department	Town of Boydton, Boydton Fire Department
Implementation Schedule	Near term
Status Update	No action taken; insufficient staff.

Mitigation Action 5	Continue to support the efforts of the Boydton Volunteer Fire Department (education, training, equipment, etc.)
Category	Emergency Services/Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	Town budget
Lead Agency/Department	Town of Boydton
Implementation Schedule	Ongoing
Status Update	Ongoing

Mitigation Action 6	Examine the feasibility of an emergency shelter in Boydton.
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	$150,000
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Town of Boydton, Mecklenburg County Emergency Services
Implementation Schedule	Near term
Status Update	No action taken; insufficient funds/staff.

Mitigation Action 7	Clean and maintain storm sewers to prevent yard and street flooding. Coordinate with VDOT when appropriate to help address any relevant issues.
Category	Prevention
Hazard(s) Addressed	Flooding
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	Town budget, VDOT
Lead Agency/Department	Public Works Department, VDOT
Implementation Schedule	Ongoing
Status Update	Ongoing – Areas of concern that have been identified include: Jefferson Street between School Street and Sheriff Street and on Carter Lane behind the Copper Kettle Restaurant.

Mitigation Action 8	Examine critical and highly significant town facilities for vulnerabilities and address them as warranted.
Category	Prevention/Property Protection/Structural Projects
Hazard(s) Addressed	Multiple
Priority	Medium
Estimated Cost	Varies by site
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Town of Boydton
Implementation Schedule	Near term
Status Update	No action taken; insufficient funds/staff

Mitigation Action 9	Prohibit or limit floodplain development through regulatory or incentive-based measures.
Category	Prevention/Property Protection
Hazard(s) Addressed	Flooding
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	Town budget
Lead Agency/Department	Town of Boydton
Implementation Schedule	Ongoing
Status Update	Ongoing

Mitigation Action 10	Routinely inspect and test the functioning and classification/color of fire hydrants. Flow data will be shared with area fire departments.
Category	Emergency Services
Hazard(s) Addressed	Wildfire
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	Town of Boydton
Lead Agency/Department	Town of Boydton
Implementation Schedule	Ongoing
Status Update	Ongoing

Mitigation Action 11	Elevate HVAC, electrical, and telecommunications systems at critical facilities to keep them above any type of flooding.
Category	Prevention
Hazard(s) Addressed	Flooding
Priority	Low
Estimated Cost	Varies by site
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Town of Boydton
Implementation Schedule	Dependent upon need and availability of funding.
Status Update	No action taken.

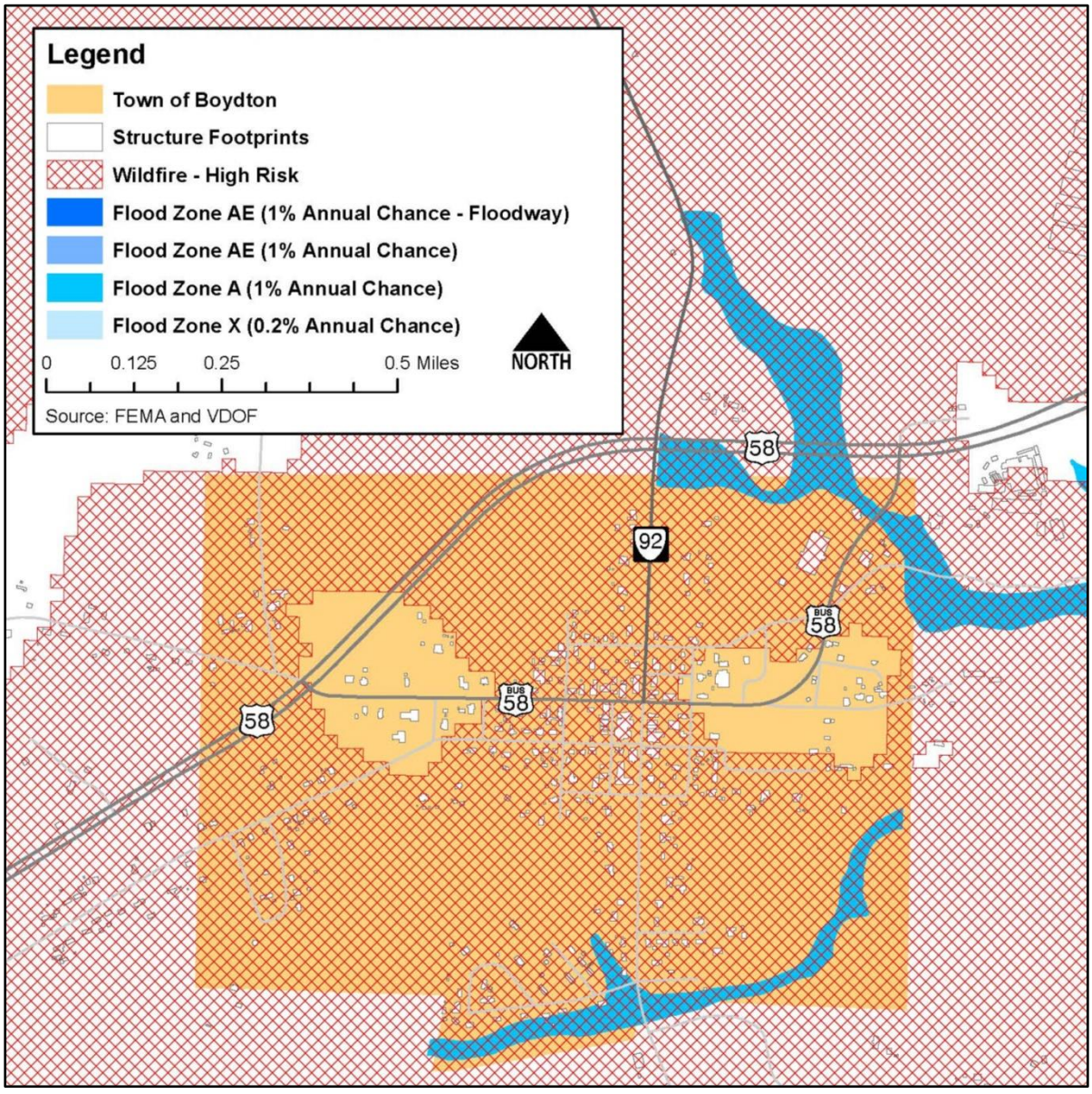
Removed Mitigation Actions:

Action	Reason
Place storm shelters at large mobile home parks. Secure new mobile homes with standard tie-downs to reduce their vulnerability to high winds.	There are no large mobile home parks within Boydton and the County addressing matters relating to building codes and inspections.
The water treatment plant, intake, and main storage tank of the Roanoke River Service Authority need an electrical backup system. In the event of a power failure, water distribution would be cut to the towns of Boydton, Brodnax, La Crosse, and South Hill, as well as portions of Mecklenburg County and one state prison. Currently the three facilities do not share the same electrical feeds, and the wiring is mostly aerial as opposed to underground. A backup generator would have to be put at all three facilities.	Addressed in the Regional Mitigation Actions section under Regional Service Authorities.
Consider relocating power lines that feed the RRSA facilities. Most of these lines are overhead, and are vulnerable to falling branches and trees, as well as the weight of ice. Some or all of these lines should be located underground to avoid the risk from natural hazards.	Addressed in the Regional Mitigation Actions section.

Flood and Wildfire Map

The flood zones shown below are for planning purposes and only include flood zones A, AE, and a portion of flood zone X. Full details can be found on FEMA's Flood Map Service Center webpage.

Additional details relating to wildfires can be found in Section 4 of this plan. Please note that only high risk areas from a 2003 Wildfire Risk Assessment Map have been included on the following map.



Public Survey

The public survey asked each participate in which local jurisdiction that they lived. The results from those who identified as living in the Town of Boydton are as follows:

Question 1

Which of the following hazards have directly impacted you, your household, or your property?

Hazard	Pct.	Hazard	Pct.
Dam Failure	0.00	High Winds	0.00
Drought	0.00	Hurricane/Tropical Cyclone	0.00
Earthquake	0.00	Landslide	0.00
Extreme Heat/Cold	100.00	Lightning	0.00
Flooding	0.00	Tornado	0.00
Hail	0.00	Wildfire	0.00
Heavy Snow/Ice	50.00		

Responses: 2 of 2

Questions 2

How concerned are you about the following hazards affecting our region?

Hazard	Very Concerned	Somewhat Concerned	Not Concerned	Responses
Dam Failure	0.00	100.00	0.00	2/2
Drought	50.00	50.00	0.00	2/2
Earthquake	0.00	0.00	100.00	2/2
Extreme Heat/Cold	50.00	50.00	0.00	2/2
Flooding	0.00	100.00	0.00	2/2
Hail	50.00	50.00	0.00	2/2
Heavy Snow/Ice	50.00	50.00	0.00	2/2
High Winds	50.00	50.00	0.00	2/2
Hurricane/Tropical Cyclone	50.00	50.00	0.00	2/2
Landslide	0.00	0.00	100.00	2/2
Lightning	0.00	100.00	0.00	2/2
Tornado	50.00	50.00	0.00	2/2
Wildfire	0.00	100.00	0.00	2/2

Question 3

Is your home located in a floodplain?

Yes	No	Not Sure	Responses
0.00	50.00	50.00	2/2

Question 4

Does your household have flood insurance?

Yes	No	Not Sure	Responses
0.00	50.00	50.00	2/2

Question 5

The following statements will help determine citizen priorities regarding planning for natural hazards. Please tell us how important each one is to you.

Priorities	Very Important	Somewhat Important	Not Important	Responses
Protect private property	100.00	0.00	0.00	2/2
Protect critical facilities (hospitals, fire stations, etc.)	100.00	0.00	0.00	2/2
Prevent development in identified hazard areas	100.00	0.00	0.00	2/2
Enhance the function of natural areas (streams, wetlands)	50.00	50.00	0.00	2/2
Protect historical and cultural landmarks	50.00	50.00	0.00	2/2
Protect and reduce damage to utilities	50.00	50.00	0.00	2/2
Strengthen emergency services (Fire, EMS, Police)	100.00	0.00	0.00	2/2
Promote cooperation among public agencies, citizens, non-profit organizations, and business	100.00	0.00	0.00	2/2

Question 6

Have you or someone in your household:

Actions	Have Done	Plan To Do	Not Interested	Responses
Attended meetings or received information on natural disasters or emergency preparedness?	0.00	100.00	0.00	2/2
Talked with members in your household about what to do in case of a natural disaster or emergency?	100.00	0.00	0.00	2/2
Prepared a "Disaster Supply Kit" (stored food, water batteries, etc.)?	0.00	100.00	0.00	2/2
Has anyone in your household been trained in First Aid or CPR?	100.00	0.00	0.00	2/2
Installed smoke detectors on each level of your home?	100.00	0.00	0.00	2/2
Signed up to receive emergency alerts from Brunswick, Halifax, or Mecklenburg counties?	100.00	0.00	0.00	2/2
Periodically check gutters, downspouts, and drain pipes on your property?	100.00	0.00	0.00	2/2

Question 7

Are you interested in making your home or neighborhood more resistant to natural hazards?

Yes	No	Responses
100.00	0.00	2/2

Question 8

What is the most effective way for you to receive information about how to make your household and home safer from natural disasters? (Select up to three)

Communication	Pct.	Communication	Pct.
Newspapers	50.00	University/College	0.00
Television	0.00	Mail	0.00
Email Newsletters	0.00	Fire/EMS	50.00
News Website	0.00	Face Sheet/Brochure	0.00
Social Media	100.00	Public Workshops	50.00
Schools	0.00	Other (please specify)	0.00

Responses: 2 of 2

Question 9

Whom would you most trust to provide you with information about how to make your household and home safer from natural hazards? (Select up to three)

Trusted Source	Pct.	Trusted Source	Pct.
News Media	0.00	Elected Officials	0.00
Government Agencies	0.00	Social Media	0.00
Insurance Agent or Company	0.00	Non-Profit Organizations	50.00
Utility Company	0.00	Not Sure	100.00
University/Research Institution	0.00	Other (please specify)	0.00
Neighbor/Friend/Family Member	0.00		

Responses: 2 of 2

Future Land Use (Flood and Wildfire)

The Town of Boydton, VA Comprehensive Plan, adopted in 2009 and amended in 2011, includes narrative on three areas located outside the town limits for potential future development. Based on reports from B & B Consultants, it is believed that Town services could be expanded to help foster development in those areas. For the purposes of the Hazard Mitigation Plan, each of the identified areas was reviewed to determine if any of the areas were included within FEMA's 1% annual chance for flooding or VDOF's "High Risk" area for wildfires.

Development Areas	Approximate Location	Flood and/or Wildfire Risk
Area #1	South of town along both sides of Rt 707 until the intersection with Rt 704, and on the north side of Rt 704 until the intersection with Rt 705.	Flood and Wildfire
Area #2	East of town along both sides of Rt 386 from Hwy 58 to the abandoned NF&D railway.	Flood and Wildfire
Area #3	West of town along both sides of Hwy 58 from Triangle Grocery to the 1st bridge at Rudd's Creek, including Rochichi Dr and the old YMCA camp.	Flood and Wildfire

Town of Chase City

Hazard Rankings

The methodology for the hazard rankings can be found in Section 5, "Risk Assessment", of this Plan. The hazard rankings included in this section are specific to the Town of Chase City, not the region as a whole.

Hazard	Location (Geographic Area Affected)	Maximum Probable Extent (Magnitude/Strength)	Probability of Future Events	Overall Hazard Ranking
Dam Failure	Negligible (1)	Weak (1)	Unlikely (1)	Low (3)
Drought	Extensive (4)	Extreme (4)	Occasional (2)	Medium/High (10)
Earthquake	Extensive (4)	Weak (1)	Unlikely (1)	Low/Medium (6)
Extreme Cold	Extensive (4)	Moderate (2)	Unlikely (1)	Medium (7)
Extreme Heat	Extensive (4)	Moderate (2)	Likely (3)	Medium/High (9)
Flood	Negligible (1)	Moderate (2)	Highly Likely (4)	Medium (7)
Hail	Extensive (4)	Moderate (2)	Likely (3)	Medium/High (9)
Tropical Cyclone	Extensive (4)	Severe (3)	Likely (3)	Medium/High (10)
Landslide	Negligible (1)	Weak (1)	Unlikely (1)	Low (3)
Lightning	Negligible (1)	Moderate (2)	Highly Likely (4)	Medium (7)
Severe Wind	Extensive (4)	Moderate (2)	Highly Likely (4)	Medium/High (10)
Severe Winter Weather	Extensive (4)	Moderate (2)	Highly Likely (4)	Medium/High (10)
Tornado	Negligible (1)	Severe (3)	Unlikely (1)	Low/Medium (5)
Wildfire	Significant (3)	Weak (1)	Unlikely (1)	Low/Medium (5)

Mitigation Actions

The Town's mitigation actions were reviewed, updated, and ranked based on discussions with local officials and SPDC staff's best guess. Among the factors considered when prioritizing the mitigation actions were: effect on overall risk to life and property, ease of implementation, political and community support, consideration of cost/benefit, and funding availability.

Mitigation Action 1	Install stationary generator backup units at critical facilities (Fire, Police, Water/Sewer facilities, etc.) that are lacking a secondary system. Where stationary generators are not feasible consider a quick-connect scenario where rotating or sharing generators can be utilized. Aging generators will be replaced as warranted.
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Varies by site
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Town Administration, Public Works
Implementation Schedule	Ongoing
Status Update	Ongoing – Generator needs are currently met at critical facilities. Aging generators may be replaced in the future.

Mitigation Action 2	Encourage the use of emergency warning systems, including: 1) residents signing up for Alert Mecklenburg to receive time-sensitive messages through their phone, email or texts; and 2) examine the feasibility of having patterned sirens at the fire department for emergency warnings.
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	Town budget
Lead Agency/Department	Town Administration, Chase City Volunteer Fire Department
Implementation Schedule	Near term
Status Update	Exploring outreach opportunities to best reach residents for Alert Mecklenburg system, the town website could be utilized. For additional information or to sign up for Alert Mecklenburg, please visit mecklenburgva.com.

Mitigation Action 3	Continue to support the efforts of the Chase City Volunteer Fire Department (education, training, equipment, etc.).
Category	Public Education and Awareness, Prevention
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Dependent upon funding in budget each year
Potential Funding Sources	Town budget
Lead Agency/Department	Town Administration
Implementation Schedule	Ongoing
Status Update	Ongoing – Financial support is provided on an annual basis. Flyer for volunteers was recently posted on town website.

Mitigation Action 4	Continue to retain the town wells as a backup water source to the current service provided by Roanoke River Service Authority.
Category	Prevention, Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	Town budget
Lead Agency/Department	Town Administration, Public Works Department
Implementation Schedule	Ongoing
Status Update	Ongoing – While the town wells continue to be retained, a formal maintenance procedure needs to be developed to ensure that the well pumps are still functional and to identify what steps would be required to safely introduce well water back into the distribution system. Monthly testing of the wells is conducted.

Mitigation Action 5	Clean and maintain storm sewers to prevent yard and street flooding. Coordinate with VDOT relating to issues on primary roadways, such as on W 2nd Street between N Washington St and Jefferson St.
Category	Prevention
Hazard(s) Addressed	Flooding
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	Town budget
Lead Agency/Department	Public Works Department
Implementation Schedule	Ongoing
Status Update	Ongoing – Public Works addresses issues as they arise.

Mitigation Action 6	Elevate controls and instrumentation at the WWTP, and any other susceptible systems, to keep them above flooding events.
Category	Prevention/Property Protection
Hazard(s) Addressed	Flooding
Priority	Medium
Estimated Cost	TBD
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Town Administration, Public Works Department
Implementation Schedule	Dependent upon availability of funding
Status Update	An increase in pipe diameter seems to have relieved the immediate overflow concerns.

Mitigation Action 7	Explore options to help address flooding/stormwater issues and damage on W 5th Street at Little Bluestone Creek near the town limits and on W 2nd St at Little Bluestone Creek. Additionally, the slope on the south side of W 2nd St near the railroad tracks has recently given way and needs to be addressed.
Category	Prevention/Property Protection/Natural Resource Protection
Hazard(s) Addressed	Flooding
Priority	Medium
Estimated Cost	TBD
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Town Administration
Implementation Schedule	Long term
Status Update	Need to explore issues more fully to understand what options and funding opportunities are available.

Mitigation Action 8	Prohibit or limit floodplain development through regulatory and/or incentive-based measures.
Category	Prevention/Property Protection/Natural Resource Protection
Hazard(s) Addressed	Flooding
Priority	Medium
Estimated Cost	Minimal – Staff time
Potential Funding Sources	Town budget
Lead Agency/Department	Town Administration
Implementation Schedule	Ongoing
Status Update	Enforcement is ongoing.

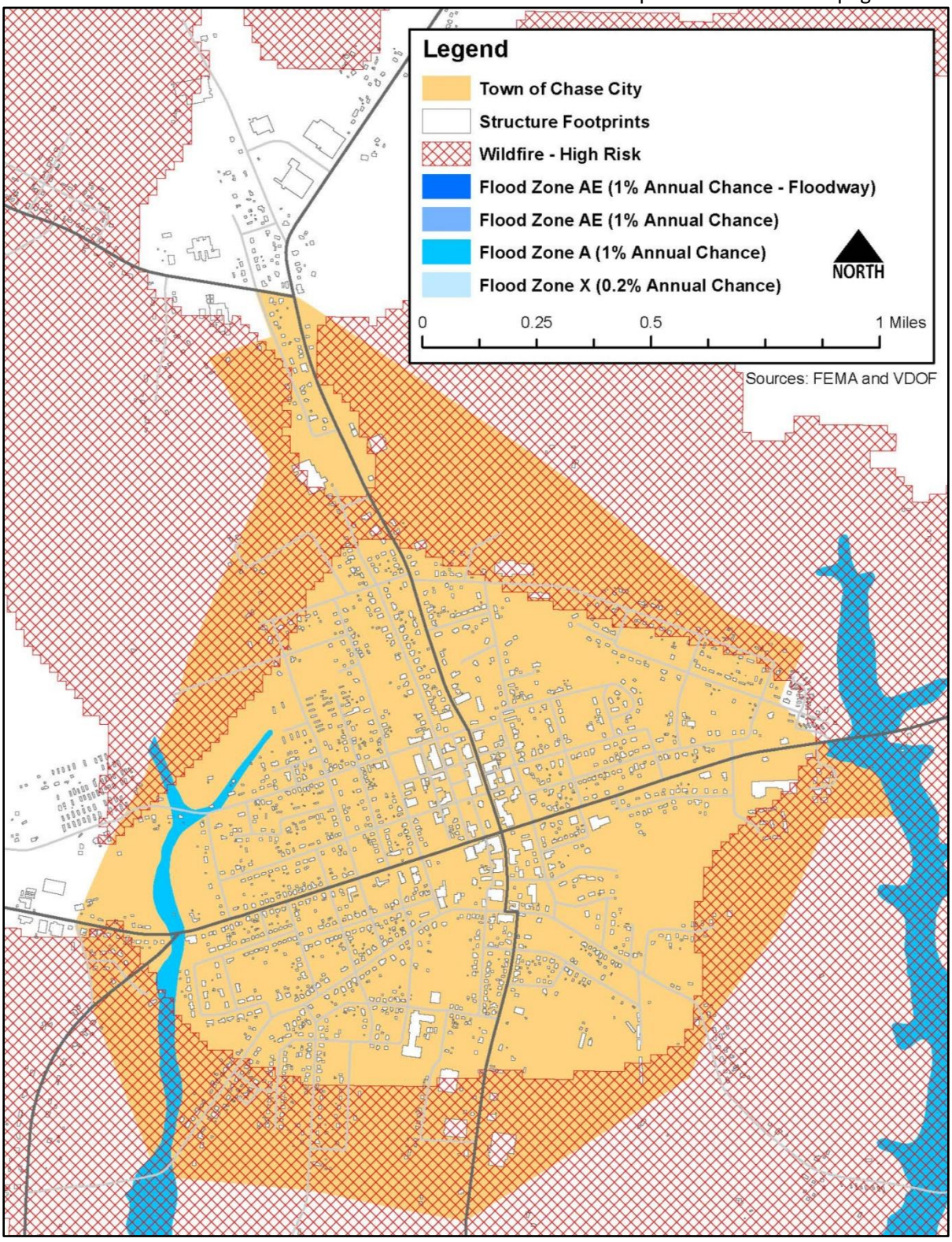
Mitigation Action 9	Routinely inspect and test the functioning and classification/color of fire hydrants. Make sure the information is shared with the fire department including any maps that they may need.
Category	Emergency Services
Hazard(s) Addressed	Wildfire
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	Town budget
Lead Agency/Department	Public Works Department
Implementation Schedule	Ongoing
Status Update	Ongoing

Removed Mitigation Actions:

Action	Reason
For critical and highly significant county and town facilities, examine windows for vulnerabilities. Install storm shutters or window clips for mounting plywood.	This action was deemed to be of such low priority at this point that it was removed from the list.
Place storm shelters at large mobile home parks. Secure new mobile homes with standard tie-downs to reduce their vulnerability to high winds.	The Town does not have large mobile home parks and the County addresses matters related to building codes and inspections.
Participate in StormReady Program, which encourages participation with fire departments to include benefits such as, early warning systems, weather spotters, shelter set-up and storm radio deployment. Consider participation in SKYWARN. SKYWARN works with the National Weather Service and spotters to disseminate information on warnings and threats. The NWS provides training around the country.	The Town can piggyback off the existing early warning system that Mecklenburg County has in place and coordinate with them on other related matters.

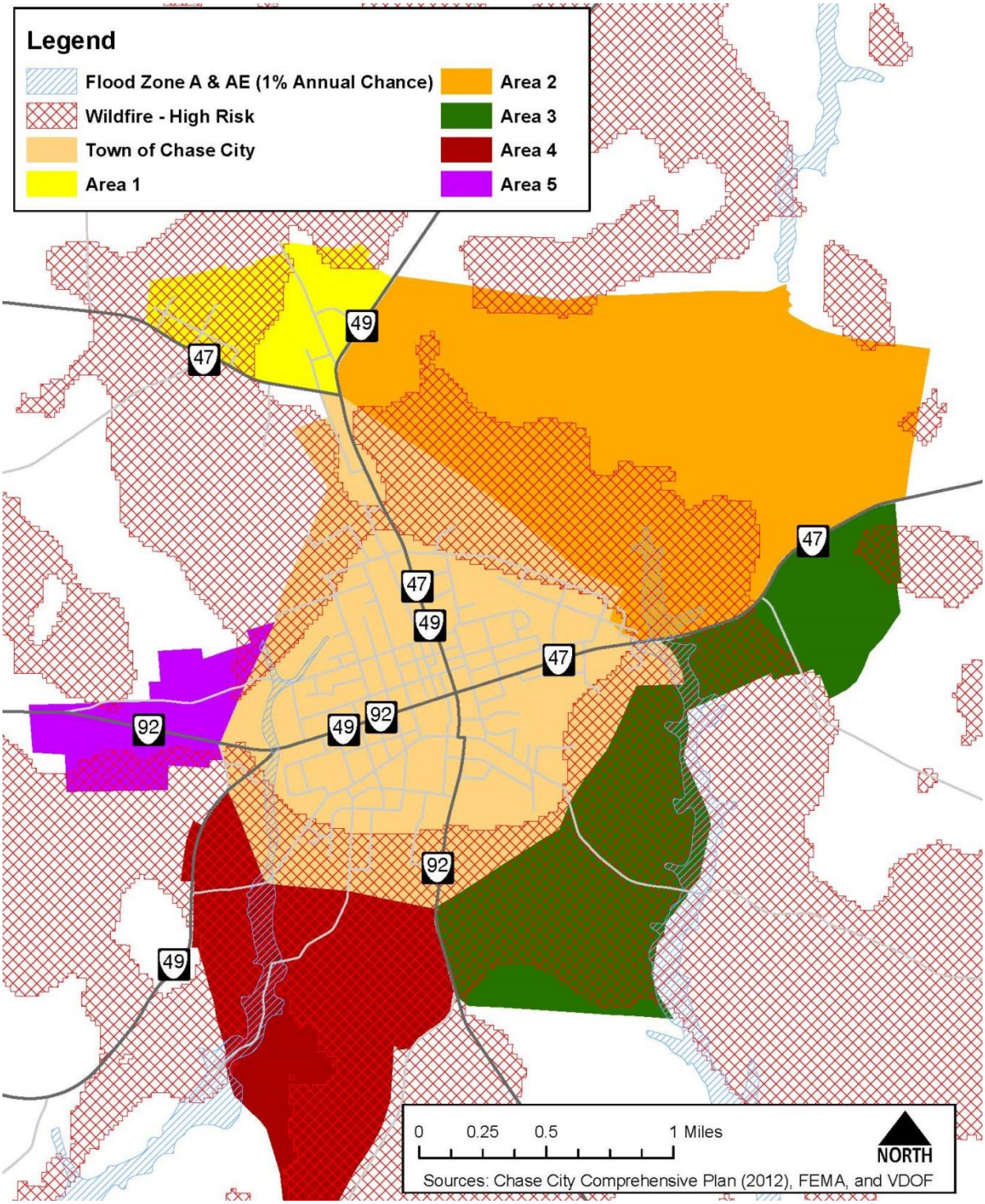
Flood and Wildfire Map

The flood zones shown below are for planning purposes and only include flood zones A, AE, and a portion of flood zone X. Full details can be found on FEMA's Flood Map Service Center webpage.



Future Annexation Area Risks Map (Flood and Wildfire)

The "Future Annexation Map" in Chase City's Comprehensive Plan, adopted in 2012, was included to better show potential flood and wildfire risks within Chase City's future annexation areas. For the purposes of the Hazard Mitigation Plan, each of the identified areas was reviewed to determine if any of the areas were included within FEMA's 1% annual chance for flooding or VDOF's "High Risk" area for wildfires.



Public Survey

The public survey asked each participate in which local jurisdiction that they lived. The results from those who identified as living in the Town of Chase City are as follows:

Question 1

Which of the following hazards have directly impacted you, your household, or your property?

Hazard	Pct.	Hazard	Pct.
Dam Failure	0.00	High Winds	100.00
Drought	0.00	Hurricane/Tropical Cyclone	0.00
Earthquake	0.00	Landslide	0.00
Extreme Heat/Cold	0.00	Lightning	0.00
Flooding	0.00	Tornado	0.00
Hail	0.00	Wildfire	0.00
Heavy Snow/Ice	0.00		

Responses: 1 of 1

Questions 2

How concerned are you about the following hazards affecting our region?

Hazard	Very Concerned	Somewhat Concerned	Not Concerned	Responses
Dam Failure	0.00	0.00	100.00	1/1
Drought	100.00	0.00	0.00	1/1
Earthquake	0.00	100.00	0.00	1/1
Extreme Heat/Cold	0.00	0.00	100.00	1/1
Flooding	0.00	100.00	0.00	1/1
Hail	0.00	100.00	0.00	1/1
Heavy Snow/Ice	0.00	100.00	0.00	1/1
High Winds	100.00	0.00	0.00	1/1
Hurricane/Tropical Cyclone	0.00	100.00	0.00	1/1
Landslide	0.00	0.00	100.00	1/1
Lightning	0.00	100.00	0.00	1/1
Tornado	100.00	0.00	0.00	1/1
Wildfire	0.00	100.00	0.00	1/1

Question 3

Is your home located in a floodplain?

Yes	No	Not Sure	Responses
0.00	100.00	0.00	1/1

Question 4

Does your household have flood insurance?

Yes	No	Not Sure	Responses
0.00	100.00	0.00	1/1

Question 5

The following statements will help determine citizen priorities regarding planning for natural hazards. Please tell us how important each one is to you.

Priorities	Very Important	Somewhat Important	Not Important	Responses
Protect private property	100.00	0.00	0.00	1/1
Protect critical facilities (hospitals, fire stations, etc.)	100.00	0.00	0.00	1/1
Prevent development in identified hazard areas	100.00	0.00	0.00	1/1
Enhance the function of natural areas (streams, wetlands)	100.00	0.00	0.00	1/1
Protect historical and cultural landmarks	100.00	0.00	0.00	1/1
Protect and reduce damage to utilities	100.00	0.00	0.00	1/1
Strengthen emergency services (Fire, EMS, Police)	100.00	0.00	0.00	1/1
Promote cooperation among public agencies, citizens, non-profit organizations, and business	100.00	0.00	0.00	1/1

Question 6

Have you or someone in your household:

Actions	Have Done	Plan To Do	Not Interested	Responses
Attended meetings or received information on natural disasters or emergency preparedness?	0.00	100.00	0.00	1/1
Talked with members in your household about what to do in case of a natural disaster or emergency?	0.00	100.00	0.00	1/1
Prepared a “Disaster Supply Kit” (stored food, water batteries, etc.)?	0.00	100.00	0.00	1/1
Has anyone in your household been trained in First Aid or CPR?	0.00	100.00	0.00	1/1
Installed smoke detectors on each level of your home?	100.00	0.00	0.00	1/1
Signed up to receive emergency alerts from Brunswick, Halifax, or Mecklenburg counties?	0.00	100.00	0.00	1/1
Periodically check gutters, downspouts, and drain pipes on your property?	100.00	0.00	0.00	1/1

Question 7

Are you interested in making your home or neighborhood more resistant to natural hazards?

Yes	No	Responses
100.00	0.00	1/1

Question 8

What is the most effective way for you to receive information about how to make your household and home safer from natural disasters? (Select up to three)

Communication	Pct.	Communication	Pct.
Newspapers	0.00	University/College	0.00
Television	100.00	Mail	0.00
Email Newsletters	0.00	Fire/EMS	0.00
News Website	0.00	Face Sheet/Brochure	100.00
Social Media	100.00	Public Workshops	0.00
Schools	0.00	Other (please specify)	0.00

Responses: 1 of 1

Question 9

Whom would you most trust to provide you with information about how to make your household and home safer from natural hazards? (Select up to three)

Trusted Source	Pct.	Trusted Source	Pct.
News Media	0.00	Elected Officials	0.00
Government Agencies	0.00	Social Media	0.00
Insurance Agent or Company	0.00	Non-Profit Organizations	0.00
Utility Company	0.00	Not Sure	100.00
University/Research Institution	0.00	Other (please specify)	0.00
Neighbor/Friend/Family Member	0.00		

Responses: 1 of 1

National Flood Insurance Program Survey

NATIONAL FLOOD INSURANCE PROGRAM (NFIP) SURVEY

MUNICIPALITY: Chase City

1. FLOODPLAIN IDENTIFICATION AND MAPPING			
Requirement	*Recommended Action*	*Yes/No*	*Comments*
a. Does the municipality maintain accessible copies of an effective Flood Insurance Rate Map (FIRM)/Digital Flood Insurance Rate Map (DFIRM)? Does the municipality maintain accessible copies of the most recent Flood Insurance Study (FIS)?	Place these documents in the local libraries or make available publicly.	Yes	
b. Has the municipality adopted the most current DFIRM/FIRM and FIS?	State the date of adoption, if approved.		
c. Does the municipality support request for map updates?	If yes, state how.	Yes	County
d. Does the municipality share with Federal Emergency Management Agency (FEMA) any new technical or scientific data that could result in map revisions within 6 months of creation or identification of new data?	If yes, specify how.	Yes	County
e. Does the municipality provide assistance with local floodplain determinations?	If yes, specify how.	No	County
f. Does the municipality maintain a record of approved Letters of Map Change?	If yes, specify the responsible office.	No	County

NATIONAL FLOOD INSURANCE PROGRAM SURVEY

2. FLOODPLAIN MANAGEMENT			
Requirement	*Recommended Action*	*Yes/No*	*Comments*
a. Has the municipality adopted a compliant floodplain management ordinance that, at a minimum, regulates the following:	If yes, answer questions (1) through (4) below.	No	County Building Dept
(1) Does the municipality issue permits for all proposed development in the Special Flood Hazard Areas (SFHAs)?	If yes, specify the office responsible.	No	
(2) Does the municipality obtain, review, and utilize any Base Flood Elevation (BFE) and floodway data, and/or require BFE data for subdivision proposals and other development proposals larger than 50 lots or 5 acres?	If yes, specify the office responsible.	No	
(3) Does the municipality identify measures to keep all new and substantially improved construction reasonably safe from flooding to or above the BFE, including anchoring, using flood-resistant materials, and designing or locating utilities and service facilities to prevent water damage?	If yes, specify the office responsible.	No	
(4) Does the municipality document and maintain records of elevation data that document lowest floor elevation for new or substantially improved structures?	If yes, specify the office responsible.	No	
b. If a compliant floodplain ordinance was adopted, does the municipality enforce the ordinance by monitoring compliance and taking remedial action to correct violations?	If yes, specify how.	N/A	

NATIONAL FLOOD INSURANCE PROGRAM SURVEY

2. FLOODPLAIN MANAGEMENT			
Requirement	*Recommended Action*	*Yes/No*	*Comments*
c. Has the municipality considered adopting activities that extend beyond the minimum requirements? Examples include: • Participation in the Community Rating System • Prohibition of production or storage of chemicals in SFHA • Prohibition of certain types of structures, such as hospitals, nursing homes, and jails in SFHA • Prohibition of certain types of residential housing (manufactured homes) in SFHA • Floodplain ordinances that prohibit any new residential or nonresidential structures in SFHA	If yes, specify activities.	No	

3. FLOOD INSURANCE			
Requirement	*Recommended Action*	*Yes/No*	*Comments*
a. Does the municipality educate community members about the availability and value of flood insurance?	If yes, specify how.	No	
b. Does the municipality inform community property owners about changes to the DFIRM/FIRM that would impact their insurance rates?	If yes, specify how.	NO	
c. Does the municipality provide general assistance to community members regarding insurance issues?	If yes, specify how.	NO	

Town of Clarksville

Hazard Rankings

The methodology for the hazard rankings can be found in Section 5, "Risk Assessment", of this Plan. The hazard rankings included in this section are specific to the Town of Clarksville, not the region as a whole.

Hazard	Location (Geographic Area Affected)	Maximum Probable Extent (Magnitude/Strength)	Probability of Future Events	Overall Hazard Ranking
Dam Failure	Negligible (1)	Weak (1)	Unlikely (1)	Low (3)
Drought	Extensive (4)	Extreme (4)	Occasional (2)	Medium/High (10)
Earthquake	Extensive (4)	Weak (1)	Unlikely (1)	Low/Medium (6)
Extreme Cold	Extensive (4)	Moderate (2)	Unlikely (1)	Medium (7)
Extreme Heat	Extensive (4)	Moderate (2)	Likely (3)	Medium/High (9)
Flood	Limited (2)	Moderate (2)	Highly Likely (4)	Medium (8)
Hail	Extensive (4)	Severe (3)	Likely (3)	Medium/High (10)
Tropical Cyclone	Extensive (4)	Severe (3)	Likely (3)	Medium/High (10)
Landslide	Negligible (1)	Weak (1)	Unlikely (1)	Low (3)
Lightning	Negligible (1)	Moderate (2)	Highly Likely (4)	Medium (7)
Severe Wind	Extensive (4)	Moderate (2)	Likely (3)	Medium/High (9)
Severe Winter Weather	Extensive (4)	Moderate (2)	Highly Likely (4)	Medium/High (10)
Tornado	Negligible (1)	Severe (3)	Unlikely (1)	Low/Medium (5)
Wildfire	Significant (3)	Weak (1)	Likely (3)	Medium (7)

Mitigation Actions

The Town's mitigation actions were reviewed, updated, and ranked based on discussions with local officials. Among the factors considered when prioritizing the mitigation actions were: effect on overall risk to life and property, ease of implementation, political and community support, consideration of cost/benefit, and funding availability.

Mitigation Action 1	Install stationary generator backup units at critical facilities (Police Department, Community Center, Town Shop, pump stations, etc.) that are lacking a secondary system. Where stationary generators are not feasible consider a quick-connect scenario where rotating or sharing generators can be utilized. Aging generators will be replaced as warranted.
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Varies based on site
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Town Administration, Public Works Department
Implementation Schedule	Near term
Status Update	Ongoing – Clarksville has quick hook-ups and stationary generators installed at various pump stations around town as well as at the WTP and WWTP. They have identified several new locations in which generators are needed.

Mitigation Action 2	Maintain redundant communication system components to back-up primary communication system.
Category	Emergency Services
Hazard(s) Addressed	Multiple

Priority	High
Estimated Cost	Minimal
Potential Funding Sources	Town budget
Lead Agency/Department	Town Administration, Police Department
Implementation Schedule	Ongoing
Status Update	Ongoing – A new repeater has been installed on the water tower and includes a backup power source. Should it fail, the Town can still utilize overlapping coverage from other towers in the area and through car-to-car communications.

Mitigation Action 3 (NEW)	**Make improvements to the community center so that it can be utilized as a storm shelter.**
Category	Emergency Services, Structural Projects
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	TBD
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Town Administration
Implementation Schedule	Near term
Status Update	Ongoing – This project is currently in the planning/exploratory phase.

Mitigation Action	**Encourage the use of emergency warning systems, including: 1) residents signing up for Alert Mecklenburg to receive time-sensitive messages through calls, email or texts; and 2) examine the feasibility of having a siren installed to alert those within the town limits of impending hazardous weather conditions.**
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal for Alert Mecklenburg (Staff time), TBD for siren
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Town Administration
Implementation Schedule	Near term
Status Update	Ongoing – Town to look into methods of encouraging residents to sign up for Alert Mecklenburg. Clarksville will also explore the idea of installing a siren to help alert the public.

Mitigation Action 4	**Clarksville will continue to support the efforts of the Fire Department (education, training, equipment, etc.) through annual donations and their use of a training facility on Town property.**
Category	Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	$45,000 +/- per year
Potential Funding Sources	Town budget
Lead Agency/Department	Town Administration
Implementation Schedule	Ongoing
Status Update	Ongoing – The Town continues to provide support to the local fire department.

Mitigation Action 5	**When new homes are constructed, provide information to encourage clearing trees, brush, and other flammable natural materials a safe distance from the home creating a "Green Zone" between the structure and the forest.**
Category	Prevention, Public Education and Awareness
Hazard(s) Addressed	Wildfire
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	VDOF

Lead Agency/Department	Town Administration, VDOF
Implementation Schedule	Immediately
Status Update	Recently obtained brochures for distribution at the Town Office. Coordinate with VDOF when additional brochures are needed.

Mitigation Action 6 (NEW)	**Incorporate additional sewer protective measures between Venable Lane and Shiney Rock Road to eliminate a stormwater infiltration issue. Specifically, the more severe rainfall events are a problem due to beavers constructing dams along the creek and causing water to spill into manholes.**
Category	Property Protection, Structural Projects
Hazard(s) Addressed	Flooding
Priority	Medium
Estimated Cost	TBD, but possibly just cost of watertight fitting manhole lids
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Town Administration, Public Works Department
Implementation Schedule	Near term
Status Update	Ongoing – Risers have been installed but infiltration problem persists.

Mitigation Action 7 (NEW)	**Update the Capital Improvement Plan to better plan for future spending on capital needs, including any relevant hazard mitigation items.**
Category	Prevention
Hazard(s) Addressed	Multiple
Priority	Medium
Estimated Cost	Minimal – Staff time
Potential Funding Sources	Town budget
Lead Agency/Department	Town Administration
Implementation Schedule	Near term
Status Update	CIP update anticipated to occur during the upcoming budget cycle.

Mitigation Action 8	**Prohibit or limit floodplain development through regulatory and/or incentive-based measures.**
Category	Prevention/Property Protection
Hazard(s) Addressed	Flooding
Priority	Medium
Estimated Cost	Minimal – Staff time
Potential Funding Sources	Town budget
Lead Agency/Department	Town Administration
Implementation Schedule	Ongoing
Status Update	Enforcement ongoing, floodplain regulations are updated when warranted (last update was in 2015).

Mitigation Action 9	**Routinely inspect and test the functioning and classification/color of fire hydrants. Make sure information is shared with area fire departments.**
Category	Emergency Services
Hazard(s) Addressed	Wildfire
Priority	Medium
Estimated Cost	Minimal – Staff time
Potential Funding Sources	Town budget
Lead Agency/Department	Public Works Department
Implementation Schedule	Ongoing
Status Update	Hydrants are typically inspected during the spring and fall of each year. Relevant information is shared with the fire department.

Mitigation Action 10	Clean and maintain stormwater infrastructure to prevent yard and street flooding.
Category	Prevention
Hazard(s) Addressed	Flooding
Priority	Medium
Estimated Cost	Minimal – Staff time
Potential Funding Sources	Town budget
Lead Agency/Department	Public Works Department
Implementation Schedule	Ongoing
Status Update	The Public Works Department routinely checks on stormwater infrastructure to prevent flooding events as part of their preventive maintenance program.

Mitigation Action 11	Examine critical and highly significant town facilities for vulnerabilities.
Category	Prevention/Property Protection
Hazard(s) Addressed	Multiple
Priority	Medium
Estimated Cost	TBD, based on results of inspections
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Public Works Department
Implementation Schedule	Mid-term (3-5 years)
Status Update	Replaced several roofs and modernized buildings since the last update. The Town will continue to make other improvements to town facilities when warranted.

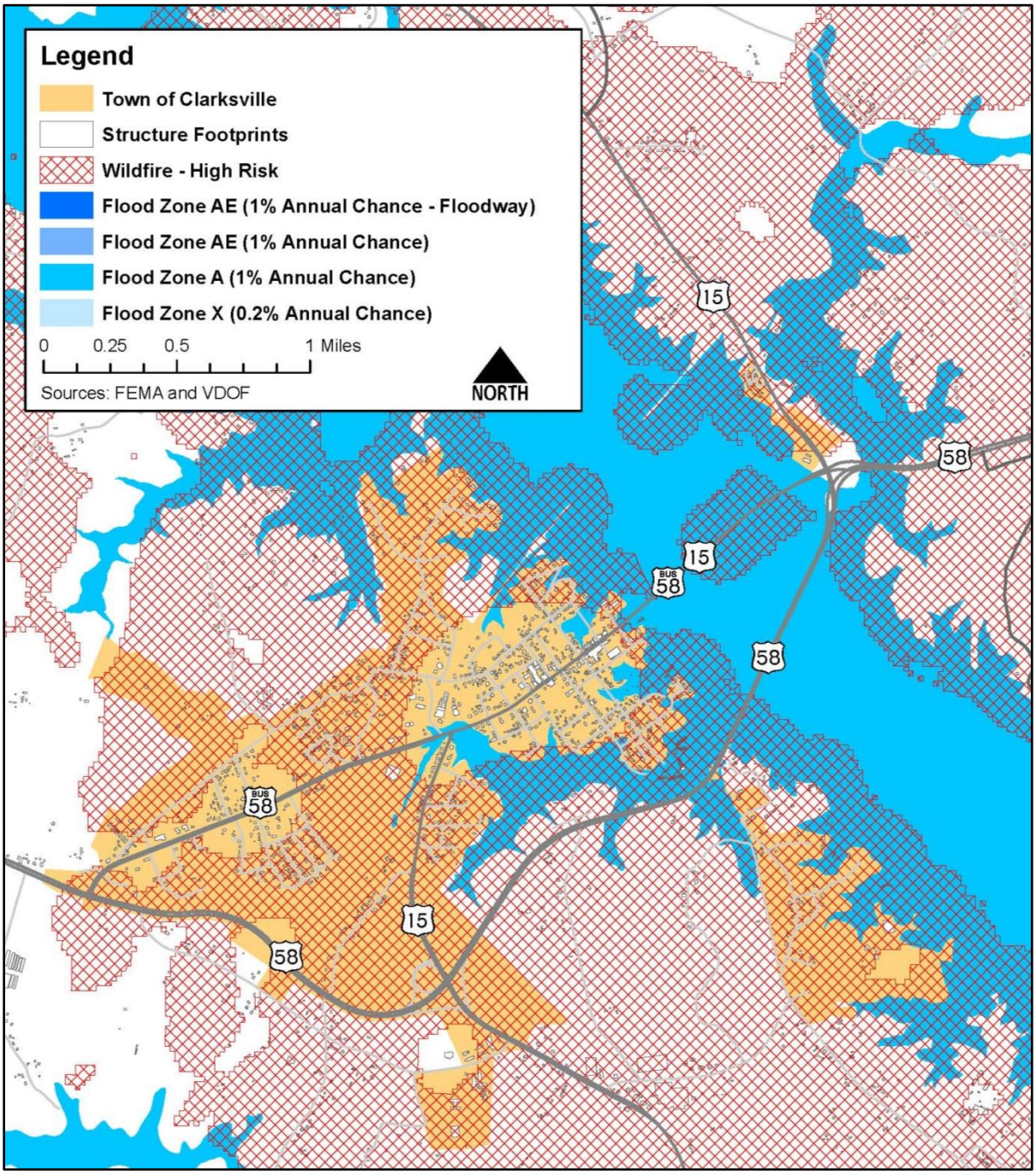
Mitigation Action 12	Explore options to elevate any critical systems located in town facilities that experience any type of flooding, including minor/occasional flooding.
Category	Prevention
Hazard(s) Addressed	Flooding
Priority	Medium
Estimated Cost	TBD
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Town Administration, Public Works Department
Implementation Schedule	Long-term
Status Update	Public Works Department continues to monitor the situation at the KCC pump station.

Mitigation Action 13	Participate in StormReady program, which encourages participation with fire departments to include benefits such as, early warning systems, weather spotters, shelter set-up, and storm radio deployment. Consider participation in SKYWARN. SKYWARN works with the National Weather Service and spotters to disseminate information on warnings and threats. The NWS provides training around the country.
Category	Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	Medium
Estimated Cost	Minimal – staff time
Potential Funding Sources	Town budget/Fire Department
Lead Agency/Department	Town Administration/Fire Department
Implementation Schedule	Long-term
Status Update	No action taken

Flood and Wildfire Map

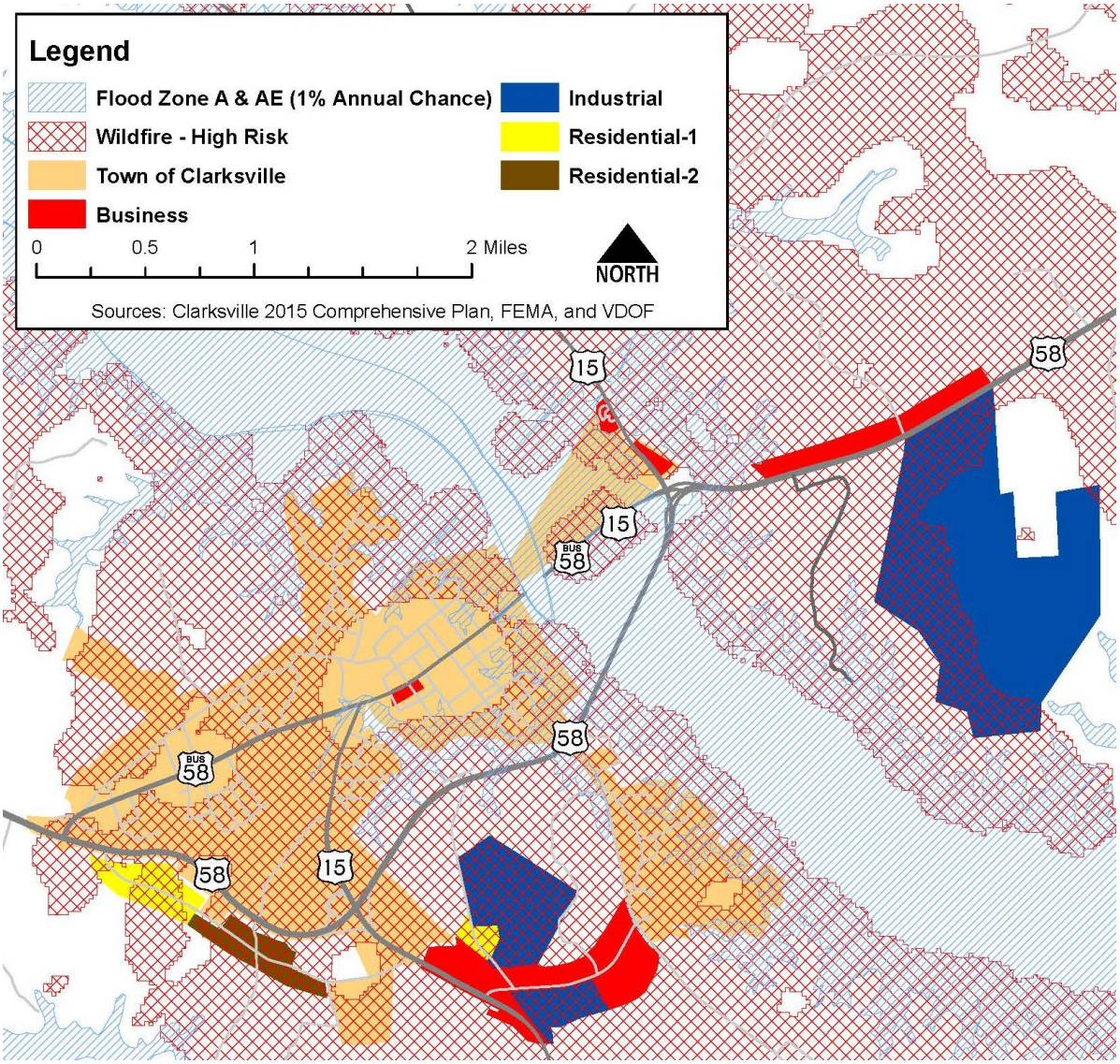
The flood zones shown below are for planning purposes and only include flood zones A, AE, and a portion of flood zone X. Full details can be found on FEMA's Flood Map Service Center webpage.

Additional details relating to wildfires can be found in Section 4 of this plan. Please note that only high risk areas from a 2003 Wildfire Risk Assessment Map have been included on the following map.



Future Growth Area Risks Map (Flood and Wildfire)

The "Future Growth Areas Map" in Clarksville's Comprehensive Plan, adopted in 2012, was included to better show potential flood and wildfire risks within the Town's future annexation areas. For the purposes of the Hazard Mitigation Plan, each of the identified areas was reviewed to determine if any of the areas were included within FEMA's 1% annual chance for flooding or VDOF's "High Risk" area for wildfires.



Public Survey

The public survey asked each participate in which local jurisdiction that they lived. The results from those who identified as living in the Town of Clarksville are as follows:

Question 1

Which of the following hazards have directly impacted you, your household, or your property?

Hazard	Pct.	Hazard	Pct.
Dam Failure	0.00	High Winds	85.00
Drought	15.00	Hurricane/Tropical Cyclone	55.00
Earthquake	0.00	Landslide	0.00
Extreme Heat/Cold	30.00	Lightning	15.00
Flooding	5.00	Tornado	10.00
Hail	25.00	Wildfire	0.00
Heavy Snow/Ice	30.00		

Responses: 20 of 20

Questions 2

How concerned are you about the following hazards affecting our region?

Hazard	Very Concerned	Somewhat Concerned	Not Concerned	Responses
Dam Failure	15.00	25.00	60.00	20/20
Drought	25.00	55.00	20.00	20/20
Earthquake	5.00	25.00	70.00	20/20
Extreme Heat/Cold	30.00	65.00	5.00	20/20
Flooding	15.00	65.00	20.00	20/20
Hail	10.53	73.68	0.00	19/20
Heavy Snow/Ice	27.78	44.44	27.78	18/20
High Winds	55.00	45.00	0.00	20/20
Hurricane/Tropical Cyclone	57.90	36.84	5.26	19/20
Landslide	10.53	5.26	84.21	19/20
Lightning	11.11	77.78	11.11	18/20
Tornado	31.58	57.90	10.53	19/20
Wildfire	10.53	57.90	31.57	19/20

Question 3

Is your home located in a floodplain?

Yes	No	Not Sure	Responses
5.00	85.00	10.00	20/20

Question 4

Does your household have flood insurance?

Yes	No	Not Sure	Responses
0.00	90.00	10.00	20/20

Question 5

The following statements will help determine citizen priorities regarding planning for natural hazards. Please tell us how important each one is to you.

Priorities	Very Important	Somewhat Important	Not Important	Responses
Protect private property	89.47	10.53	0.00	19/20
Protect critical facilities (hospitals, fire stations, etc.)	95.00	5.00	0.00	20/20
Prevent development in identified hazard areas	60.00	40.00	0.00	20/20
Enhance the function of natural areas (streams, wetlands)	50.00	50.00	0.00	20/20
Protect historical and cultural landmarks	50.00	45.00	5.00	20/20
Protect and reduce damage to utilities	90.00	10.00	0.00	20/20
Strengthen emergency services (Fire, EMS, Police)	95.00	5.00	0.00	20/20
Promote cooperation among public agencies, citizens, non-profit organizations, and business	80.00	20.00	0.00	20/20

Question 6

Have you or someone in your household:

Actions	Have Done	Plan To Do	Not Interested	Responses
Attended meetings or received information on natural disasters or emergency preparedness?	36.84	31.58	31.58	19/20
Talked with members in your household about what to do in case of a natural disaster or emergency?	85.00	15.00	0.00	20/20
Prepared a "Disaster Supply Kit" (stored food, water batteries, etc.)?	45.00	45.00	10.00	20/20
Has anyone in your household been trained in First Aid or CPR?	73.68	10.53	15.79	19/20
Installed smoke detectors on each level of your home?	95.00	5.00	0.00	20/20
Signed up to receive emergency alerts from Brunswick, Halifax, or Mecklenburg counties?	45.00	55.00	0.00	20/20
Periodically check gutters, downspouts, and drain pipes on your property?	90.00	10.00	0.00	20/20

Question 7

Are you interested in making your home or neighborhood more resistant to natural hazards?

Yes	No	Responses
100.00	0.00	20/20

Question 8

What is the most effective way for you to receive information about how to make your household and home safer from natural disasters? (Select up to three)

Communication	Pct.	Communication	Pct.
Newspapers	40.00	University/College	0.00
Television	30.00	Mail	50.00
Email Newsletters	40.00	Fire/EMS	5.00
News Website	10.00	Face Sheet/Brochure	35.00
Social Media	70.00	Public Workshops	5.00
Schools	10.00	Other (please specify)	0.00

Responses: 20 of 20

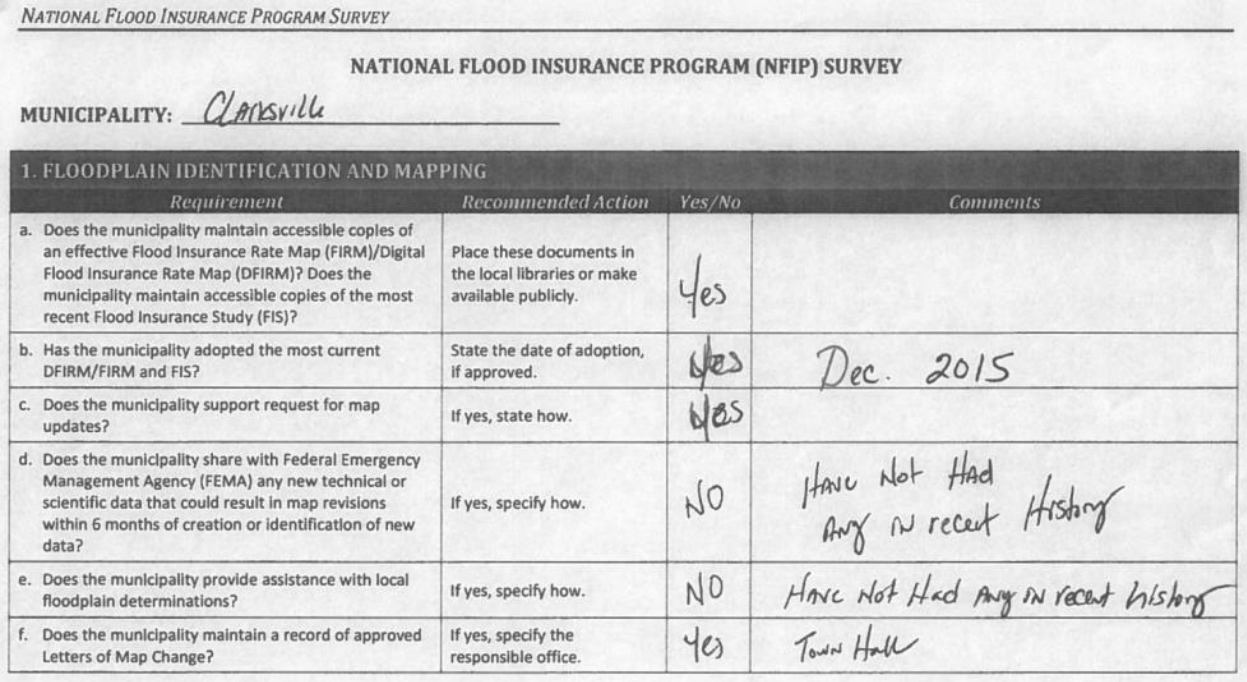
Question 9

Whom would you most trust to provide you with information about how to make your household and home safer from natural hazards? (Select up to three)

Trusted Source	Pct.	Trusted Source	Pct.
News Media	15.79	Elected Officials	15.79
Government Agencies	36.84	Social Media	15.79
Insurance Agent or Company	15.79	Non-Profit Organizations	21.05
Utility Company	63.16	Not Sure	10.53
University/Research Institution	15.79	Other (please specify)	0.00
Neighbor/Friend/Family Member	31.58		

Responses: 19 of 20

National Flood Insurance Program Survey



NATIONAL FLOOD INSURANCE PROGRAM SURVEY

NATIONAL FLOOD INSURANCE PROGRAM (NFIP) SURVEY

MUNICIPALITY: Clarksville

1. FLOODPLAIN IDENTIFICATION AND MAPPING

Requirement	Recommended Action	Yes/No	Comments
a. Does the municipality maintain accessible copies of an effective Flood Insurance Rate Map (FIRM)/Digital Flood Insurance Rate Map (DFIRM)? Does the municipality maintain accessible copies of the most recent Flood Insurance Study (FIS)?	Place these documents in the local libraries or make available publicly.	Yes	
b. Has the municipality adopted the most current DFIRM/FIRM and FIS?	State the date of adoption, if approved.	Yes	Dec. 2015
c. Does the municipality support request for map updates?	If yes, state how.	Yes	
d. Does the municipality share with Federal Emergency Management Agency (FEMA) any new technical or scientific data that could result in map revisions within 6 months of creation or identification of new data?	If yes, specify how.	NO	Have Not Had Any in recent History
e. Does the municipality provide assistance with local floodplain determinations?	If yes, specify how.	NO	Have Not Had Any in recent History
f. Does the municipality maintain a record of approved Letters of Map Change?	If yes, specify the responsible office.	Yes	Town Hall

NATIONAL FLOOD INSURANCE PROGRAM SURVEY

2. FLOODPLAIN MANAGEMENT			
Requirement	*Recommended Action*	*Yes/No*	*Comments*
a. Has the municipality adopted a compliant floodplain management ordinance that, at a minimum, regulates the following:	If yes, answer questions (1) through (4) below.	Yes	
(1) Does the municipality issue permits for all proposed development in the Special Flood Hazard Areas (SFHAs)?	If yes, specify the office responsible.	Yes	Town Hall
(2) Does the municipality obtain, review, and utilize any Base Flood Elevation (BFE) and floodway data, and/or require BFE data for subdivision proposals and other development proposals larger than 50 lots or 5 acres?	If yes, specify the office responsible.	Yes	Have Not Had one recently
(3) Does the municipality identify measures to keep all new and substantially improved construction reasonably safe from flooding to or above the BFE, including anchoring, using flood-resistant materials, and designing or locating utilities and service facilities to prevent water damage?	If yes, specify the office responsible.	Yes	Town Hall
(4) Does the municipality document and maintain records of elevation data that document lowest floor elevation for new or substantially improved structures?	If yes, specify the office responsible.	Yes	Town Hall
b. If a compliant floodplain ordinance was adopted, does the municipality enforce the ordinance by monitoring compliance and taking remedial action to correct violations?	If yes, specify how.	Yes	

NATIONAL FLOOD INSURANCE PROGRAM SURVEY

2. FLOODPLAIN MANAGEMENT			
Requirement	*Recommended Action*	*Yes/No*	*Comments*
c. Has the municipality considered adopting activities that extend beyond the minimum requirements? Examples include: • Participation in the Community Rating System • Prohibition of production or storage of chemicals in SFHA • Prohibition of certain types of structures, such as hospitals, nursing homes, and jails in SFHA • Prohibition of certain types of residential housing (manufactured homes) in SFHA • Floodplain ordinances that prohibit any new residential or nonresidential structures in SFHA	If yes, specify activities.	NO	

3. FLOOD INSURANCE			
Requirement	*Recommended Action*	*Yes/No*	*Comments*
a. Does the municipality educate community members about the availability and value of flood insurance?	If yes, specify how.	Yes	Any Flood Plain Related Requests
b. Does the municipality inform community property owners about changes to the DFIRM/FIRM that would impact their insurance rates?	If yes, specify how.	NO	
c. Does the municipality provide general assistance to community members regarding insurance issues?	If yes, specify how.	NO	

Town of La Crosse

Hazard Rankings

The methodology for the hazard rankings can be found in Section 5, "Risk Assessment", of this Plan. The hazard rankings included in this section are specific to the Town of La Crosse, not the region as a whole.

Hazard	Location (Geographic Area Affected)	Maximum Probable Extent (Magnitude/Strength)	Probability of Future Events	Overall Hazard Ranking
Dam Failure	Negligible (1)	Weak (1)	Unlikely (1)	Low (3)
Drought	Extensive (4)	Extreme (4)	Occasional (2)	Medium/High (10)
Earthquake	Extensive (4)	Weak (1)	Unlikely (1)	Low/Medium (6)
Extreme Cold	Extensive (4)	Moderate (2)	Unlikely (1)	Medium (7)
Extreme Heat	Extensive (4)	Moderate (2)	Likely (3)	Medium/High (9)
Flood	Negligible (1)	Weak (1)	Highly Likely (4)	Low/Medium (6)
Hail	Extensive (4)	Moderate (2)	Occasional (2)	Medium (8)
Tropical Cyclone	Extensive (4)	Severe (3)	Likely (3)	Medium/High (10)
Landslide	Negligible (1)	Weak (1)	Unlikely (1)	Low (3)
Lightning	Negligible (1)	Moderate (2)	Highly Likely (4)	Medium (7)
Severe Wind	Extensive (4)	Moderate (2)	Occasional (2)	Medium (8)
Severe Winter Weather	Extensive (4)	Moderate (2)	Highly Likely (4)	Medium/High (10)
Tornado	Negligible (1)	Severe (3)	Unlikely (1)	Low/Medium (5)
Wildfire	Significant (3)	Weak (1)	Likely (3)	Medium (7)

Mitigation Actions

The Town's mitigation actions were reviewed, updated, and ranked based on discussions with local officials. Among the factors considered when prioritizing the mitigation actions were: effect on overall risk to life and property, ease of implementation, political and community support, consideration of cost/benefit, and funding availability.

Mitigation Action 1	Install a generator at the Roanoke pump station, town office, fire department and public works building. Where stationary generators are not feasible, consider a quick-connect scenario where rotating or shared generators can be used.
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Varies by site
Potential Funding Sources	Federal/State grants, Town Budget
Lead Agency/Department	Town of La Crosse, Mecklenburg County Emergency Services
Implementation Schedule	Near term
Status Update	No action taken; insufficient funds. Future grant opportunities to be explored.

Mitigation Action 2	Encourage residents to sign up for Alert Mecklenburg to receive emergency notifications through a variety of methods (email, text, phone, etc.)
Category	Public Education and Awareness, Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	Town Budget
Lead Agency/Department	Town of La Crosse, Mecklenburg County Emergency Services
Implementation Schedule	Near term

Status Update	Exploring outreach options.

Mitigation Action 3	**Continue to improve firefighter education and training through the funding of training resources such as the firehouse in Chase City, the training facility near La Crosse, and the Fire Training Center in South Boston.**
Category	Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	Mecklenburg County Budget, Grant Funding
Lead Agency/Department	Mecklenburg County Emergency Services
Implementation Schedule	Ongoing
Status Update	Ongoing

Mitigation Action 4	**Examine the feasibility of a patterned siren via the fire department to alert residents of one or more specific hazards.**
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	Town Budget, La Crosse Fire Department
Lead Agency/Department	Town of La Crosse, La Crosse Fire Department
Implementation Schedule	Ongoing
Status Update	Ongoing

Mitigation Action 5 (NEW)	**Explore options to address stormwater flooding occurring in the Pine St/ Montgomery St area.**
Category	Prevention, Structural Projects
Hazard(s) Addressed	Flooding
Priority	High
Estimated Cost	TBD
Potential Funding Sources	Federal/State grants, Town Budget
Lead Agency/Department	Town of La Crosse
Implementation Schedule	Near term
Status Update	Insufficient funds, grant opportunities being explored.

Mitigation Action 6	**Routinely inspect and test the functioning and classification/color of fire hydrants. Make sure that the information is shared with the fire department.**
Category	Emergency Services
Hazard(s) Addressed	Wildfire
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	Town Budget
Lead Agency/Department	Town of La Crosse Public Works
Implementation Schedule	Ongoing
Status Update	Ongoing

Mitigation Action 7	**Clean and maintain stormwater infrastructure to prevent yard and street flooding.**
Category	Prevention
Hazard(s) Addressed	Flooding
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	Town Budget, VDOT
Lead Agency/Department	Town of La Crosse Public Works Department, VDOT
Implementation Schedule	Ongoing

Status Update	Ongoing – Issues are addressed as they arise.

Mitigation Action 8	**When new homes are constructed, provide information to encourage clearing trees, brush, and other flammable natural materials a safe distance from the home creating a "Green Zone" between the forest and the structure.**
Category	Prevention
Hazard(s) Addressed	Wildfire
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	VDOF
Lead Agency/Department	Town of La Crosse, Virginia Department of Forestry
Implementation Schedule	Immediate
Status Update	Coordinate with VDOF for additional brochures as needed.

Mitigation Action 9	**Prohibit or limit floodplain development through the adoption and enforcement of floodplain regulations.**
Category	Prevention/Property Protection/Natural Resource Protection
Hazard(s) Addressed	Flooding
Priority	Moderate
Estimated Cost	Minimal – limited to changes in local ordinances
Potential Funding Sources	Town Budget
Lead Agency/Department	Town of La Crosse
Implementation Schedule	Long-term
Status Update	Identified floodplain is currently in an undeveloped area, ordinances should be in place before development pressures can impact this area.

Mitigation Action 10	**Coordinate with Mecklenburg County for the placement of a storm shelter at the Shady Springs Mobile Home Park.**
Category	Prevention/Property Protection
Hazard(s) Addressed	Multiple
Priority	Medium
Estimated Cost	TBD
Potential Funding Sources	Federal/State grants, Town Budget
Lead Agency/Department	Town of La Crosse, Mecklenburg County Emergency Services
Implementation Schedule	Long term
Status Update	No action taken; lack of funding

Mitigation Action 11	**Elevate HVAC, electrical, and telecommunications systems at critical facilities to keep them above any type of flooding.**
Category	Prevention
Hazard(s) Addressed	Flooding
Priority	Low
Estimated Cost	TBD
Potential Funding Sources	Federal/State grants, Town Budget
Lead Agency/Department	Town of La Crosse
Implementation Schedule	Dependent upon availability of funding
Status Update	Systems that have not already been raised are in low-risk situations

Mitigation Action 12	For critical and highly significant town facilities, examine windows for vulnerabilities. Install storm shutters or window clips for mounting plywood.
Category	Prevention/Property Protection/Structural Projects
Hazard(s) Addressed	Tropical Cyclone, Severe Wind, Tornado
Priority	Low
Estimated Cost	TBD
Potential Funding Sources	Federal/State grants, Town Budget
Lead Agency/Department	Town of La Crosse, Mecklenburg County Building Inspections
Implementation Schedule	Long-term
Status Update	No action taken; insufficient funds/staff, limited number of highly significant town facilities

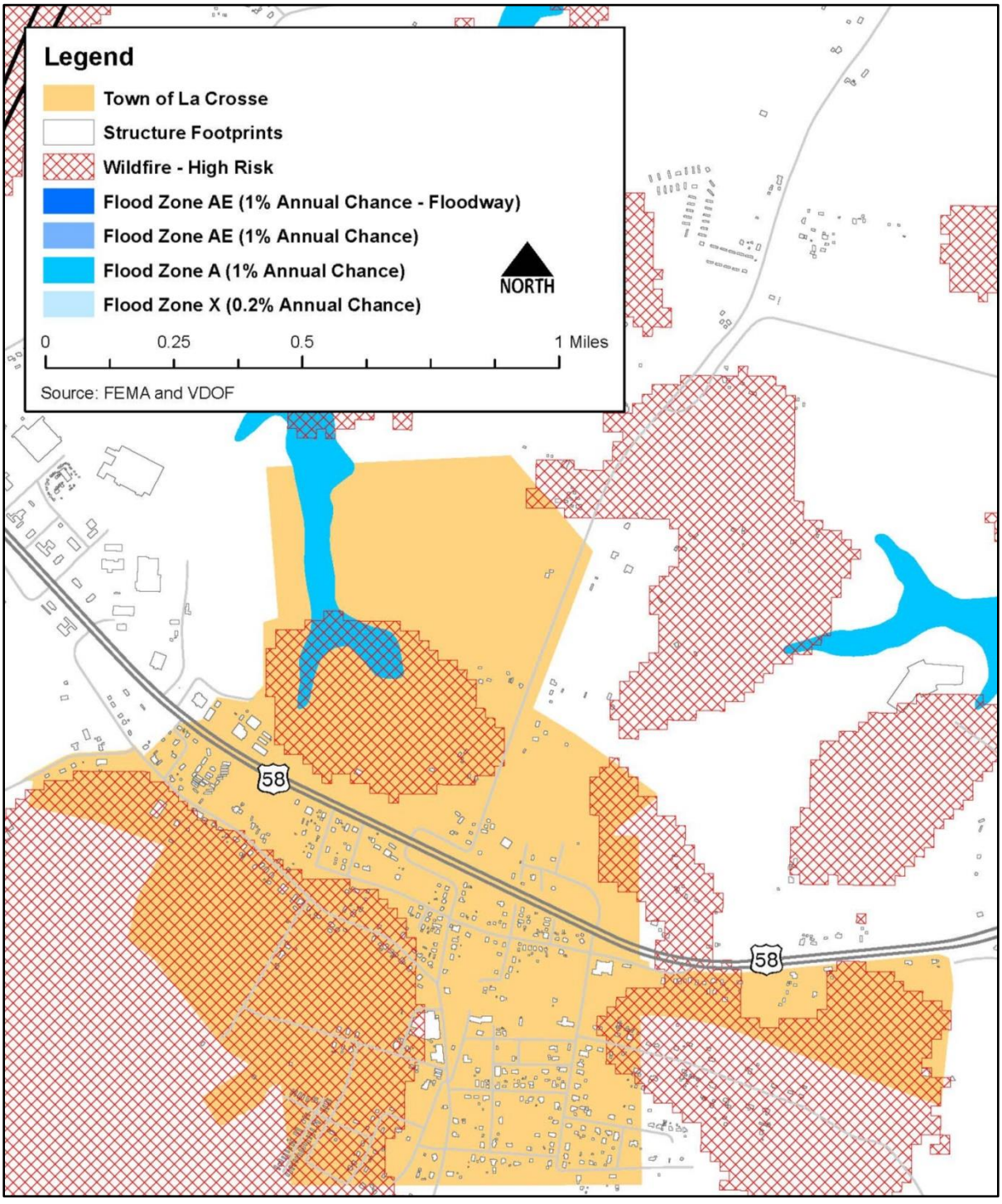
Removed Mitigation Actions:

Action	Reason
The water treatment plant, intake, and main storage tank of the Roanoke River Service Authority need an electrical backup system. In the event of a power failure, water distribution would be cut to the towns of Boydton, Brodnax, La Crosse, and South Hill, as well as portions of Mecklenburg County and one state prison. Currently the three facilities do not share the same electrical feeds, and the wiring is mostly aerial as opposed to underground. A backup generator would have to be put at all three facilities.	Addressed in the Regional Mitigation Actions section under Regional Service Authorities.
Consider relocating power lines that feed the RRSA facilities. Most of these lines are overhead, and are vulnerable to falling branches and trees, as well as the weight of ice. Some or all of these lines should be located underground to avoid the risk from natural hazards.	Addressed in the Regional Mitigation Actions section.
Participate in StormReady Program, which encourages participation with fire departments to include benefits such as, early warning systems, weather spotters, shelter set-up and storm radio deployment. Consider participation in SKYWARN. SKYWARN works with the National Weather Service and spotters to disseminate information on warnings and threats. The NWS provides training around the country.	The Town can piggyback off the existing early warning system that Mecklenburg County has in place and coordinate with them on other related matters.

Flood and Wildfire Map

The flood zones shown below are for planning purposes and only include flood zones A, AE, and a portion of flood zone X. Full details can be found on FEMA's Flood Map Service Center webpage.

Additional details relating to wildfires can be found in Section 4 of this plan. Please note that only high risk areas from a 2003 Wildfire Risk Assessment Map have been included on the following map.



Public Survey

The public survey asked each participate in which local jurisdiction that they lived. The results from those who identified as living in the Town of La Crosse are as follows:

Question 1

Which of the following hazards have directly impacted you, your household, or your property?

Hazard	Pct.	Hazard	Pct.
Dam Failure	0.00	High Winds	0.00
Drought	0.00	Hurricane/Tropical Cyclone	100.00
Earthquake	0.00	Landslide	0.00
Extreme Heat/Cold	100.00	Lightning	100.00
Flooding	0.00	Tornado	0.00
Hail	0.00	Wildfire	0.00
Heavy Snow/Ice	100.00		

Responses: 1 of 1

Questions 2

How concerned are you about the following hazards affecting our region?

Hazard	Very Concerned	Somewhat Concerned	Not Concerned	Responses
Dam Failure	0.00	0.00	100.00	1/1
Drought	0.00	100.00	0.00	1/1
Earthquake	0.00	100.00	0.00	1/1
Extreme Heat/Cold	100.00	0.00	0.00	1/1
Flooding	0.00	100.00	0.00	1/1
Hail	0.00	100.00	0.00	1/1
Heavy Snow/Ice	0.00	100.00	0.00	1/1
High Winds	0.00	100.00	0.00	1/1
Hurricane/Tropical Cyclone	100.00	0.00	0.00	1/1
Landslide	0.00	0.00	100.00	1/1
Lightning	0.00	100.00	0.00	1/1
Tornado	0.00	100.00	0.00	1/1
Wildfire	0.00	100.00	0.00	1/1

Question 3

Is your home located in a floodplain?

Yes	No	Not Sure	Responses
0.00	100.00	0.00	1/1

Question 4

Does your household have flood insurance?

Yes	No	Not Sure	Responses
0.00	100.00	0.00	1/1

Question 5

The following statements will help determine citizen priorities regarding planning for natural hazards. Please tell us how important each one is to you.

Priorities	Very Important	Somewhat Important	Not Important	Responses
Protect private property	100.00	0.00	0.00	1/1
Protect critical facilities (hospitals, fire stations, etc.)	100.00	0.00	0.00	1/1
Prevent development in identified hazard areas	100.00	0.00	0.00	1/1
Enhance the function of natural areas (streams, wetlands)	0.00	100.00	0.00	1/1
Protect historical and cultural landmarks	0.00	100.00	0.00	1/1
Protect and reduce damage to utilities	0.00	100.00	0.00	1/1
Strengthen emergency services (Fire, EMS, Police)	100.00	0.00	0.00	1/1
Promote cooperation among public agencies, citizens, non-profit organizations, and business	100.00	0.00	0.00	1/1

Question 6

Have you or someone in your household:

Actions	Have Done	Plan To Do	Not Interested	Responses
Attended meetings or received information on natural disasters or emergency preparedness?	100.00	0.00	0.00	1/1
Talked with members in your household about what to do in case of a natural disaster or emergency?	100.00	0.00	0.00	1/1
Prepared a “Disaster Supply Kit” (stored food, water batteries, etc.)?	100.00	0.00	0.00	1/1
Has anyone in your household been trained in First Aid or CPR?	100.00	0.00	0.00	1/1
Installed smoke detectors on each level of your home?	100.00	0.00	0.00	1/1
Signed up to receive emergency alerts from Brunswick, Halifax, or Mecklenburg counties?	100.00	0.00	0.00	1/1
Periodically check gutters, downspouts, and drain pipes on your property?	100.00	0.00	0.00	1/1

Question 7

Are you interested in making your home or neighborhood more resistant to natural hazards?

Yes	No	Responses
100.00	0.00	1/1

Question 8

What is the most effective way for you to receive information about how to make your household and home safer from natural disasters? (Select up to three)

Communication	Pct.	Communication	Pct.
Newspapers	0.00	University/College	0.00
Television	0.00	Mail	0.00
Email Newsletters	100.00	Fire/EMS	0.00
News Website	0.00	Face Sheet/Brochure	0.00
Social Media	100.00	Public Workshops	0.00
Schools	0.00	Other (please specify)	0.00

Responses: 1 of 1

Question 9

Whom would you most trust to provide you with information about how to make your household and home safer from natural hazards? (Select up to three)

Trusted Source	Pct.	Trusted Source	Pct.
News Media	0.00	Elected Officials	0.00
Government Agencies	100.00	Social Media	0.00
Insurance Agent or Company	0.00	Non-Profit Organizations	100.00
Utility Company	0.00	Not Sure	0.00
University/Research Institution	0.00	Other (please specify)	0.00
Neighbor/Friend/Family Member	0.00		

Responses: 1 of 1

Town of South Hill

Hazard Rankings

The methodology for the hazard rankings can be found in Section 5, "Risk Assessment", of this Plan. The hazard rankings included in this section are specific to the Town of South Hill, not the region as a whole.

Hazard	Location (Geographic Area Affected)	Maximum Probable Extent (Magnitude/Strength)	Probability of Future Events	Overall Hazard Ranking
Dam Failure	Negligible (1)	Weak (1)	Unlikely (1)	Low (3)
Drought	Extensive (4)	Extreme (4)	Occasional (2)	Medium/High (10)
Earthquake	Extensive (4)	Weak (1)	Unlikely (1)	Low/Medium (6)
Extreme Cold	Extensive (4)	Moderate (2)	Unlikely (1)	Medium (7)
Extreme Heat	Extensive (4)	Moderate (2)	Likely (3)	Medium/High (9)
Flood	Negligible (1)	Weak (1)	Highly Likely (4)	Low/Medium (6)
Hail	Extensive (4)	Severe (3)	Likely (3)	Medium/High (10)
Tropical Cyclone	Extensive (4)	Severe (3)	Likely (3)	Medium/High (10)
Landslide	Negligible (1)	Weak (1)	Unlikely (1)	Low (3)
Lightning	Negligible (1)	Moderate (2)	Highly Likely (4)	Medium (7)
Severe Wind	Extensive (4)	Moderate (2)	Likely (3)	Medium/High (9)
Severe Winter Weather	Extensive (4)	Moderate (2)	Highly Likely (4)	Medium/High (10)
Tornado	Negligible (1)	Severe (3)	Occasional (2)	Low/Medium (6)
Wildfire	Significant (3)	Weak (1)	Likely (3)	Medium (7)

Mitigation Actions

The Town's mitigation actions were reviewed, updated, and ranked based on discussions with local officials. Among the factors considered when prioritizing the mitigation actions were: effect on overall risk to life and property, ease of implementation, political and community support, consideration of cost/benefit, and funding availability.

Mitigation Action 1	Install stationary generator backup units at critical facilities (Fire, Police, Water/Sewer facilities, radio towers, etc.) that are lacking a secondary system. Where stationary generators are not feasible consider a quick-connect scenario where rotating or sharing generators can be utilized. Aging generators will be replaced as warranted.
Category	Emergency Services
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Varies by site ($60,000 +/- per pump station)
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Town Administration, Public Works Department
Implementation Schedule	Near term
Status Update	Exploring funding opportunities – Generators would be beneficial at the VCU, Parker Park, Wedgewood, Cycle Lane, and Sporoco pump stations, and the Main Street water tank. Other locations will be considered as needed. Generators have been replaced at Taylor's Creek and Mountain Creek pump stations.

Mitigation Action 2 (NEW)	Address stormwater flooding issues at various locations around town.
Category	Prevention/Structural Projects
Hazard(s) Addressed	Flooding
Priority	High

Estimated Cost	Varies based on improvements needed at each location
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Public Works Department
Implementation Schedule	Ongoing
Status Update	Ongoing – Problem areas are being monitored. Action will be taken if they worsen or when funding becomes available to mitigate issues.

Mitigation Action 3	**Encourage residents to sign up for Alert Mecklenburg to receive time-sensitive messages through their phone, email or texts and utilize social media, website and/or town email blast to pass along information related to hazard events.**
Category	Emergency Services/Public Education and Awareness
Hazard(s) Addressed	Multiple
Priority	High
Estimated Cost	Minimal
Potential Funding Sources	Town budget
Lead Agency/Department	Town Administration
Implementation Schedule	Ongoing
Status Update	Ongoing - For additional information or to sign up for Alert Mecklenburg, please visit mecklenburgva.com.

Mitigation Action 4	**Routinely inspect and test the functioning and classification/color of fire hydrants. Make sure that the information is shared with the fire department, including any maps that they may need.**
Category	Emergency Services
Hazard(s) Addressed	Wildfire
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	Town budget
Lead Agency/Department	Public Works Department
Implementation Schedule	Ongoing
Status Update	Ongoing – Inspections. Near term – Integration of flow data into Town GIS.

Mitigation Action 5	**Clean and maintain storm sewers to prevent yard and street flooding.**
Category	Prevention
Hazard(s) Addressed	Flooding
Priority	Medium
Estimated Cost	Minimal – Staff time
Potential Funding Sources	Town budget
Lead Agency/Department	Public Works Department
Implementation Schedule	Ongoing
Status Update	Ongoing – Storm sewers are inspected and cleaned on a regular basis.

Mitigation Action 6	**Make sure that new mobile homes are secured with standard tie-downs to reduce their vulnerability to high winds.**
Category	Prevention/Structural Projects
Hazard(s) Addressed	Multiple
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	Town budget
Lead Agency/Department	Building Inspector
Implementation Schedule	Ongoing
Status Update	Ongoing

Mitigation Action 7	When new homes are constructed, provide information to encourage clearing trees, brush, and other flammable natural materials a safe distance from the home creating a "Green Zone" between the forest and the structure.
Category	Prevention
Hazard(s) Addressed	Wildfire
Priority	Medium
Estimated Cost	Minimal
Potential Funding Sources	VDOF
Lead Agency/Department	Planning and Zoning, Building Inspector, VDOF
Implementation Schedule	Ongoing
Status Update	Ongoing – Coordinate with VDOF for additional brochures when needed.

Mitigation Action 8	Prohibit or limit floodplain development through the adoption and enforcement of floodplain regulations.
Category	Prevention/Property Protection/Natural Resource Protection
Hazard(s) Addressed	Flooding
Priority	Moderate
Estimated Cost	Minimal – limited to changes in local ordinances
Potential Funding Sources	Town budget
Lead Agency/Department	Planning and Zoning Department
Implementation Schedule	Mid-term
Status Update	Identified floodplain is currently in largely undeveloped areas, ordinances should be in place before development pressures can impact these areas.

Mitigation Action 9	Continue to support the efforts of the South Hill Volunteer Fire Department (education, training, equipment, etc.).
Category	Public Education and Awareness, Prevention
Hazard(s) Addressed	Multiple
Priority	Medium
Estimated Cost	Dependent upon funding in budget each year
Potential Funding Sources	Town budget
Lead Agency/Department	Town Administration
Implementation Schedule	Ongoing
Status Update	Ongoing

Mitigation Action 10	If the Mountain Creek pump station is rebuilt to accommodate additional capacity it should be elevated, floodproofed or relocated due to periodic flooding issues.
Category	Property Protection/Structural Projects
Hazard(s) Addressed	Flooding
Priority	Medium
Estimated Cost	TBD
Potential Funding Sources	Federal/State grants, Town budget
Lead Agency/Department	Public Work Department
Implementation Schedule	Long-term
Status Update	No action, situation is being monitored.

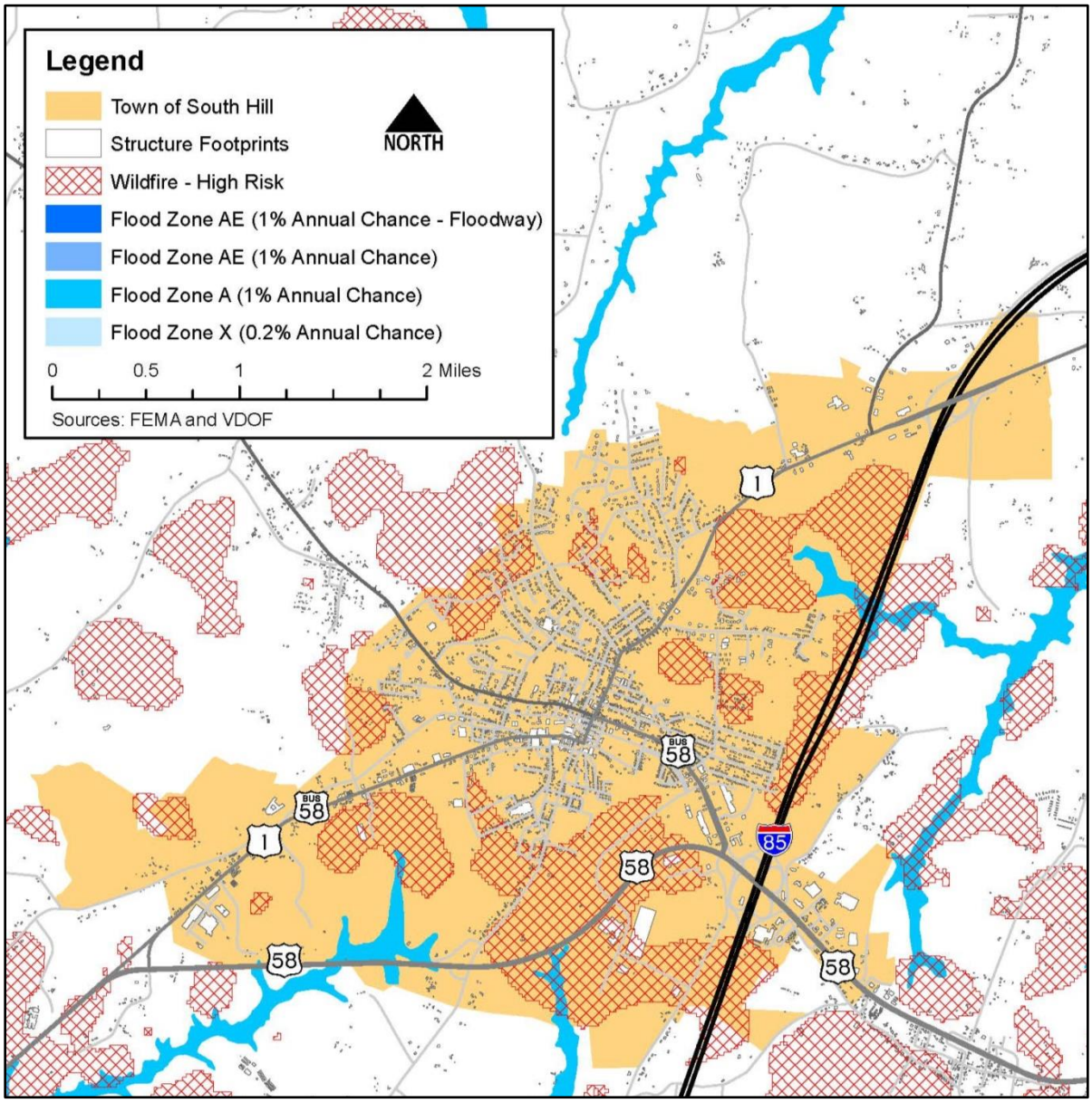
Removed Mitigation Actions:

Action	Reason
For critical and highly significant county and town facilities, examine windows for vulnerabilities. Install storm shutters and window clips for mounting plywood.	This action was deemed to be of such low priority at this point that it was removed from the list.
Participate in StormReady program, which encourages participation with fire departments to include benefits such as, early warning systems, weather spotters, shelter set-up, and storm radio deployment. Consider participation in SKYWARN. SKYWARN works with the National Weather Service and spotters to disseminate information on warnings and threats. The NWS provides training around the country.	The Town feels the County is already handling most of this.
The water treatment plant, intake, and main storage tank of the Roanoke River Service Authority need an electrical backup system. In the event of a power failure, water distribution would be cut to the towns of Boydton, Brodnax, La Crosse, and South Hill, as well as portions of Mecklenburg County and one state prison. Currently the three facilities do not share the same electrical feeds, and the wiring is mostly aerial as opposed to underground. A backup generator would have to be put at all three facilities.	Addressed in the Regional Mitigation Actions section under Regional Service Authorities.
Consider relocating power lines that feed the RRSA facilities. Most of these lines are overhead, and are vulnerable to falling branches and trees, as well as the weight of ice. Some or all of these lines should be located underground to avoid the risk from natural hazards.	Addressed in the Regional Mitigation Actions section.

Flood and Wildfire Map

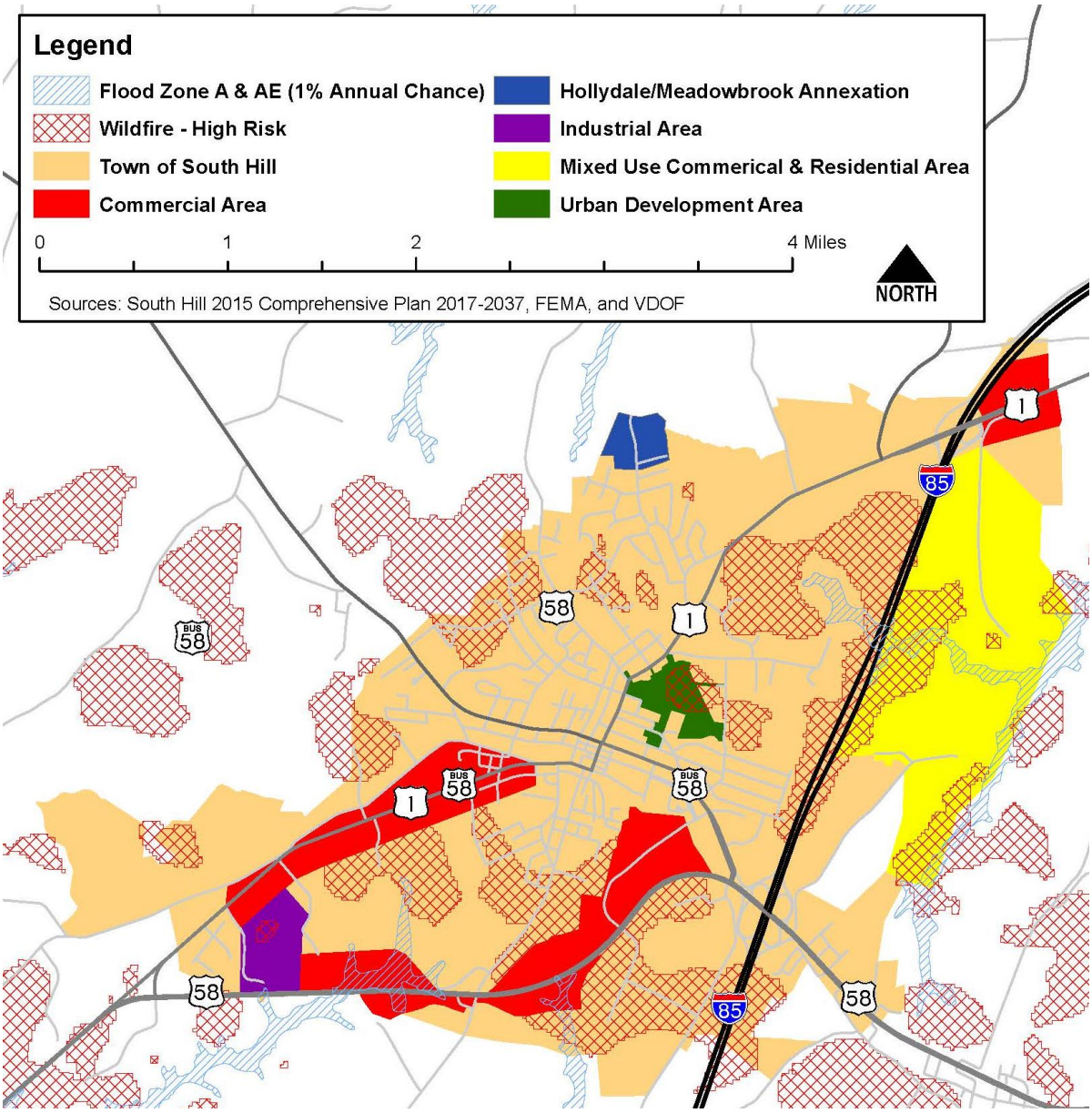
The flood zones shown below are for planning purposes and only include flood zones A, AE, and a portion of flood zone X. Full details can be found on FEMA's Flood Map Service Center webpage.

Additional details relating to wildfires can be found in Section 4 of this plan. Please note that only high risk areas from a 2003 Wildfire Risk Assessment Map have been included on the following map.



Future Land Use Risk Map (Flood and Wildfire)

The "Future Land Use Map" in South Hill's Comprehensive Plan, adopted in 2017, was included to better show potential flood and wildfire risks within the Town's future growth areas. For the purposes of the Hazard Mitigation Plan, each of the identified areas was reviewed to determine if any of the areas were included within FEMA's 1% annual chance for flooding or VDOF's "High Risk" area for wildfires.



Public Survey

The public survey asked each participate in which local jurisdiction that they lived. The results from those who identified as living in the Town of South Hill are as follows:

Question 1

Which of the following hazards have directly impacted you, your household, or your property?

Hazard	Pct.	Hazard	Pct.
Dam Failure	0.00	High Winds	50.00
Drought	12.50	Hurricane/Tropical Cyclone	56.25
Earthquake	6.25	Landslide	0.00
Extreme Heat/Cold	25.00	Lightning	31.25
Flooding	25.00	Tornado	6.25
Hail	37.50	Wildfire	0.00
Heavy Snow/Ice	43.75		

Responses: 16 of 16

Questions 2

How concerned are you about the following hazards affecting our region?

Hazard	Very Concerned	Somewhat Concerned	Not Concerned	Responses
Dam Failure	6.25	37.50	56.25	16/16
Drought	18.75	68.75	12.50	16/16
Earthquake	0.00	25.00	75.00	16/16
Extreme Heat/Cold	37.50	37.50	25.00	16/16
Flooding	25.00	43.75	31.25	16/16
Hail	18.75	68.75	12.50	16/16
Heavy Snow/Ice	31.25	62.50	6.25	16/16
High Winds	62.50	31.25	6.25	16/16
Hurricane/Tropical Cyclone	50.00	43.75	6.25	16/16
Landslide	0.00	0.00	100.00	16/16
Lightning	37.50	56.25	6.25	16/16
Tornado	37.50	62.50	0.00	16/16
Wildfire	18.75	37.50	43.75	16/16

Question 3

Is your home located in a floodplain?

Yes	No	Not Sure	Responses
6.25	6.25	87.50	16/16

Question 4

Does your household have flood insurance?

Yes	No	Not Sure	Responses
6.25	93.75	0.00	16/16

Question 5

The following statements will help determine citizen priorities regarding planning for natural hazards. Please tell us how important each one is to you.

Priorities	Very Important	Somewhat Important	Not Important	Responses
Protect private property	75.00	25.00	0.00	16/16
Protect critical facilities (hospitals, fire stations, etc.)	100.00	0.00	0.00	16/16
Prevent development in identified hazard areas	50.00	50.00	0.00	16/16
Enhance the function of natural areas (streams, wetlands)	68.75	31.25	0.00	16/16
Protect historical and cultural landmarks	56.25	43.75	0.00	16/16
Protect and reduce damage to utilities	93.75	6.25	0.00	16/16
Strengthen emergency services (Fire, EMS, Police)	81.25	18.75	0.00	16/16
Promote cooperation among public agencies, citizens, non-profit organizations, and business	75.00	25.00	0.00	16/16

Question 6

Have you or someone in your household:

Actions	Have Done	Plan To Do	Not Interested	Responses
Attended meetings or received information on natural disasters or emergency preparedness?	43.75	37.50	18.75	16/16
Talked with members in your household about what to do in case of a natural disaster or emergency?	93.75	0.00	6.25	16/16
Prepared a "Disaster Supply Kit" (stored food, water batteries, etc.)?	62.50	37.50	0.00	16/16
Has anyone in your household been trained in First Aid or CPR?	62.50	25.00	12.50	16/16
Installed smoke detectors on each level of your home?	93.75	6.25	0.00	16/16
Signed up to receive emergency alerts from Brunswick, Halifax, or Mecklenburg counties?	62.50	37.50	0.00	16/16
Periodically check gutters, downspouts, and drain pipes on your property?	87.50	0.00	12.50	16/16

Question 7

Are you interested in making your home or neighborhood more resistant to natural hazards?

Yes	No	Responses
87.50	12.50	16/16

Question 8

What is the most effective way for you to receive information about how to make your household and home safer from natural disasters? (Select up to three)

Communication	Pct.	Communication	Pct.
Newspapers	25.00	University/College	0.00
Television	25.00	Mail	43.75
Email Newsletters	56.25	Fire/EMS	18.75
News Website	12.50	Face Sheet/Brochure	25.00
Social Media	68.75	Public Workshops	31.25
Schools	6.25	Other (please specify)	6.25

Responses: 16 of 16

*Other: house and text warnings

Question 9

Whom would you most trust to provide you with information about how to make your household and home safer from natural hazards? (Select up to three)

Trusted Source	Pct.	Trusted Source	Pct.
News Media	6.25	Elected Officials	25.00
Government Agencies	56.25	Social Media	0.00
Insurance Agent or Company	37.50	Non-Profit Organizations	25.00
Utility Company	62.50	Not Sure	18.75
University/Research Institution	12.50	Other (please specify)	0.00
Neighbor/Friend/Family Member	18.75		

Responses: 16 of 16

Section

9

Plan Maintenance

This section outlines the role of each participating jurisdiction in the implementation of the plan and how it will be monitored, evaluated, and updated over time. The continued involvement of the public will also be addressed.

Implementation

The participating jurisdictions are responsible for implementing the specific mitigation actions as prescribed in Section 8 of this Plan. Upon adoption, each jurisdiction should play an active role and assign responsibility and accountability to each "Lead Agency/Department" to increase the likelihood of implementation. Mitigation is most successful when actions can be implemented into the day-to-day functions and priorities of government.

All jurisdictions are encouraged to integrate relevant components of the Hazard Mitigation Plan into their local government decision making processes or mechanisms, such as Comprehensive Plans, Capital Improvement Programs, and Emergency Operations Plans. Information from the Hazard Identification, Risk Assessment, and Mitigation Actions sections can be included in Comprehensive Plans during future updates. Projects that require large investments, such as acquisition or retrofits, should be considered for inclusion in Capital Improvement Plan updates on an annual basis. However, how each jurisdiction chooses to carrying out the implementation process is entirely up to them.

The direct participation and input by the localities proved invaluable in the shaping of the mitigation actions to better reflect the needs and capabilities of each jurisdiction. It is believed that by making the mitigation actions more relevant and meaningful to each locality, the prioritized mitigation actions stand a better chance of ultimately being implemented.

The RRSA and HCSA have also participated throughout the planning process as they oversee some of the region's most critical infrastructure. Their ability to carry out mitigation actions and be better positioned to pursue grant funds to do so, is paramount to the region's population that depends on them.

Monitoring and Evaluating

The HMP Planning Team will meet annually to report on the results on their monitoring efforts and evaluate the effectiveness of the Plan. Chad Neese, SPDC GIS Planner, will serve as the responsible person for providing coordination of the monitoring materials to each locality and scheduling of the annual meeting. This shall include directly contacting the Planning Team member for all participating jurisdictions and supplying them with a "Mitigation Action Progress Report Form" for each mitigation

action established by said jurisdiction. It shall be the responsibility of the Planning Team member to fill out the aforementioned form and submit it to Mr. Neese for reporting purposes. Progress reports for the monitoring of Regional Mitigation Actions will be completed at the annual meeting since they require the input of numerous jurisdictions, not just one.

Mitigation Action Progress Report Form

Progress Reporting Period	From:	To:
Mitigation Action		
Lead Agency/Department		
Project Status	□ Mitigation Action Complete □ Mitigation Action Ongoing □ Mitigation Action Not Started	

Summary of Mitigation Action Progress

What was accomplished for this project during the reporting period?

_____

_____

_____

What obstacles, problems, or delays did implementation of the mitigation action encounter?

_____

_____

_____

If the mitigation actions has not started or been completed, is it still relevant? Should it be changed?

_____

_____

_____

Other comments:

_____

_____

_____

The annual meeting will provide an opportunity for the results to be reviewed and evaluated for effectiveness by the HMP Planning Team. As a general starting point, each mitigation action will be reviewed to determine where it is in the process: not started, ongoing, or complete. While this may be enough to determine effectiveness for some mitigation actions, others may require additional criteria, measures, or metrics to properly evaluate them. The HMP Planning Team shall have the authority to implement additional evaluation criteria at future meetings as conditions may warrant. This meeting will also provide an opportunity for localities to identify any needed training or technical assistance to help achieve their mitigation actions.

The monitoring and evaluation results will be compiled by Mr. Neese and provided to the each HMP Planning Team member to share with their respective jurisdiction. The SPDC will also share the results with the SPDC Board, Virginia Department of Emergency Management and FEMA Region 3 staff.

Plan Amendment Process

Should a significant revision or amendment to the Plan be deemed necessary by the HMP Planning Team, it shall follow the process described in this section. The amendment shall be initiated by the HMP Planning Team, with the proposed changes being provided to each of the jurisdictions within the Southside Planning District and to the Virginia Department of Emergency Management for their review and comments. The proposed amendment shall then be posted on the SPDC website for public review and comments. Following the public comment period the amendment may be adopted by any relevant governing body.

When a revision or amendment to the Plan is deemed necessary by a locality, the following process shall be followed. The amendment will be initiated by the locality, with the proposed changes being to VDEM for their comments. The proposed amendment shall then be made publicly available for review and comment by the locality. Following the public comment period the amendment may be adopted by the locality.

Disaster Declaration

Following a disaster declaration, the HMP Planning Team may hold a meeting to make any necessary revisions from lessons learned or to address specific circumstances arising from the event. It will be the responsibility of the SPDC to schedule the meeting. Amendments to the plan must follow the Plan Amendment Process.

Five-Year Plan Review and Update

In accordance with federal regulations, the Plan will be reviewed and updated every five years. Significant changes that could impact the Plan include: new development, increased exposure to certain hazards, new mitigation techniques, a decrease in capabilities to address hazards, and changes to federal or state legislation. The review also provides the HMP Planning Team and other local officials the opportunity to evaluate what mitigation actions have been successful, identify areas for improvement, and ensure that the public has been afforded the opportunity to provide their input.

SPDC staff will coordinate with VDEM on pursuing grant funds to cover the cost of future reviews and updates to the Regional Hazard Mitigation Plan. This should keep timelines associated with the plan update on track and keep the plan from lapsing outside of its approved five-year approval window.

Continue Public Involvement

Public participation is an integral component of the mitigation planning process and will continue to be essential as this Plan evolves over time. As the public has been provided with several opportunities to participate during the update process (Continuous opportunity to provide comments on the SPDC Hazard Mitigation webpage, two public meetings, public survey, etc.), they will continue to have opportunities throughout the five-year plan maintenance cycle as well. The Plan will remain on the SPDC website with information on how comments can be submitted at any time.

Appendix

A

Local Mitigation Plan Review Tool

LOCAL MITIGATION PLAN REVIEW TOOL 2019

The *Local Mitigation Plan Review Tool* demonstrates how the Local Mitigation Plan meets the regulation in 44 CFR §201.6 and offers States and FEMA Mitigation Planners an opportunity to provide feedback to the community.

- The Regulation Checklist provides a summary of FEMA's evaluation of whether the Plan has addressed all requirements.
- The Plan Assessment identifies the plan's strengths as well as documents areas for future improvement.
- The Multi-jurisdiction Summary Sheet is an optional worksheet that can be used to document how each jurisdiction met the requirements of the each Element of the Plan (Planning Process; Hazard Identification and Risk Assessment; Mitigation Strategy; Plan Review, Evaluation, and Implementation; and Plan Adoption).

The FEMA Mitigation Planner must reference this *Local Mitigation Plan Review Guide* when completing the *Local Mitigation Plan Review Tool*.

<table>
<tr><td>Jurisdiction:
Southside Planning District Commission</td><td colspan="2">Title of Plan: Regional Hazard Mitigation Plan – Southside Planning District Commission 2020</td><td>Date of Plan: 2020</td></tr>
<tr><td colspan="2">Local Point of Contact: Chad Neese</td><td colspan="2" rowspan="3">Address:
200 S. Mecklenburg Ave.
South Hill, VA 23970</td></tr>
<tr><td colspan="2">Title: GIS Planner</td></tr>
<tr><td colspan="2">Agency: Southside Planning District Commission</td></tr>
<tr><td colspan="2">Phone Number: 434-447-7101 ext. 211</td><td colspan="2">E-Mail: cneese@southsidepdc.org</td></tr>
</table>

State Reviewer:	Title:	Date:

FEMA Reviewer:	Title:	Date:
Date Received in FEMA Region ***(insert #)***		
Plan Not Approved		
Plan Approvable Pending Adoption		
Plan Approved		

SECTION 1:
REGULATION CHECKLIST

INSTRUCTIONS: The Regulation Checklist must be completed by FEMA. The purpose of the Checklist is to identify the location of relevant or applicable content in the Plan by Element/sub-element and to determine if each requirement has been 'Met' or 'Not Met.' The 'Required Revisions' summary at the bottom of each Element must be completed by FEMA to provide a clear explanation of the revisions that are required for plan approval. Required revisions must be explained for each plan sub-element that is 'Not Met.' Sub-elements should be referenced in each summary by using the appropriate numbers (A1, B3, etc.), where applicable. Requirements for each Element and sub-element are described in detail in this *Plan Review Guide* in Section 4, Regulation Checklist.

1. REGULATION CHECKLIST **Regulation** (44 CFR 201.6 Local Mitigation Plans)	**Location in Plan (section and/or page number)**	**Met**	**Not Met**
ELEMENT A. PLANNING PROCESS			
A1. Does the Plan document the planning process, including how it was prepared and who was involved in the process for each jurisdiction? (Requirement §201.6(c)(1))			
A2. Does the Plan document an opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, agencies that have the authority to regulate development as well as other interests to be involved in the planning process? (Requirement §201.6(b)(2))			
A3. Does the Plan document how the public was involved in the planning process during the drafting stage? (Requirement §201.6(b)(1))			
A4. Does the Plan describe the review and incorporation of existing plans, studies, reports, and technical information? (Requirement §201.6(b)(3))			
A5. Is there discussion of how the community(ies) will continue public participation in the plan maintenance process? (Requirement §201.6(c)(4)(iii))			
A6. Is there a description of the method and schedule for keeping the plan current (monitoring, evaluating and updating the mitigation plan within a 5-year cycle)? (Requirement §201.6(c)(4)(i))			
ELEMENT A: REQUIRED REVISIONS			
ELEMENT B. HAZARD IDENTIFICATION AND RISK ASSESSMENT			

1. REGULATION CHECKLIST **Regulation** (44 CFR 201.6 Local Mitigation Plans)	Location in Plan (section and/or page number)	Met	Not Met
B1. Does the Plan include a description of the type, location, and extent of all natural hazards that can affect each jurisdiction(s)? (Requirement §201.6(c)(2)(i))			
B2. Does the Plan include information on previous occurrences of hazard events and on the probability of future hazard events for each jurisdiction? (Requirement §201.6(c)(2)(i))			
B3. Is there a description of each identified hazard's impact on the community as well as an overall summary of the community's vulnerability for each jurisdiction? (Requirement §201.6(c)(2)(ii))			
B4. Does the Plan address NFIP insured structures within the jurisdiction that have been repetitively damaged by floods? (Requirement §201.6(c)(2)(ii))			
ELEMENT B: REQUIRED REVISIONS			
ELEMENT C. MITIGATION STRATEGY			
C1. Does the plan document each jurisdiction's existing authorities, policies, programs and resources and its ability to expand on and improve these existing policies and programs? (Requirement §201.6(c)(3))			
C2. Does the Plan address each jurisdiction's participation in the NFIP and continued compliance with NFIP requirements, as appropriate? (Requirement §201.6(c)(3)(ii))			
C3. Does the Plan include goals to reduce/avoid long-term vulnerabilities to the identified hazards? (Requirement §201.6(c)(3)(i))			
C4. Does the Plan identify and analyze a comprehensive range of specific mitigation actions and projects for each jurisdiction being considered to reduce the effects of hazards, with emphasis on new and existing buildings and infrastructure? (Requirement §201.6(c)(3)(ii))			
C5. Does the Plan contain an action plan that describes how the actions identified will be prioritized (including cost benefit review), implemented, and administered by each jurisdiction? (Requirement §201.6(c)(3)(iv)); (Requirement §201.6(c)(3)(iii))			
C6. Does the Plan describe a process by which local governments will integrate the requirements of the mitigation plan into other planning mechanisms, such as comprehensive or capital improvement plans, when appropriate? (Requirement §201.6(c)(4)(ii))			
ELEMENT C: REQUIRED REVISIONS			
ELEMENT D. PLAN REVIEW, EVALUATION, AND IMPLEMENTATION (applicable to plan updates only)			

1. REGULATION CHECKLIST **Regulation** (44 CFR 201.6 Local Mitigation Plans)	Location in Plan (section and/or page number)	Met	Not Met
D1. Was the plan revised to reflect changes in development? (Requirement §201.6(d)(3))			
D2. Was the plan revised to reflect progress in local mitigation efforts? (Requirement §201.6(d)(3))			
D3. Was the plan revised to reflect changes in priorities? (Requirement §201.6(d)(3))			
ELEMENT D: REQUIRED REVISIONS			
ELEMENT E. PLAN ADOPTION			
E1. Does the Plan include documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval? (Requirement §201.6(c)(5))			
E2. For multi-jurisdictional plans, has each jurisdiction requesting approval of the plan documented formal plan adoption? (Requirement §201.6(c)(5))			
ELEMENT E: REQUIRED REVISIONS			
OPTIONAL: HIGH HAZARD POTENTIAL DAM RISKS			
HHPD1. Did Element A4 (planning process) describe the incorporation of existing plans, studies, reports, and technical information for high hazard potential dams?			
HHPD2. Did Element B3 (risk assessment) address HHPDs?			
HHPD3. Did Element C3 (mitigation goals) include mitigation goals to reduce long-term vulnerabilities from high hazard potential dams that pose an unacceptable risk to the public?			
HHPD4. Did Element C4-C5 (mitigation actions) address HHPDs prioritize mitigation actions to reduce vulnerabilities from high hazard potential dams that pose an unacceptable risk to the public?			
REQUIRED REVISIONS			
ELEMENT F. ADDITIONAL STATE REQUIREMENTS (OPTIONAL FOR STATE REVIEWERS ONLY; NOT TO BE COMPLETED BY FEMA)			
F1.			
F2.			
ELEMENT F: REQUIRED REVISIONS			

SECTION 2:
PLAN ASSESSMENT

INSTRUCTIONS: The purpose of the Plan Assessment is to offer the local community more comprehensive feedback to the community on the quality and utility of the plan in a narrative format. The audience for the Plan Assessment is not only the plan developer/local community planner, but also elected officials, local departments and agencies, and others involved in implementing the Local Mitigation Plan. The Plan Assessment must be completed by FEMA. The Assessment is an opportunity for FEMA to provide feedback and information to the community on: 1) suggested improvements to the Plan; 2) specific sections in the Plan where the community has gone above and beyond minimum requirements; 3) recommendations for plan implementation; and 4) ongoing partnership(s) and information on other FEMA programs, specifically RiskMAP and Hazard Mitigation Assistance programs. The Plan Assessment is divided into two sections:

1. Plan Strengths and Opportunities for Improvement
2. Resources for Implementing Your Approved Plan

Plan Strengths and Opportunities for Improvement is organized according to the plan Elements listed in the Regulation Checklist. Each Element includes a series of italicized bulleted items that are suggested topics for consideration while evaluating plans, but it is not intended to be a comprehensive list. FEMA Mitigation Planners are not required to answer each bullet item and should use them as a guide to paraphrase their own written assessment (2-3 sentences) of each Element.

The Plan Assessment must not reiterate the required revisions from the Regulation Checklist or be regulatory in nature and should be open-ended and to provide the community with suggestions for improvements or recommended revisions. The recommended revisions are suggestions for improvement and are not required to be made for the Plan to meet Federal regulatory requirements. The italicized text should be deleted once FEMA has added comments regarding strengths of the plan and potential improvements for future plan revisions. It is recommended that the Plan Assessment be a short synopsis of the overall strengths and weaknesses of the Plan (no longer than two pages), rather than a complete recap section by section.

Resources for Implementing Your Approved Plan provides a place for FEMA to offer information, data sources and general suggestions on the plan implementation and maintenance process. Information on other possible sources of assistance including, but not limited to, existing publications, grant funding or training opportunities, can be provided. States may add state and local resources, if available.

A. Plan Strengths and Opportunities for Improvement

This section provides a discussion of the strengths of the plan document and identifies areas where these could be improved beyond minimum requirements.

Element A: Planning Process

How does the Plan go above and beyond minimum requirements to document the planning process with respect to:

- *Involvement of stakeholders (elected officials/decision makers, plan implementers, business owners, academic institutions, utility companies, water/sanitation districts, etc.);*
- *Involvement of Planning, Emergency Management, Public Works Departments or other planning agencies (i.e., regional planning councils);*
- *Diverse methods of participation (meetings, surveys, online, etc.); and*
- *Reflective of an open and inclusive public involvement process.*

Element B: Hazard Identification and Risk Assessment

In addition to the requirements listed in the Regulation Checklist, 44 CFR 201.6 Local Mitigation Plans identifies additional elements that should be included as part of a plan's risk assessment. The plan should describe vulnerability in terms of:

1) *A general description of land uses and future development trends within the community so that mitigation options can be considered in future land use decisions;*
2) *The types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard areas; and*
3) *A description of potential dollar losses to vulnerable structures, and a description of the methodology used to prepare the estimate.*

How does the Plan go above and beyond minimum requirements to document the Hazard Identification and Risk Assessment with respect to:

- *Use of best available data (flood maps, HAZUS, flood studies) to describe significant hazards;*
- *Communication of risk on people, property, and infrastructure to the public (through tables, charts, maps, photos, etc.);*
- *Incorporation of techniques and methodologies to estimate dollar losses to vulnerable structures;*
- *Incorporation of Risk MAP products (i.e., depth grids, Flood Risk Report, Changes Since Last FIRM, Areas of Mitigation Interest, etc.); and*
- *Identification of any data gaps that can be filled as new data became available.*

Element C: Mitigation Strategy

How does the Plan go above and beyond minimum requirements to document the Mitigation Strategy with respect to:

- *Key problems identified in, and linkages to, the vulnerability assessment;*
- *Serving as a blueprint for reducing potential losses identified in the Hazard Identification and Risk Assessment;*
- *Plan content flow from the risk assessment (problem identification) to goal setting to mitigation action development;*
- *An understanding of mitigation principles (diversity of actions that include structural projects, preventative measures, outreach activities, property protection measures, post-disaster actions, etc);*
- *Specific mitigation actions for each participating jurisdiction that reflects their unique risks and capabilities;*
- *Integration of mitigation actions with existing local authorities, policies, programs, and resources; and*
- *Discussion of existing programs (including the NFIP), plans, and policies that could be used to implement mitigation, as well as document past projects.*

Element D: Plan Update, Evaluation, and Implementation (*Plan Updates Only*)

How does the Plan go above and beyond minimum requirements to document the 5-year Evaluation and Implementation measures with respect to:

- *Status of previously recommended mitigation actions;*
- *Identification of barriers or obstacles to successful implementation or completion of mitigation actions, along with possible solutions for overcoming risk;*
- *Documentation of annual reviews and committee involvement;*
- *Identification of a lead person to take ownership of, and champion the Plan;*
- *Reducing risks from natural hazards and serving as a guide for decisions makers as they commit resources to reducing the effects of natural hazards;*
- *An approach to evaluating future conditions (i.e. socio-economic, environmental, demographic, change in built environment etc.);*
- *Discussion of how changing conditions and opportunities could impact community resilience in the long term; and*
- *Discussion of how the mitigation goals and actions support the long-term community vision for increased resilience.*

B. Resources for Implementing Your Approved Plan

Ideas may be offered on moving the mitigation plan forward and continuing the relationship with key mitigation stakeholders such as the following:

- *What FEMA assistance (funding) programs are available (for example, Hazard Mitigation Assistance (HMA)) to the jurisdiction(s) to assist with implementing the mitigation actions?*

- *What other Federal programs (National Flood Insurance Program (NFIP), Community Rating System (CRS), Risk MAP, etc.) may provide assistance for mitigation activities?*
- *What publications, technical guidance or other resources are available to the jurisdiction(s) relevant to the identified mitigation actions?*
- *Are there upcoming trainings/workshops (Benefit-Cost Analysis (BCA), HMA, etc.) to assist the jurisdictions(s)?*
- *What mitigation actions can be funded by other Federal agencies (for example, U.S. Forest Service, National Oceanic and Atmospheric Administration (NOAA), Environmental Protection Agency (EPA) Smart Growth, Housing and Urban Development (HUD) Sustainable Communities, etc.) and/or state and local agencies?*

Appendix

B

Meetings and Outreach

The meetings included in this appendix are broken into four categories: planning team meetings, public meetings, public survey, and other meetings and outreach.

Planning Team Meetings

August 2, 2018

A kickoff meeting was held on August 2, 2018 at the SPDC office. The agenda, sign-in sheet and invitation to attend that was sent out to the local jurisdictions, state agencies, and other identified stakeholders is included in this section.

SPDC
SOUTHSIDE PLANNING DISTRICT COMMISSION

SPDC Hazard Mitigation Kickoff Meeting

Southside Planning District Commission
200 S. Mecklenburg Avenue
Thursday, August 2, 2018 @ 2 PM

AGENDA

I	Welcome
II	Introductions
III	Hazard Mitigation Planning – Grant Funding and Projects
IV	Hazard Mitigation/Current Status
V	Overview of the Plan/Update
VI	Next Steps

Hazard Mitigation Plan Update
Kickoff Meeting
August 2, 2018 @ 2PM

Name	Jurisdiction/Agency	Email	Phone
Tom Tanner	Town of Lacrosse	TTANNER.Town of LACROSSE@GMAIL.Com	434-447-9304 434-447-93
Hope Cole	Town of South Boston	hcole@southbostonva.us	434 575-4241
Steve Phillips	Town of South Boston	sphillips@southbostonVA.US	434-575-4293
Daniel Clark	Town of South Boston	dclark@southbostonva.us	434-575-4290
Jon Taylor	Mecklenburg County VA	jon.taylor@mecklenburgva.com	434-262-3876
Andy Wells	SPDC	awells@southsidepdc.org	434 447 7101 212
Doug Gagnon	VDEM Region 1	doug.gagnon@vdem.virginia.gov	804-310-3629
Chris Bruce	VDEM Region 3	chris.bruce@vdem.virginia.gov	804-516-5796
Lew Stringer	Mecklenburg County	lstringer@buggs.Net	336-346-6434
Tara Murphy	Town of Clarksville	treasurer@clarksvilleva.org	(434) 374-8117
Jeff Hinkle	Roanoke River Service Auth.	rrsc.jeff@bitbroadband.com	434-917-9018
MICHAEL FUNDERBURK	Roanoke River Service Authority	RRSAMIKE@BITBROADBAND.COM	434-955-1045
Bill Wilson	Town of South Hill	bwilson@southhillva.org	434-447-3191
CAL MOORE			
BUDDY HYDE	BRUNSWICK COUNTY	BHYDE@BRUNSWICKCO.GOV	434-532-5994
CHARLOTTE T. WOODRIDGE PHD	BRUNSWICK CO.	cwoodridge@brunswickva.com	434-848-3107
Scott J. Thomas	Virginia DCR DAM SAFETY	scott.thomas@dcr.virginia.gov	804-625-3994
Chad Neese	SPDC	cneese@southsidepdc.org	434-447-7101

While the following email is South Hill specific, other emails and/or letters containing the same information were sent individually to other local jurisdictions, state agencies, and identified stakeholders.

SPDC

Chad Neese <cneese@southsidepdc.org>

Natural Hazard Mitigation Plan Update - Kickoff Meeting

Chad Neese <cneese@southsidepdc.org> Tue, Jul 17, 2018 at 10:37 AM
To: Kim Callis <kcallis@southhillva.org>

Good morning Kim,

The Southside Planning District Commission has recently signed a contract with the Virginia Department of Emergency Management to carry out the region's update of the 2013 Natural Hazard Mitigation Plan. Updates are completed every five years and our region is currently at the end of the five year window. The purpose of the plan, in accordance with the Disaster Mitigation Act of 2000, is "to reduce the loss of life and property, human suffering, economic disruption, and disaster assistance costs resulting from natural disasters." Additionally, the Act also requires such a plan to be in place as a precondition for a locality to be eligible for FEMA mitigation grant funds.

The SPDC will be holding a kickoff meeting on ***Thursday, August 2nd, at 2:00 pm*** in the Conference Room of the Southside Planning District Office, located at 200 South Mecklenburg Avenue, South Hill, VA 23970. The purpose of this meeting is to provide an overview of natural hazard mitigation, the planning process, what roles and responsibilities that localities and agencies will have, and what grant opportunities may be available for your community. Mr. Christopher Bruce, representing the Virginia Department of Emergency Management, will specifically highlight the various grant programs that each locality would be eligible for once the plan has been updated and the subject locality has adopted it.

A member of your locality is strongly encouraged to attend, and please feel free to invite other staff members or other qualified individuals from your locality, especially those who have experience with emergency management. Even if you are unable to participate in all the potential meetings, we would appreciate any assistance from you or other members of your staff during the plan review process and sharing your concerns on hazards impacting your area.

We hope that you or a representative will join us at the kickoff meeting as we begin the important task of updating the region's hazard mitigation plan. Additional materials and light refreshments will be provided at the meeting. Should you have any questions prior to the meeting please feel free to give me a call at (434) 447-7101 ext. 211.

Thank you!

--
Chad Neese

GIS Planner
Southside Planning District Commission
200 S. Mecklenburg Ave.
South Hill, VA 23970
(434) 447-7101 ext. 211

February 14, 2019

A planning team meeting was held on February 14, 2019 at the SPDC office. The agenda, sign-in sheet and invitation to attend that was sent out to the local jurisdictions, state agencies, and other identified stakeholders is included in this section.

SPDC
SOUTHSIDE PLANNING DISTRICT COMMISSION

Hazard Mitigation Planning Committee

A meeting of the Hazard Mitigation Planning Committee will be held in the Conference Room of the Southside Planning District Commission building on ***Thursday, February 14, 2019 at 10:00 a.m.*** Your attendance is respectfully requested.

Chad Neese
GIS Planner

TENTATIVE AGENDA
Consideration of:

I Call Meeting to Order

II Provide overview of Regional Profile, Hazard Identification, Local Inventory and Federal Disaster Declarations and receive comments from committee

III Update on Risk Assessment

IV Discuss Outreach Strategies

V Provide overview of Capability Assessment and Distribute Materials to each member

VI Other

VII Adjournment

Hazard Mitigation Planning Team Meeting

Meeting Sign-in Sheet
February 14, 2019 @ 10:00 AM
SPDC Office

Name	Jurisdiction/Title
Chad Neese	SPDC/GIS Planner
Jon Taylor	Mecklenburg Emergency Svcs Coord.
Steve Dishmon	Halifax County Emergency Services
Detrick EASley	HALIFAX Co. /Planning - Zoning Administrator
MARK NOVSAK	TOWN OF SOUTH HILL Fleet & FACILITY SUPT.
Angela Lawrence	Town of Chase City Town Manager
Hope Cole	South Boston Planning & Zoning
Daniel Clark	South Boston Fire - Captain
STEVEN Phillips	South Boston - Fire Chief
Lew Etringer	Mecklenburg Emerg. Services Assist Coordinator
JEFF JONES	townmanager@clarksvilleva.org
Andy Wells	SPDC
Doug Gagnon	VDEM Region 1
MICHAEL FUNDERBURK	Roanoke River Ser. Auth / Assist. Sup
PAUL MALONE	RRSA
Jeffrey B. HINKLE	RRSA
CARL ESPY	TOWN OF HALIFAX townmanager@townofhalifax.com
Chris Bruce	VDEM

SPDC

Chad Neese <cneese@southsidepdc.org>

Hazard Mitigation Planning Committee Meeting - Feb. 14th

Chad Neese <cneese@southsidepdc.org> Fri, Jan 25, 2019 at 11:14 AM
To: townofvirgilina@embarqmail.com, Allen Elliott <aelliott@southhillva.org>, Andy Wells <awells@southsidepdc.org>, Angela Lawrence <cc.townmanager@gmail.com>, Bill Wilson <bwilson@southhillva.org>, Buddy Hyde <bhyde@brunswickco.com>, "C. J. Dean" <cjdean@lawrencevilleweb.com>, "Carl Espy, IV" <townmanager@townofhalifax.com>, Chad Neese <cneese@southsidepdc.org>, Christopher Bruce <chris.bruce@vdem.virginia.gov>, Daniel Clark <dclark@southbostonva.us>, Diane Ashley <mayorofalberta@albertava.com>, Douglas Gagnon <doug.gagnon@vdem.virginia.gov>, Gail Moody <gmoody@southsidepdc.org>, Hope Cole <hcole@southbostonva.us>, Jason Johnson <rescue312@yahoo.com>, Jeff Jones <townmanager@clarksvilleva.org>, Johnny Kirkland <jmkirkland@boydton.org>, Jon Taylor <jon.taylor@mecklenburgva.com>, Lew Stringer <lstringer@buggs.net>, Michael Funderburk <rrsamike@bitbroadband.com>, "Radford, Mari" <Mari.Radford@fema.dhs.gov>, Steve Dishman <srd@co.halifax.va.us>, Steve Phillips <sphillips@southbostonva.us>, "Thomas, Scott" <scott.thomas@dcr.virginia.gov>, Tom Tanner <ttanner.townoflacrosse@gmail.com>, Town of Brodnax <townofbrodnax@gmail.com>, Trina Addison <trina.addison@vdem.virginia.gov>

Good morning everyone,

The next Hazard Mitigation Planning Committee meeting has been scheduled for Thursday, February 14th, at 10:00 a.m. in the Conference Room of the Southside Planning District Commission office. An agenda has been attached to this email for your reference.

Additionally, four draft documents relating to the Hazard Mitigation Plan have also been attached. They include: Regional Profile, Federal Disaster Declarations, Local Inventory, and Hazard Identification. Please note that Local Inventory only contains info on Law Enforcement, Fire, Rescue and Dams at this point, as work continues on collecting data relating to roads, bridges, utilities, etc. and will be included at a future date. Also, the Hazard Identification document does not currently include Risk Assessment's at this time. That work will begin once the aforementioned inventories are completed.

Please take time to review the attached documents prior to the meeting if possible, especially any sections or data that may be relevant to your locality and/or agency. You may provide your feedback on any of the attached documents prior to the meeting if you choose, with email being the preferred method. Providing your comments in advance may also help us move more quickly through our meeting on the 14th as well.

In addition to providing an overview of the work completed to date at the meeting, we will also discuss what outreach strategies we may choose to pursue and cover the Capability Assessment that each governmental jurisdiction will need to fill out for the update. Please note that materials will be provided to assist each locality with the Capability Assessment. Should you be unable to attend the meeting please let me know and we can make other arrangements to keep you in the loop and make sure you receive all relevant materials.

Thank you again for your willingness to participate in this update process. Should you have any questions, please let me know. Have a great weekend and I hope to see you on the 14th.

--
Chad Neese

GIS Planner
Southside Planning District Commission
200 S. Mecklenburg Ave.
South Hill, VA 23970
(434) 447-7101 ext. 211

5 attachments

Hazard Mitigation Agenda 2-14-19.docx
47K

HMP - Regional Profile.docx
243K

Federal Disaster Declarations.docx
19K

Local Inventory.docx
156K

Hazard Identification.docx
8866K

August 5, 2019

A planning team meeting was held on August 5, 2019 at the SPDC office. The agenda, sign-in sheet and invitation to attend that was sent out to the local jurisdictions, state agencies, and other identified stakeholders is included in this section.

SPDC
SOUTHSIDE PLANNING DISTRICT COMMISSION

Hazard Mitigation Planning Committee

A meeting of the Hazard Mitigation Planning Committee will be held in the Conference Room of the Southside Planning District Commission building on ***Monday, August 5, 2019 at 10:00 a.m.*** Your attendance is respectfully requested.

Chad Neese
GIS Planner

TENTATIVE AGENDA
Consideration of:

I	Call Meeting to Order
II	Hazard Rankings/Methodology
III	Local Inventory/Assets
IV	Capability Assessments
V	Review and Update Regional Mitigation Goals/Actions
VI	HAZUS
VII	Community Survey
VIII	Public Meeting
IX	Other
X	Adjournment

Hazard Mitigation Plan Update – Sign In Sheet

Planning Team Meeting
August 5, 2019 @ 10:00 AM
SPDC Conference Room

Name	Jurisdiction/Title
Daniel Clark	Town of South Boston - Captain
Hope Cole	Town of South Boston - Zoning Adm.
Steve Phillips	Town of South Boston - Fire Chief
Doug Gagnon	VDEM Region 1 Planner
Mark Novsak	Town of South Hill
Chris Bruce	VDEM
Jon Taylor	Mecklenburg County Emergency Svcs.
Buddy Hyde	Brunswick County Emer. Svcs.
Lew Stringer	Mecklenburg Co. Emergency Services
Chad Neese	SPDC | GIS Planner

SPDC

Chad Neese <cneese@southsidepdc.org>

Hazard Mitigation Plan Meeting

Chad Neese <cneese@southsidepdc.org> Thu, Jul 18, 2019 at 9:25 AM
To: Allen Elliott <aelliott@southhillva.org>, Andy Wells <awells@southsidepdc.org>, Bill Wilson <bwilson@southhillva.org>, Buddy Hyde <bhyde@brunswickco.com>, "C. J. Dean" <cjdean@lawrencevilleweb.com>, "Carl Espy, IV" <townmanager@townofhalifax.com>, Chad Neese <cneese@southsidepdc.org>, Christopher Bruce <chris.bruce@vdem.virginia.gov>, Daniel Clark <dclark@southbostonva.us>, Diane Ashley <mayorofalberta@albertava.com>, Don Dugger <don.dugger@scotts.com>, Douglas Gagnon <doug.gagnon@vdem.virginia.gov>, Gail Moody <gmoody@southsidepdc.org>, Hope Cole <hcole@southbostonva.us>, Ira Wilkerson <townofscottsburg@yahoo.com>, Jason Johnson <rescue312@yahoo.com>, Jeff Hinkle <rrsajeff@bitbroadband.com>, Jeff Jones <townmanager@clarksvilleva.org>, Johnny Kirkland <jmkirkland@boydton.org>, Jon Taylor <jon.taylor@mecklenburgva.com>, Lew Stringer <lstringer@buggs.net>, Michael Funderburk <rrsamike@bitbroadband.com>, "Radford, Mari" <Mari.Radford@fema.dhs.gov>, Steve Dishman <srd@co.halifax.va.us>, Steve Phillips <sphillips@southbostonva.us>, "Thomas, Scott" <scott.thomas@dcr.virginia.gov>, Tom Tanner <ttanner.townoflacrosse@gmail.com>, Town of Brodnax <townofbrodnax@gmail.com>, Town Of virgilina <townofvirgilina@embarqmail.com>, Trina Addison <trina.addison@vdem.virginia.gov>, William Hall <cc.townmanager@gmail.com>, Deborah Gosney <dgosney@southsidepdc.org>, cwoolridge@brunswickco.com, Mark Novsak <mnovsak@southhillva.org>

Good morning everyone,

The next Hazard Mitigation Plan Team Meeting will be held on Monday, August 5, 2019 at 10:00 am in the Conference Room of the Southside Planning District Commission office. A formal agenda will be sent out prior to the meeting. Topics will include hazard rankings for all 15 jurisdictions within the Southside Planning District, the methodology of the rankings, an update on the local inventory of critical facilities, an overview of the capability assessments completed so far and a discussion on next steps.

If you have been unable to attend past meetings or participate in the update process to-date on behalf of your locality, please know that we can easily catch you up. While a lot of data can be collected through public means, it is important that feedback be provided and that mitigation actions are decided on by each locality.

On that note, we are at a point in which I can meet with any locality that wants to get a head start on reviewing and updating their mitigation actions. These are the actions that your locality hopes to pursue in an effort to limit the effects of future natural hazards. We can utilize the SPDC office or have the meeting in your locality, whichever you prefer. Please feel free to reach out and we'll set something up.

Thanks again for all the time and effort you have put into this plan update so far.

--
Chad Neese

GIS Planner
Southside Planning District Commission
200 S. Mecklenburg Ave.
South Hill, VA 23970
(434) 447-7101 ext. 211

SPDC

Chad Neese <cneese@southsidepdc.org>

Hazard Mitigation Plan Meeting

Chad Neese <cneese@southsidepdc.org> Fri, Aug 2, 2019 at 2:34 PM
To: Andy Wells <awells@southsidepdc.org>, Bill Wilson <bwilson@southhillva.org>, Buddy Hyde <bhyde@brunswickco.com>, "C. J. Dean" <cjdean@lawrencevilleweb.com>, "Carl Espy, IV" <townmanager@townofhalifax.com>, Chad Neese <cneese@southsidepdc.org>, Christopher Bruce <chris.bruce@vdem.virginia.gov>, Daniel Clark <dclark@southbostonva.us>, Diane Ashley <mayorofalberta@albertava.com>, Don Dugger <don.dugger@scotts.com>, Douglas Gagnon <doug.gagnon@vdem.virginia.gov>, Hope Cole <hcole@southbostonva.us>, Ira Wilkerson <townofscottsburg@yahoo.com>, Jason Johnson <rescue312@yahoo.com>, Jeff Hinkle <rrsajeff@bitbroadband.com>, Jeff Jones <townmanager@clarksvilleva.org>, Johnny Kirkland <jmkirkland@boydton.org>, Jon Taylor <jon.taylor@mecklenburgva.com>, Lew Stringer <lstringer@buggs.net>, Michael Funderburk <rrsamike@bitbroadband.com>, "Radford, Mari" <Mari.Radford@fema.dhs.gov>, Steve Dishman <srd@co.halifax.va.us>, Steve Phillips <sphillips@southbostonva.us>, "Thomas, Scott" <scott.thomas@dcr.virginia.gov>, Tom Tanner <ttanner.townoflacrosse@gmail.com>, Town of Brodnax <townofbrodnax@gmail.com>, Town Of virgilina <townofvirgilina@embarqmail.com>, Trina Addison <trina.addison@vdem.virginia.gov>, William Hall <cc.townmanager@gmail.com>
Cc: Deborah Gosney <dgosney@southsidepdc.org>

Good afternoon everyone,

Just a reminder that the next Hazard Mitigation Plan Team Meeting will be on Monday, August 5, 2019 at 10:00 am in the Conference Room of the Southside Planning District Commission office. Attached to this email you will find an agenda.

If you are unable to attend please let me know and I can keep you in the loop through email, a telephone call or we can hold a separate meeting as our schedules allow.

Have a great weekend and hope to see you on Monday.

--
Chad Neese

GIS Planner
Southside Planning District Commission
200 S. Mecklenburg Ave.
South Hill, VA 23970
(434) 447-7101 ext. 211

HMP Agenda 8-5-19.pdf
454K

January 28, 2020

A HMP Planning Team meeting was held January 28, 2020. The meeting focused on addressing any last comments before the HMP is finalized. Once comments are addressed the HMP will be submitted to VDEM for their review and comments.

SOUTHSIDE PLANNING DISTRICT COMMISSION

Hazard Mitigation Planning Team Meeting

200 South Mecklenburg Avenue, South Hill, VA 23970
January 28, 2020
10:00 a.m.

TENTATIVE AGENDA

I Call Meeting to Order

II Review and/or Address Comments on the Draft Regional Hazard Mitigation Plan

III Possible Action - Submit the Plan to VDEM for Review

IV Other

V Adjournment

Hazard Mitigation Plan Update – Sign In Sheet

Planning Team Meeting – Southside Planning District Commission
January 28, 2019 @ 10:00 a.m.

Name	Jurisdictions
STEVEN T. PHILLIPS	South Boston
Hope Cole	South Boston
Doug Gagnon	VDEM
MARK NOVSAK	TOWN OF SOUTH HILL
Chris Bruce	VDEM
Dusty Forbes	Chase City
MARK ESTES	HCSA
C.J. Dean	Lawrenceville
CARL ESPY	TOWN OF HALIFAX
[illegible]	RRSA
Buddy Hyde	BRUNSWICK CO. ESC
Steve Nishman	Halifax Co
Patrick EASLY	HALIFAX CO

Hazard Mitigation Plan Update – Sign In Sheet

Planning Team Meeting – Southside Planning District Commission
January 28, 2019 @ 10:00 a.m.

Name	Jurisdictions
Jon Taylor	MECKLENBURG County

SPDC

Chad Neese <cneese@southsidepdc.org>

Hazard Mitigation Plan Update

Chad Neese <cneese@southsidepdc.org> Wed, Jan 8, 2020 at 5:07 PM
To: Andy Wells <awells@southsidepdc.org>, Buddy Hyde <bhyde@brunswickco.com>, "C. J. Dean" <cjdean@lawrencevilleweb.com>, "Carl Espy, IV" <townmanager@townofhalifax.com>, Chad Neese <cneese@southsidepdc.org>, Christopher Bruce <chris.bruce@vdem.virginia.gov>, Daniel Clark <dclark@southbostonva.us>, Don Dugger <don.dugger@scotts.com>, Douglas Gagnon <doug.gagnon@vdem.virginia.gov>, Dusty Forbes <cc.townmanager@gmail.com>, Hope Cole <hcole@southbostonva.us>, Ira Wilkerson <townofscottsburg@yahoo.com>, Jason Johnson <rescue312@yahoo.com>, Jeff Hinkle <rrsajeff@bitbroadband.com>, Jeff Jones <townmanager@clarksvilleva.org>, Johnny Kirkland <jmkirkland@boydton.org>, Jon Taylor <jon.taylor@mecklenburgva.com>, Lew Stringer <lstringer@buggs.net>, Mark Estes <mestes@hcsa.us>, Mayor of Alberta <mayorofalberta@albertava.com>, "Radford, Mari" <Mari.Radford@fema.dhs.gov>, Steve Dishman <srd@co.halifax.va.us>, Steve Phillips <sphillips@southbostonva.us>, "Thomas, Scott" <scott.thomas@dcr.virginia.gov>, Tom Tanner <ttanner.townoflacrosse@gmail.com>, Town of Brodnax <townofbrodnax@gmail.com>, Town Of virgilina <townofvirgilina@embarqmail.com>, Trina Addison <trina.addison@vdem.virginia.gov>, Mark Novsak <mnovsak@southhillva.org>, curt@tankcare.net
Cc: Deborah Gosney <dgosney@southsidepdc.org>

Good afternoon everyone,

I wanted to reach out this afternoon to update everyone on where things stand with the Regional Hazard Mitigation Plan update.

Planning Team Meeting
The next Planning Team meeting is scheduled for **Tuesday, January 28th at 10a.m.** at the SPDC office. Please plan to attend. I hope that we are in a position to address any final comments that any of you or the public may have. The goal is to finalize the plan at that meeting if at all possible so that we can formally submit it to VDEM to begin the review process.

Public Meeting
As part of the planning process we are required to have two public meetings. The first meeting was held in October of 2019 with several of you attending. The next public meeting is scheduled for Wednesday, January 15th at 5:00 p.m. at the SPDC office. If you attended the first public meeting you might consider skipping this one and simply attend the Planning Team Meeting later in the month. The format will be the same as the first public meeting. It will begin with a presentation and then evolve into an open house style event. Display boards profiling each locality will be utilized to show: identified hazards, hazard maps, hazard rankings, draft mitigation actions, and survey results (as applicable).

Draft Regional Hazard Mitigation Plan
A working draft of the plan has been posted on the SPDC website for the public and Planning Team to review and offer comment on. Please note that several sections require a small amount of work but the majority of the plan is in place. When you review the plan, please pay particular attention to the Mitigation Actions for your jurisdiction and make sure they are in good order. Let me know of any changes as soon as possible. The plan is over 300 pages so you may want to simply skip to the sections most relevant to your jurisdiction. You can access the plan on the link listed below.
Draft Regional Hazard Mitigation Plan 2020

Town of Chase City
Dusty, it may be beneficial for us to set up a separate meeting as your schedule allows to get you caught up on the plan. I believe we have worked with the Mayor and two town managers during the update process and I want to make sure your comfortable with all references to Chase City.

Thanks again for all the time each of you has put into this plan, it is greatly appreciated. Please let me know if you have any questions or comments at your earliest convenience.
--
Chad Neese

GIS Planner
Southside Planning District Commission
200 S. Mecklenburg Ave.

SPDC

Chad Neese <cneese@southsidepdc.org>

Hazard Mitigation Plan Update - Planning Team Meeting

Chad Neese <cneese@southsidepdc.org> Fri, Jan 24, 2020 at 2:27 PM
To: Andy Wells <awells@southsidepdc.org>, Buddy Hyde <bhyde@brunswickco.com>, "C. J. Dean" <cjdean@lawrencevilleweb.com>, "Carl Espy, IV" <townmanager@townofhalifax.com>, Chad Neese <cneese@southsidepdc.org>, Christopher Bruce <chris.bruce@vdem.virginia.gov>, Daniel Clark <dclark@southbostonva.us>, Don Dugger <don.dugger@scotts.com>, Douglas Gagnon <doug.gagnon@vdem.virginia.gov>, Dusty Forbes <cc.townmanager@gmail.com>, Hope Cole <hcole@southbostonva.us>, Ira Wilkerson <townofscottsburg@yahoo.com>, Jason Johnson <rescue312@yahoo.com>, Jeff Hinkle <rrsajeff@bitbroadband.com>, Jeff Jones <townmanager@clarksvilleva.org>, Johnny Kirkland <jmkirkland@boydton.org>, Jon Taylor <jon.taylor@mecklenburgva.com>, Lew Stringer <lstringer@buggs.net>, Mark Estes <mestes@hcsa.us>, Mayor of Alberta <mayorofalbertava@gmail.com>, "Radford, Mari" <Mari.Radford@fema.dhs.gov>, Steve Dishman <srd@co.halifax.va.us>, Steve Phillips <sphillips@southbostonva.us>, "Thomas, Scott" <scott.thomas@dcr.virginia.gov>, Tom Tanner <ttanner.townoflacrosse@gmail.com>, Town of Brodnax <townofbrodnax@gmail.com>, Town Of virgilina <townofvirgilina@embarqmail.com>, Trina Addison <trina.addison@vdem.virginia.gov>, Mark Novsak <mnovsak@southhillva.org>, bfrancisco@hcsa.us
Cc: Deborah Gosney <dgosney@southsidepdc.org>

Good afternoon everyone,

I wanted to send out a reminder that our next Hazard Mitigation Planning Team meeting will be held on Tuesday, January 28, 2020 at 10:00 a.m. at the SPDC office. Please plan to attend if possible as we will be finalizing any last comments before submitting the Plan to VDEM for their review. The agenda has been attached to this email for your reference.

The draft Regional Hazard Mitigation Plan can be found by clicking on the following link: Draft Regional Hazard Mitigation Plan

Please make sure to take a look at the Executive Summary (Section 8) for your respective jurisdiction and make sure that everything looks correct. Feel free to share any comments that you may have either at the meeting or before. Hope to see you Tuesday, have a good weekend.

--
Chad Neese

GIS Planner
Southside Planning District Commission
200 S. Mecklenburg Ave.
South Hill, VA 23970
(434) 447-7101 ext. 211

Hazard Mitigation Plan Agenda 1-28-2020.docx
47K

Public Meetings

October 28, 2019

A public meeting was held on October 28, 2019 at the SPDC office. The agenda, sign-in sheet, public notices (newspaper, SPDC website, SPDC Facebook page), a picture of the meeting room, and invitation to attend that was sent out to the local jurisdictions, state agencies, and other identified stakeholders is included in this section.

SPDC
SOUTHSIDE PLANNING DISTRICT COMMISSION

Regional Hazard Mitigation Plan Update – Public Meeting
200 South Mecklenburg Avenue, South Hill, VA 23970
October 28, 2019
7:00 p.m. – 9:00 p.m.

TENTATIVE AGENDA

I Welcome and introductions

II Presentation – Overview of the Hazard Mitigation Plan

III Break Out Session - Review hazard information and proposed mitigation actions. Each jurisdiction will be represented with a display board that includes, as applicable: flood map, wildfire map, landslide map, Kerr Dam Inundation Zone map, hazard rankings, proposed mitigation actions, and results from a public survey.

IV Other

V Adjournment

If special assistance is needed for persons with disabilities or limited English proficiency, please contact Chad Neese in advance of the meeting at (434) 447-7101 or cneese@southsidepdc.org.

Hazard Mitigation Plan Update – Sign In Sheet

Public Meeting – Southside Planning District Commission
October 28, 2019 @ 7:00 P.M.

Name	Name
Hope Cole	
Deborah B Gosney	
Andy Wells	
Susan Kyte	
Yair P. Moody	
Bryant Francisco	
Steve Dishman	
Chad Neese	



A picture of the SPDC conference room prior to the public meeting. Display boards representing information for each jurisdiction are visible.

Public notice was placed in three newspapers have coverage in the Southside region, they included: Mecklenburg Sun, Brunswick Times-Gazette, and Gazette-Virginian.



PUBLIC MEETING
Regional Hazard Mitigation Plan Update
Southside Planning District Commission

A public meeting will be held on Monday, October 28, 2019 from 7:00 p.m. to 9:00 p.m. in the conference room of the Southside Planning District Commission, 200 South Mecklenburg Avenue, South Hill, VA to solicit public input on the Regional Hazard Mitigation Plan update. This plan covers the counties of Brunswick, Halifax, and Mecklenburg, as well as the 12 towns located within their respective boundaries.

The meeting will begin with a presentation and will then evolve into an open house event, with displays and information provided for each of the 15 jurisdictions within the Southside Planning District. Information will include, but not be limited to: hazards identified, hazard rankings, various hazard maps, draft mitigation actions, and public survey results (as applicable).

All interested parties are urged to attend. For additional information or if special assistance is needed for persons with disabilities or limited English proficiency, please contact Chad Neese in advance of the meeting at (434) 447-7101 or cneese@southsidepdc.org.

Mecklenburg Sun - Oct. 23, 2019



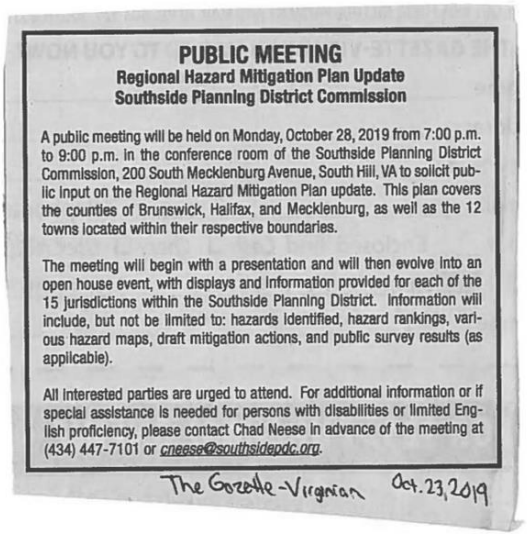
PUBLIC MEETING
Regional Hazard Mitigation Plan Update
Southside Planning District Commission

A public meeting will be held on Monday, October 28, 2019 from 7:00 p.m. to 9:00 p.m. in the conference room of the Southside Planning District Commission, 200 South Mecklenburg Avenue, South Hill, VA to solicit public input on the Regional Hazard Mitigation Plan update. This plan covers the counties of Brunswick, Halifax, and Mecklenburg, as well as the 12 towns located within their respective boundaries.

The meeting will begin with a presentation and will then evolve into an open house event, with displays and information provided for each of the 15 jurisdictions within the Southside Planning District. Information will include, but not be limited to: hazards identified, hazard rankings, various hazard maps, draft mitigation actions, and public survey results (as applicable).

All interested parties are urged to attend. For additional information or if special assistance is needed for persons with disabilities or limited English proficiency, please contact Chad Neese in advance of the meeting at (434) 447-7101 or cneese@southsidepdc.org.

Brunswick Times-Gazette
Oct 23, 2019



PUBLIC MEETING
Regional Hazard Mitigation Plan Update
Southside Planning District Commission

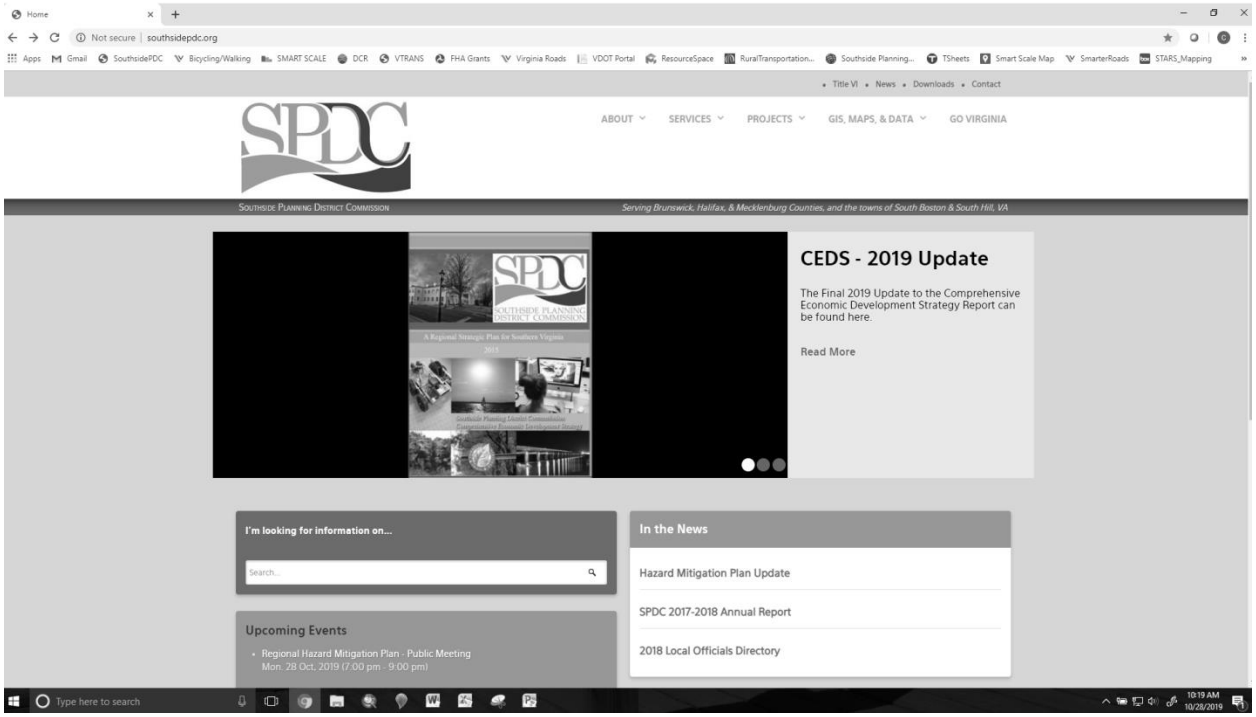
A public meeting will be held on Monday, October 28, 2019 from 7:00 p.m. to 9:00 p.m. in the conference room of the Southside Planning District Commission, 200 South Mecklenburg Avenue, South Hill, VA to solicit public input on the Regional Hazard Mitigation Plan update. This plan covers the counties of Brunswick, Halifax, and Mecklenburg, as well as the 12 towns located within their respective boundaries.

The meeting will begin with a presentation and will then evolve into an open house event, with displays and information provided for each of the 15 jurisdictions within the Southside Planning District. Information will include, but not be limited to: hazards identified, hazard rankings, various hazard maps, draft mitigation actions, and public survey results (as applicable).

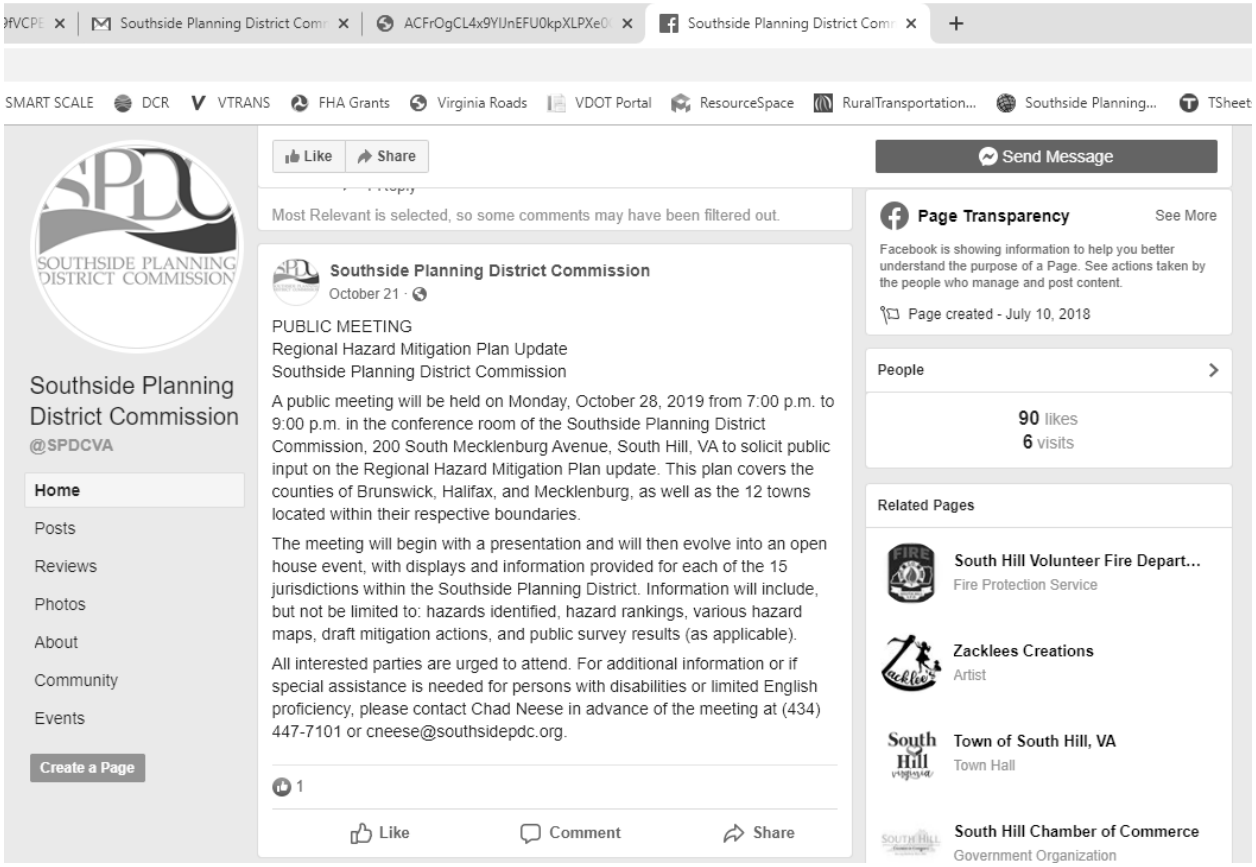
All interested parties are urged to attend. For additional information or if special assistance is needed for persons with disabilities or limited English proficiency, please contact Chad Neese in advance of the meeting at (434) 447-7101 or cneese@southsidepdc.org.

The Gazette-Virginian Oct. 23, 2019

SPDC Website



SPDC Facebook Page



Email to Hazard Mitigation Planning Team

SPDC

Chad Neese <cneese@southsidepdc.org>

Public Meeting - Hazard Mitigation Plan Update

Chad Neese <cneese@southsidepdc.org> Fri, Oct 18, 2019 at 10:12 AM
To: Andy Wells <awells@southsidepdc.org>, Buddy Hyde <bhyde@brunswickco.com>, "C. J. Dean" <cjdean@lawrencevilleweb.com>, "Carl Espy, IV" <townmanager@townofhalifax.com>, Chad Neese <cneese@southsidepdc.org>, Christopher Bruce <chris.bruce@vdem.virginia.gov>, Daniel Clark <dclark@southbostonva.us>, Don Dugger <don.dugger@scotts.com>, Douglas Gagnon <doug.gagnon@vdem.virginia.gov>, Hope Cole <hcole@southbostonva.us>, Ira Wilkerson <townofscottsburg@yahoo.com>, Jason Johnson <rescue312@yahoo.com>, Jeff Hinkle <rrsajeff@bitbroadband.com>, Jeff Jones <townmanager@clarksvilleva.org>, Johnny Kirkland <jmkirkland@boydton.org>, Jon Taylor <jon.taylor@mecklenburgva.com>, Lew Stringer <lstringer@buggs.net>, Mark Estes <mestes@hcsa.us>, "Radford, Mari" <Mari.Radford@fema.dhs.gov>, Steve Dishman <srd@co.halifax.va.us>, Steve Phillips <sphillips@southbostonva.us>, "Thomas, Scott" <scott.thomas@dcr.virginia.gov>, Tom Tanner <ttanner.townoflacrosse@gmail.com>, Town of Brodnax <townofbrodnax@gmail.com>, Town Of virgilina <townofvirgilina@embarqmail.com>, Trina Addison <trina.addison@vdem.virginia.gov>, curt@tankcare.net, Mark Novsak <mnovsak@southhillva.org>
Bcc: Deborah Gosney <dgosney@southsidepdc.org>, Kim Callis <kcallis@southhillva.org>

Good morning all,

A meeting to gather input from the public on the Hazard Mitigation Plan update has been scheduled for ***Monday, October 28, 2019 from 7:00 p.m. - 9:00 p.m.*** at the Southside Planning District Commission office. While your attendance is not required at this meeting, it would allow you to learn what concerns the public may have and what other localities have prioritized as mitigation actions. There will be a presentation at the beginning of the meeting before it transitions into an open house format with each jurisdiction being profiled on it's own display board for review and comment.

An agenda and the public meeting notice have been attached to this email for your convenience. Please share this email with anyone you think may be interested in attending. It would also be greatly appreciated if you could help spread the word about the meeting through any social media platform that you utilize. Finally, feel free to check out the Hazard Mitigation webpage as it provides an overview of the update process so far with numerous draft documents available for review. Thank you!

--
Chad Neese

GIS Planner
Southside Planning District Commission
200 S. Mecklenburg Ave.
South Hill, VA 23970
(434) 447-7101 ext. 211

2 attachments

Public Meeting Agenda - 10-28-19.pdf
362K

Public Hearing Notice.pdf
332K

Newspaper Article – The Mecklenburg Sun (Wednesday, November 6, 2019)

The Mecklenburg Sun Wednesday, November 6, 2019

Hazard mitigation plan unveiled

The Southside Planning District Commission in cooperation with the 12 towns and three counties that make up the planning district unveiled preliminary updates to the district-wide hazard mitigation plans (HMP).

Hazard mitigation plans are required by state and federal agencies before communities are eligible for certain types of non-emergency disaster assistance, including funding for mitigation projects. The ultimate goal of hazard mitigation is to reduce loss of life and property, lessening the impact of disasters.

The plan was last updated in 2013.

There are separate summary plans for Brunswick, Halifax and Mecklenburg counties as well as the Towns of Alberta, Boydton, Brodnax, Chase City, Clarksville, Halifax, La Crosse, Lawrenceville, Scottsburg, South Boston, South Hill and Virgilina.

Chad Neese, GIS Planner with the Southside Planning District Commission, unveiled the updates Monday night at a sparsely attended meeting in South Hill. This is the initial step toward completion of a comprehensive plan, Neese explained.

Tables around the room held display boards with flood, wildfire and landslide maps, the Kerr Dam Inundation Zone map, hazard rankings, and proposed mitigation actions as well as results from a public survey for each of the 15 locations.

The data was compiled by Neese and a steering committee of 37 regional and local officials, a representative from FEMA (Federal Emergency Management Administration), and three representatives from the Virginia Department of Emergency Management.

To develop for each community, committee members looked at a description of the hazard, the location where the hazards occur, the extent of the hazard and previous and future occurrences of the hazard.

Neese said it was interesting to note that the one hazard people said most directly impacted them or their property — and which were of the greatest concern to local officials — was damage from sever winds. For those in the Riverdale area of Halifax County, flooding was also a major concern.

Hope Cole, a planner and zoning administrator for South Boston, said the town is already working toward a solution for Riverdale. The proposal is to turn much of the area into green space.

Other hazards for communities in the Southside Planning District include severe thunderstorms, lightning, tornados, hurricanes and tropical storms, winter storms, extreme temperatures, drought, landslides, earthquakes, dam failure and wildrye and forest fires.

Beyond these particular risks, the group focus is on identifying specific actions and proposals to reduce or eliminate long-term risk to the people and property in the Southside Planning District, Neese said. Their goal, in preparing the updated plan, is to educate the public and key officials on hazard awareness, encourage local jurisdictions to incorporate risk reduction principles into their daily activities, processes and planning, and to reduce natural hazard losses by implementing mitigation measures.

Moving forward, Neese said the next step is to receive feedback from the public and local officials before preparing the final draft of the plan. Neese said the steering committee will be asked to review and comment on this final draft. After incorporating their changes, it will be sent to FEMA.

Neese said he expects the steering committee to complete work on the hazard mitigation plan update by mid-2020. While the process continues, he encourages the public and key officials to follow along and provide input either in person or through the website, www.southsidepdc.org, and click on the hazard mitigation link.

January 15, 2020

A public meeting was held on January 15, 2020 at the SPDC office. The agenda, sign-in sheet, public notices, and targeted invitations that were sent out to local jurisdictions, state agencies, and other identified stakeholders is included in this section.

SPDC
SOUTHSIDE PLANNING DISTRICT COMMISSION

Regional Hazard Mitigation Plan Update – Public Meeting

200 South Mecklenburg Avenue, South Hill, VA 23970
January 15, 2020
5:00 p.m.

TENTATIVE AGENDA

I Welcome and introductions

II Presentation – Overview of the Hazard Mitigation Plan

III Break Out Session - Review hazard information and proposed mitigation actions. Each jurisdiction will be represented with a display board that includes, as applicable: flood map, wildfire map, landslide map, Kerr Dam Inundation Zone map, hazard rankings, proposed mitigation actions, and results from a public survey.

IV Other

V Adjournment

Hazard Mitigation Plan Update – Sign In Sheet

Public Meeting – Southside Planning District Commission
January 15, 2020 @ 5:00 P.M.

Name	Name
MARK NOUSAK	TOWN OF SOUTH HILL
Chad Neese	

Town of South Hill – Comment Sheet

REPLACED 2 GENERATORS AT ~~[illegible]~~ TAYLORS CRK & MOUNTAIN CRK SEWER PUMP STA.

FENCE AROUND E. MAIN ST WATER TANK.

Public notice was placed in three newspapers having coverage in the Southside region, they included: Mecklenburg Sun, Brunswick Times-Gazette, and Gazette-Virginian.

PUBLIC MEETING
Regional Hazard Mitigation Plan Update
Southside Planning District Commission

A public meeting will be held on Wednesday, January 15, 2020 at 5:00 p.m. in the conference room of the Southside Planning District Commission, 200 South Mecklenburg Avenue, South Hill, VA to solicit public input on the Regional Hazard Mitigation Plan update. This plan covers the counties of Brunswick, Halifax, and Mecklenburg, as well as the 12 towns located within their respective boundaries.

The meeting will begin with a presentation and will then evolve into an open house event, with displays and information provided for each of the 15 jurisdictions within the Southside Planning District. Information will include, but not be limited to: hazards identified, hazard rankings, various hazard maps, draft mitigation actions, and public survey results (as applicable).

All interested parties are urged to attend. For additional information or if special assistance is needed for persons with disabilities or limited English proficiency, please contact Chad Neese in advance of the meeting at (434) 447-7101 or cneese@southsidepdc.org. 1/8/20 Mecklenburg Sun

Scanned with CamScanner

PUBLIC MEETING
2045 Rural Long-Range Transportation Plan
Southside Planning District Commission

A public meeting will be held on Thursday, January 2, 2020 from 5:00 p.m. until 7:00 p.m. in the conference room of the Southside Planning District Commission, 200 S. Mecklenburg Ave, South Hill, VA to solicit public input on the 2045 Rural Long-Range Transportation Plan. This plan covers the counties of Brunswick, Halifax, and Mecklenburg, as well as the 12 towns located within their respective boundaries. The meeting will begin with a presentation and will then evolve into an open house event.

Comments on the plan will be received at the meeting or may be submitted until January 8, 2020 to Chad Neese, GIS Planner, Southside Planning District Commission, 200 S. Mecklenburg Ave., South Hill, VA 23970. You may also email them to cneese@southsidepdc.org or call (434) 447-7101 extension 211.

The SPDC ensures nondiscrimination in all programs and activities in accordance with Title VI of the Civil Rights Act of 1964. If special assistance is needed for persons with disabilities or limited English proficiency, contact Chad Neese at least seven business days in advance of the meeting at (434) 447-7101 or

Brunswick Times-Gazette 1/8/2020

PUBLIC MEETING
Regional Hazard Mitigation Plan Update
Southside Planning District Commission

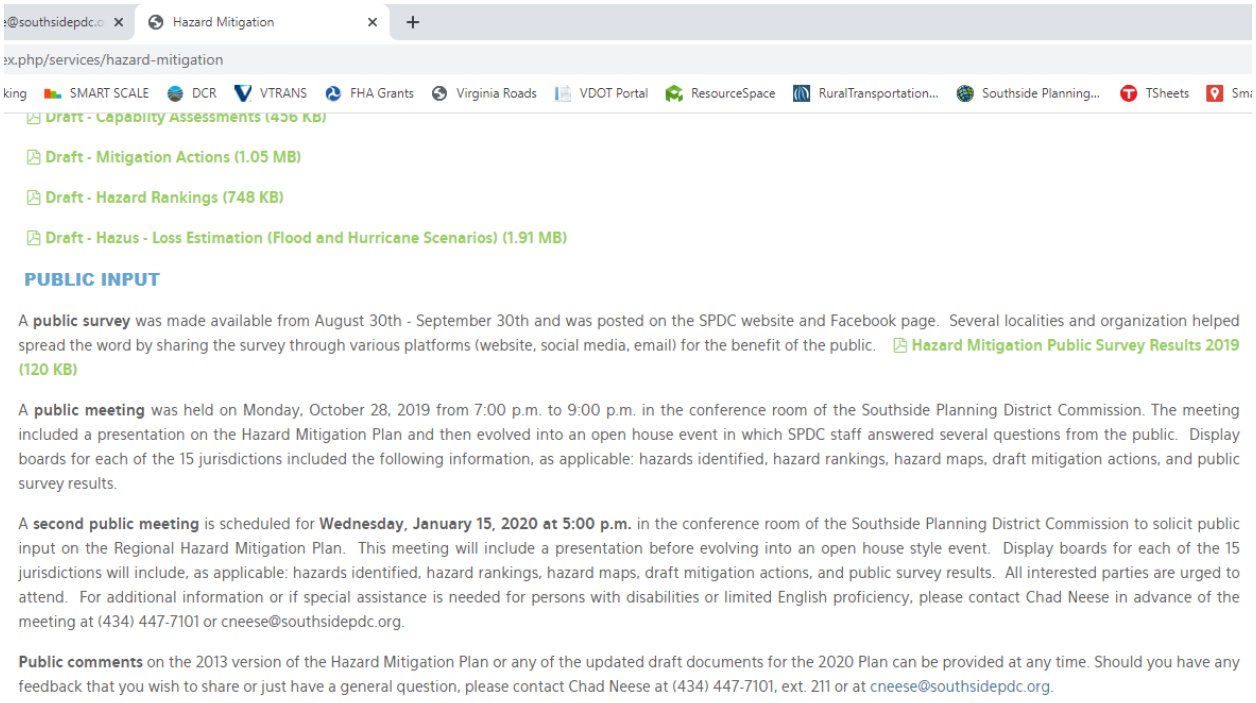
A public meeting will be held on Wednesday, January 15, 2020 at 5:00 p.m. in the conference room of the Southside Planning District Commission, 200 South Mecklenburg Avenue, South Hill, VA to solicit public input on the Regional Hazard Mitigation Plan update. This plan covers the counties of Brunswick, Halifax, and Mecklenburg, as well as the 12 towns located within their respective boundaries.

The meeting will begin with a presentation and will then evolve into an open house event, with displays and information provided for each of the 15 jurisdictions within the Southside Planning District. Information will include, but not be limited to: hazards identified, hazard rankings, various hazard maps, draft mitigation actions, and public survey results (as applicable).

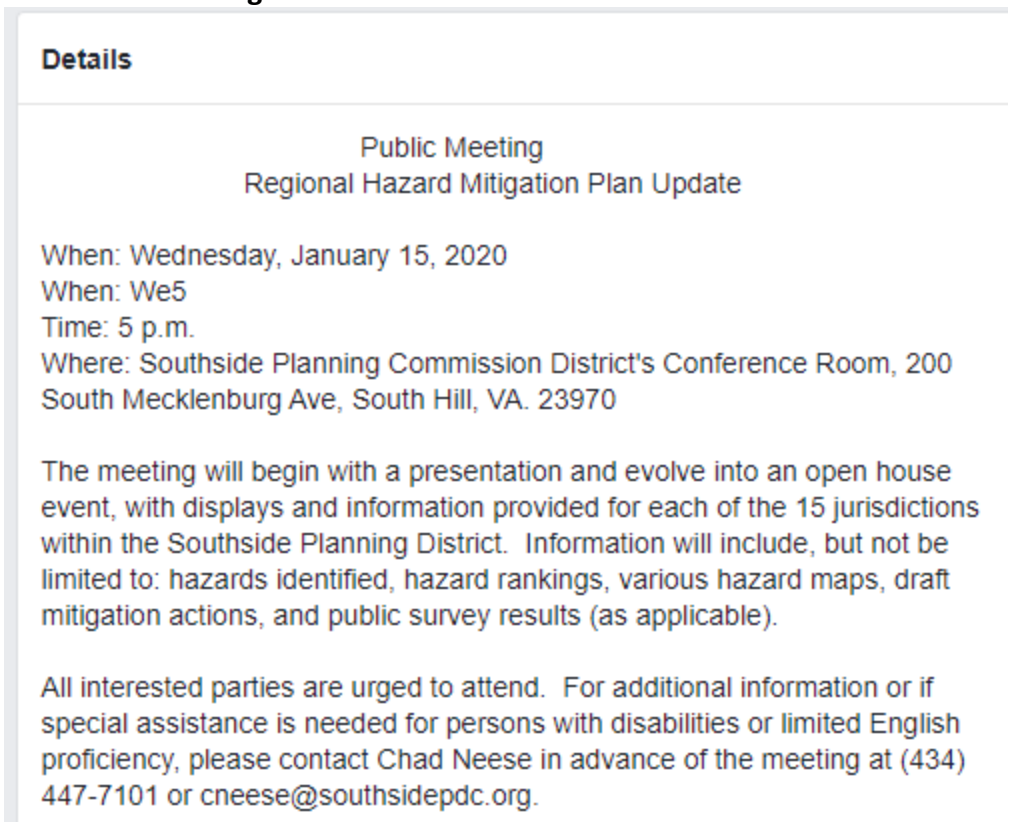
All interested parties are urged to attend. For additional information or if special assistance is needed for persons with disabilities or limited English proficiency, please contact Chad Neese in advance of the meeting at (434) 447-7101 or cneese@southsidepdc.org.

Gazette-Virginian 1/8/2020

SPDC Website



SPDC Facebook Page – Event



Letter mailed to Alberta and Scottsburg – Additional Outreach

SOUTHSIDE PLANNING DISTRICT COMMISSION

January 7, 2020

Town of Alberta
Attn: Curtis Williams, Mayor
P.O. Box 157
Alberta, VA 23821

Mayor Williams,

The Southside Planning District Commission is in the process of finalizing all updates to the Regional Hazard Mitigation Plan. This plan profiles numerous natural hazards that can negatively impact the communities across the region, including the Town of Alberta, and provides recommended actions to help minimize or eliminate property damage and loss of life. A more detail overview and draft version of the plan can be found on www.southsidepdc.org by clicking on "Hazard Mitigation" under the "Services" dropdown menu on the homepage.

I'm writing you today with the hopes that the Town of Alberta will choose to participate in the update process as we have not heard from town officials during previous outreach attempts. Please note that I am more than willing to meet with you at your convenience to discuss this matter is greater detail and get the town caught up on the update process. Additionally, there is a public meeting scheduled for January 15th at 5:00 p.m. at the Southside Planning District Commission office in South Hill that you or another town representative could attend to learn more. However, if the Town of Alberta is not interested in participating in the Regional Hazard Mitigation Plan please let me know in writing as soon as possible.

I wish to thank you in advance for your time and consideration on this matter. Please feel free to contact me at your earliest convenience with how the Town wishes to proceed.

Thank you,

Chad Neese
GIS Planner

cc: Linda Helm, Town Clerk

200 S. Mecklenburg Ave. ■ South Hill, VA 23970 ■ Phone (434) 447-7101 ■ Fax (434) 447-7104 ■ www.southsidepdc.org

Counties of Halifax, Mecklenburg and Brunswick – Town of South Boston – Town of South Hill
Towns of Alberta, Brodnax, Chase City, Clarksville, Halifax, LaCrosse, Lawrenceville, Scottsburg, and Virgilina

Email Sent to County Extension Offices – Invitation to Public Meeting and Crop Damage Data



Chad Neese <cneese@southsidepdc.org>

Regional Hazard Mitigation Plan - Comments
1 message

Chad Neese <cneese@southsidepdc.org> Tue, Jan 7, 2020 at 5:04 PM
To: jasonf@vt.edu, cclarke@vt.edu, clgregg@vt.edu

Good afternoon folks,

The Southside Planning District Commission is in the process of updating our Regional Hazard Mitigation Plan which covers the counties of Brunswick, Halifax, and Mecklenburg. This plan profiles numerous natural hazards that can negatively impact the communities across our region and provides recommended actions to help minimize or eliminate property damage and loss of life. I wanted to reach out to the local extension offices and let you know that a draft version of the update is available on the following link. Draft Regional Hazard Mitigation Plan 2020 Please note that several small sections are incomplete at this time but will be addressed in the coming weeks.

If you have any comments on the plan or would want to share data relevant to the plan (such as crop damage sustained from recent floods, drought, etc.) we would certainly be interested in hearing from you. There is also a public meeting scheduled for January 15th at 5:00 p.m. at the Southside Planning District Commission office at 200 S. Mecklenburg Avenue in South Hill that you are more than welcome to attend. In addition to a presentation we plan on having numerous display boards profiling each of our 15 governmental jurisdictions regarding: hazards identified, hazard rankings, hazard maps, draft mitigation actions, and public survey results as applicable.

Please feel free to reach out at your convenience or explore our dedicated webpage on the Regional Hazard Mitigation Plan update. Thank you!

--
Chad Neese

GIS Planner
Southside Planning District Commission
200 S. Mecklenburg Ave.
South Hill, VA 23970
(434) 447-7101 ext. 211

Public Survey

A public survey was conducted and made available to the public from August 30th until September 30th.

Email to Hazard Mitigation Planning Team and SPDC Staff

SPDC

Chad Neese <cneese@southsidepdc.org>

Southside Hazard Mitigation Plan - Community Survey Now Available

Chad Neese <cneese@southsidepdc.org> Tue, Sep 3, 2019 at 2:04 PM
To: Allen Elliott <aelliott@southhillva.org>, Andy Wells <awells@southsidepdc.org>, Bill Wilson <bwilson@southhillva.org>, Buddy Hyde <bhyde@brunswickco.com>, "C. J. Dean" <cjdean@lawrencevilleweb.com>, "Carl Espy, IV" <townmanager@townofhalifax.com>, Chad Neese <cneese@southsidepdc.org>, Daniel Clark <dclark@southbostonva.us>, Diane Ashley <mayorofalberta@albertava.com>, Don Dugger <don.dugger@scotts.com>, Hope Cole <hcole@southbostonva.us>, Ira Wilkerson <townofscottsburg@yahoo.com>, Jason Johnson <rescue312@yahoo.com>, Jeff Hinkle <rrsajeff@bitbroadband.com>, Jeff Jones <townmanager@clarksvilleva.org>, Johnny Kirkland <jmkirkland@boydton.org>, Jon Taylor <jon.taylor@mecklenburgva.com>, Lew Stringer <lstringer@buggs.net>, Mark Estes <mestes@hcsa.us>, Steve Dishman <srd@co.halifax.va.us>, Steve Phillips <sphillips@southbostonva.us>, Tom Tanner <ttanner.townoflacrosse@gmail.com>, Town of Brodnax <townofbrodnax@gmail.com>, Town Of virgilina <townofvirgilina@embarqmail.com>, Mark Novsak <mnovsak@southhillva.org>, CC Mayor Bratton <cc.mayorbratton@gmail.com>
Bcc: Lisa McGee <lmcgee@southsidepdc.org>, Stephanie Creedle <screedle@southsidepdc.org>, Deborah Gosney <dgosney@southsidepdc.org>, Ashleigh Zincone <azincone@southsidepdc.org>, Sangi Cooper <scooper@southsidepdc.org>, Gail Moody <moodygailandy@gmail.com>

Good afternoon everyone,

The Hazard Mitigation Plan survey that was discussed and reviewed at the last Planning Team meeting on August 5th is now available to the public by utilizing the link below. As you are aware, the intent of the survey is to gather public input and opinions as they relate to various hazards that can impact our region.

Please take time to participate in the survey, it consists of only 10 questions should take only a few minutes to complete. The survey will remain open through September 30th. Please feel free to share the link with anyone who may be interested. If it could be shared on any town/county social media accounts and/or websites it would be greatly appreciated. If anyone requires the survey to be in a different format (such as PDF or hard copy) so that all who want to participate are able, please let me know I will make such accommodations. Thank you!

Southside Hazard Mitigation Plan Survey

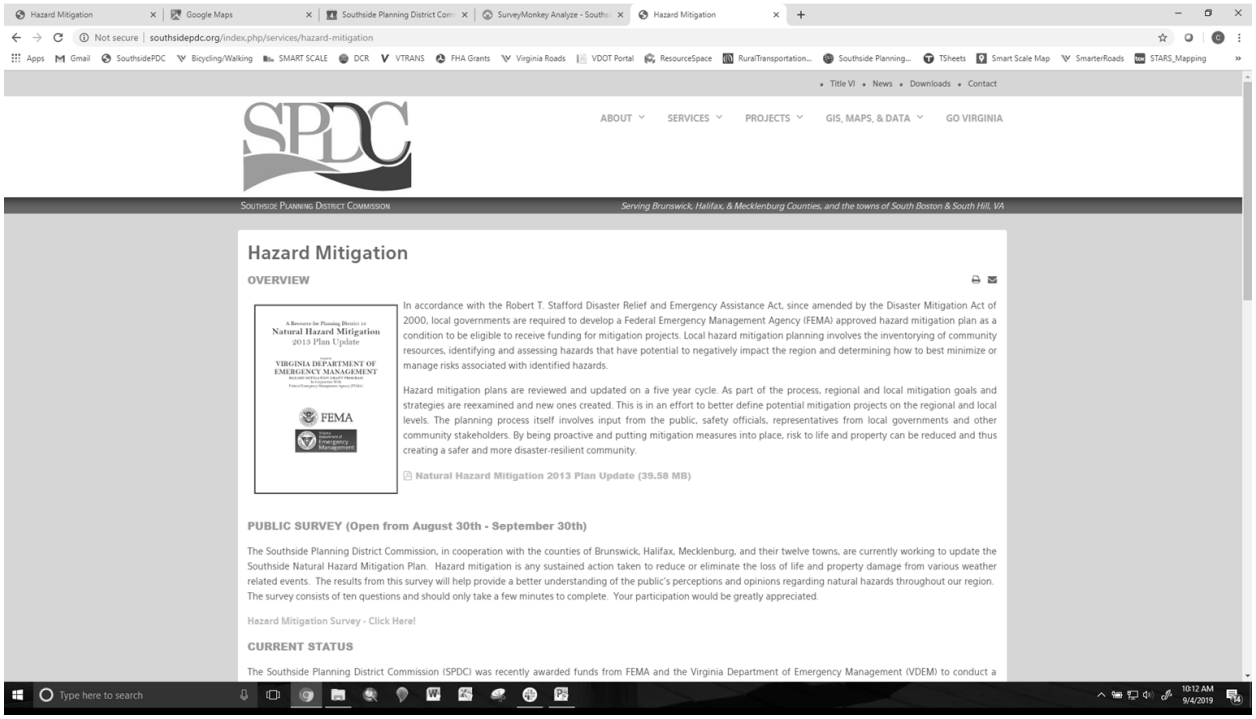
--
Chad Neese

GIS Planner
Southside Planning District Commission
200 S. Mecklenburg Ave.
South Hill, VA 23970
(434) 447-7101 ext. 211

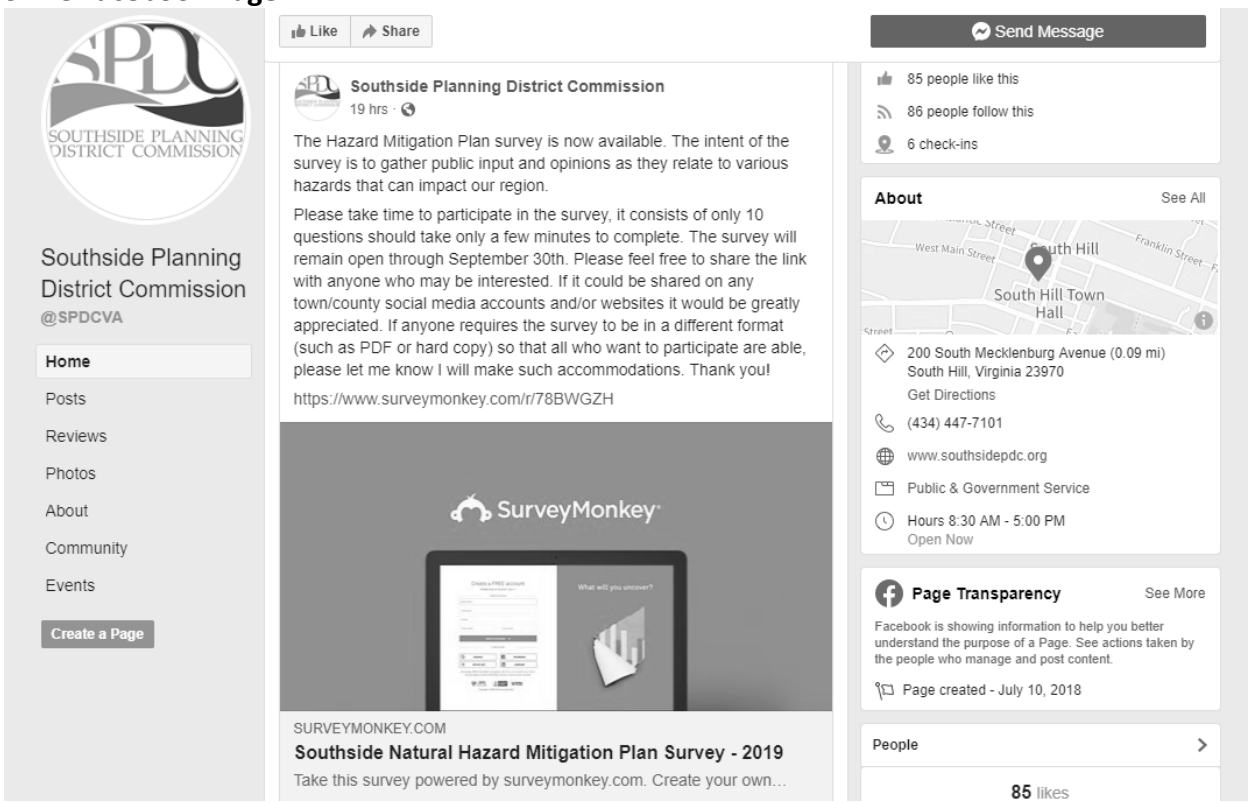
Additional email requests to help spread the word and share the survey link were sent to:

Town of La Crosse (townoflacrosse@gmail.com) – September 6th
Town of South Boston (traab@southbostonva.us) – September 9th
Town of South Hill (kcallis@southhillva.org) – September 9th
Brunswick County (dwalker@brunswickco.com) – September 16th
Brunswick County Chamber of Commerce (brunschamber@lawrencevilleweb.com) – September 20th
South Hill Chamber of Commerce (frank@southhillchamber.com) – September 20th
Halifax County Chamber of Commerce (info@halifaxchamber.net) – September 20th
Chase City Chamber of Commerce (chasecityva@verizon.net) – September 20th

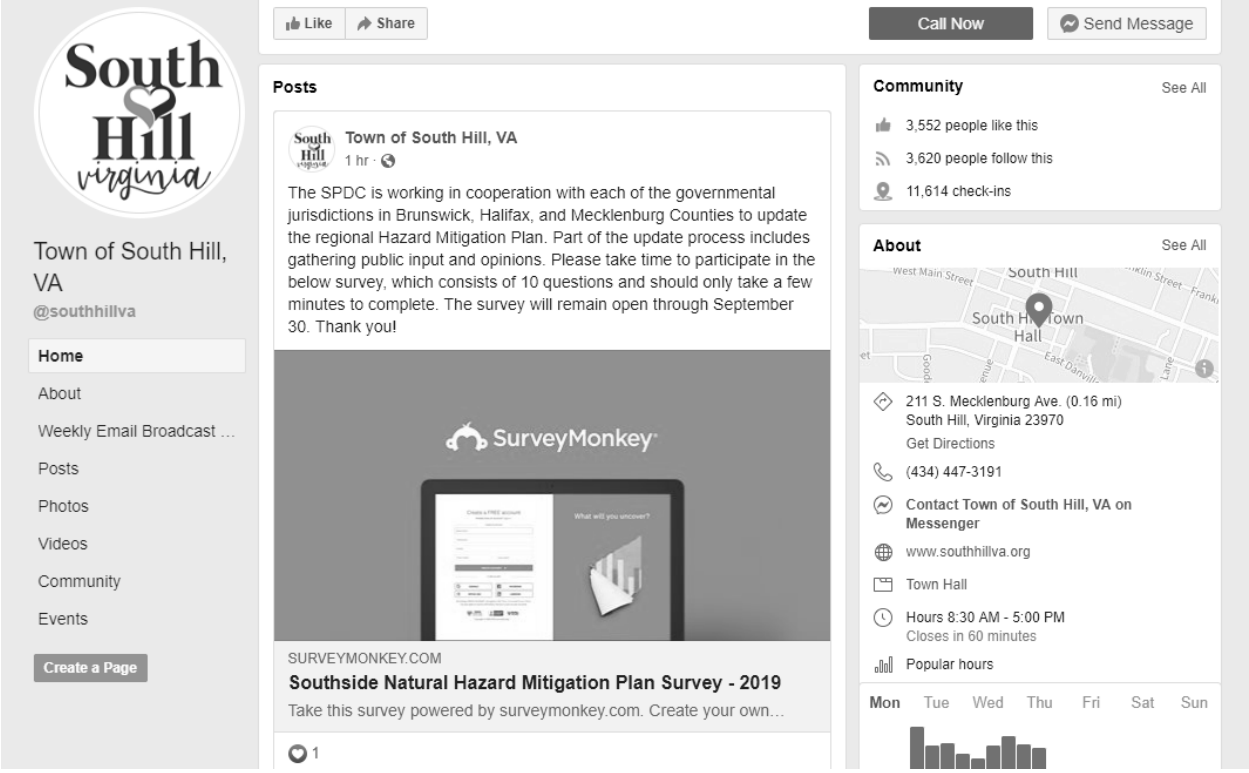
SPDC Website



SPDC Facebook Page



Town of South Hill Facebook Page



Town of Halifax Email Blast

From: Melissa Carr
Sent: Tuesday, September 03, 2019 2:31 PM
Cc: Denise Barksdale <townoffice@townofhalifax.com>
Subject: Southside Hazard Mitigation Plan Survey

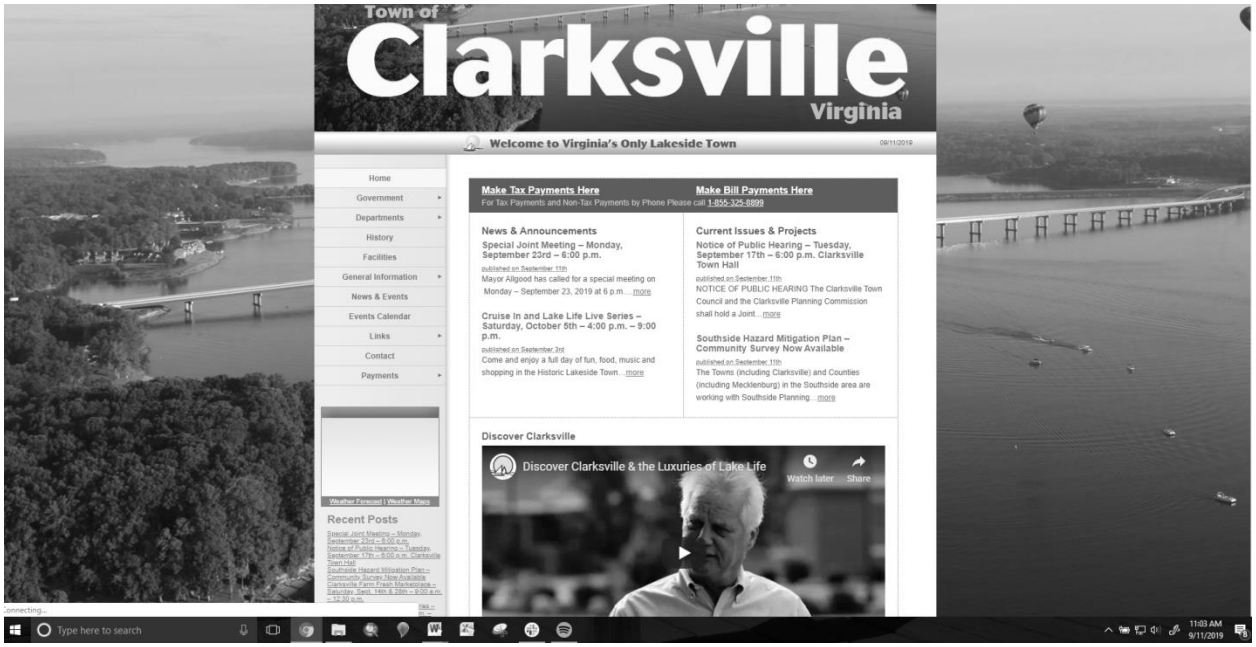
Hello everyone,

As part of the regional Hazard Mitigation Plan being updated by the Southside Planning District Commission and participating localities in Halifax, Mecklenburg, and Brunswick Counties, the planning team recently discussed and reviewed a survey which is now available to the public by utilizing the link below. The intent of the survey is to gather public input and opinions as they relate to various hazards that can impact our region.

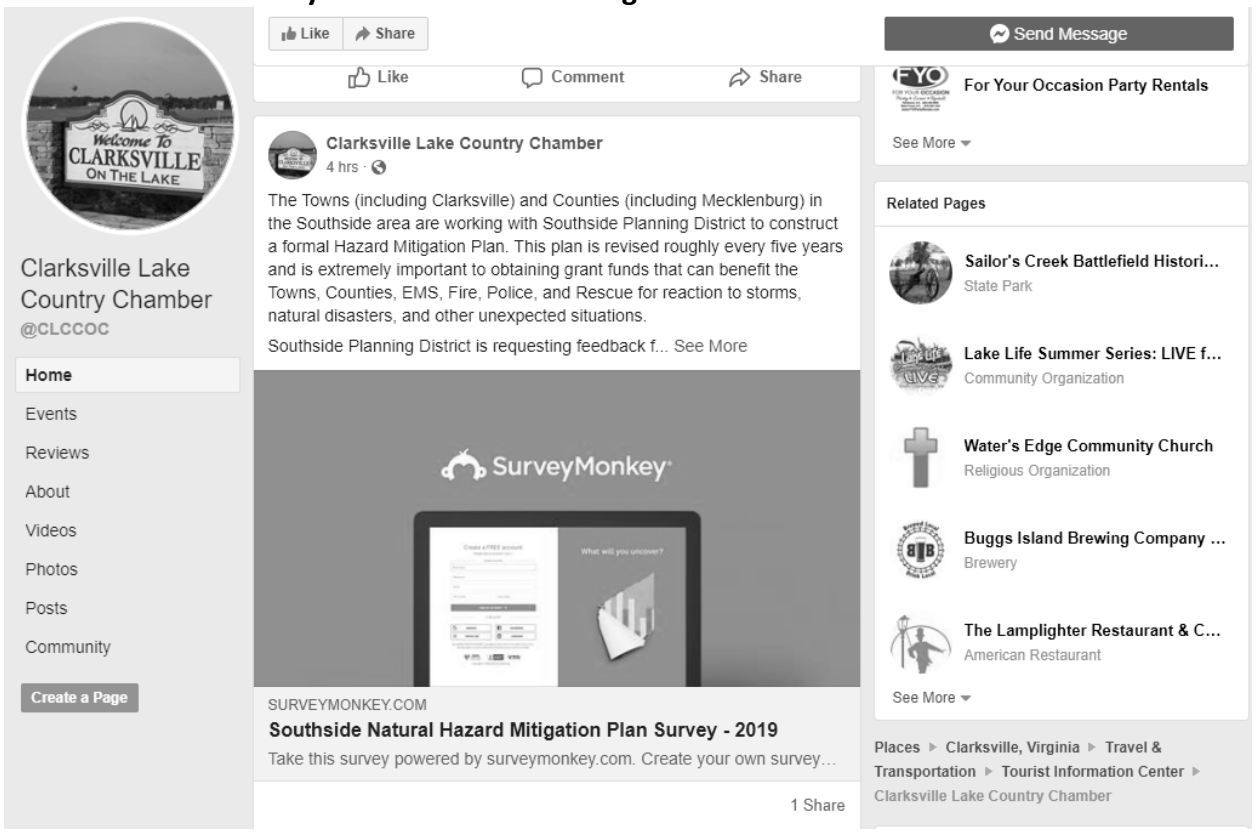
Please take time to participate in the survey, it consists of only 10 questions should take only a few minutes to complete. The survey will remain open through September 30th. Please feel free to share the link with anyone who may be interested. Thank you!

Southside Hazard Mitigation Plan Survey

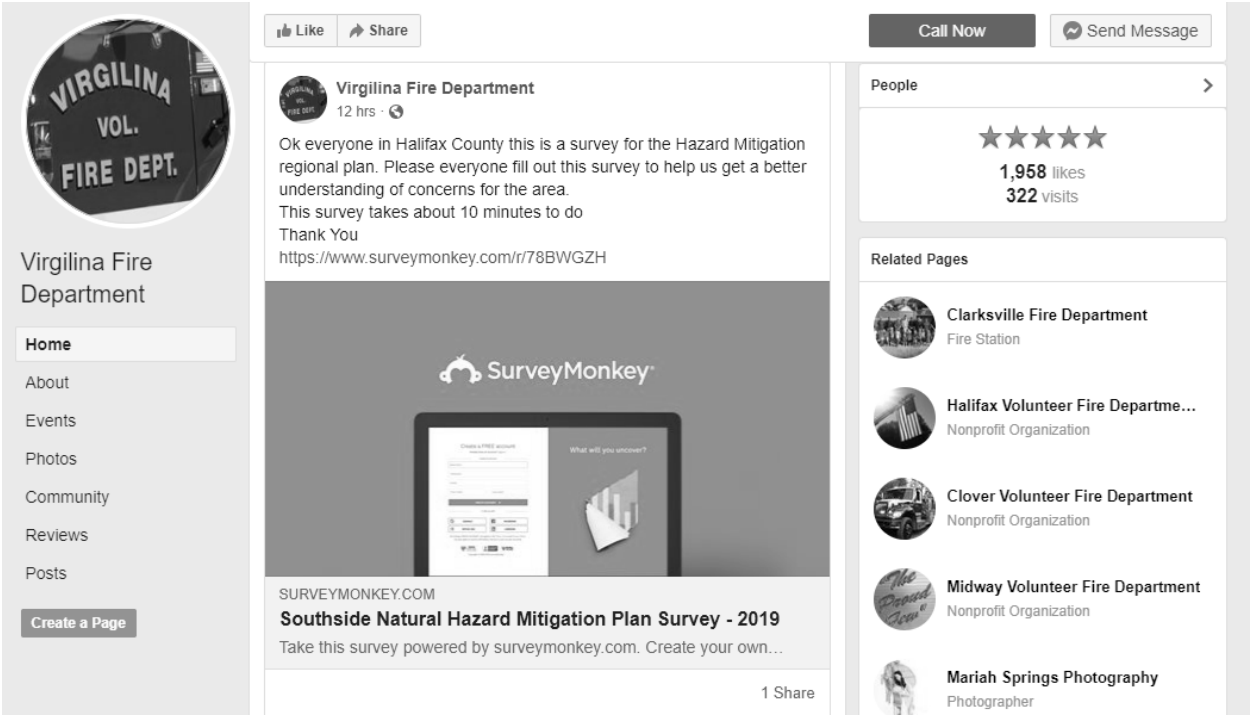
Town of Clarksville Website



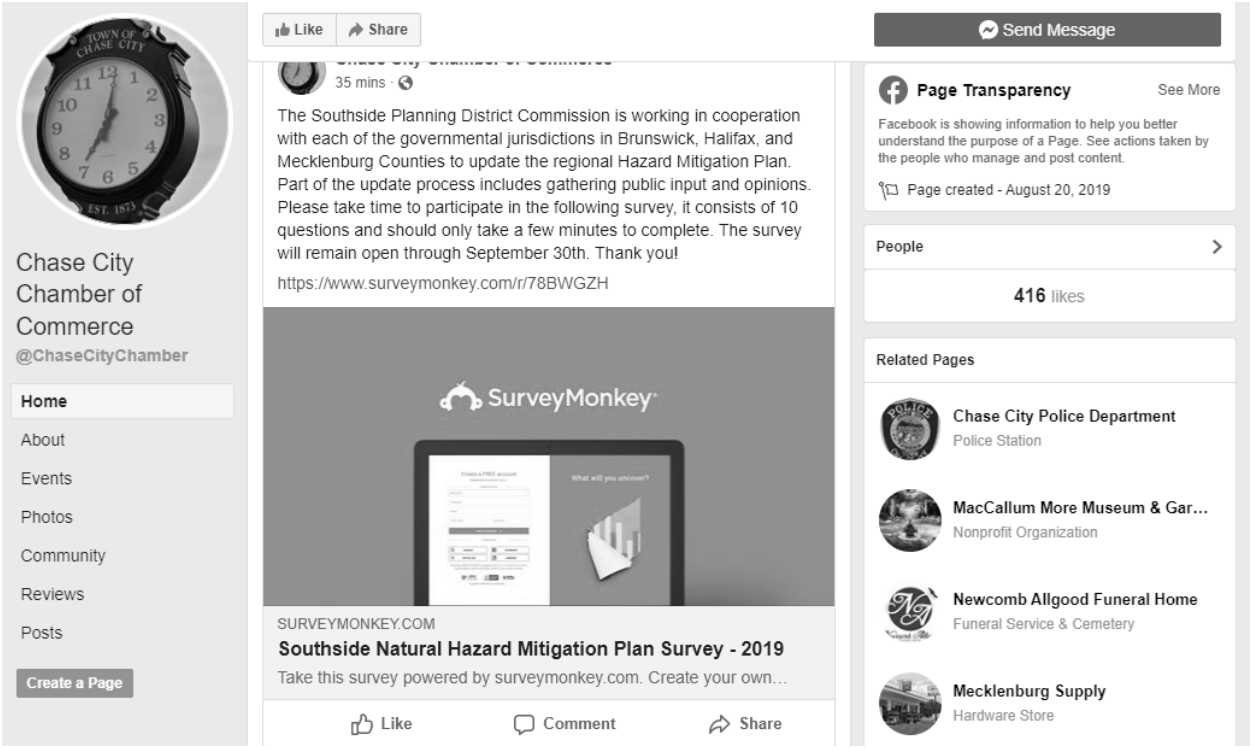
Clarksville Lake Country Chamber Facebook Page



Virgilina Fire Department Facebook Page



Chase City Chamber of Commerce Facebook Page



Other Meetings and Outreach

May 23, 2018 – VDEM
Meeting to discuss the HMP Update and grant contract.
Attending: Chris Bruce (VDEM), Trina Addison (VDEM), Gail Moody (SPDC), Stephanie Creedle (SPDC), and Chad Neese (SPDC)

October 23, 2018 – Town of Brodnax
Meeting to discuss HMP Update, review hazards, and establish Planning Team contact.
Attending: Ben Spence (Brodnax) and Chad Neese (SPDC)

October 30, 2018 – FEMA Site Visit
FEMA staff provided comments, forms, and other information for the HMP Update.
Attending: Mari Radford (FEMA), Chris Bruce (VDEM), Doug Gagnon (VDEM), Gail Moody (SPDC), Andy Wells (SPDC), and Chad Neese (SPDC)

November 14, 2018 – Town of Halifax
Meeting to discuss HMP Update, review hazards, and establish Planning Team contact.
Attending: Carl Espy, IV (Halifax) and Chad Neese (SPDC)

November 26, 2018 – Halifax County
Meeting to discuss HMP Update, review hazards, and establish Planning Team contact.
Attending: Steve Dishman (Halifax County) and Chad Neese (SPDC)

December 17, 2018 – Town of Chase City
Meeting to discuss HMP Update, review hazards, establish Planning Team contact, water/sewer infrastructure, and stormwater flooding issues.
Attending: Angela Lawrence (Chase City) and Chad Neese (SPDC)

December 19, 2018 – Town of Lawrenceville
Meeting to discuss water/sewer infrastructure and stormwater flooding issues.
Attending: C. J. Dean (Lawrenceville) and Chad Neese (SPDC)

December 19, 2018 – Town of Clarksville
Meeting to discuss HMP Update, review hazards, establish Planning Team contact, water/sewer infrastructure, and stormwater flooding issues.
Attending: Jeff Jones (Clarksville), Richard Elliott (Clarksville), and Chad Neese (SPDC)

December 20, 2018 – Town of South Hill
Meeting to discuss water/sewer infrastructure and stormwater flooding issues.
Attending: Bill Wilson (South Hill), Mark Novsak (South Hill), Wayne Hudson (South Hill), and Chad Neese (SPDC)

December 21, 2018 – Sent Letters to Encourage Participation in HMP Update
Letters mailed to: Town of Alberta, Town of Boydton, Town of Scottsburg, and Town of Virgilina.

The following is a copy of the letter mailed to the Town of Virgilina to serve as an example.

SOUTHSIDE PLANNING DISTRICT COMMISSION

December 21, 2018

Town of Virgilina
Mayor Ralph Murray
P.O. Box 118
Virgilina, VA 24598

Mayor Murray,

The Southside Planning District Commission is currently updating two major planning documents, the 2045 Regional Long Range Transportation Plan and the regional Hazard Mitigation Plan. I'm writing you today with the hopes that we can get together in early January to discuss each of the aforementioned plans in detail and also to ensure that Virgilina has been provided with the opportunity to participate in the planning process.

In short, the Regional Long Range Transportation Plan is a document that inventories the entire transportation network for the region and provides recommendations for improvements to satisfy existing and future transportation needs. To begin with, I would like to review existing recommendations in the plan with you and to also discuss and learn of new projects that may be included during the plan's update.

The Hazard Mitigation Plan profiles numerous natural hazards that can negatively impact the communities across the region and what actions may be taken to help minimize or eliminate potential property damage and loss of life. Participation from an Virgilina representative will be paramount as each locality will be reviewing and updating their individual goals based upon their own unique circumstances.

Again, I hope that we are able to schedule a meeting so that I may discuss each of these planning documents in more detail with you and to help answer any questions that you may have. As of now, my calendar is open for the first half of January. We could meet at the SPDC office in South Hill or I can meet with you in Virgilina, whichever works best for you. I can be reached at (434) 447-7101, ext. 211 or by email at cneese@southsidepdc.org. I hope to hear from you soon!

Thank you,

Chad Neese
GIS Planner

200 S. Mecklenburg Ave. ■ South Hill, VA 23970 ■ Phone (434) 447-7101 ■ Fax (434) 447-7104 ■ www.southsidepdc.org

Counties of Halifax, Mecklenburg and Brunswick – Town of South Boston – Town of South Hill
Towns of Alberta, Brodnax, Chase City, Clarksville, Halifax, LaCrosse, Lawrenceville, Scottsburg, and Virgilina

January 3, 2019 – Town of Virgilina
Meeting to discuss HMP Update, review hazards, and establish a Planning Team contact.
Attending: Virgilina Town Council and Chad Neese (SPDC)

January 10, 2019 – Town of Boydton
Meeting to discuss HMP Update, review hazards, stormwater flooding issues, sewer pump stations, and establish Planning Team contact.
Attending: John Kirkland (Boydton), R.H. Park, III (Boydton), and Chad Neese (SPDC)

January 15, 2019 – Roanoke River Service Authority
Meeting to discuss critical water facilities.
Attending: Michael Funderburk (RRSA) and Chad Neese (SPDC)

January 23, 2019 – Mecklenburg County
Meeting to discuss HMP Update.
Attending: Jon Taylor (Mecklenburg County) and Chad Neese (SPDC)

January 30, 2019 – Mecklenburg County
Meeting to discuss critical facilities inventory, public work equipment, FEMA reimbursement rates, shelters, EOC, and Mecklenburg County EOP.
Attending: Jon Taylor (Mecklenburg County), Lew Stringer (Mecklenburg County), and Chad Neese (SPDC)

March 7, 2019 – Halifax County Service Authority
Meeting to discuss critical water/sewer inventory.
Attending: Mark Estes (HCSA) and Chad Neese (SPDC)

April 5, 2019 – Capability Assessment Worksheets Mailed to All 15 Jurisdictions

The following letter to the Town of Alberta is included to serve as an example of what all fifteen jurisdictions within the Southside Planning District received.

SOUTHSIDE PLANNING DISTRICT COMMISSION

April 5, 2019

Town of Alberta
Attn: Mayor Curtis Williams
P.O. Box 157
Alberta, VA 23821

Dear Mayor Williams,

The Southside Planning District Commission is currently in the process of updating the regional Hazard Mitigation Plan. As you are aware, this plan is used to help minimize or eliminate potential property damage and loss of life due to natural disasters for all fifteen jurisdictions within the District. One of the major components of the update process is the capability assessment. This assessment collects information on each localities staff, policies, programs, plans, and funding to better understand its ability to implement and carry out mitigation actions. This will be useful as the planning process moves forward and each locality reviews and updates their existing mitigation actions listed in the current Hazard Mitigation Plan.

Enclosed with this letter you will find several worksheets relating to the capability assessment. They are broken into four sections, including: Administrative and Technical, Planning and Regulatory, Financial, and Education and Outreach. The worksheets mainly consist of yes/no questions for your convenience.

It would be greatly appreciated if you could complete the enclosed worksheets and return them to the Southside Planning District Commission by April 30, 2019. A self-addressed envelope has been provided for your convenience for returning the completed worksheets. You may also scan and email them to cneese@southsidepdc.org as well.

I wish to thank you in advance for your participation in the capability assessment. Should you have any questions or if you require any assistance in completing the worksheets please let me know at your earliest convenience. I may be reached by telephone by (434) 447-7101 extension 211.

Thank you,

Chad Neese
GIS Planner

Enclosures

200 S. Mecklenburg Ave. ■ South Hill, VA 23970 ■ Phone (434) 447-7101 ■ Fax (434) 447-7104 ■ www.southsidepdc.org

Counties of Halifax, Mecklenburg and Brunswick – Town of South Boston – Town of South Hill
Towns of Alberta, Brodnax, Chase City, Clarksville, Halifax, LaCrosse, Lawrenceville, Scottsburg, and Virgilina

April 18, 2019 – Town of South Hill
Meeting to discuss Capability Assessment worksheets.
Attending: Bill Wilson (South Hill), Mark Novsak (South Hill), and Chad Neese (SPDC)

May 24, 2019 – Email Reminding Localities to Complete Capability Assessment worksheets
The following email to the Town of Scottsburg, with the Capability Assessment worksheets, is included to serve as an example. Emails were sent to the following jurisdictions: Town of Alberta, Town of Boydton, Town of Brodnax, Brunswick County, Town of Chase City, Town of Halifax, Mecklenburg County, and the Town of Scottsburg.

SPDC

Chad Neese <cneese@southsidepdc.org>

Capability Assessment - Hazard Mitigation Plan Update

Chad Neese <cneese@southsidepdc.org> Fri, May 24, 2019 at 10:14 AM
To: Ira Wilkerson <townofscottsburg@yahoo.com>

Good morning Mayor Wilkerson,

The Southside Planning District Commission is currently in the process of updating the regional Hazard Mitigation Plan. As you are aware, this plan is used to help minimize or eliminate potential property damage and loss of life due to natural disasters for all fifteen jurisdictions within the District. One of the major components of the update process if the capability assessment. This assessment collects information on each localities staff, policies, programs, plans, and funding to better understand its ability to implement and carry out mitigation actions. This will be useful as the planning process moves forward and each locality reviews and updates their existing mitigation actions listed in the current Hazard Mitigation Plan.

Attached to this email you will find several worksheets relating to the capability assessment. They are broken into four sections, including: Administrative and Technical, Planning and Regulatory, Financial, and Education and Outreach. The worksheets mainly consist of yes/no questions for your convenience.

It would be greatly appreciated if you could complete the attached worksheets and return them by Thursday, June 13th. I wish to thank you in advance for your participation in this process. Should you have any questions or if you require any assistance in completing the worksheets please let me know at your earliest convenience.

--
Chad Neese

GIS Planner
Southside Planning District Commission
200 S. Mecklenburg Ave.
South Hill, VA 23970
(434) 447-7101 ext. 211

4 attachments

Capability Assessment - Education and Outreach.docx
17K

Capability Assessment - Financial.docx
17K

Capability Assessment - Administrative and Technical.docx
20K

Capability Assessment - Planning and Regulatory.docx
19K

July 3, 2019 – Town of La Crosse
Meeting to review and update mitigation actions for the Town of La Crosse.
Attending: Tom Tanner (La Crosse) and Chad Neese (SPDC)

July 29, 2019 – Brunswick County
Meeting to review and update mitigation actions for Brunswick County.
Attending: Buddy Hyde (Brunswick County) and Chad Neese (SPDC)

August 6, 2019 – Mecklenburg County
Meeting to review and update mitigation actions for Mecklenburg County.
Attending: Jon Taylor (Mecklenburg County) and Chad Neese (SPDC)

August 8, 2019 – Halifax County
Meeting to review and update mitigation actions for Halifax County.
Attending: Steve Dishman (Halifax County) and Chad Neese (SPDC)

August 12, 2019 – Letters Mailed to Organize Meeting for Review and Update of Mitigation Actions
Letters were mailed to local jurisdictions to establish a meeting date/time to review and update their mitigation actions. Included with the letters were the jurisdictions mitigation actions from the 2013 HMP for reference purposes. A brochure which provided an overview of grant opportunities was also included.

The following letter to the Town of Brodnax is included to serve as an example of what was mailed to each jurisdiction. Please note that letters were not mailed to the Town of Crosse, or the Counties of Brunswick, Halifax, or Mecklenburg as they had already scheduled meetings to review and update their mitigation actions.

SOUTHSIDE PLANNING DISTRICT COMMISSION

August 12, 2019

Town of Brodnax
Attn: Mayor Don Dugger
P.O. Box K
Brodnax, VA 23920

Dear Mayor Dugger,

The Southside Planning District Commission is currently in the process of updating the regional Hazard Mitigation Plan. As you are aware, this plan is used to help minimize or eliminate potential property damage and loss of life due to natural disasters across the Southside region, including the Town of Brodnax. The most important component of this plan, and the one which needs to be updated for grant purposes, is the reviewing and updating of the Town's proposed mitigation actions.

Enclosed with this letter you will find the mitigation actions for the Town of Brodnax from the 2013 version of the Hazard Mitigation Plan. I would like to meet with you in the coming weeks as your schedule allows so that we can review and update these mitigation actions as necessary. If the Town fails to participate it is our understanding that they will be viewed as ineligible to pursue future grant funds through the Virginia Department of Emergency Management. A brochure outlining numerous grant opportunities has also been enclosed for your reference.

Please note that I am more than willing to help bring you up to speed with the hazard mitigation planning process and to also help with the reviewing and updating of mitigation actions relevant to the Town of Brodnax. Please let me know what date/time would work best for us to get together. If it would be easier for you to meet in the evening I can easily make that accommodation in my schedule. You can contact me by phone at 434-447-7101 ext. 211 or by email at cneese@southsidepdc.org.

Thank you,

Chad Neese
GIS Planner

Enclosures: 2013 Town of Brodnax Mitigation Actions
Hazard Mitigation Assistance – Grant Brochure

August 19, 2019 – Town of South Hill
Meeting to review and update mitigation actions for the Town of South Hill.
Attending: Mark Novsak (South Hill) and Chad Neese (SPDC)

August 20, 2019 – Town of Chase City
Meeting to review and update mitigation actions for the Town of Chase City.
Attending: Eddie Bratton (Chase City) and Chad Neese (SPDC)

August 20, 2019 – Town of Halifax
Meeting to review and update mitigation actions for the Town of Halifax.
Attending: Carl Espy, IV (Halifax) and Chad Neese (SPDC)

August 21, 2019 – Town of Lawrenceville
Meeting to review and update mitigation actions for the Town of Lawrenceville.
Attending: C. J. Dean (Lawrenceville) and Chad Neese (SPDC)

August 21, 2019 – Halifax County Service Authority
Meeting to review and update mitigation actions relevant to the HCSA.
Attending: Mark Estes (HCSA), Bryant Francisco (HCSA) and Chad Neese (SPDC)

August 22, 2019 – Town of South Boston
Meeting to review and update mitigation actions for the Town of South Boston.
Attending: Tom Raab (South Boston), Hope Cole (South Boston), Steve Phillips (South Boston), Danny McCormick (South Boston), and Chad Neese (SPDC)

September 4, 2019 – Town of Clarksville
Meeting to review and update mitigation actions for the Town of Clarksville.
Attending: Jeff Jones (Clarksville) and Chad Neese (SPDC)

September 9, 2019 – Roanoke River Service Authority
Meeting to review and update mitigation actions relevant to the Roanoke River Service Authority.
Attending: Jeff Hinkle (RRSA) and Chad Neese (SPDC)

September 10, 2019 – Town of Virgilina
Meeting to review and update mitigation actions for the Town of Virgilina.
Attending: Ralph Murray (Virgilina), Jason Johnson (Virgilina) and Chad Neese (SPDC)

September 10, 2019 – Town of Clarksville
Meeting to continue review and update mitigation actions for the Town of Clarksville.
Attending: Jeff Jones (Clarksville) and Chad Neese (SPDC)

September 18, 2019 – Email Reminding Localities of Need to Review and Update Mitigation Actions
The following email to the Town of Boydton is included to serve as an example. Emails were sent to the following jurisdictions: Town of Alberta, Town of Boydton, Town of Brodnax, and Town of Scottsburg.

SPDC

Chad Neese <cneese@southsidepdc.org>

Meeting Date - Hazard Mitigation
1 message

Chad Neese <cneese@southsidepdc.org> Wed, Sep 18, 2019 at 1:07 PM
To: Johnny Kirkland <jmkirkland@boydton.org>

Good afternoon Mayor Kirkland,

I wanted to reach out to you today with the hopes of being able to schedule a meeting regarding the ongoing update of the Regional Hazard Mitigation Plan, which includes information specific to the Town of Boydton. The old mitigation actions included in the plan need to be reviewed and updated to better reflect the capabilities and priorities of the Town. Please note that I will help you though this process and offer suggestions where I can. Attached to this email are the old mitigation actions in question.

Based on meetings with eleven other jurisdictions in the region and the two regional service authorities, the meeting should last around an hour. Please let me know what date/time works best for you to meet. As of now, the only time I would be unavailable for the rest of the month would be during the afternoon on the 26th. I would like to thank you in advance for your time and consideration on this matter and hope to hear from you soon.

--
Chad Neese

GIS Planner
Southside Planning District Commission
200 S. Mecklenburg Ave.
South Hill, VA 23970
(434) 447-7101 ext. 211

Boydton Mitigation Actions.pdf
70K

September 27, 2019 – Town of Brodnax
Meeting to review and update mitigation actions for the Town of Brodnax.
Attending: Don Dugger (Brodnax) and Chad Neese (SPDC)

October 22-30, 2019 – Commonwealth Regional Council
Email exchanges to solicit input from Commonwealth Regional Council, a neighboring Planning District Commission, on the SPDC's Hazard Mitigation Plan and any other feedback that they might share on the update process.

December 6, 2019 – Commonwealth Regional Council
Email exchange concerning how Commonwealth Regional Council established a portion of the Implementation Plan within their Hazard Mitigation Plan.

January 7, 2020 – Letters to the towns of Alberta and Scottsburg
Letters were sent to the towns of Alberta and Scottsburg to invite them to the January 15, 2020 public meeting, offer to meet with them to bring them up-to-speed on the Hazard Mitigation Plan, or to learn if they simply do not wish to participate in the update process. A copy of the letter is follows for reference purposes.

SOUTHSIDE PLANNING DISTRICT COMMISSION

January 7, 2020

Town of Alberta
Attn: Curtis Williams, Mayor
P.O. Box 157
Alberta, VA 23821

Mayor Williams,

The Southside Planning District Commission is in the process of finalizing all updates to the Regional Hazard Mitigation Plan. This plan profiles numerous natural hazards that can negatively impact the communities across the region, including the Town of Alberta, and provides recommended actions to help minimize or eliminate property damage and loss of life. A more detail overview and draft version of the plan can be found on www.southsidepdc.org by clicking on "Hazard Mitigation" under the "Services" dropdown menu on the homepage.

I'm writing you today with the hopes that the Town of Alberta will choose to participate in the update process as we have not heard from town officials during previous outreach attempts. Please note that I am more than willing to meet with you at your convenience to discuss this matter is greater detail and get the town caught up on the update process. Additionally, there is a public meeting scheduled for January 15th at 5:00 p.m. at the Southside Planning District Commission office in South Hill that you or another town representative could attend to learn more. However, if the Town of Alberta is not interested in participating in the Regional Hazard Mitigation Plan please let me know in writing as soon as possible.

I wish to thank you in advance for your time and consideration on this matter. Please feel free to contact me at your earliest convenience with how the Town wishes to proceed.

Thank you,

Chad Neese
GIS Planner

cc: Linda Helm, Town Clerk

200 S. Mecklenburg Ave. ■ South Hill, VA 23970 ■ Phone (434) 447-7101 ■ Fax (434) 447-7104 ■ www.southsidepdc.org

Counties of Halifax, Mecklenburg and Brunswick – Town of South Boston – Town of South Hill
Towns of Alberta, Brodnax, Chase City, Clarksville, Halifax, LaCrosse, Lawrenceville, Scottsburg, and Virgilina

January 7, 2020 – County Extension Offices (Brunswick, Halifax, and Mecklenburg)
Email sent to the local County Extension offices to apprise them of the Hazard Mitigation Plan update, provide links to the SPDC website for additional information (including a draft of the plan), and to let them know that any data they had concerning crop damage as the result of droughts, flooding, etc. that they could share would be appreciated.

January 13, 2020 – Town of Chase City

Meeting to bring new town manager (Dusty Forbes) up-to-date on the Hazard Mitigation Plan, review mitigation actions, and visit problem areas around the town.

Attending: Dusty Forbes (Chase City) and Chad Neese (SPDC)

Appendix

C

FEMA's Schedule of Equipment Rates - 2019

FEMA's SCHEDULE OF EQUIPMENT RATES

DEPARTMENT OF HOMELAND SECURITY
FEDERAL EMERGENCY MANAGEMENT AGENCY
RECOVERY DIRECTORATE
PUBLIC ASSISTANCE DIVISION
WASHINGTON, DC 20472

The rates on this Schedule of Equipment Rates are for applicant owned equipment in good mechanical condition, complete with all required attachments. Each rate covers all costs eligible under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. § 5121, et seq., for ownership and operation of equipment, including depreciation, overhead, all maintenance, field repairs, fuel, lubricants, tires, OSHA equipment and other costs incidental to operation. Standby equipment costs are not eligible.

Equipment must be in actual operation performing eligible work in order for reimbursement to be eligible. LABOR COSTS OF OPERATOR ARE NOT INCLUDED in the rates and should be approved separately from equipment costs.

Information regarding the use of the Schedule is contained in 44 CFR § 206.228 Allowable Costs. Rates for equipment not listed will be furnished by FEMA upon request. Any appeals shall be in accordance with 44 CFR § 206.206 Appeals.

THESE RATES ARE APPLICABLE TO MAJOR DISASTERS AND EMERGENCIES DECLARED BY THE PRESIDENT ON OR AFTER August 15, 2019.

FEMA Code ID		Equipment Description					
Cost Code	Equipment	Specifications	Capacity or Size	HP	Notes	Unit	2019 Updated Rate
8010	Air Compressor	Air Delivery	41 CFM	to 10	Hoses included.	hour	$ 1.62
8011	Air Compressor	Air Delivery	103 CFM	to 30	Hoses included.	hour	$ 9.86
8012	Air Compressor	Air Delivery	130 CFM	to 50	Hoses included.	hour	$ 12.49
8013	Air Compressor	Air Delivery	175 CFM	to 90	Hoses included.	hour	$ 20.98
8014	Air Compressor	Air Delivery	400 CFM	to 145	Hoses included.	hour	$ 32.13
8015	Air Compressor	Air Delivery	575 CFM	to 230	Hoses included.	hour	$ 57.05
8016	Air Compressor	Air Delivery	1100 CFM	to 355	Hoses included.	hour	$ 95.60
8017	Air Compressor	Air Delivery	1600 CFM	to 500	Hoses included.	hour	$ 98.55
8040	Ambulance			to 150		hour	$ 28.09
8041	Ambulance			to 210		hour	$ 41.18
8050	Board, Arrow			to 8	Trailer Mounted.	hour	$ 4.53
8051	Board, Message			to 5	Trailer Mounted.	hour	$ 11.60
8060	Auger, Portable	Hole Diameter	16 In	to 6		hour	$ 2.34
8061	Auger, Portable	Hole Diameter	18 In	to 13		hour	$ 4.65
8062	Auger, Tractor Mntd	Max. Auger Diameter	36 In	to 13	Includes digger, boom and mounting hardware.	hour	$ 3.25
8063	Auger, Truck Mntd	Max. Auger Size	24 In	to 100	Includes digger, boom and mounting hardware. Add this rate to tractor rate for total auger and tractor rate.	hour	$ 34.93
8064	Hydraulic Post Driver					hour	$ 35.27
8065	Auger	Horizontal Directional Boring Machine	250 X 100	300	DD-140B YR-2003	hour	$ 172.29
8066	Auger	Horizontal Directional Boring Machine	50 X 100	24	Average to 7,000 lbs	hour	$ 33.83
8067	Auger, Directional Boring Machine	Auger, Directional Boring Machine	7,000 - 10,000 lbs	45	JT920L (2013)	hour	$ 41.04
8068	Bush Hog	Bush Hog - Model 326	Single Spindle Rotary Cutters			hour	$ 20.61
8068-1	Bush Hog	Bush Hog - Model 3210	Lift, Pull, Semi-Mount & Offset Model			hour	$ 28.74
8068-2	Bush Hog	Bush Hog - Model 2815	Flex Wing Rotary Cutters			hour	$ 43.17
8070	Automobile			to 130	Transporting people.	mile	$ 0.545
8071	Automobile			to 130	Transporting cargo.	hour	$ 12.43
8072	Automobile, Police			to 250	Patrolling.	mile	$ 0.545
8073	Automobile, Police			to 250	Stationary with engine running.	hour	$ 16.05
8075	Motorcycle, Police					mile	$ 0.505
8076	Automibile - Chevy Trailblazer	6 or 8 cl		285 to 300		hour	$ 23.99
8077	Automobile - Ford Expedition	Fire Command Center	EcoBoost V-6	360	2015 Model	hour	$ 19.62
8078	MRAP Armored Rescue Vehicle	Search and Rescue	Military Suplus Vehicle	375-450	Qualified foe operational rate on	Hr.	$ 51.80
8079	MRAP C-MTV	Multi-Theater (Military Surplus)Vehicle	gvwr 55000 Lbs	to 350	Qualified foe operational rate on	Hr.	$ 48.35

8080	All Terrain Vehicle (ATV)	Engine 110cc, 4-Wheel; 20" tyre		6.5-7.5		hour	$ 8.23
8081	All Terrain Vehicle (ATV)	Engine 125cc, 4-Wheel; 21" tyre		7.6-8.6		hour	$ 8.67
8082	All Terrain Vehicle (ATV)	Engine 150cc, 4-Wheel; 22" tyre		9.0-10.0		hour	$ 8.68
8083	All Terrain Vehicle (ATV)	Engine 200cc, 4-Wheel; 24" tyre		12-14.0		hour	$ 9.23
8084	All Terrain Vehicle (ATV)	Engine 250cc, 4-Wheel; 24" tyre		15-17		hour	$ 9.81
8085	All Terrain Vehicle (ATV)	Engine 300cc, 4-Wheel; 24" tyre		18-20		hour	$ 10.66
8086	All Terrain Vehicle (ATV)	Engine 400cc. 4-Wheel; 25" tyre		26-28		hour	$ 12.20
8087	All Terrain Vehicle (ATV)	Engine 450cc, 4-Wheel; 25" tyre		26-28		hour	$ 13.07
8088	All Terrain Vehicle (ATV)	Engine 650cc, 4-Wheel; 25" tyre		38-40		hour	$ 13.86
8089	All Terrain Vehicle (ATV)	Engine 750cc, 4-Wheel; 25" tyre		44-46		hour	$ 14.79
8110	Barge, Deck	Size	50'x35'x7.25'	0	Push by Tug-Boat	hour	$ 52.00
8111	Barge, Deck	Size	50'x35'x9'	0	Push by Tug-Boat	hour	$ 61.96
8112	Barge, Deck	Size	120'x45'x10'	0	Push by Tug-Boat	hour	$ 109.97
8113	Barge, Deck	Size	160'x45'x11"	0	Push by Tug-Boat	hour	$ 136.90
8120	Boat, Tow	Size	55'x20'x5'	to 870	Steel.	hour	$ 352.71
8121	Boat, Tow	Size	60'x21'x5'	to 1050	Steel.	hour	$ 400.32
8122	Boat, Tow	Size	70'x30'x7.5'	to 1350	Steel.	hour	$ 624.56
8123	Boat, Tow	Size	120'x34'x8'	to 2000	Steel.	hour	$ 1,181.86
8124	Airboat	815AGIS Airboat w/spray unit	15'x8'	400		hour	$ 32.70
8125	Airboat	815AGIS Airboat w/spray unit	15'x8'	425		hour	$ 33.06
8126	Swamp Buggy	Conquest		360		hour	$ 41.35
8130	Boat, Row			0	Heavy duty.	hour	$ 1.46
8131	Boat, Runabout	Size	13'x5'	to 50	Outboard.	hour	$ 12.55
8132	Boat, Tender	Size	14'x7'	to 100	Inboard with 360 degree drive.	hour	$ 16.58
8133	Boat, Push	Size	45'x21'x6'	to 435	Flat hull.	hour	$ 235.03
8134	Boat, Push	Size	54'x21'x6'	to 525	Flat hull.	hour	$ 290.74
8135	Boat, Push	Size	58'x24'x7.5'	to 705	Flat hull.	hour	$ 355.70
8136	Boat, Push	Size	64'x25'x8'	to 870	Flat hull.	hour	$ 359.36
8140	Boat, Tug	Length	16 Ft	to 100		hour	$ 47.35
8141	Boat, Tug	Length	18 Ft	to 175		hour	$ 70.55
8142	Boat, Tug	Length	26 Ft	to 250		hour	$ 90.10
8143	Boat, Tug	Length	40 Ft	to 380		hour	$ 215.09
8144	Boat, Tug	Length	51 Ft	to 700		hour	$ 302.01
8145	Jet Ski	3-seater				hour	$ 27.70
8146	Jet Ski					hour	$ 8.60
8147	Boat, Inflatable Rescue Raft	Zodiac		0		hour	$ 1.13
8148	Boat, Runabout	1544 lbs	11 passenger capacity	190-250		hour	$ 65.51
8149	Boat, removable engine	2000 Johnson Outboard Motor w 15" shaft		15		hour	$ 1.58
8151	Broom, Pavement	Broom Length	96 In	to 100		hour	$ 30.41
8153	Broom, Pavement, Mntd	Broom Length	72 In	to 18	Add Prime Mover cost for total rate	hour	$ 6.24
8154	Broom, Pavement, Pull	Broom Length	84 In	to 20	Add Prime Mover cost for total rate	hour	$ 23.75
8155	Broom, Pavement	Broom Length	72 In	to 35		hour	$ 25.28
8157	Sweeper, Pavement			to 110		hour	$ 78.79
8158	Sweeper, Pavement			to 230		hour	$ 102.03
8180	Bus			to 150		hour	$ 21.60
8181	Bus			to 210		hour	$ 25.82
8182	Bus			to 300		hour	$ 39.65
8183	Blower	Gasoline powered Toro Pro Force		27		hour	$ 15.40
8183x	Mosquito Sprayer	2015 Adapco Guardian 95 ES	15-gal; 350 lbs			hour	$ 18.83
8184	Back-Pack Blower			to 4.4		hour	$ 1.53
8185	Walk-Behind Blower			13		hour	$ 6.83
8187	Chainsaw	Bar Length = 20 in	3.0 cu in	2.7		hour	$ 1.91
8188	Chainsaw	Bar Length = 20 in	5.0 cu in			hour	$ 2.59
8189	Chainsaw	Bar Length = 20 in	6.0 cu in	3.4		hour	$ 2.77

8190	Chain Saw	Bar Length = 16 in	2.5 cu in	2.4		hour	$ 1.80
8191	Chain Saw (STIHL)	Bar Length = 25 in	7.5 cu in	3.62		hour	$ 3.73
8192	Chain Saw, Pole	Bar Length = 18 in	4.0 cu in	3.2		hour	$ 2.10
8193	Skidder	model 748 E		to 173		hour	$ 56.25
8194	Skidder	model 648 G11		to 177		hour	$ 105.44
8195	Cutter, Brush	Cutter Size	8 ft	to 150		hour	$ 119.52
8196	Cutter, Brush	Cutter Size	8 ft	to 190		hour	$ 134.74
8197	Cutter, Brush	Cutter Size	10 ft	to 245		hour	$ 142.31
8198	Bruncher Cutter	Cutter, Brush - 247 hp, 1997 Model 511 Feller		to 247		hour	$ 193.95
8199	Log Trailer	40 ft		0		hour	$ 10.15
8200	Chipper, Brush	Chipping Capacity	6 In	to 35	Trailer Mounted.	hour	$ 8.97
8201	Chipper, Brush	Chipping Capacity	9 In	to 65	Trailer Mounted.	hour	$ 17.06
8202	Chipper, Brush	Chipping Capacity	12 In	to 100	Trailer Mounted.	hour	$ 24.89
8203	Chipper, Brush	Chipping Capacity	15 In	to 125	Trailer Mounted.	hour	$ 35.75
8204	Chipper, Brush	Chipping Capacity	18 In	to 200	Trailer Mounted.	hour	$ 50.41
8208	Loader - Tractor - Knuckleboom	model Barko 595 ML		to 173		hour	$ 169.74
8209	Loader - Wheel	model 210 w/ Buck Saw 50 inch Bar		to 240		hour	$ 98.48
8210	Clamshell & Dragline, Crawler		149,999 lbs	to 235	Bucket not included in rate.	hour	$ 134.68
8211	Clamshell & Dragline, Crawler		250,000 lbs	to 520	Bucket not included in rate.	hour	$ 178.82
8212	Clamshell & Dragline, Truck			to 240	Bucket not included in rate.	hour	$ 147.05
8218	BOMAG Compactor	BW100AD-3		33		Hour	$ 24.80
8219	Compactor -2-Ton Pavement Roller	Single Drum Vibratoty Compactor	to 2.9 Ton	28		hour	$ 28.72
8220	Compactor			to 10		hour	$ 15.92
8221	Compactor, towed, Vibratory Drum			to 45	Plus tow Truck	hour	$ 33.56
8222	Compactor, Vibratory, Drum			to 75		hour	$ 24.09
8223	Compactor, pneumatic, wheel			to 100		hour	$ 26.90
8225	Compactor, Sanitation			to 300		hour	$ 96.11
8226	Compactor, Sanitation			to 400		hour	$ 154.63
8227	Compactor, Sanitation			535		hour	$ 264.25
8228	Compactor, towed, Pneumatic, Wheel	Hercules PT-11,	10,000 lbs		11-Wheels (Towed)	hour	$ 18.48
8229	Compactor,Towed Steel Drum Static Compactor	GTD-54120	20,000 lbs		Grid Drum (Towed)	hour	$ 16.22
8240	Feeder, Grizzly			to 35		hour	$ 25.47
8241	Feeder, Grizzly			to 55		hour	$ 33.55
8242	Feeder, Grizzly			to 75		hour	$ 65.18
8250	Dozer, Crawler	Deere 450J LT		to 75		hour	$ 54.20
8251	Dozer, Crawler	Deere 650K LGP; ROPS/FOPS		to 105		hour	$ 65.14
8252	Dozer, Crawler			to 160		hour	$ 98.77
8253	Dozer, Crawler			to 250		hour	$ 153.35
8254	Dozer, Crawler			to 360		hour	$ 218.47
8255	Dozer, Crawler	Make/Model: CAT D10T (disc. 2014); Protection: EROPS; Type Semi-U		to 574		hour	$ 317.49
8256	Dozer, Crawler			to 850		hour	$ 358.48
8260	Dozer, Wheel			to 300		hour	$ 66.26
8261	Dozer, Wheel			to 400		hour	$ 101.22
8262	Dozer, Wheel			to 500		hour	$ 184.08
8263	Dozer, Wheel			to 625		hour	$ 239.31
8269	Box Scraper	3 hitch attach for tractor; 2007 Befco		0		hour	$ 3.65
8270	Bucket, Clamshell	Capacity	1.0 CY	0	Includes teeth. Does not include Clamshell & Dragline	hour	$ 4.64
8271	Bucket, Clamshell	Capacity	2.5 CY	0	Includes teeth. Does not include Clamshell & Dragline	hour	$ 8.81
8272	Bucket, Clamshell	Capacity	5.0 CY	0	Includes teeth. Does not include Clamshell & Dragline	hour	$ 13.19
8273	Bucket, Clamshell	Capacity	7.5 CY	0	Includes teeth. Does not include Clamshell & Dragline	hour	$ 23.31
8275	Bucket, Dragline	Capacity	2.0 CY	0	Does not include Clamshell & Dragline	hour	$ 3.98
8276	Bucket, Dragline	Capacity	5.0 CY	0	Does not include Clamshell & Dragline	hour	$ 9.93

8277	Bucket, Dragline	Capacity	10 CY	0	Does not include Clamshell & Dragline	hour	$ 14.19
8278	Bucket, Dragline	Capacity	14 CY	0	Does not include Clamshell & Dragline	hour	$ 18.72
8280	Excavator, Hydraulic	Bucket Capacity	0.5 CY	to 45	Crawler, Truck & Wheel. Includes bucket.	hour	$ 18.97
8281	Excavator, Hydraulic	Bucket Capacity	1.0 CY	to 90	Crawler, Truck & Wheel. Includes bucket.	hour	$ 36.06
8282	Excavator, Hydraulic	Bucket Capacity	1.5 CY	to 160	Crawler, Truck & Wheel. Includes bucket.	hour	$ 55.30
8283	Excavator, Hydraulic	Bucket Capacity	2.5 CY	to 265	Crawler, Truck & Wheel. Includes bucket.	hour	$ 158.86
8284	Excavator, Hydraulic	Bucket Capacity	4.5 CY	to 420	Crawler, Truck & Wheel. Includes bucket.	hour	$ 264.64
8285	Excavator, Hydraulic	Bucket Capacity	7.5 CY	to 650	Crawler, Truck & Wheel. Includes bucket.	hour	$ 304.91
8286	Excavator, Hydraulic	Bucket Capacity	12 CY	to 1000	Crawler, Truck & Wheel. Includes bucket.	hour	$ 466.41
8287	Excavator	2007 model Gradall XL3100 III		184		hour	$ 102.62
8288	Excavator	2003 model Gradall XL4100 III		238		hour	$ 117.66
8289	Excavator	2006 model Gradall XL5100		230		hour	$ 109.03
8290	Trowel, Concrete	Diameter	48 In	to 12		hour	$ 4.94
8300	Fork Lift	Capacity	6000 Lbs	to 60		hour	$ 14.73
8301	Fork Lift	Capacity	12000 Lbs	to 90		hour	$ 21.12
8302	Fork Lift	Capacity	18000 Lbs	to 140		hour	$ 28.79
8303	Fork Lift	Capacity	50000 Lbs	to 215		hour	$ 63.25
8306	Fork Lift Material handler	Diesel, CAT TH360B	6600-11500 gvwr lbs	94.9	3.1- 3.5 Mton	hour	$ 44.62
8307	Fork Lift Material handler	Diesel, CAT TH460B	9000 Lbs	94.9	4.5 - 4.9 Mton	hour	$ 51.93
8308	Fork Lift Material handler	Diesel, CAT TH560B	10000 Lbs	117.5	4.5 - 4.9 Mton	hour	$ 56.14
8309	Fork Lift Accessory	2003 ACS Paddle Fork		0		hour	$ 3.53
8310	Generator	Prime Output	5.5 KW	to 10		hour	$ 5.36
8311	Generator	Prime Output	16 KW	to 25		hour	$ 7.81
8312	Generator	Prime Output	60KW	to 88		hour	$ 25.56
8313	Generator	Prime Output	100 KW	to 125		hour	$ 43.60
8314	Generator	Prime Output	150 KW	to 240		hour	$ 62.83
8315	Generator	Prime Output	210 KW	to 300		hour	$ 85.70
8316	Generator	Prime Output	280 KW	to 400		hour	$ 103.34
8317	Generator	Prime Output	350 KW	to 500		hour	$ 114.23
8318	Generator	Prime Output	530 KW	to 750		hour	$ 202.00
8319	Generator	Prime Output	710 KW	to 1000		hour	$ 225.34
8327	Generator	Prime Output	800 KW	1065		hour	$ 232.46
8328	Generator	Prime Output	900 KW	1355		hour	$ 295.15
8329	Generator	Prime Output	1000 KW	1000	Open	hour	$ 356.94
8320	Generator	Prime Output	1100 KW	1645	Open	hour	$ 393.43
8321	Generator	Prime Output	2500 KW	to 3000		hour	$ 553.78
8322	Generator	Prime Output	1,000 KW	to 1645	Enclosed	hour	$ 450.78
8323	Generator	Prime Output	1,500 KW	to 2500	Enclosed	hour	$ 583.01
8324	Generator	Prime Output	1100KW	2500	Enclosed	hour	$ 567.48
8325	Generator	Prime Output	40KW	63	Open	hour	$ 23.16
8326	Generator	Prime Output	20KW	35	Open/Closeed	hour	$ 18.05
8327	Generator Large	Prime Output	80 KW	120		Hr.	$ 31.65
8328	Generator Heavy Duty	Prime Output	2000KW		Open	Hr.	$ 490.00
8330	Graders	Moldboard Size	10 Ft	to 110	Includes Rigid and Articulate equipment.	hour	$ 43.98
8331	Graders	Moldboard Size	12 Ft	to 150	Includes Rigid and Articulate equipment.	hour	$ 63.63
8332	Graders	Moldboard Size	14 Ft	to 225	Includes Rigid and Articulate equipment.	hour	$ 80.43
8350	Hose, Discharge	Diameter	3 In	0	Per 25 foot length. Includes couplings.	hour	$ 0.16
8351	Hose, Discharge	Diameter	4 In	0	Per 25 foot length. Includes couplings.	hour	$ 0.24
8352	Hose, Discharge	Diameter	6 In	0	Per 25 foot length. Includes couplings.	hour	$ 0.62
8353	Hose, Discharge	Diameter	8 In	0	Per 25 foot length. Includes couplings.	hour	$ 0.62

8354	Hose, Discharge	Diameter	12 In	0	Per 25 foot length. Includes couplings.	hour	$ 0.92
8355	Hose, Discharge	Diameter	16 In	0	Per 25 foot length. Includes couplings.	hour	$ 1.71
8356	Hose, Suction	Diameter	3 In	0	Per 25 foot length. Includes couplings.	hour	$ 0.31
8357	Hose, Suction	Diameter	4 In	0	Per 25 foot length. Includes couplings.	hour	$ 0.37
8358	Hose, Suction	Diameter	6 In	0	Per 25 foot length. Includes couplings.	hour	$ 1.17
8359	Hose, Suction	Diameter	8 In	0	Per 25 foot length. Includes couplings.	hour	$ 1.11
8360	Hose, Suction	Diameter	12 In	0	Per 25 foot length. Includes couplings.	hour	$ 1.73
8361	Hose, Suction	Diameter	16 In	0	Per 25 foot length. Includes couplings.	hour	$ 3.29
8380	Loader, Crawler	Bucket Capacity	0.5 CY	to 32	Includes bucket.	hour	$ 19.59
8381	Loader, Crawler	Bucket Capacity	1 CY	to 60	Includes bucket.	hour	$ 36.87
8382	Loader, Crawler	Bucket Capacity	2 CY	to 118	Includes bucket.	hour	$ 69.24
8383	Loader, Crawler	Bucket Capacity	3 CY	to 178	Includes bucket.	hour	$ 103.22
8384	Loader, Crawler	Bucket Capacity	4 CY	to 238	Includes bucket.	hour	$ 123.73
8390	Loader, Wheel	Bucket Capacity	0.5 CY	to 38		hour	$ 20.80
8391	Loader, Wheel	Bucket Capacity	1 CY	to 60		hour	$ 41.33
8392	Loader, Wheel	Bucket Capacity	2 CY	to 105	CAT-926	hour	$ 38.10
8393	Loader, Wheel	Bucket Capacity	3 CY	to 152		hour	$ 46.17
8394	Loader, Wheel	Bucket Capacity	4 CY	232		hour	$ 76.27
8395	Loader, Wheel	Bucket Capacity	5 CY	255		hour	$ 79.50
8396	Loader, Wheel	Bucket Capacity	6 CY	to 305		hour	$ 116.12
8397	Loader, Wheel	Bucket Capacity	7 CY	to 360		hour	$ 129.40
8398	Loader, Wheel	Bucket Capacity	8 CY	to 530		hour	$ 188.87
8401	Loader, Tractor, Wheel	Bucket Capacity	0.87 CY	to 80	Case 580 Super L	hour	$ 37.13
8410	Mixer, Concrete Portable	Batching Capacity	10 Cft	8	Diesel Powered	hour	$ 3.13
8411	Mixer, Concrete Portable	Batching Capacity	12 Cft	11	Gasoline Powered	hour	$ 4.31
8412	Mixer, Concrete, Trailer Mntd	Batching Capacity	11 Cft	to 10		hour	$ 15.32
8413	Mixer, Concrete, Trailer Mntd	Batching Capacity	16 Cft	to 25		hour	$ 20.47
8414	Truck, Concrete Mixer	Mixer Capacity	13 CY	to 300		hour	$ 84.71
8419	Hand-Held, Pavement Breakers	Weight	25~90 Lbs	0	Air Tool/Electric Power	hour	$ 1.12
8420	Self-Propelled Pavement Breaker,			to 70-80	Self-Propelled (Diesel)	hour	$ 59.54
8421	Vibrator, Concrete	Hand Held		to 4		hour	$ 1.63
8423	Spreader, Chip	Spread Hopper Width	12.5 Ft	to 152		hour	$ 90.67
8424	Spreader, Chip	Spread Hopper Width	16.5 Ft	to 215		hour	$ 125.19
8425	Spreader, Chip, Mntd	Hopper Size	8 Ft	to 8	Trailer & truck mounted.	hour	$ 4.77
8430	Paver, Asphalt, Towed			0	Does not include Prime Mover.	hour	$ 12.67
8431	Paver, Asphalt	Crawler		to 50	Includes wheel and crawler equipment.	hour	$ 76.41
8432	Paver, Asphalt	Crawler		to 125	Includes wheel and crawler equipment.	hour	$ 96.52
8433	Paver, Asphalt	Crawler		to 175	Includes wheel and crawler equipment.	hour	$ 144.69
8434	Paver, Asphalt		35,000Lbs & Over	to 250	Includes wheel and crawler equipment.	hour	$ 224.01
8436	Pick-up, Asphalt			to 110		hour	$ 98.06
8437	Pick-up, Asphalt	Cederapids	CR MS-2	113 to 140	Asphalt-Pick-up Machine	hour	$ 140.59
8438	Pick-up, Asphalt	Blaw-Knox	MC-330	184 to 200	Asphalt-Pick-up Machine	hour	$ 189.75
8439	Pick-up, Asphalt		MTV 1000C	to 275	Asphalt-Pick-up Machine	hour	$ 214.03
8440	Striper	Paint Capacity	40 Gal	to 22		hour	$ 16.92
8441	Striper	Paint Capacity	90 Gal	to 60		hour	$ 24.24
8442	Striper	Paint Capacity	120 Gal	to 122		hour	$ 45.28
8445	Striper, Truck Mntd	Paint Capacity	120 Gal	to 460		hour	$ 83.35
8446	Striper, Walk-behind	Paint Capacity	12 Gal	5		hour	$ 4.23
8447	Paver accessory -Belt Extension	2002 Leeboy Conveyor Belt Extension	24' X 50'	0	crawler	hour	$ 33.48
8450	Plow, Snow, Grader Mntd	Width	to 10 Ft	0	Include Grader for total cost	hour	$ 28.28
8451	Plow, Snow, Grader Mntd	Width	to 14 Ft	0	Include Grader for total cost	hour	$ 33.21

8452	Plow, Truck Mntd	Width	to 15 Ft	0	Include truck for total cost	hour	$ 25.23
8453	Plow, Truck Mntd	Width	to 15 Ft	0	With leveling wing. Include truck for total cost	hour	$ 41.04
8455	Spreader, Sand	Mounting	Tailgate, Chassis	0	Truck not included	hour	$ 8.24
8456	Spreader, Sand	Mounting	Dump Body	0	Truck not included	hour	$ 10.55
8457	Spreader, Sand	Mounting	Truck (10yd)	0	Truck not included	hour	$ 13.41
8458	Spreader, Chemical	Capacity	5 CY	to 4	Trailer & truck mounted.	hour	$ 6.30
8469	Pump - Trash Pump	10 MTC	2" Pump	to 7	10,000 gph	hour	$ 7.87
8470	Pump	Centrifugal, 8M pump	2" - 10,000 gal/hr.	to 4.5	Hoses not included.	hour	$ 6.31
8471	Pump	Diaphragm pump	2" - 3,000 gal/hr.	to 6	Hoses not included.	hour	$ 6.98
8472	Pump	Centrifugal, 18M pump	3" - 18,000 gal/hr. pump	to 10	Hoses not included.	hour	$ 8.05
8473	Pump			to 15	Hoses not included.	hour	$ 12.08
8474	Pump			to 25	Hoses not included.	hour	$ 13.77
8475	Pump			to 40	Hoses not included.	hour	$ 16.98
8476	Pump	4" - 40,000 gal/hr.	4" - 40,000 gal/hr.	to 60	Hoses not included.	hour	$ 27.45
8477	Pump			to 95	Hoses not included.	hour	$ 32.77
8478	Pump			to 140	Hoses not included.	hour	$ 41.84
8479	Pump			to 200	Hoses not included.	hour	$ 50.79
8480	Pump			to 275	Does not include Hoses.	hour	$ 68.33
8481	Pump			to 350	Does not include Hoses.	hour	$ 81.66
8482	Pump			to 425	Does not include Hoses.	hour	$ 99.01
8483	Pump			to 500	Does not include Hoses.	hour	$ 117.21
8484	Pump			to 575	Does not include Hoses.	hour	$ 136.53
8485	Pump			to 650	Does not include Hoses.	hour	$ 154.88
8486	Aerial Lift, Truck Mntd	Max. Platform Height	40 Ft		Add this rate to truck rate for total lift and truck rate	hour	$ 11.63
8487	Aerial Lift, Truck Mntd	Max. Platform Height	61 Ft		Add this rate to truck rate for total lift and truck rate	hour	$ 21.99
8488	Aerial Lift, Truck Mntd	Max. Platform Height	80 Ft		Add this rate to truck rate for total lift and truck rate	hour	$ 39.80
8489	Aerial Lift, Truck Mntd	Max. Platform Load - 600Lbs	81 Ft -100 Ft. Ht.		Articulated and Telescoping. Add this rate to truck rate for total lift and truck rate	hour	$ 42.16
8490	Aerial Lift, Self-Propelled	Max. Platform Height	37 Ft. Ht.	to 15	Articulated, Telescoping, Scissor.	hour	$ 9.02
8491	Aerial Lift, Self-Propelled	Max. Platform Height	60 Ft. Ht.	to 30	Articulated, Telescoping, Scissor.	hour	$ 17.39
8492	Aerial Lift, Self-Propelled	Max. Platform Height	70 Ft. Ht.	to 50	Articulated, Telescoping, Scissor.	hour	$ 31.57
8493	Aerial Lift, Self-Propelled	Max. Platform Height	125 Ft. Ht.	to 85	Articulated and Telescoping.	hour	$ 56.70
8494	Aerial Lift, Self-Propelled	Max. Platform Height	150 Ft. Ht.	to 130	Articulated and Telescoping.	hour	$ 73.90
8495	I.C. Aerial Lift, Self-Propelled	Max. Platform Load - 500 Lbs	75"x155", 40Ft Ht.	to 80	2000 Lbs Capacity	hour	$ 29.71
8496	Crane, Truck Mntd	Max. Lift Capacity	24000 Lbs	0	Include truck rate for total cost	hour	$ 16.54
8497	Crane, Truck Mntd	Max. Lift Capacity	36000 Lbs	0	Include truck rate for total cost	hour	$ 23.17
8498	Crane, Truck Mntd	Max. Lift Capacity	60000 Lbs	0	Include truck rate for total cost	hour	$ 37.46
8499	Pump - Trash-Pump	CPB Rating - 10MTC	10000 gal/Hr	7	Self- Priming Trash Pump	hour	$ 7.76
8500	Crane	Max. Lift Capacity	8 MT	to 80		hour	$ 40.75
8501	Crane	Max. Lift Capacity	15 MT	to 150		hour	$ 67.83
8502	Crane	Max. Lift Capacity	50 MT	to 200		hour	$ 93.95
8503	Crane	Max. Lift Capacity	70 MT	to 300		hour	$ 180.23
8504	Crane	Max. Lift Capacity	110 MT	to 350		hour	$ 258.23
8510	Saw, Concrete	Blade Diameter	14 In	to 14		hour	$ 7.62
8511	Saw, Concrete	Blade Diameter	26 In	to 35		hour	$ 12.47
8512	Saw, Concrete	Blade Diameter	48 In	to 65		hour	$ 26.81
8513	Saw, Rock	Blade Diameter		to 100		hour	$ 35.13
8514	Saw, Rock	Blade Diameter		to 200		hour	$ 68.85
8517	Jackhammer (Dry)	Weight Class	25-45 Lbs	0	Pneumatic Powered	hour	$ 1.77
8518	Jackhammer (Wet)	Weight Class	30-55 Lbs	0	Pneumatic Powered	hour	$ 2.02
8521	Scraper	Scraper Capacity	15 CY	to 262		hour	$ 133.80
8522	Scraper	Scraper Capacity	22 CY	to 365		hour	$ 174.30
8523	Scraper	Scraper Capacity	34 CY	to 500		hour	$ 322.77

8524	Scraper	Scraper Capacity	44 CY	to 604		hour	$ 354.84
8540	Loader, Skid-Steer	Operating Capacity	976 - 1250 Lbs	to 36		hour	$ 26.83
8541	Loader, Skid-Steer	Operating Capacity	1751 - 2200 Lbs	to 66		hour	$ 35.47
8542	Loader, Skid-Steer	Operating Capacity	2901 to 3300 Lbs	to 81		hour	$ 38.72
8550	Snow Blower, Truck Mntd	Capacity	600 Tph	to 75	Does not include truck	hour	$ 35.39
8551	Snow Blower, Truck Mntd	Capacity	1400 Tph	to 200	Does not include truck	hour	$ 94.72
8552	Snow Blower, Truck Mntd	Capacity	2000 Tph	to 340	Does not include truck	hour	$ 143.88
8553	Snow Blower, Truck Mntd	Capacity	2500 Tph	to 400	Does not include truck	hour	$ 156.93
8558	Snow Thrower, Walk Behind	Cutting Width	25 in	to 5		hour	$ 2.97
8559	Snow Thrower, Walk Behind	Cutting Width	60 in	to 15		hour	$ 14.47
8560	Snow Blower	Capacity	2,000 Tph	to 400		hour	$ 234.49
8561	Snow Blower	Capacity	2,500 Tph	to 500		hour	$ 256.20
8562	Snow Blower	Capacity	3,500 Tph	to 600		hour	$ 285.56
8563	The Vammas 4500	Snow Remover	26ft Plow, 20ft Broom + Airblast	428	Equip with Plow & Broom	hour	$ 260.00
8564	The Vammas 5500	RM300	96"W x 20"D	350	Soil Stabilization, Reclaimer	hour	$ 212.00
8565	Oshkosh Pavement Sweeper	H-Series		420	Equip with Broom	hour	$ 229.00
8569	Dust Control De-Ice Unit	1300-2000 gal	173"Lx98"Wx51"H	5.5	Hydro Pump w/100' 1/2" hose	hour	$ 3.54
8570	Loader-Backhoe, Wheel	Loader Bucket Capacity	0.5 CY	to 40	Loader and Backhoe Buckets included.	hour	$ 23.95
8571	Loader-Backhoe, Wheel	Loader Bucket Capacity	1 CY	to 70	Loader and Backhoe Buckets included.	hour	$ 33.36
8572	Loader-Backhoe, Wheel	Loader Bucket Capacity	1.5 CY	to 95	Loader and Backhoe Buckets included.	hour	$ 43.46
8573	Loader-Backhoe, Wheel	Loader Bucket Capacity	1.75 CY	to 115	Loader and Backhoe Buckets included.	hour	$ 49.55
8580	Distributor, Asphalt	Tank Capacity Mounted on Trailer	550 Gal	16	burners, insulated tank, and circulating spray bar.	hour	$ 14.97
8581	Distributor, Asphalt	Tank Capacity Mounted on Trailer	1000 Gal	38	Truck Mounted. Includes burners, insulated tank, and circulating spray bar. Include truck rate.	hour	$ 22.45
8582	Distributor, Asphalt	Tank Capacity Mounted on Truck	4000 Gal		Truck Mounted. Includes burners, insulated tank, and circulating spray bar. Include truck rate.	hour	$ 32.52
8583	Distributor	ETNYRE Oil Distributor Model - PB348		300		hour	$ 43.57
8584	Distributor	ETNYRE Quad Chip Spreader		280		hour	$ 90.67
8590	Trailer, Dump	Capacity	20 CY	0	Does not include Prime Mover.	hour	$ 13.13
8591	Trailer, Dump	Capacity	30 CY	0	Does not include Prime Mover.	hour	$ 13.37
8600	Trailer, Equipment	Capacity	30 Tons	0		hour	$ 16.71
8601	Trailer, Equipment	Capacity	40 Tons	0		hour	$ 18.49
8602	Trailer, Equipment	Capacity	60 Tons	0		hour	$ 19.30
8603	Trailer, Equipment	Capacity	120 Tons	0		hour	$ 30.52
8610	Trailer, Water	Tank Capacity	4000 Gal	0	Includes a centrifugal pump with sump and a rear spraybar.	hour	$ 15.85
8611	Trailer, Water	Tank Capacity	6000 Gal	0	Includes a centrifugal pump with sump and a rear spraybar.	hour	$ 19.49
8612	Trailer, Water	Tank Capacity	10000 Gal	0	Includes a centrifugal pump with sump and a rear spraybar.	hour	$ 22.76
8613	Trailer, Water	Tank Capacity	14000 Gal	0	Includes a centrifugal pump with sump and a rear spraybar.	hour	$ 28.39
8614	Truck- Water Tanker	1000 gal. tank		175		hour	$ 35.84
8620	Tub Grinder			to 440		hour	$ 98.30
8621	Tub Grinder			to 630		hour	$ 148.62
8622	Tub Grinder			to 760		hour	$ 189.56
8623	Tub Grinder			to 1000		hour	$ 332.79
8627	Horizontal Grinder	Model HG6000		630		hour	$ 59.12
8628	Stump Grinder	1988 Vermeer SC-112		102		hour	$ 48.59
8629	Stump Grinder	24" grinding wheel		110		hour	$ 46.31
8630	Sprayer, Seed	Working Capacity	750 Gal	to 30	Trailer & truck mounted. Does not include Prime Mover.	hour	$ 14.78
8631	Sprayer, Seed	Working Capacity	1250 Gal	to 50	Trailer & truck mounted. Does not include Prime Mover.	hour	$ 19.74
8632	Sprayer, Seed	Working Capacity	3500 Gal	to 115	Trailer & truck mounted. Does not include Prime Mover.	hour	$ 32.52
8633	Mulcher, Trailer Mntd	Working Capacity	7 TPH	to 35		hour	$ 15.59

8634	Mulcher, Trailer Mntd	Working Capacity	10 TPH	to 55		hour	$	23.12
8635	Mulcher, Trailer Mntd	Working Capacity	20 TPH	to 120		hour	$	33.58
8636	Scraper	Soil Recycler WR 2400	w 317 gal fuel tank	563		hour	$	265.76
8637	Trailer CAT	Double Belly Bottom-dump Trailer	26 CY of soil in one dump	330	13 CY of soil each berry	hour	$	95.10
8638	Rake	Barber Beach Sand Rake 600HDr, towed		0	Towed by Beach vehicle	hour	$	15.78
8639	Chipper	Wildcat 626 Cougar Trommel Screen chipper w belt		125		hour	$	35.38
8640	Trailer, Office	Trailer Size	8' x 24'	0	Cargo Size 16ft	hour	$	2.31
8641	Trailer, Office	Trailer Size	8' x 32'	0	Cargo Size 24ft	hour	$	2.76
8642	Trailer, Office	Trailer Size	10' x 32'	0	Cargo Size 20ft	hour	$	3.69
8643	Trailer	Haz-Mat Equipment trailer	8'x18'	0	Move by Tractor to Location	hour	$	38.88
8644	Trailer, Covered Utility Trailer	(7' X 16')		0	Move by Tractor to Location	hour	$	5.88
8645	Trailer, Dodge Ram	8' x 24' shower trailer- 12 showers		101		hour	$	30.33
8646	Trailer, Dodge	8' x 32' flatbed water	25,000 MGVW	200	4x2-Axle	hour	$	28.60
8650	Trencher			to 40	Walk-behind, Crawler & Wheel Mounted. Chain and Wheel.	hour	$	16.91
8651	Trencher			to 85	Walk-behind, Crawler & Wheel Mounted. Chain and Wheel.	hour	$	29.53
8654	Trencher accessories	2008 Griswold Trenchbox		0		hour	$	1.96
8660	Plow, Cable	Plow Depth	24 in	to 30		hour	$	13.77
8661	Plow, Cable	Plow Depth	36 in	to 65		hour	$	40.07
8662	Plow, Cable	Plow Depth	48 in	to 110		hour	$	44.60
8670	Derrick, Hydraulic Digger	Max. Boom = 60 Ft, 12,000 Ft-Lb Hydraulic	Lift Capacity 15,500 Lbs	275	Includes hydraulic pole alignment attachment. Include truck rate	hour	$	35.07
8671	Derrick, Hydraulic Digger	Max. Boom = 90 Ft, 14000 Ft-Lb Hydraulic	Lift Capacity 26,700 Lbs	310	Includes hydraulic pole alignment attachment. Include truck rate	hour	$	56.12
8672	Movax SP-60	28-32 ton Head	134KW	178	Sonic Sidegrip Vibratory Pile Driver	Hour	$	109.20
8680	Truck, Fire -Industrial -112Ft Ladder Aerial Platform	Pump/Tank Capacity	3000gpm/1000 gal Water or Foam	600	2-1000gpm Nozzles 1-Each side of Platform	Hour	$	198.30
8681	Truck, Fire, Engine Type-1	Pump/Tank Capacity	1000GPM/300gal		Engine, with Pump & Roll	hour	$	140.00
8682	Truck, Fire, Engine Type-2	Pump/Tank Capacity	500GPM/300gal		Engine, with Pump & Roll	hour	$	132.00
8683	Truck, Fire, Ladder(48ft)(Type-III)	Pump/Tank Capacity	150gpm/500gal,	115-149	Hose 1-1/2"D 500' Long	hour	$	119.30
8684	Truck, Fire, Aerial (Cummins IXL9)100Ft Ladder	Pump/Tank Capacity	2000gpm/500gal	450	1500gpm Monitor/nozzle	hour	$	178.00
8685	Truck, Fire, Ladder(48ft)(Type-I)	Pump/Tank Capacity	1000gpm/400gal, 500gpm Master Stream	200-250	Hose 2-1/2"D 1200' Long	hour	$	154.00
8686	Truck, Fire, Ladder(48ft)(Type-II)	Pump/Tank Capacity	500gpm/300gal,	100-199	Hose 2-1/2"D 1000' Long	hour	$	131.50
8687	Truck, Fire, Support Water Tender S1	Pump/Tank Capacity	300GPM/4000+gal	115-149	S1 Water Tender	hour	$	114.50
8688	Truck, Fire, Support Water Tender S2	Pump/Tank Capacity	200GPM/2500+gal		S2 Water Tender	hour	$	103.50
8689	Truck, Fire, Support Water Tender S3	Pump/Tank Capacity	200GPM/1000+gal		S3 Water Tender	hour	$	79.00
8690	Truck, Fire - Water Tender	Pump Capacity	1000 GPM @150 psi			hour	$	70.33
8691	Truck, Fire, Tanker	Pump/Tank Capacity	1250 GPM/2500 gal	500		hour	$	74.57
8692	Truck, Fire, Pumper	Pump/Tank Capacity	1500 GPM/1000 gal	500		hour	$	81.10
8693	Truck, Fire, Pumper	Pump Capacity	2000 GPM			hour	$	84.04
8694	Truck, Fire Aerial Ladder (75Ft)	Pump/Tank Capacity	1500GPM/600 gal	475		hour	$	121.00
8695	Truck, Fire Aerial Ladder (150Ft)	Ladder length	150 FT		No Platform,	hour	$	146.43
8696	Truck, Fire (Rescure)	No Ladder		330	Rescure Equipment	hour	$	96.36
8697	Truck, Fire, Tactical Water Tender T1	Pump/Tank Capacity	250GPM/2000+gal	175		hour	$	119.50
8698	Truck, Fire, Tactical Water Tender T2	Pump/Tank Capacity	250GPM/1000+gal			hour	$	102.67
8699	Truck, Fire, Engine Type-3	Pump/Tank Capacity	150GPM/500gal		Engine, with Pump & Roll	hour	$	126.50
8700	Truck, Flatbed	Maximum Gvw	15000 Lbs	to 200	Diesel Engine	hour	$	25.46
8701	Truck, Flatbed	Maximum Gvw	25000 Lbs	to 275	Gasoline Engine	hour	$	40.36
8701-1	Truck, Flatbed	Maximum Gvw	25000 Lbs	200	Diesel Engine	hour	$	28.55
8702	Truck, Flatbed	Maximum Gvw	30000 Lbs	217	Diesel Engine	hour	$	32.90
8703	Truck, Flatbed	Maximum Gvw	45000 Lbs	to 380	Diesel Engine	hour	$	52.73
8708	Trailer, semi	48ft to 53ft, flat-bed, freight, two axle	50,000+ gvwr	0		hour	$	8.67
8709	Trailer, semi	enclosed 48 ft to 53 ft, two axles	50,000+ gvwr	0	Enclosed	hour	$	9.82
8710	Trailer, semi	28ft, single axle, freight	25,000 gvwr	0		hour	$	10.01

8711	Flat bed utility trailer	6 ton		0		hour	$ 3.21
8712	Cleaner, Sewer/Catch Basin	Hopper Capacity	5 CY	50	Truck Mounted. (350 gal)	hour	$ 25.51
8713	Cleaner, Sewer/Catch Basin	Hopper Capacity	14 CY	60	Truck Mounted. (1500 Gal)	hour	$ 32.02
8714	Vactor-Combined Sewer Cleaning	800 Gal Spoils/400 Gal Water	500/800 gal	190	with water & waste Tanks	hour	$ 85.10
8714-1	Vector Combine Vaccum Truck	1500 gal Water	15 Cu Yd	330	with water & waste Tanks	hour	$ 86.94
8715	Truck, Hydro Vac	model LP555DT	36 - Hp pump	36	Towed by tractor	hour	$ 18.50
8716	Leaf Vac	Tow by Truck 22,000 cfm capacity		85	Leaf Vac + Truck Code 8811	hour	$ 52.93
8717	Truck, Vacuum	60,000 GVW		400		hour	$ 76.72
8719	Litter Picker	model 2007 Barber		0	Towed by tractor	hour	$ 9.60
8720	Truck, Dump	Struck Capacity	8 CY	to 220		hour	$ 57.70
8721	Truck, Dump	Struck Capacity	10 CY	to 320		hour	$ 72.05
8722	Truck, Dump	Struck Capacity	12 CY	to 400		hour	$ 79.62
8723	Truck, Dump	Struck Capacity	14 CY	to 400		hour	$ 77.50
8724	Truck, Dump, Off Highway	Struck Capacity	28 CY	to 450		hour	$ 136.57
8725	Truck, Dump	Struck Capacity	18 CY	to 400		hour	$ 91.65
8730	Truck, Garbage	Capacity	25 CY	to 255		hour	$ 49.79
8731	Truck, Garbage	Capacity	32 CY	to 325		hour	$ 57.06
8733	E-BAM Services	Environmental Beta Attenuation Air Monitor		0	Powered by Solar System	hour	$ 3.07
8734	Attenuator, safety	that can stop a vehicle at 60 mph		0		hour	$ 5.64
8735	Truck, Attenuator	2004 Truck Mounted for 60 mph		0		hour	$ 3.89
8736	Truck, tow	1987 Chevy Kodiak 70		175		hour	$ 28.73
8744	Van, Custom	Special Service Canteen Truck		350		hour	$ 18.35
8745	Van, step	model MT10FD		300		hour	$ 22.05
8746	Van-up to 15 passenger	light duty, class 1		225-300		hour	$ 20.48
8747	Van-up to 15 passenger	light duty, class 2		225-300		hour	$ 20.77
8748	Van-cargo	light duty, class 1		225 - 300		hour	$ 22.44
8749	Van-cargo	light duty, class 2		225-300		hour	$ 22.68
8750	Vehicle, Small			to 30		hour	$ 6.41
8753	Vehicle, Recreational			to 10		hour	$ 2.87
8754	Motor Coach	GVW=50534	56 Passenger + 1-Driver	430	Passenger Transportation	Hour	$ 63.94
8755	Golf Cart	Capacity	2 person	0	Battery operated	hour	$ 3.80
8770	Welder, Portable			to 16	Includes ground cable and lead cable.	hour	$ 4.11
8771	Welder, Portable			to 34	Includes ground cable and lead cable.	hour	$ 7.21
8772	Welder, Portable			to 50	Includes ground cable and lead cable.	hour	$ 13.66
8773	Welder, Portable			to 80	Includes ground cable and lead cable.	hour	$ 13.75
8780	Truck, Water	Tank Capacity	2500 Gal	to 175	Include pump and rear spray system.	hour	$ 31.05
8781	Truck, Water	Tank Capacity	4000 Gal	to 250	Include pump and rear spray system.	hour	$ 56.57
8788	Container & roll off truck	Roll off Truck	30 yds,	200	Roll-off-Truck only	hour	$ 23.73
8789	Truck, Tractor	1997 Freightliner F120		430		hour	$ 56.81
8790	Truck, Tractor	4 x 2	25000 lbs	to 210		hour	$ 43.43
8791	Truck, Tractor	4 x 2	35000 lbs	to 330		hour	$ 47.57
8792	Truck, Tractor	6 x 2	45000 lbs	to 360		hour	$ 52.98
8794	Truck, freight	Enclosed w/lift gate. Medium duty class 5	gvwr 16000-19500 Lbs	200	4 X 2 Axle (D)	hour	$ 27.25
8795	Truck, backhoe carrier	Three axle, class 8, heavy duty	over 33000Lbs	280		hour	$ 34.56
8796	Truck, freight	Eenclosed w/lift gate. Heavy duty, class 7	26,001 to 33,000 lbs gvwr	217	4 X 2 Axle (D)	hour	$ 31.43
8798	Truck	Tilt and roll-back, two axle, class 7 heavy duty,	to 33,000 gvwr	217	4 X 2 Axle (D)	hour	$ 32.13
8799	Truck,	Tilt and roll back, three axle. class 8 heavy duty	over 33,001+ gvwr	280	6 X 4 Axle (D)	hour	$ 42.33
8800	Truck, Pickup				When transporting people.	mile	$ 0.545
8801	Truck, Pickup	1/2-ton Pickup Truck	4x2-Axle	160		hour	$ 12.78
8802	Truck, Pickup	1-ton Pickup Truck	4x2-Axle	234		hour	$ 17.91
8803	Truck, Pickup	1 1/4-ton Pickup Truck	4x2-Axle	260		hour	$ 21.10
8804	Truck, Pickup	1 1/2-ton Pickup Truck	4x2-Axle	300		hour	$ 23.22

8805	Truck, Pickup	1 3/4-ton Pickup Truck	4x2-Axle	300		hour	$	24.85
8806	Truck, Pickup	3/4-ton Pickup Truck	4x2-Axle	165		hour	$	14.32
8807	Truck, Pickup	3/4-ton Pickup Truck	4x4-Axle	285	Crew	hour	$	22.64
8808	Truck, Pickup	1-ton Pickup Truck	4x4-Axle	340	Crew	hour	$	22.99
8809	Truck, Pickup	1 1/4-ton Pickup Truck	4x4-Axle	360	Crew	hour	$	26.55
8810	Truck, Pickup	1 1/2-ton Pickup Truck	4x4-Axle	362	Crew	hour	$	26.82
8811	Truck, Pickup	1 3/4-ton Pickup Truck	4x4-Axle	362	Crew	hour	$	27.55
8820	Skidder accessory	2005 JCB Grapple Claw		0		hour	$	1.75
8821	Forklift, accessory	2005 ACS Grapple Bucket		0		hour	$	1.56
8822	Truck, Loader	Debris/Log (Knuckleboom Loader/Truck)		230		hour	$	53.22
8823	Chipper- Wood Recycler	Cat 16 engine		700		hour	$	118.50
8824	Skidder	model Cat 525B		up to 160		hour	$	64.79
8825	Skidder	40K lbs- model Cat 525C		161 and up		hour	$	128.67
8840	Truck, service	fuel and lube	up to 26,000 gvwr	215-225		hour	$	40.19
8841	Truck, fuel	2009 International 1,800 gal. storage tank		200		hour	$	32.01
8842	Mobile Command Trailer	(8' X 28') with 7.5 KW Generator		0	Move to Location by Tractor	hour	$	14.73
8843	Mobile Response Trailer	(8' X 31') with 4.5 KW Generator?		0	Move to Location by Tractor	hour	$	13.87
8844	Mobile Command Center	(unified) (RV) Ulitimaster MP-35	43 FT Long with Generator	400		hour	$	86.10
8845	Mobile Command Post Vehicle	(RV) (In- Motion)	22-Ft Long	340		hour	$	31.55
8846	Mobile Command Post Vehicle	(RV) (Stationary) w/9.6 KW Generator	22-Ft Long	340		hour	$	20.33
8847	Mobile Command Center (Trailer)	48'x8' Trailer, Fully Equiped Mobile Command Center	48-Ft Long	0	Move to Location by Tractor	hour	$	31.69
8848	Mobile Command Center (Trailer)	48'x8' When being Moved w/Truck Tractor		310		hour	$	50.69
8849	Mobile Command Center	43'x8.5' x 13.5'H with self 30kw Generator		280	Generator Rate not included	hour	$	55.37
8850	Mobile Command Center	2007-Freightliner MT-55, (RV)		260		hour	$	47.12
8851	Mobile Command Van	1990- Ford Econoline-Communication Van		230	Communication Equipment	hour	$	42.78
8852	Mobile Command Center	47.5' X 8.75 Fully Equip' (In motion) (RV)		410		hour	$	68.04
8853	Mobile Command Center	47.5' X 8.75 Fully Equip' (Stationary)		410		hour	$	45.89
8854	Mobile Command Vehicle	53' X 8.75 Fully Equip		480-550		hour	$	98.84
8870	Light Tower	Terex/Amida AL 4000. with (4) 500 watt lights	w/10kw power unit	13.5		hour	$	11.11
8871	Light Tower	2004 Allmand				hour	$	6.93
8872	SandBagger Machine	(Spider) automatic	w/Vibration & Conveyor Motors	2-4.5		hour	$	49.42
8900	Helicopter	OH-58 KIOWA (Military) is the same as "Bell-206B3		420		hour	$	467.00
8901	Helicopter	OH-58 KIOWA (Military) is the same as "Bell-206BR		420		hour	$	489.00
8902	Helicopter	Model Bell 206-L3 Jet Range Helicopter		650	Jet Range III-Helicopter	hour	$	575.00
8903	Helicopter	Model Bell 206L1 Long Ranger		650	Long Ranger	hour	$	585.47
8904	Helicopter	Model Bell 206LT Long Range Twinranger		450	Twinranger	hour	$	763.30
8905	Helicopter	Model Bell 407 EMS- Ambulance		250		hour	$	625.35
8906	Piper-Fixed wing	Model Navajo PA-31		310		hour	$	476.60
8907	Piper-Fixed wing	PA-31-350, Navajo Chieftn twin engine		350		hour	$	507.20
8908	Sikorsky Helicopter	Model UH-60 (Blackhawk) medium lift	Medium Lift	1890	Fire Fighter Same as S70C	hour	$	2,974.45
8909	Helicopter	Model UH-A (Blackhawk) Medium lift	Medium Lift	1890	Fire Fighter	hour	$	5,559.04
8910	Boeing Helicopter	Model CH-47 (Chinook) heavy lift	Heavy Lift	2850	Fire Fighter	hour	$	10,857.50
8911	Helicopter- light utility	Model Bell 407GX - 7 seater	7-Seaters	675	Passenger Aircraft	hour	$	620.38
8912	Helicopter- light utility	Modle Bell 206L- 7 seater	7-Seaters	420	Passenger Aircraft	hour	$	607.92
8913	Helicopter	Model Bell-206L4		726		hour	$	570.24
8914	King Air 200 Turboprop Aircraft	Blackhawk King Air B200XP61		669		hour	$	1,318.11
8915	Turboprops Blackhawk Aircraft	Blackhawk Caravan XP42 A		850		hour	$	738.12
8916	Turboprops Blackhawk Aircraft	King Air C90 XP135 A		550		hour	$	1,108.33
8917	Aerostar Piston Aircraft	Aerostar 601P		290		hour	$	466.67
8918	Bell UH -1H Huey Helicopter II	Engine:1 × Lycoming T53-L-11 turboshaft		1100	Travel Range 253 Nautical Miles	hour	$	1,376.74

8943	Wire Puller Machine	Overhead Wire Pulling Machine		30	Overhead/Underground Wire Pulling Machine	hour	$ 20.16
8944	Wire Tensioning Machine	3000 Lbs			Overhead Wire Tensioning Machine	hour	$ 14.84
8945	Aerial Lift - 20 Ft High	model 2008 Genie Scissor Lift	1000 Lbs		24 Volt	hour	$ 6.44

Appendix

D

Emergency Management Equipment

Town of South Hill

Description	Brand	Kind	Attributes
1994 Champion 710A Road Grader	Champion/Volvo	Motor Grader	12' Blade, Front Ripper
2007 New Holland B95 Backhoe/Loader	New Holland	Extend-A-Hoe/Loader	Extendable Hoe/4-in-1 bucket
2008/10 International 7400/Loadmaster	International	25 Yd Rear Load Garbage	1 Cart Tipper/Dumpster Winch
Multiquip 6x6 Pump Trailer	Multiquip	1200 GPM	
Multiquip 4x4 Pump Trailer	Multiquip	450 GPM	
2007 Henderson 14' Spreader	Henderson	15 Yd Salt Spreader	Diesel Pony Motor Driven
1995 Ford F800 Generator Mounted	Cat/Olympian	150 KW w/ 4000# Crane	150kw genset for 3ph/230v + 220/110
2007 International Vaccon	International	Sewer JetVac Truck	9 cu yd Debris Body/ 1500 gal water
2015 Kubota RTV900 Utility	Kubota	Diesel ATUV	Enclosed cab
2011 Kubota RTV900 Utility	Kubota	Diesel ATUV	Cab
2012 JD 4320 Compact Tractor/Loader	John Deere	Diesel Turf Tractor	Loader w/ 4-in-1 bucket
2012 Flink 10' HYD Salt Spreader	Flink 10' Auger Feed	10 Yd Hydraulic Salt Spreader	
2007 Cat 315C L Excavator	Caterpillar	Trackhoe	18' Digging Depth
T86 2013 Kaufman HD Equipment Trailer	Kaufman	HPP-Deluxe 10 Ton/ 20 Ft Deck	Electric Brakes
2013 Volvo Tandem Dump	Volvo	Dump Truck	14-16 cu yd w/ 2 way tailgate/ 11' plow
2014 Peterbilt FEL Newway Mommoth	Peterbilt	40 Yd FEL Garbage	Commercial Front Load Dumpster
2017 JD 5075E 4x4 Utility Tractor	John Deere	W/ 7' HD Bush Hog	
2015 Flink SS 10' Spreader	Flink 10' SS Hopper	10 Yd Hydraulic Salt Spreader	
2015 CAT 914K Wheel Loader	Caterpillar	Rubber Tire Loader 2.5 cu yd	Quick Coupler – Forks 4-in-1 bucket
2016 Kaufman Equipment Trailer BLK	Kaufman	D-Deluxe 7.5 Ton/16 ft	Electric Brakes
2017 CAT 289D Skid Steer Loader	Caterpillar	Skid Steer	Enclosed cab, forks, 4-in-1 bucket
2018 Kaufman HD 26' Equip Trailer	Kaufman	Tri Axle 28 ton/26 ft	Air Brakes
2010 CAT IT14G Loader	Caterpillar	Rubber Tire Loader	Quick Coupler – Forks 4-in-1 bucket
2014 Polaris Brutus 4x4 Utility	Polaris	Diesel ATV	Full cab heat, front hyd bucket
2013 CAT 420 IT F Backhoe/Loader	Caterpillar	Backhoe/Loader	Extendable Hoe/ 4-in-1 bucket
2014 JD 5065E 4x4 Utility Tractor	John Deere	w/ 7' HD Bush Hog	
1997 Ford F800 S/A Flatbed Dump	Ford	Diesel Flatbed Dump Truck	14' bed, 5 speed manual trans w/ air brakes
2012 F450 4x4 Diesel Flatbed Dump	Ford	Diesel Flatbed Dump Truck	10' bed, removable sides
2015 Ford 550/ALTEC Bucket Truck	Ford/Altec	45' reach bucket, 330 lb. limit	
2016 Volvo Tri Axle Dump	Volvo	Diesel Dump Truck w/ Auto	14-16 yd 2-way tailgate/11' plow
2018 International 7300 SA 6yd Dump	International	Diesel Dump Truck w/ Auto	10' plow
2018 International 7300 SA 6yd Dump	International	Diesel Dump Truck w/ Auto	10' plow
2018 CAT 305 Mini-Excavator	Caterpillar	Rubber Track Mini	w/ blade, thumb, bucket rotate/tip
2019 Mack FEL Newway Mommoth	Mack	40 yd FEL Garbage	Commercial Front Load Dumpster
2019 International SA 6yd Dump	International	Diesel Dump Truck w/ Auto	11' plow

2012 Grapple Loader Truck	Freightliner	Diesel Grapple Truck	20 cu yd body
Coleman LT Tower Gen Trailer	Coleman	Diesel Light Tower/Generator	
Aries Self-Propelled Sewer Camera	Aries	Self-contained skid mount 6"+	Goes in back of ATUV or pickup
Sewer Push-Type Camera	Usemi	3" dia. and up sewer camera	

Additional Equipment:

- 10 Chain Saws (including 2 pole saws)
- 2 Message Boards
- 1 Arrow Board
- Road Barriers

Town of Clarksville

Description	Brand	Kind	Attributes
2002 F450 Bucket Truck	Ford	Bucket Truck	
1998 International Garbage Truck	International	Garbage Truck	
2013 International Garbage Truck	International	Garbage Truck	
1990 International Garbage Truck	International	Garbage Truck	
2000 International Dump Truck	International	Dump Truck	
2000 GMC Dump Truck	GMC	Dump Truck	
1995 International 4900 Dump Truck	International	Dump Truck	
2000 International Dump Truck	International	Dump Truck	
2008 Chevrolet Pickup Truck	Chevrolet	Pickup Truck	
2002 Chevrolet S-10	Chevrolet	Pickup Truck	
1998 Dodge Pickup Truck	Dodge	Pickup Truck	
2018 Nissan 4x4 Pickup Truck	Nissan	Pickup Truck	
2002 GMC Extended Cab Pickup Truck	GMC	Pickup Truck	
2017 F250 Pickup Truck	Ford	Pickup Truck	
1990 Chevrolet 2500 Life Gate/Fuel	Chevrolet	Lift Gate/Fuel	
1981 Ford Tanker Truck	Ford	Tanker Truck	
1997 Chevrolet 2500 Utility Truck	Chevrolet	Utility Truck	
2001 Dodge 2500 Utility Truck	Dodge	Utility Truck	
Schonstedt Magnetic Locator	Schonstedt	Magnetic Locator	
Pipehorn Line Locator	Pipehorn	Line Locator	
2001 Komatsu WB 140 Backhoe/Loader	Komatsu	Backhoe/Loader	
John Deere 310SL Backhoe	John Deere	Backhoe	
Termite Backhoe	Termite	Backhoe	
Stihl 029 Chainsaw	Stihl	Chainsaw	
Husqvarna 136 Chainsaw	Husqvarna	Chainsaw	
Stihl 034 Chainsaw	Stihl	Chainsaw	
Stihl MS391 Chainsaw	Stihl	Chainsaw	
Robin Post Hole Digger		Post Hole Digger	
Bandit 150XP Chipper	Bandit	Chipper	
Side Arm Crane		Side Arm Crane	
Hyster Forklift	Hyster	Forklift	
Man Basket (for Forklift)		Man Basket (for Forklift)	
Generac GP 7500E Generator	Generac	Generator	
1977 15kw Generator w/ Trailer		Generator	
Coleman 5000 Watt Generator	Coleman	Generator	
Amida AL4000 Light Tower	Amida	Light Tower	
3.5 HP Sewer Line Smoker		Sewer Line Smoker	
Pavement Cutter		Pavement Cutter	
Godwin 6" Prime Pump	Godwin	Pump	
Homelite 5 HP 3" Pump	Homelite	Pump	
Godwin 4" Pump	Godwin	Pump	
Target PO 3511 Concrete Saw	Target	Concrete Saw	

Stihl 14" T5800 Pipe Saw	Stihl	Pipe Saw	
Sign Trailer		Sign Trailer	
Snowdogg Plow	Snowdogg	Snow Plow	
Snow Plow		Snow Plow	
6' Sweepster Sweeper Broom	Sweepster	Sweeper Broom	
200 Gal. Water Tank		Water Tank	
Case JX65 Tractor	Case	Tractor	
7'x12' Trailer		Trailer	
8'x18' Trailer		Trailer	
Yellow Trailer		Trailer	
4'x6' Trailer (for Concrete Saw)		Trailer	
Waterline Tapping Machine		Waterline Tapping Machine	
Stihl 025	Stihl	Chainsaw	

Appendix

E

Participation by Jurisdiction

Y = Yes I = Invited, Did Not Participate

Jurisdiction	Planning Process	HIRA	Mitigation Strategies	Plan Review	Plan Adoption
Brunswick County	Y	Y	Y	Y	
Town of Alberta	I	I	I	I	
Town of Brodnax	Y	Y	Y	I	
Town of Lawrenceville	Y	Y	Y	Y	
Halifax County	Y	Y	Y	Y	
Town of Halifax	Y	Y	Y	Y	
Town of South Boston	Y	Y	Y	Y	
Town of Scottsburg	I	I	I	I	
Town of Virgilina	Y	Y	Y	I	
Mecklenburg County	Y	Y	Y	Y	
Town of Boydton	Y	Y	I	I	
Town of Chase City	Y	Y	Y	Y	
Town of Clarksville	Y	Y	Y	Y	
Town of La Crosse	Y	Y	Y	Y	
Town of South Hill	Y	Y	Y	Y	

Details of each meeting and outreach efforts are provided in Appendix B.

Private Wells

Item: To prohibit the installation of private wells in Town when public water is available.

Discussion:

1. The current ordinance is very ambiguous and does not give clear direction on if private wells are allowed in Town or not.

Recommendation:

1. Town Council adopt as a first reading the following change to Section 6-2-52.

(b) No private wells will be allowed in Town if public water is available.

CCPD Positions

Item: To add two new positions to the Chase City PD.

Discussion:

1. The PD is currently structured so that Sergeant is the highest position achieved.

2. By adding higher positions, employees are given incentives to stay with the Town until retirement.

Recommendation:

1. Town Council approves the addition of a Lieutenant and Corporal position to the Chase City Police Department.