Religious Organization | Educational Building | Emergency Medical Services | Government Building | Utility | National Register Historical Structure

Description: **Community assets** are historical structures listed on the National Register of Historic Places, government facilities (federal, state, local), emergency medical services (EMS), religious organizations, utilities, postsecondary educational facilities, or other buildings of significance that contribute to the *built environment* of community. A hazard vulnerability analysis of community historic/cultural should be conducted by floodplain managers and risk planners to develop mitigation strategies for these assets.

A designated historic structure can obtain the benefit of subsidized flood insurance through the NFIP even if it has been substantially improved or substantially damaged so long as the building maintains its historic designation. Although the NFIP provides relief to historic structures from having to comply with NFIP floodplain management requirements for new construction, communities and owners of historic structures should give consideration to mitigation measures that can reduce the impacts of flooding on historic structures located in Special Flood Hazard Areas (44 CFR §60.3).

Community Engagement and Verification:

Review the accuracy and completeness of all *active* **community assets**. Report any structures that are missing. Verify the buildings and location using the Table and Risk MAP View of the WV Flood Tool. Review and identify mitigation strategies for the community assets vulnerable to flooding.

Table CA-1. Essential Facility Types and Qualification Criteria for Statewide Risk Assessment

COMMUNITY ASSET	Government Buildings	EMS	Religious Organizations	Educational Facilities	Utilities	Historical Buildings
Qualification	Local, State, and Federal Buildings	Ambulances	Worship facility	Post-secondary educational facilities	Large utility structures (e.g., not small pump stations)	NR Site Points Historic District Buildings older than 1930
FEMA Lifeline Component	Government Service, Shelter	Patient Movement	Food, Water, Shelter	Shelter	Water, Health, Facility Management	

Community Lifelines: FEMA recently developed the community lifelines construct to increase effectiveness in disaster operations and better position the Agency to respond to catastrophic incidents. Community assets cover a minimum of four lifeline sectors: Safety and Security; Food, Water, Shelter; Health and Medical; and Energy (CA-1).

Community Assets: A total of 32 community assets (non-historical) were inventoried in the 1%-annual-chance floodplain for the **Region 9** Planning and Development Council (Table CA-2). **Jefferson County** (ranked 45th in the state) has the largest number of inventoried community resources (n=13) in Region 9. In the floodplain are three Shepherdstown University *post-secondary educational* buildings located in **Shepherdstown**, **Jefferson County**, the highest ranking in the State for post-secondary facilities in an incorporated area and county. **Jefferson** and **Berkeley** counties are ranked 10th in the State for the number of inventoried *utility* buildings. The city of **Martinsburg** (ranked 1st of all incorporated areas) has four utilities located in the high-risk floodplain followed by the town of **Shepherdstown** (ranked 4th of all incorporated areas).

Historical Community Assets: A total of 190 *historical buildings* were inventoried in the 1%-annual-chance floodplain for **Region 9** (Table CA-3). The data sources for the historical buildings are from the National Register *site* and *area* designations. Buildings identified within National Register Areas or registered historic districts are older than 1930. **Jefferson County** is ranked 4th in the State as having the most historical buildings (123) in the high-risk floodplain. Most of these historical buildings are in the towns of **Shepherdstown** (51) and **Harpers Ferry** (29). The unincorporated area of **Jefferson County** is ranked 1st among all unincorporated areas with 26 historical buildings followed by the unincorporated area of **Berkeley County** (18 buildings). The town of **Bath** (Berkeley Springs) in Morgan County is ranked 10th in the State for an incorporated area with the most historical buildings (47). For the most National Register Areas in the State that intersect the 1% floodplain, **Jefferson County** (23 NR Areas) is ranked first, **Berkeley County** (20) second, and **Morgan County** (2) nineteenth. For more complete information about the historical designations, refer to the National Register WV Listings.

FEMA LIFELINE RESOURCES

Bringing Lifelines into Hazard Mitigation Planning: Slides | Audio | Fact Sheet | BRIC | FEMA Website

HISTORICAL RESOURCES

Incorporating Historic Resources in Hazard Mitigation Plan: FEMA R3 Presentation | MD Guide

FEMA Technical Bulletin: Floodplain Management of Historic Structures

Map Resources: WV Flood Tool's Risk MAP View | WV SHPO GIS Viewer

National Register Listing: WV State Historic Preservation Office

Table CA-2. Community Assets vulnerable to riverine flooding.

Community Name	County	Religious Org.	Govt. Bldg.	Utility	Education	EMS	Other	Total (Non-Historical)
Berkeley County*	BERKELEY	1	0	0	0	0	0	1
Hedgesville	BERKELEY	0	0	0	0	0	0	0
Martinsburg	BERKELEY	2	1	4	0	0	0	7
SUM	**BERKELEY**	**3**	**1**	**4**	**0**	**0**	**0**	**8**
Bolivar	JEFFERSON	0	0	0	0	0	0	0
Charles Town	JEFFERSON	0	0	1	0	0	0	1
Harpers Ferry	JEFFERSON	0	1	0	0	0	0	1
Jefferson County*	JEFFERSON	2	2	1	0	0	0	5
Ranson	JEFFERSON	1	0	0	0	0	0	1
Shepherdstown	JEFFERSON	0	0	2	3	0	0	5
SUM	**JEFFERSON**	**3**	**3**	**4**	**3**	**0**	**0**	**13**
Bath	MORGAN	6	2	0	0	0	0	8
Morgan County*	MORGAN	0	1	0	0	1	0	2
Paw Paw	MORGAN	1	0	0	0	0	0	1
SUM	**MORGAN**	**7**	**3**	**0**	**0**	**1**	**0**	**11**
TOTAL		**13**	**7**	**8**	**3**	**1**	**0**	**32**

 * Unincorporated Community

Region 9 Tabular Community-Level Report Link: https://data.wvgis.wvu.edu/pub/RA/State/CL/

Table CA-3. Historical Community Assets vulnerable to riverine flooding.

Community Name	County	NR Bldg. Sites	Bldg. in Historic District (older than 1930)	Total Historic Bldgs.	# NR Areas /Districts in 1% Floodplain
Berkeley County*	BERKELEY	6	12	18	13
Hedgesville	BERKELEY	0	0	0	0
Martinsburg	BERKELEY	0	2	2	8
	BERKELEY	**6**	**14**	**20**	**20**
Bolivar	JEFFERSON	0	3	3	3
Charles Town	JEFFERSON	0	14	14	2
Harpers Ferry	JEFFERSON	1	28	29	4
Jefferson County*	JEFFERSON	3	23	26	21
Ranson	JEFFERSON	0	0	0	1
Shepherdstown	JEFFERSON	1	50	51	2
	JEFFERSON	**5**	**118**	**123**	**23**
Bath	MORGAN	2	45	47	1
Morgan County*	MORGAN	0	0	0	2
Paw Paw	MORGAN	0	0	0	0
	MORGAN	**2**	**45**	**47**	**3**
TOTAL		**13**	**177**	**190**	**46**

* Unincorporated Community

Building-Level Community Assets by Flood Depth: Community assets most vulnerable to a high-risk 1%-annual-chance (100-yr) flood event are displayed below. The flood depth grid and building damage estimates quantify the degree of risk at which facilities may be subject to the greatest flood damage.

Table CA-4. Community Assets most vulnerable to 1% Flood Depth. What is the degree of risk?

Community Name	County	Facility Name	**Facility Type**	Flood Tool Link	**Flood Depth**	Building Damage Percent
Harpers Ferry	JEFFERSON	National Park Service Information Center	**Government**	FT	31.9	78%
Shepherdstown	JEFFERSON	Shepherd's Mill	**Utilities**	FT	12.3	55%
Shepherdstown	JEFFERSON	Shepherdstown Water Works Plant	**Utilities**	FT	2.9	16%
Jefferson County*	JEFFERSON	Millville Pentecostal Church	**Religious Institution**	FT	7.1	13%
Charles Town	JEFFERSON	Wastewater Treatment Plant	**Utilities**	FT	2.1	12%
Berkeley County*	BERKELEY	Little Falls Chapel	**Religious Institution**	FT	6.4	11%
Martinsburg	BERKELEY	Holy Grace Church of God	**Religious Institution**	FT	3.4	11%
Martinsburg	BERKELEY	Roach Energy	**Utilities**	FT	3.5	10%
Martinsburg	BERKELEY	Martinsburg Sewage Treatment Plant	**Utilities**	FT	4.8	9%
Bath	MORGAN	Morgan County Courthouse	**Government**	FT	2.6	7%
Bath	MORGAN	Morgan County Public Library	**Government**	FT	2.9	7%
Shepherdstown	JEFFERSON	Shepherd University White Hall	**Education**	FT	2.0	5%
Shepherdstown	JEFFERSON	Shepherd University McMurran and Reynolds Hall	**Education**	FT	2.0	5%

* Unincorporated Community

Region 9 Tabular Building-Level Report Link: https://data.wvgis.wvu.edu/pub/RA/Region9/BLRA/2A_CommunityAsset/

Utility Facilities by Flood Depth: Utility buildings prone to a high-risk 1%-annual-chance (100-yr) flood event are displayed below. The flood depth grid and building damage estimates quantify the degree of risk at which facilities may be subject to the greatest flood damage. Located in a high-risk advisory floodplain, the **Martinsburg Sewage Treatment Plant** with an appraised value of $51,761,800 is the most expensive facility among the community assets of **Region 9**.

Table CA-5a. Utility buildings at risk of a 1% Flood. What is the degree of risk?

Community Name	County	Facility Name	Facility Type	Flood Tool Link	Flood Depth	Building Damage Percent
Shepherdstown	JEFFERSON	Shepherd's Mill	**Utilities**	FT	12.3	55%
Shepherdstown	JEFFERSON	Shepherdstown Water Works Plant	**Utilities**	FT	2.9	16%
Charles Town	JEFFERSON	Wastewater Treatment Plant	**Utilities**	FT	2.1	12%
Martinsburg	BERKELEY	Roach Energy	**Utilities**	FT	3.5	10%
Martinsburg	BERKELEY	Martinsburg Sewage Treatment Plant	**Utilities**	FT	4.8	9%
Martinsburg	BERKELEY	Kilmer Springs Water Filtration Plant	**Utilities**	FT	1.0	0%
Martinsburg	BERKELEY	Martinsburg Recycling Center	**Utilities**	FT	0.0	0%
Jefferson County*	JEFFERSON	Harper's Ferry Water Works	**Utilities**	FT	0.0	0%

  * Unincorporated Community

Educational (Post-secondary) Community Assets by Flood Depth: The following table shows the post-secondary educational facilities located in the high-risk (100-yr) floodplain of **Region 9**. All three buildings belong to **Shepherd University** in Shepherdstown, Jefferson County.

Table CA-5b. Educational (Post-secondary) buildings at risk of a 1% Flood. What is the degree of risk?

Community Name	County	Facility Name	Facility Type	Flood Tool Link	Flood Depth	Building Damage Percent
Shepherdstown	JEFFERSON	Shepherd University White Hall	**Education**	FT	2.0	5%
Shepherdstown	JEFFERSON	Shepherd University McMurran and Reynolds Hall	**Education**	FT	2.0	5%
Shepherdstown	JEFFERSON	Shepherd University Human Resources	**Education**	FT	2.0	0%

Region 9 Tabular Building-Level Report Link: https://data.wvgis.wvu.edu/pub/RA/Region9/BLRA/2A_CommunityAsset/

Historical Community Assets by Flood Depth: Historical buildings most vulnerable to a high-risk 1%-annual-chance (100-yr) flood event in each county are displayed below. The flood depth grid and building damage estimates quantify the degree of risk at which facilities may be subject to the greatest flood damage. The town of Harpers Ferry has a history of catastrophic floods and is one of the most vulnerable communities in the State.

Table CA-6a. Jefferson County Historical buildings most vulnerable to 1% Flood Depth.

Community Name	County	Historical Place	Facility Type	Flood Tool Link	Flood Depth	Building Damage Percent
Harpers Ferry	JEFFERSON	Harpers Ferry Historic District	**National Register**	FT	33.0	78%
Harpers Ferry	JEFFERSON	Harpers Ferry Historic District	**National Register**	FT	32.8	78%
Harpers Ferry	JEFFERSON	Harpers Ferry Historic District	**National Register**	FT	32.7	78%
Harpers Ferry	JEFFERSON	Harpers Ferry Historic District	**National Register**	FT	32.1	78%
Harpers Ferry	JEFFERSON	Harpers Ferry Historic District	**National Register**	FT	31.9	78%
Harpers Ferry	JEFFERSON	Harpers Ferry Historic District	**National Register**	FT	31.7	78%
Harpers Ferry	JEFFERSON	Harpers Ferry Historic District	**National Register**	FT	31.5	78%
Harpers Ferry	JEFFERSON	Harpers Ferry Historic District	**National Register**	FT	31.3	78%
Harpers Ferry	JEFFERSON	Harpers Ferry Historic District	**National Register**	FT	31.2	78%
Harpers Ferry	JEFFERSON	Harpers Ferry Historic District	**National Register**	FT	30.5	78%
Harpers Ferry	JEFFERSON	Harpers Ferry Historic District	**National Register**	FT	29.4	78%
Harpers Ferry	JEFFERSON	Harpers Ferry Historic District	**National Register**	FT	29.1	78%
Harpers Ferry	JEFFERSON	Harpers Ferry Historic District	**National Register**	FT	28.4	78%
Harpers Ferry	JEFFERSON	Harpers Ferry Historic District	**National Register**	FT	27.9	78%
Harpers Ferry	JEFFERSON	Harpers Ferry Historic District	**National Register**	FT	26.6	75%
Harpers Ferry	JEFFERSON	Harpers Ferry Historic District	**National Register**	FT	26.1	73%
Harpers Ferry	JEFFERSON	Harpers Ferry Historic District	**National Register**	FT	25.9	72%

Table CA-6b. Morgan County Historical buildings most vulnerable to 1% Flood Depth.

Community Name	County	Historical Place	Facility Type	Flood Tool Link	Flood Depth	Building Damage Percent
Bath	MORGAN	Town of Bath Historic District	**National Register**	FT	8.3	27%
Bath	MORGAN	Town of Bath Historic District	**National Register**	FT	7.8	40%
Bath	MORGAN	Town of Bath Historic District	**National Register**	FT	7.0	16%
Bath	MORGAN	Town of Bath Historic District	**National Register**	FT	6.6	37%
Bath	MORGAN	Town of Bath Historic District	**National Register**	FT	5.5	16%
Bath	MORGAN	Town of Bath Historic District	**National Register**	FT	5.0	16%
Bath	MORGAN	Town of Bath Historic District	**National Register**	FT	4.8	8%
Bath	MORGAN	Town of Bath Historic District	**National Register**	FT	4.7	17%
Bath	MORGAN	Town of Bath Historic District	**National Register**	FT	4.4	5%
Bath	MORGAN	Town of Bath Historic District	**National Register**	FT	4.2	2%

Table CA-6c. Berkeley County buildings most vulnerable to 1% Flood Depth. What is the degree of risk?

Community Name	County	Historical Place	Facility Type	Flood Tool Link	Flood Depth	Building Damage Percent
Berkeley County*	BERKELEY	Darkesville Historic District	**National Register**	FT	5.2	22%
Berkeley County*	BERKELEY	Darkesville Historic District	**National Register**	FT	4.7	13%
Martinsburg	BERKELEY	Tuscarora Creek Historic District	**National Register**	FT	2.5	11%
Martinsburg	BERKELEY	Tuscarora Creek Historic District	**National Register**	FT	2.1	14%
Berkeley County*	BERKELEY	Darkesville Historic District	**National Register**	FT	2.1	8%
Berkeley County*	BERKELEY	Mill Creek Historic District	**National Register**	FT	1.1	4%

* Unincorporated Community

National Register Areas: The historical districts with the most buildings older than 1930 are listed below. Refer to the detailed National Register report as to which buildings contribute to the historic designation.

Table CA-7. National Register Areas with the estimated highest number of historic buildings.

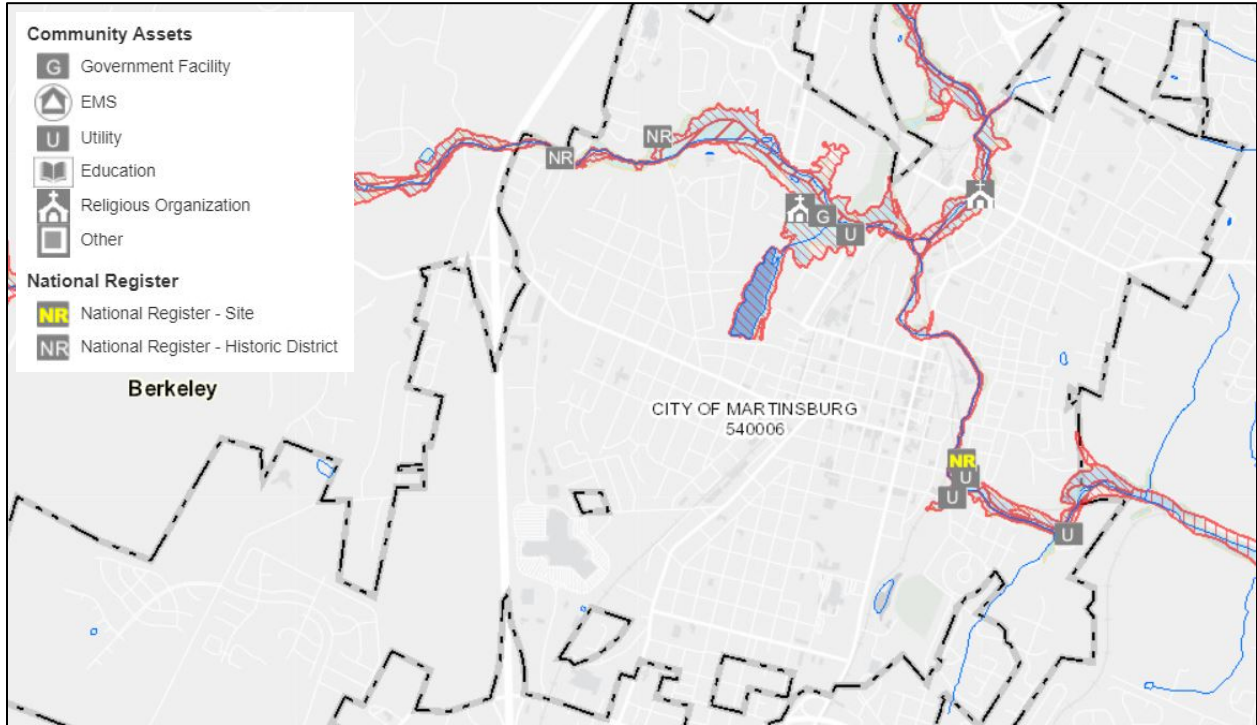| Community Name	County	Historic Name	# Bldg. Points in NR Area	Flood Tool Link
Shepherdstown	JEFFERSON	Shepherdstown Historic District (Boundary Increase)	57	[FT]
Bath	MORGAN	Town of Bath Historic District	45	[FT]
Harpers Ferry	JEFFERSON	Harpers Ferry National Historical Park	31	[FT]
Harpers Ferry	JEFFERSON	Harpers Ferry Historic District	28	[FT]
Harpers Ferry	JEFFERSON	Harpers Ferry Historic District (Additional Information)	28	[FT]
Shepherdstown	JEFFERSON	Shepherdstown Historic District	15	[FT]
Charles Town	JEFFERSON	Old Charles Town Historic District	13	[FT]
Jefferson County*	JEFFERSON	Middleway Historic District	9	[FT]
Berkeley County*	BERKELEY	Darkesville Historic District	5	[FT]
Berkeley County*	BERKELEY	Mill Creek Historic District	3	[FT]
Berkeley County*	BERKELEY	Scrabble Historic District	3	[FT]
Berkeley County*	BERKELEY	Tuscarora Creek Historic District	3	[FT]

* Unincorporated Community

Source: Region 9 National Register Name Report: https://data.wvgis.wvu.edu/pub/RA/Region9/BLRA/2A_CommunityAsset/

Verification - WV Flood Tool Risk MAP: The **WV Flood Tool's Risk MAP View** should be used to view and verify mapped community assets and other risk layers, such as the example below of Martinsburg in Berkeley County.

Figure CA-8. Community Assets in city of Martinsburg displayed on Risk MAP View of the WV Flood Tool.

WV Flood Tool Map Link: https://www.mapwv.gov/flood/map/?wkid=102100&x=-8679524&y=4787539&l=7&v=2

Verification - Tabular Report: Community Assets can also be viewed and verified for each community by linking to the risk assessment **tabular report** (Excel spreadsheet). To verify the geographic location of each facility, the Excel table provides map view links. Community Asset data fields include Community Identifiers, Building ID, Address, Facility Name, Facility Type, Specific Occupancy Code, Building Value, Building Value Source, Flood Zone, Floodway, Flood Depth, Building Damage Estimate, and Flood Tool viewer link.

Table CA-9. Community Assets for city of Martinsburg displayed in Tabular Report with map links.

Facility Name	Full Address	Facility Type	Flood Tool Link
Holy Grace Church of God	215 W Moler Ave, Martinsburg, WV, 25404	Religious Institution	FT
Roach Energy	333 E John St, Martinsburg, WV, 25401	Utilities	FT
Martinsburg Sewage Treatment Plant	500 E John St, Martinsburg, WV, 25401	Utilities	FT
Tuscarora Creek Historic District	600A N TENNESSEE AVE, Martinsburg, WV, 25401	National Register - Historic District	FT
Tuscarora Creek Historic District	200 OLD MILL RD, Martinsburg, WV, 25401	National Register - Historic District	FT
Berkeley City Council Warehouse	750 Baltimore St, Martinsburg, WV, 25401	Government	FT
Kilmer Springs Water Filtration Plant	602 Baltimore St, Martinsburg, WV, 25401	Utilities	FT
Kingdom Hall of Jehovah's Witnesses	725 Baltimore St, Martinsburg, WV, 25401	Religious Institution	FT
Martinsburg Recycling Center	9999 E Stephen St, Martinsburg, WV, 25401	Utilities	FT

Region 9 Tabular Building-Level Report Link: https://data.wvgis.wvu.edu/pub/RA/Region9/BLRA/2A_CommunityAsset/

Verification with Community-Level Report: A summary report for all communities and regions can be accessed at https://data.wvgis.wvu.edu/pub/RA/State/CL/. See Tables CA-2 and CA-3 for sample outputs.

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