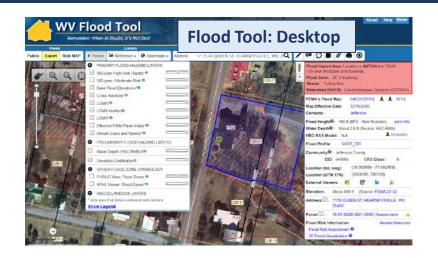
# WV Flood Tool





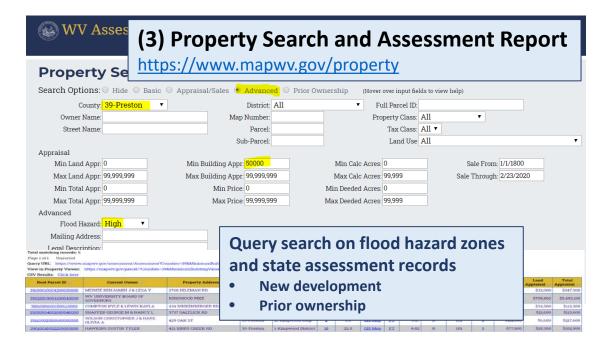
#### (1) Flood Tool: Desktop Version

https://www.mapwv.gov/flood

#### (2) Flood Tool: Mobile Version

https://www.mapwv.gov/flood/mmap

Public resource applications that support floodplain management and flood reduction activities





### WV Flood Tool

### **Flood Tool Views**

(www.mapwv.gov/flood)

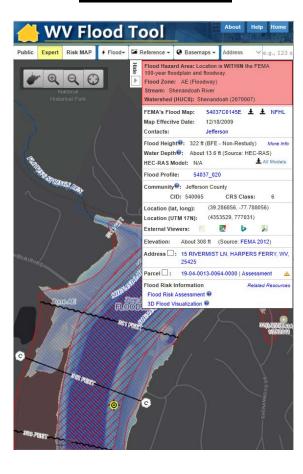
- Public View for general public
- Expert View for floodplain managers
- RiskMAP View for flood risk planners

# WV Flood Tool Views

#### **Public View**

#### **WV Flood Tool** Flood▼ Reference ▼ Basemaps ▼ Flood Hazard Area: Location is WITHIN the FEMA 00-year floodplain and floodway. click to enable zoom in box 54037C0145E ± ± NFHL CID: 540065 CRS Class: Location (lat. long): Location (UTM 17N): About 308 ft (Source: FEMA 2012) Address : 15 RIVERMIST LN. HARPERS FERRY, WV 19-04-0013-0064-0000 | Assessment Flood Risk Assessment ® 3D Flood Visualization @

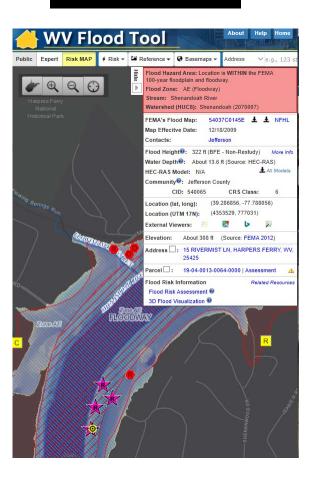
#### **Expert View**



Quick Determination if IN or Out of Flood Zone

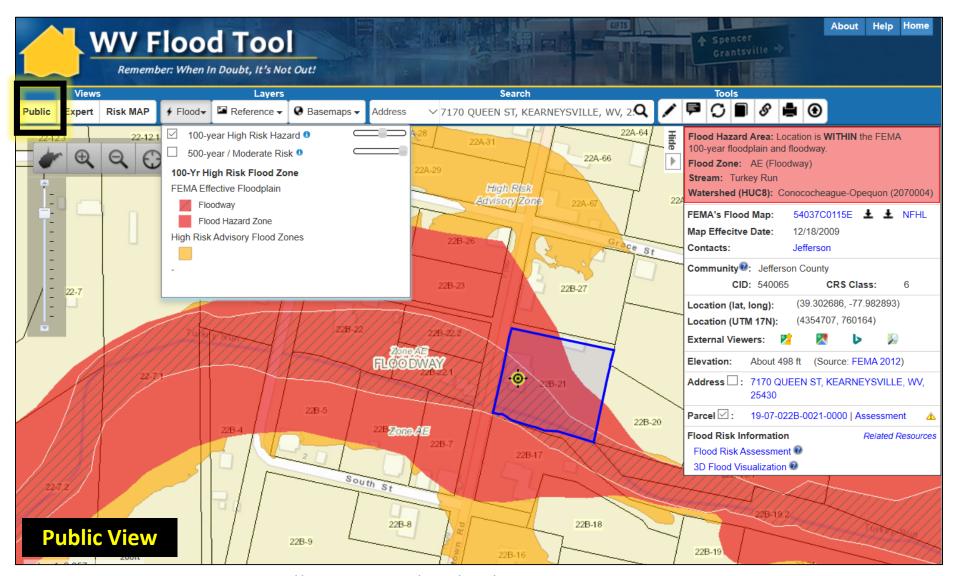
Floodplain Management and Permits, Disaster Assessments

#### **RiskMAP View**

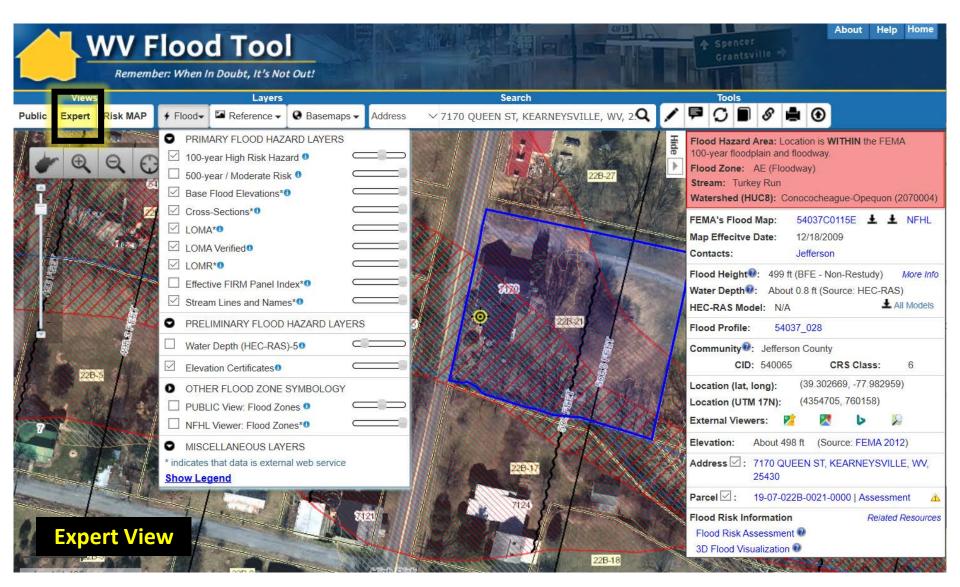


Building-Specific Flood Risk Assessments

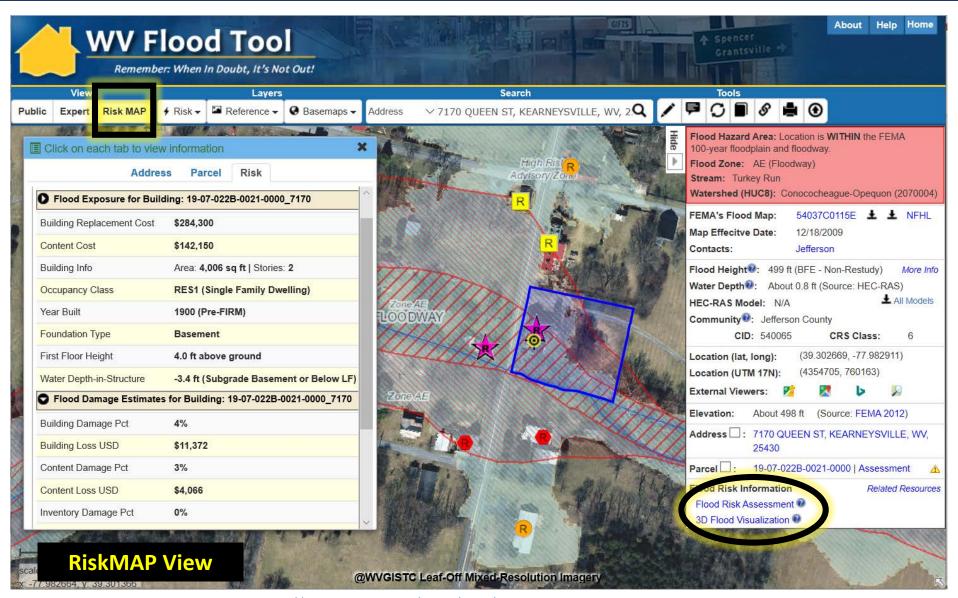
# WV Flood Tool – Public View



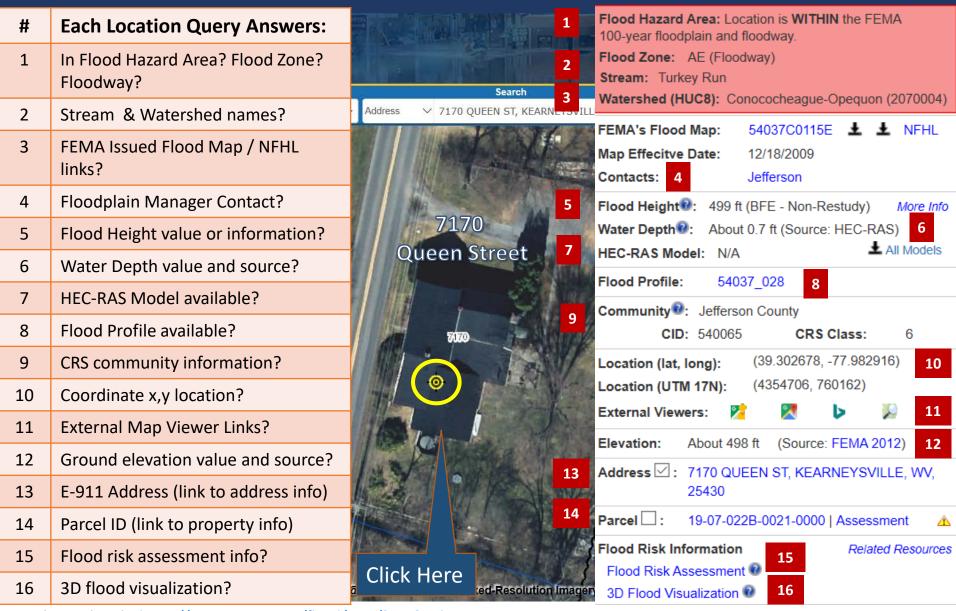
# WV Flood Tool – Expert View



# WV Flood Tool – RiskMAP View

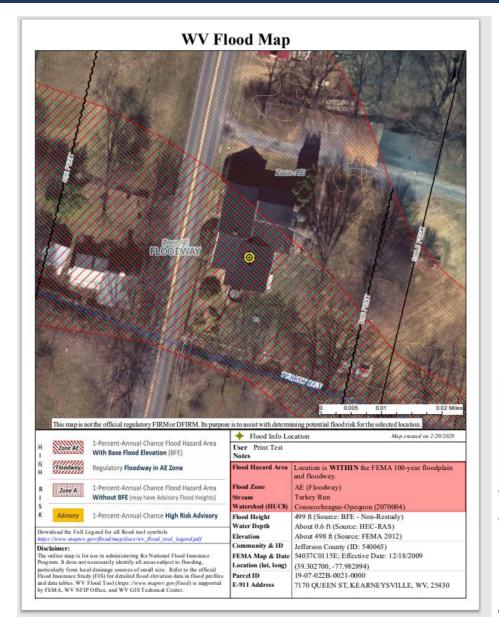


# Flood Query Results Panel



Parcel ID Web Link: <a href="https://www.mapwv.gov/flood/map/?v=1&pid=19-07-022B-0021-0000">https://www.mapwv.gov/flood/map/?v=1&pid=19-07-022B-0021-0000</a>

# Print Out for Permits, LOMAs, etc.

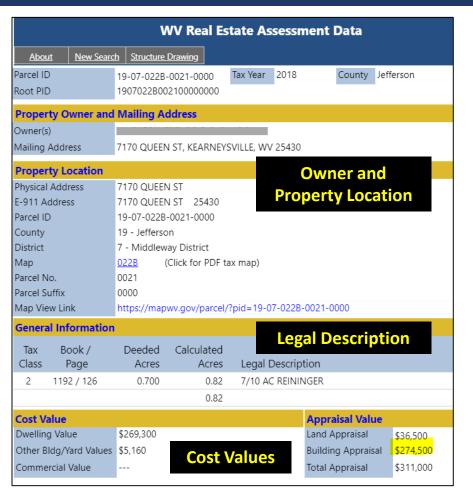




# Print Flood Query Results

Flood Hazard Area	Location is WITHIN the FEMA 100-year floodplain
	and floodway.
Flood Zone	AE (Floodway)
Stream	Turkey Run
Watershed (HUC8)	Conococheague-Opequon (2070004)
Flood Height	499 ft (Source: BFE - Non-Restudy)
Water Depth	About 0.6 ft (Source: HEC-RAS)
Elevation	About 498 ft (Source: FEMA 2012)
Community & ID	Jefferson County (ID: 540065)
FEMA Map & Date	54037C0115E; Effective Date: 12/18/2009
Location (lat, long)	(39.302700, -77.982894)
Parcel ID	19-07-022B-0021-0000
E-911 Address	7170 QUEEN ST, KEARNEYSVILLE, WV, 25430

# Building 19-07-022B-0021-0000\_7170

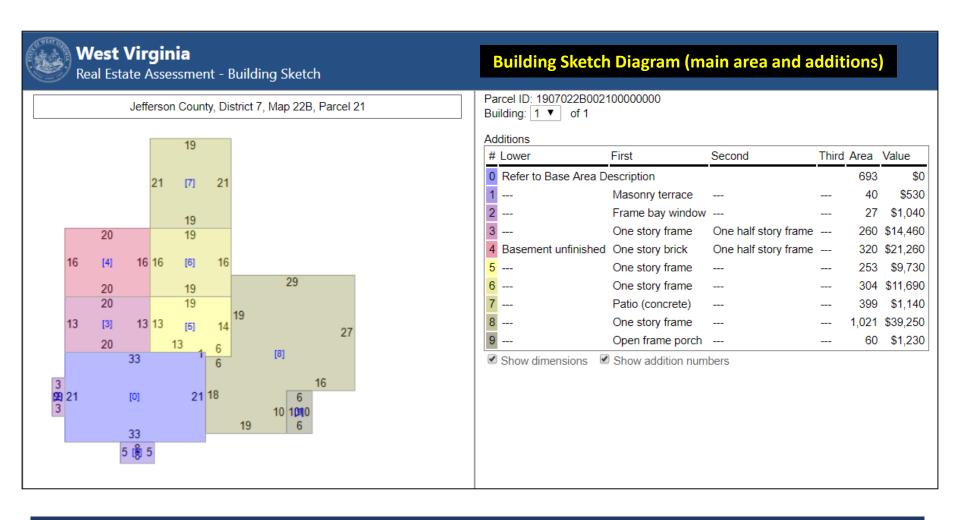


Cost \	/alue						Appraisa	l Value				
Dwellir	ng Valu	е	\$269,300				Land Appr	aisal	\$36,500			
Other I	Bldg/Ya	rd Values	\$5,160				Building A	ppraisal	\$274,500			
Comm	ercial V	alue					Total Appr	aisal	\$311,000			
Buildi	ing Inf	ormatio	n									
Proper	ty Class		R - Reside	ntial								
Land Use 101 - Residential 1 Family				Main Building								
Sum of	f Structi	ure Areas	4,006				le.	forn	natio	n		
# of Bu	uildings	(Cards)	1					шош	ilatio			
	V						Exterior				quare	D. Haller
Card	Year Built	Stories	Grade	Architectur	al Stylo		Wall	Rac	ement Typ		otage (SFLA)	Building Value
1	1900	2	R+	Conventi	,		Frame	Das	Part	C	4.006	\$269,300
	1500		DŦ	Conventi	Ullai		Traine		rait		4,006	\$269,300
											4,000	\$203,300
	Year					Heat				Full	Half	Total
Card	Built		Attic	Fuel	S	ystem	Heat/A	C Be	drooms	Baths	Baths	Rooms
1	1900	Unf	finished	Oil	Но	t Water	Centra	I	5	2	1	9
									5	2	1	9
Other	Buildi	ng and '	Yard Impr	ovements								
							Outk	ouild	ings			Adjusted
Bldg/	/				Year					F	Replace	Replace
Card :	# Lin	е Туре			Built	Grade	Units	Size	Are	a	Cost	Cost
1	1	Frame	or CB Deta	ched Garage	1984	С	1	10x20	20	00	\$3,910	\$3,400
1	2	Four S Barn	ide Closed	Wood Pole	1981	С	1	28x20	56	50	\$4,550	\$1,760

Flood Zone I	nforn	nation				Learn more	at <u>WV Flood Tool</u>
Acres (c.)	Risk						
0.82	High	Th	is parcel appears to b	e in a HIGH RISK flo	od hazard zone.		
Sales History	1			Propert	y Intersec	t	
Sale Date		Price	Sale Type		-	ok	Page
6/5/2017				Floo	d Zone	2	123
6/5/2017						1192	123
6/2/2017	5	\$343,250	Land and Buildings	4	0	1192	126

Web **Parcel Assessment Report** for Building Identification, Building Characteristics, and Cost Values

# Building 19-07-022B-0021-0000\_7170



**Building Sketches** from parcel assessment records are available for all **Residential** and **Farm** properties. Very useful for Building Identification.

# Data Privacy at State Level

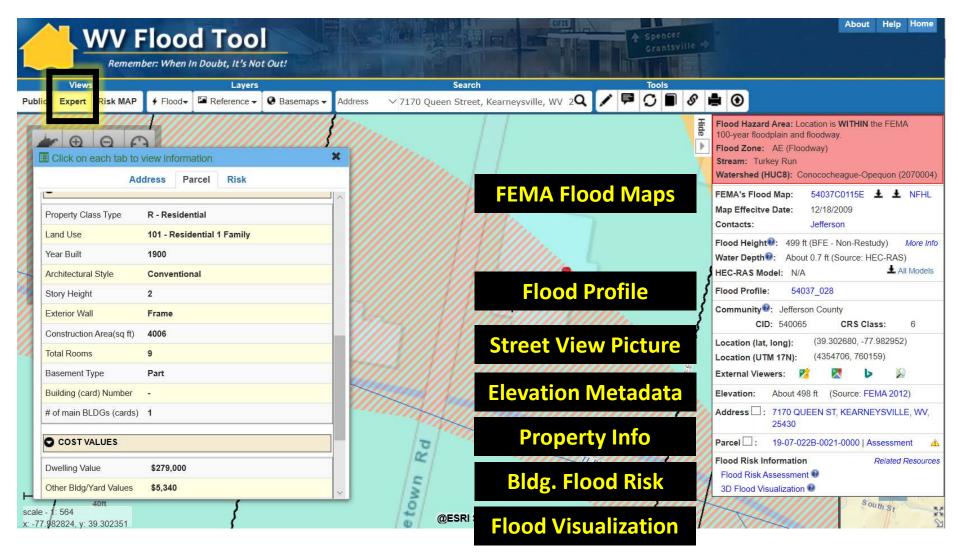
West Virginia Statewide Parcel Files and Attributes in Public Domain: The local and state governments have the authority to share property owner names and addresses with the public (Senate Bill 588). For example, West Virginia's parcel assessment data which includes names and addresses is publicly accessible; only sensitive information like phone numbers or security alarm information are redacted by the WV Property Tax Division before release. Both the WV Property Tax Division and county assessors are co-custodians of the parcel map files and assessment records. All the West Virginia parcel data and assessment information can be downloaded from the State Data Clearinghouse.

# Building 19-07-022B-0021-0000\_7170



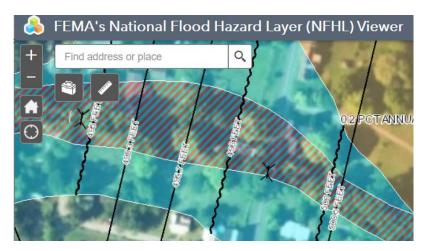
Flood Tool External Link to Google **Street View** 

# Information Links

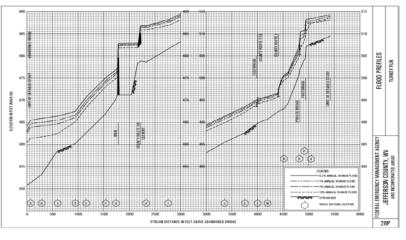


https://www.mapwv.gov/flood/map/?v=1&pid=19-07-022B-0021-0000

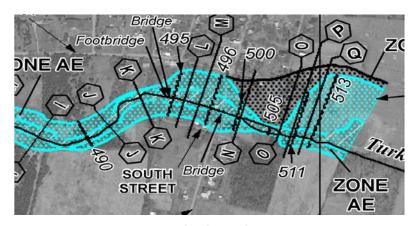
# Information Links



**FEMA's NFHL Viewer** 



**Flood Profile** 



**FEMA Issued Flood Map** 

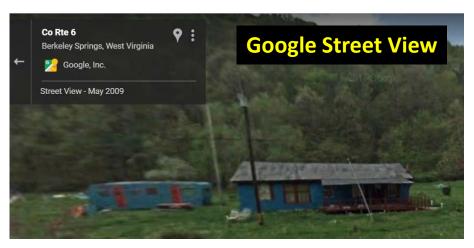


**Street View Image** 

Building 19-07-022B-0021-0000\_7170

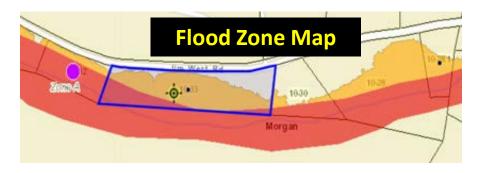
https://www.mapwv.gov/flood/map/?v=1&pid=19-07-022B-0021-0000

# High-Risk Advisory A Zone





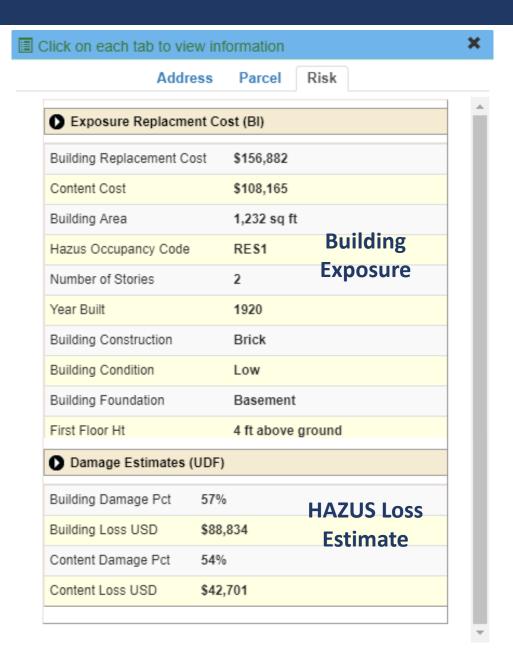


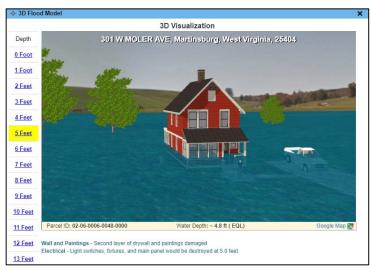


# WV Flood Tool

### 3D Flood Visualizations

# RiskMAP View – 3D Visualization



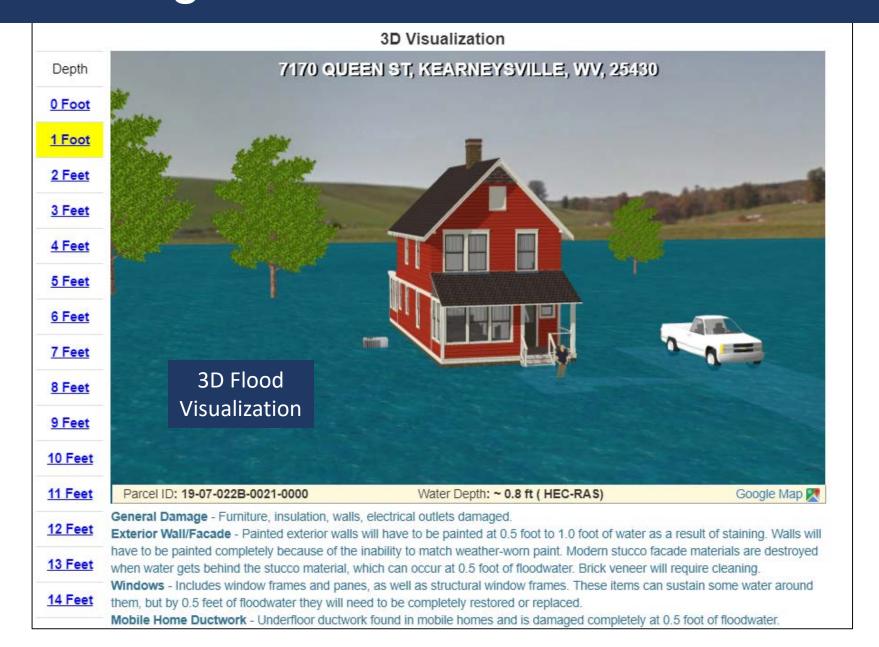


Flood Depth – 3D Visualization



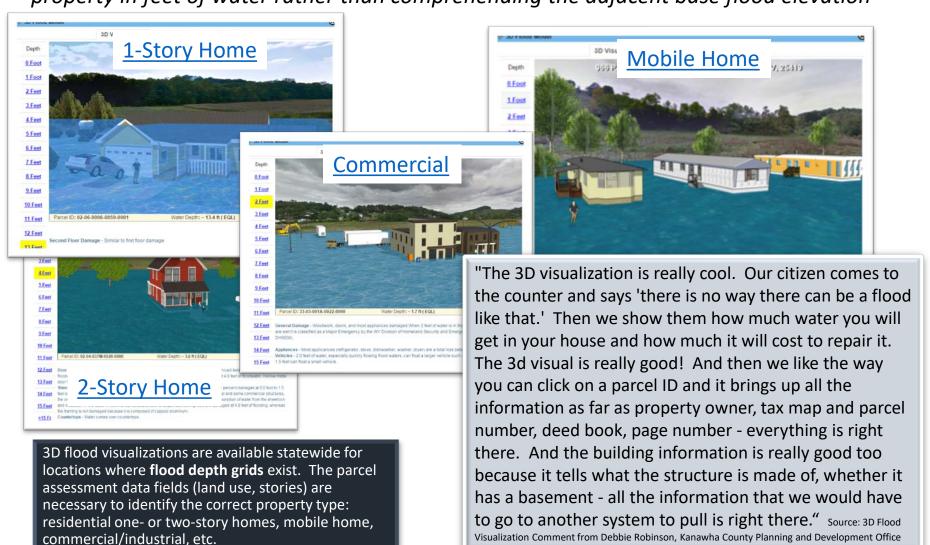
**Street View Image** 

# Building 7170:19-07-022B-0021-0000



### 3D Flood Visualizations

Visualizations are easier for non-technical users to understand flood risks to their property in feet of water rather than comprehending the adjacent base flood elevation

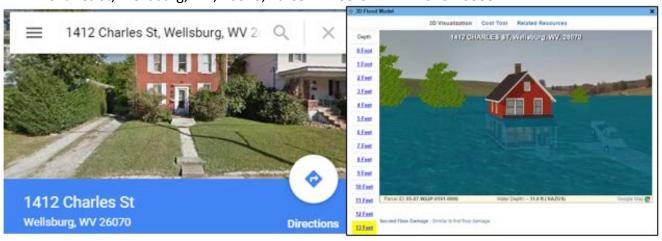


### 3D Flood Visualizations

#### **Brooke County**

https://www.mapwv.gov/flood/map/?v=1&pid=05-07-W22P-0161-0000

1412 Charles St, Wellsburg, WV, 26070, Parcel ID: 05-07-W22P-0161-0000



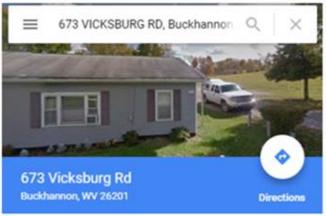
"This is the coolest thing ever....thank you!!!"

Source: 3D Flood Visualization Comment from Terri Jo Bennett, CFM, Upshur County Building Permit, Floodplain and Addressing and Mapping Coordinator

#### **Upshur County**

 $\underline{\text{https://www.mapwv.gov/flood/map/?v=0\&pid=49-05-0003-0031-0000}}$ 

673 Vicksburg RD, Buckhannon, WV, 26201, Parcel ID: 49-05-0003-0031-0000



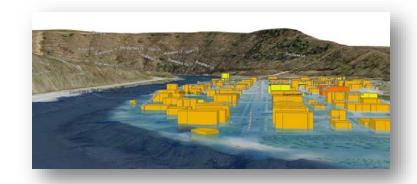


# 3D Flood Visualization - Community

#### Basic Steps for Creating 3D Flood Visualizations

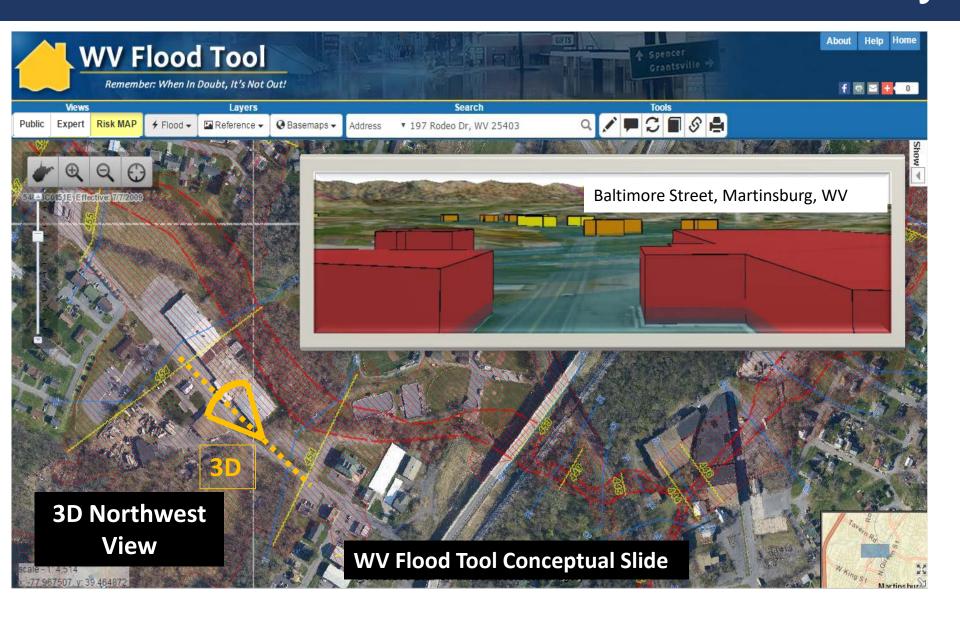
- Start with High-Resolution Digital Terrain Model
- Overlay High-Resolution Aerial Image
- Then add Streets
- Then add Building Footprints
- Extrude Building Footprints to Known Heights ("sugar-cube" 3D buildings)
- Generate Detailed 3D Building Models
- Photo-Texture the 3D Building Models
- Add Trees and other Landscape/Streetscape Features
- Add Flood Overlay (Riverine 1% Annual Chance Flood)

The objective is to make the 3D visualizations as realistic as possible in a minimal amount of processing time



Source: NEMAC

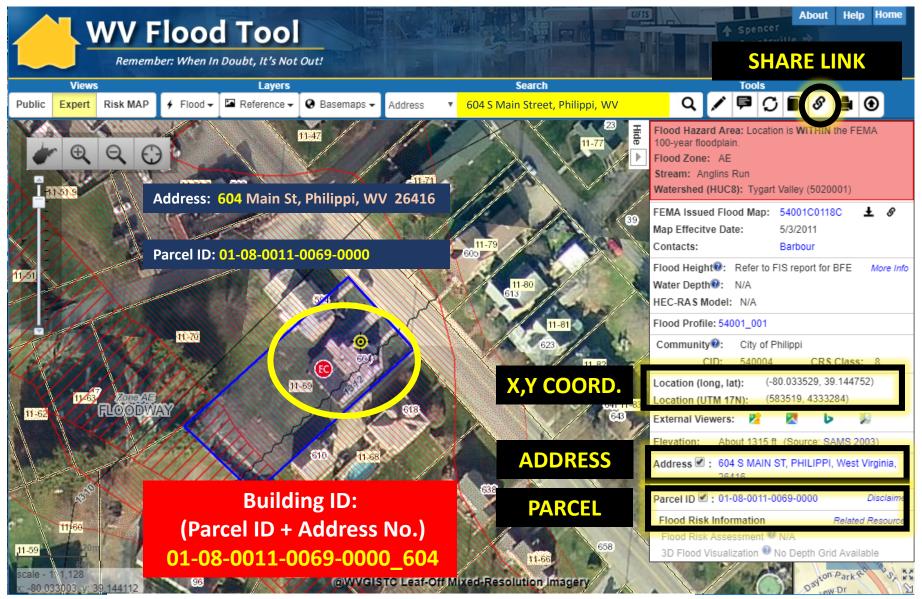
# 3D Flood Visualization - Community



# WV Flood Tool

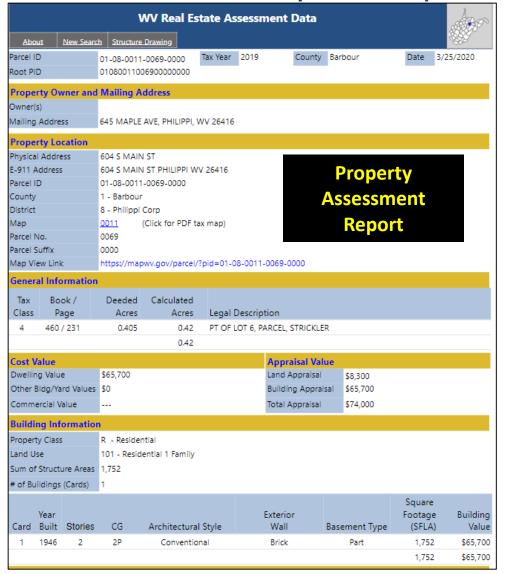
# **Property Identification**

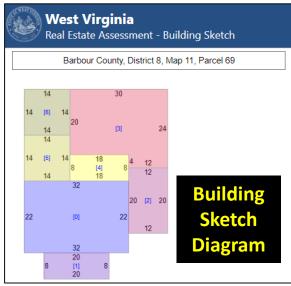
# Property Identification – Bldg. ID

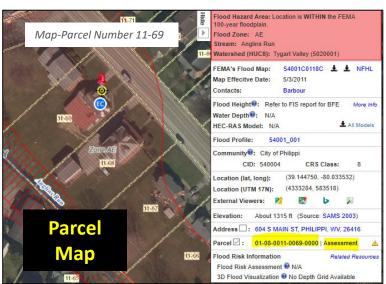


# Property Parcels and Assessment Reports

E-911 and County Assessor report location at 604 S Main Street







# Unique Building Identifier

#### Collect multiple spatial identifiers to verify location

Parcel	01-08-0011-0069-0000					
	01 - 08 - 0011 - 0069 - 0000 County District Map Parcel Suffix					
Address	604 S Main St, Philippi, West Virginia, 26416					



<b>Building Identifier</b>	01-08-0011-0069-0000_604				
X,Y Coordinate	39.144752, -80.033529				
Google Plus Code (11-digit)	86FX4XV8+VHF				
Share MAP URL Link	https://www.mapwv.gov/flood/map/?wkid=102100&x=- 8909292&y=4742427&l=12&v=1				
Share Parcel Assessment URL Link	http://www.mapwv.gov/Assessment/Detail/?PID=0108001100690000000				



= Unique Identifiers

Notes: Owner Name from assessment records and Building Pictures (elevation certificates) can be helpful for property identification purposes

Proper Building and Property Identifiers are important for exchanging building-level data efficiently among local, state, and federal partners (including UDFs, LOMAs, Mitigated Buyout Properties, Elevation Certificates, Repetitive Loss Structures, etc.)

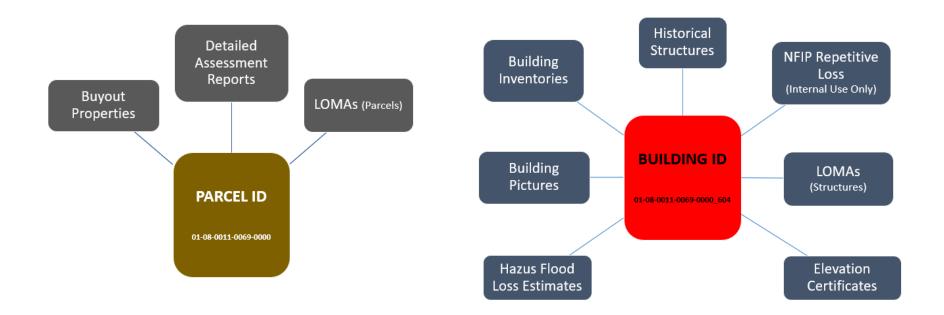
# Building Unique Identifier

Parcel	01-08-0011-0069-0000					
	01 - 08 - 0011 - 0069 - 0000         County District       Map Parcel Suffix					
Address	604 S Main St, Philippi, West Virginia, 26416					



**Building Identifier** 

01-08-0011-0069-0000\_604



### Other WV Flood Tool Features

### **WV Flood Tool**

- Flood Operational Layers
- Flood Zones and Symbology Types
- Programming Logic (Flood Zone, Flood Height, Water Depth) for Flood Query Result Panel
- High Resolution Ground Elevation Data
- Property Identification / Unique Building Identifier
- WV Property Viewer & Search
- Uses of Flood Tool

### WV Flood Tool

Address

Parcel Coordinate

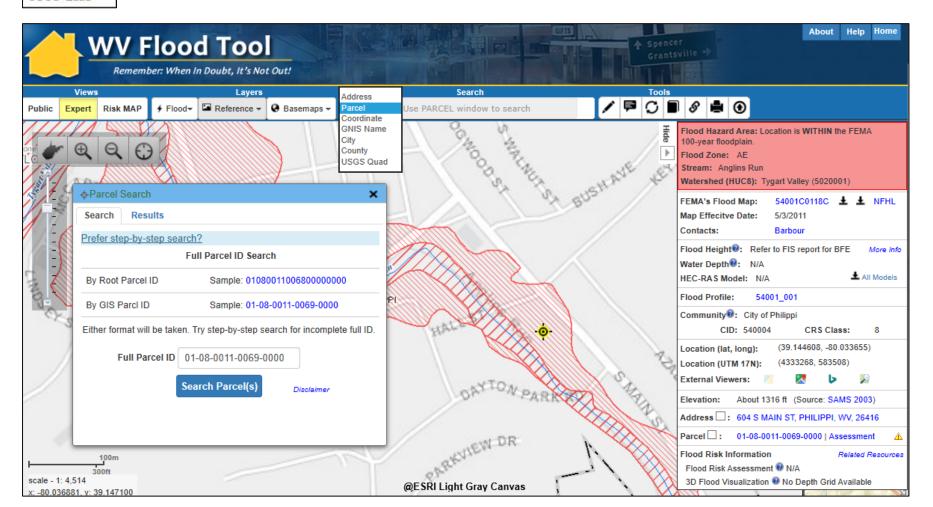
**GNIS Name** 

City

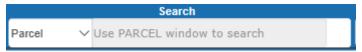
County

USGS Quad

### **Search and Zoom Tools**



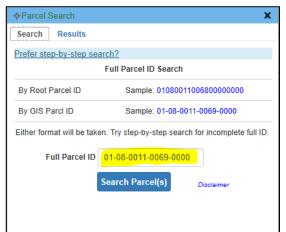
# Search by Parcel



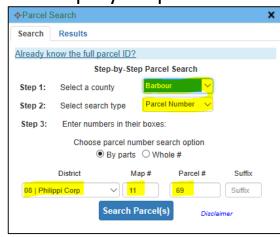
Select "Parcel" from pull down search list

#### **Search By:**

#### Full Parcel ID



#### Step-by-Step Parcel ID



#### **Property Owner**



#### Results (Parcel 01-08-0011-0069-0000)





# WV Flood Tool

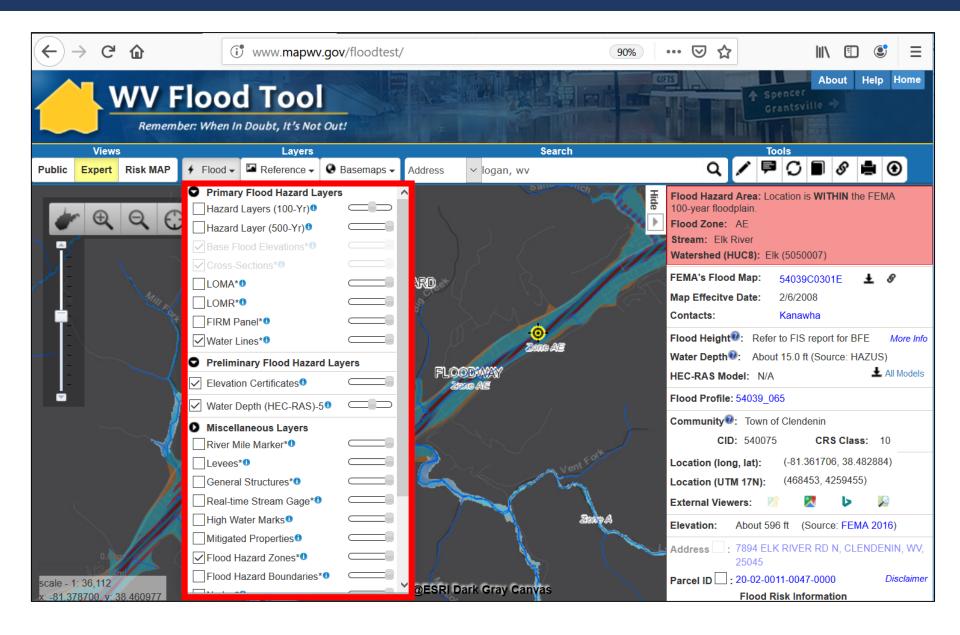
# Operational Flood Layers

# Flood Layers

FLOOD LAYERS	Public View for general public	Expert View floodplain managers	RiskMAP View flood risk reduction
<ul> <li>Flood Hazard/Management Layers</li> <li>NFHL Flood Areas (Effective and Preliminary)</li> <li>High-Risk Advisory Flood Zones</li> <li>Base Flood Elevations</li> <li>LOMAs / LOMRs</li> <li>Panel Index (link to FEMA issued map)</li> <li>Structures, Levees, Mile Markers*</li> <li>Flood Elevation Certificates</li> </ul>	Yes Yes No No No No	Yes Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes Yes Yes
Flood Risk  Flood Water Depths (HEC-RAS model-backed)  Other Water Depths (Hazus, USGS HWM)  Historical High-Water Marks (points)  Levees  Dams  Exposure to Buildings and Facilities  Future Map Conditions  Building-Specific Flood Risk Assessments	No No No No No No No	Yes No No Yes No No No	Yes
Property Mitigation  • Open Space Preservation	No	No	Yes
Flood Prediction  • USGS Real-Time Stream Gages*	No	No	Yes

<sup>\*</sup> External Agency Web Map Services

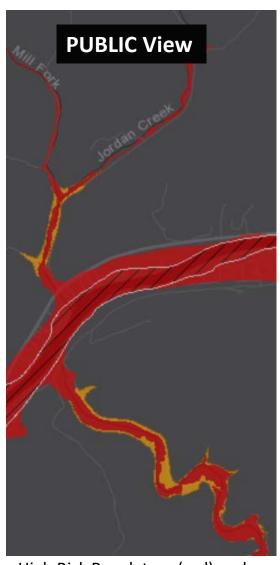
# Flood Layers – Expert View



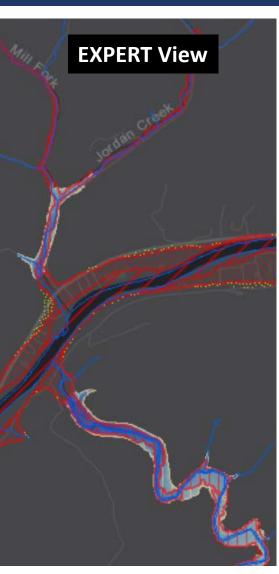
# WV Flood Tool

# Flood Zones & Symbology

# Multiple Flood Zone Symbology Types



High Risk Regulatory (red) and Non-Regulatory (orange)



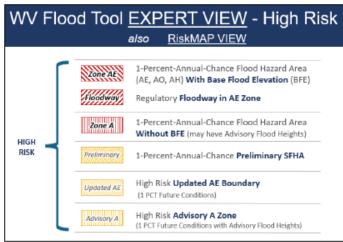
**Depth Grid Underlies Flood Zones** 

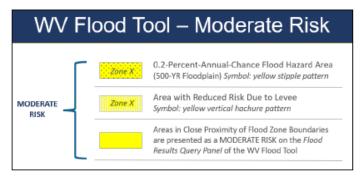


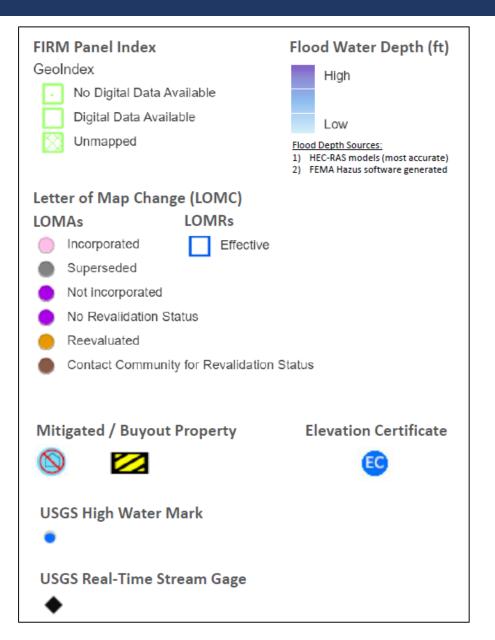
**NFHL Viewer** 

# Flood Layer Symbols

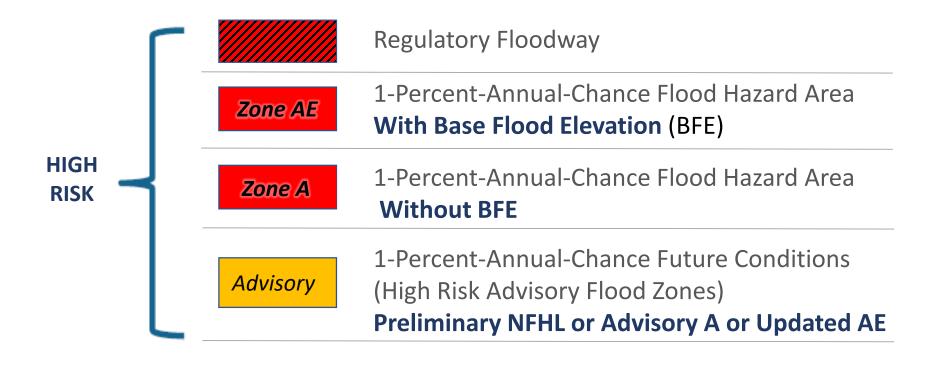






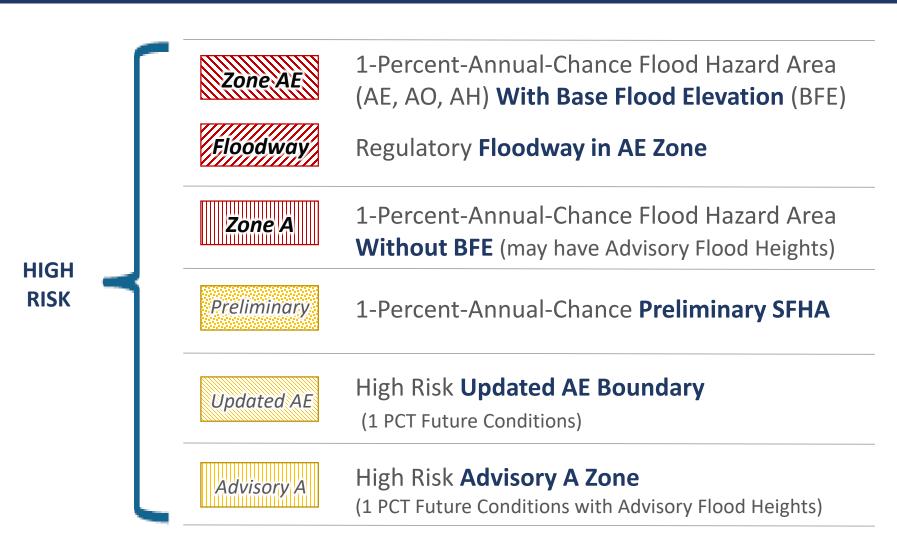


### WV Flood Tool PUBLIC VIEW - High Risk

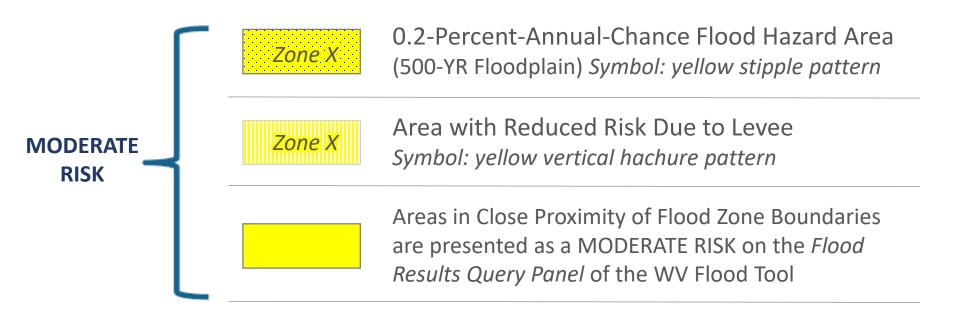


### WV Flood Tool EXPERT VIEW - High Risk

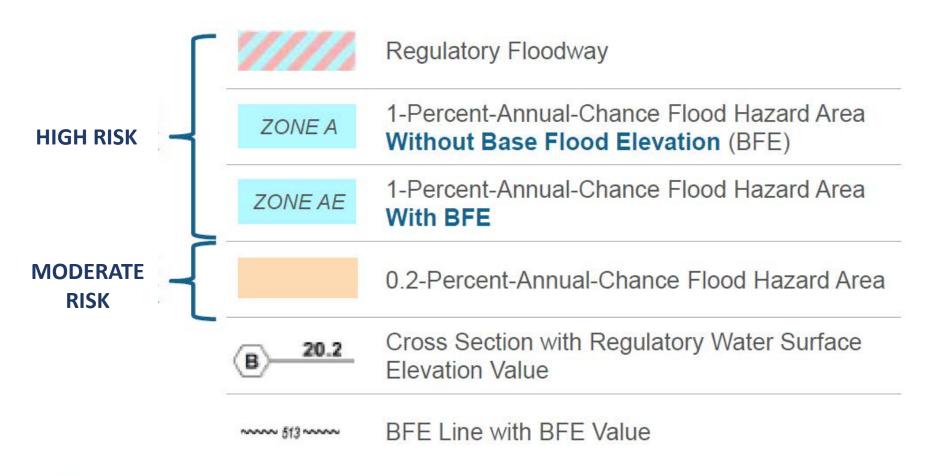
also RiskMAP VIEW



### WV Flood Tool – Moderate Risk



### FEMA NFHL Viewer





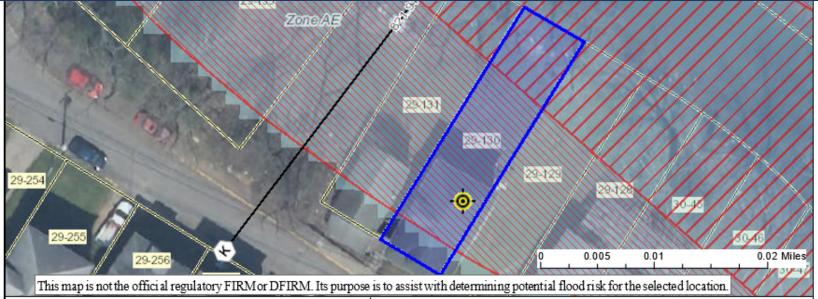


### WV Flood Tool

# **Print Function Legend Layouts**

# Print Flood Map (Expert View)

http://www.mapwv.gov/floodtest/?wkid=102100&x=-8899682&y=4811867&l=13&v=1



H G H	Zone AE	1-Percent-Annual-Chance Flood Hazard Area With Base Flood Elevation (BFE) Regulatory Floodway in AE Zone
R I S	Zone A	1-Percent-Annual-Chance Flood Hazard Area Without BFE (may have Advisory Flood Heights)
S K	Advisory	1-Percent-Annual-Chance High Risk Advisory

Download the Full Legend for all flood tool symbols https://www.mapwv.gov/flood/map/docs/wv\_flood\_tool\_legend.pdf

#### Disclaimer:

The online map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. Refer to the official Flood Insurance Study (FIS) for detailed flood elevation data in flood profiles and data tables. WV Flood Tool (https://www.mapwv.gov/flood) is supported by FEMA, WV NFIP Office, and WV GIS Technical Center.

 15 to about Williamschill	ming potential neodification the selected location.
Flood Info Lo	cation Map created on 10/10/2019
User Expert View	Print Layout
Notes	
Flood Hazard Area	Location is WITHIN the FEMA 100-year floodplain.
Flood Zone	AE
Stream	Deckers Creek
Watershed (HUC8)	Upper Monongahela (5020003)
Flood Height	822.0 ft (Source: BFE - Restudy)
Water Depth	About 4.3 ft (Source: HEC-RAS)
Elevation	About 819 ft (Source: WVU 2017)
Community & ID	City of Morgantown (ID: 540141)
FEMA Map & Date	54061C0114E; Effective Date: 4/5/2019
Location (lat, long)	(39.626870, -79.947203)
Parcel ID	31-10-0029-0130-0000
E-911 Address	629 PENNSYLVANIA AVE, MORGANTOWN, WV, 26501

# Print Flood Map (Public View)



/////////	Regulatory Floodway
Zone AE	1-Percent-Annual-Chance Flood Hazard Area With Base Flood Elevation (BFE)
Zone A	1-Percent-Annual-Chance Flood Hazard Area Without BFE (may have Advisory Flood Heights)
Advisory	1-Percent-Annual-Chance Future Conditions (High Risk Advisory Flood Zones)
	Zone A

Download the Full Legend for all flood tool symbols https://www.mapwv.gov/flood/map/docs/wv\_flood\_tool\_legend.pdf

#### Disclaimer:

The online map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. Refer to the official Flood Insurance Study (FIS) for detailed flood elevation data in flood profiles and data tables. WV Flood Tool (https://www.MapWV.gov/flood) is supported by FEMA, WV NFIP Office, and WV GIS Technical Center.

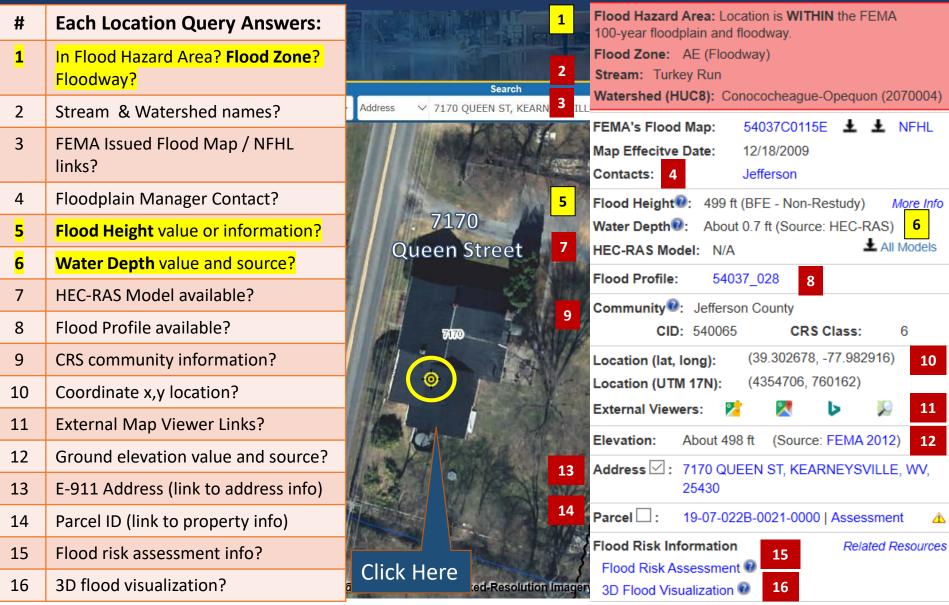
ю	CONTROL OF THE PARTY OF THE PAR		
09	e is to assist with deterr	mining potential flood risk for the selected location.	236
	• Flood Info Lo	cation Map created on 10/1	0/2019
	User Public View Notes	v Print Layout	
	Flood Hazard Area	Location is WITHIN an updated detailed floodplain	1
		boundary but NOT a FEMA 100-year effective	
	Flood Zone	Updated AE Floodplain Boundary	
	Stream	Opequon Creek	
	Watershed (HUC8)	Conococheague-Opequon (2070004)	
	Flood Height	412 ft (Source: BFE - Non-Restudy)	
	Water Depth	About 5.3 ft (Source: HEC-RAS)	
	Elevation	About 407 ft (Source: FEMA 2012)	
_	Community & ID	Berkeley County (ID: 540282)	
	FEMA Map & Date	54003C0255E; Effective Date: 7/7/2009	
	Location (lat, long)	(39.363731, -77.966901)	
5	Parcel ID	02-01-0021-0006-0012	
	E-911 Address	292 SPIRAL LN, Inwood, WV, 25428	

# Flood Query Results Panel

# Programming Logic Determinations for Flood Query Results Panel

- Flood Zones 12 zone status conditions
- Flood Heights Base Flood Heights, Advisory Flood Heights – 5 status conditions
- **Depth Grid** Model-Backed (most accurate) or Hazus

# Flood Query Results Panel



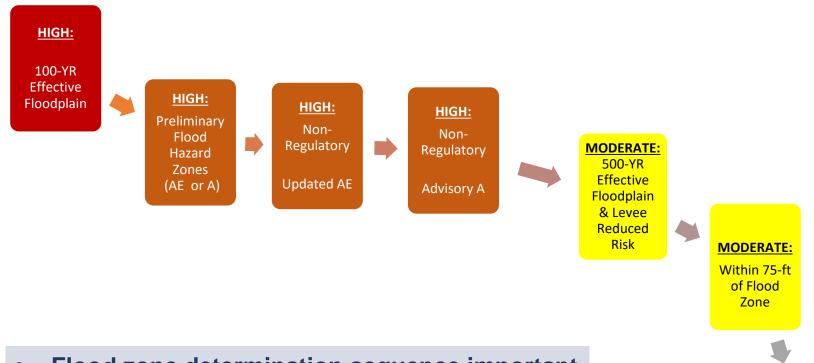
Parcel ID Web Link: https://www.mapwv.gov/flood/map/?v=1&pid=19-07-022B-0021-0000

# Flood Zone: < zone designation >

Status #	Flood Risk Zone Designation	Message	Floodplain Type Label	WSEL Grid	Flood Degree Risk	Color Warning Status
1	AE, AH (5), AO (2)	Location is WITHIN the FEMA 100-year floodplain.	Effective 100 yr Zone AE, AH, AO	BFE-R or BFE-NR	High	Red
2	AE (Floodway)	Location is WITHIN the FEMA 100-year floodplain and floodway.	Effective 100 yr Zone AE, AH, AO - Floodway	BFE-R or BFE-NR	High	Red
3	Α	Location is WITHIN the FEMA 100-year floodplain.	Effective 100 yr Zone A	< None >	High	Red
4	A (Advisory A)	Location is WITHIN the FEMA 100-year floodplain. Advisory Flood Heights available.	Effective 100 yr Zone A <i>and</i> Advisory Zone A	AFH	High	Red
5	Preliminary Flood Zone	Location is WITHIN an updated FEMA 100-year flood hazard zone. The flood zone is preliminary and under review to become effective.	Preliminary 100 yr Zone AE	< None >	High	Orange
6	Preliminary Flood Zone (Floodway)	Location is WITHIN an updated FEMA 100-year flood hazard zone and floodway. The flood zone is preliminary and under review to become effective.	Preliminary 100 yr Zone AE - Floodway	< None >	High	Orange
7	Updated AE Floodplain Bdry.	Location is WITHIN an updated detailed floodplain boundary but NOT a FEMA 100-year effective floodplain.	Updated Zone AE	BFE-NR	High	Orange
8	Advisory A	Location is WITHIN an advisory floodplain but NOT a FEMA 100-year effective floodplain.	Advisory Zone A	AFH	High	Orange
9	Shaded X (500-YR Flood)	Location is WITHIN a moderate flood risk hazard such as a FEMA 500-year floodplain.	Zone X - 0.2 PCT ANNUAL CHANCE FLOOD HAZARD	< None >	Moderate	Yellow
10	X (Levee Protected)	Location is PROTECTED by a levee from a 100-year flood	Zone X - AREA WITH REDUCED FLOOD RISK DUE TO LEVEE	< None >	Moderate	Yellow
11	Near Flood Zone	Location is NOT WITHIN identified flood hazard area, but within 75 feet of an identified flood hazard area.	Separate Buffer Layer	< None >	Moderate	Yellow
12	Out of Flood Zone	Location is NOT WITHIN any identified flood hazard area. Unmapped flood hazard areas may be present.	No Record Found	< None >	Low	Green

Three Degrees of Risk: High, Moderate, Low. Four Warning Status Colors: In 100-YR Effective Floodplains (red), Preliminary Flood Zones and non-regulatory Advisory A/Updated AE Floodplains (orange), moderate risk or close to high risk zones (yellow), and low risk (green). The query consists of stacked floodplain boundary layers (see next slide)

## Flood Zone Determination Sequence



- Flood zone determination sequence important for programming logic
- WV Flood Tool first checks query location for High Risk flood zones, then Moderate Risk flood zones.



# Flood Height: < Value >

Status #	Flood Height Designation	Flood Zones	Message for FLOOD HEIGHT:	Source Message on Query Panel	More Info Link on Flood Query Results Panel
1	Base Flood Elevation (Restudy) BFE Grid	AE Zones Flood Zone Statuses 1 & 2	< value> ft. (Display Float)	(BFE Restudy)	Advisory Flood Heights (AFH) for Approximate A Zones: CAUTION CAUTION!! The advisory flood height should be used with caution in the proximity of a culvert, bridge, flood control structure or other impoundment since stream crossings were not included in the hydraulic
2	Base Flood Elevation (Non- Restudy) Updated AE Grid	AE Zones Flood Zone Statuses 1, 2, 7	< value> ft. (Display Integer)	(BFE Non- Restudy)	analyses for approximate floodplains. Also, if the site is close to the confluence with a larger stream, compare the advisory flood height at the location of interest to the advisory flood height or Base Flood Elevation on the larger stream to determine whether the site is within the backwater influence of the larger stream. More information:  http://www.mapwv.gov/flood/content/documents/AFHh
3	Base Flood Elevation (Non- Restudy)	AE Zones Flood Zone Statuses 1 & 2	no value	Refer to FIS report for BFE	andout.pdf Restudy and Non-Restudy AE Zones: To validate base flood elevations refer to the Flood Profiles and Flood
4	Advisory Flood Height <mark>AFH Grid</mark>	A Zones, Preliminary  Flood Zone Statuses 4, 5, 6, & 8 (Refer to Flood Zone Slide)	About < value> ft.	(AFH)	Vertical Datum: The vertical datum of all flood height values for in West Virginia is NAVD 88 except for McDowell county is NGVD 29.
5	No Flood Height Information	Flood Zone Statuses 3, 5, 6, 9, 10, 11, 12	no value	N/A	

Invisible Composite Query Rasters for flood height values of Water Surface Elevation Level (WSEL) layers: (1) *Advisory Flood Height* WSEL AFH Grid (WSEL\_1PCT\_AFH\_5ft); (2) *Restudy* WSEL BFE Grid (WSEL\_1PCT\_BFE\_1m); *Updated AE* (WSEL\_1PCT\_Update\_AE)

# Water Depth: about <<value>>

Water Depth	Message	Sources
Water Depth:	About << value >> ft.	<ul> <li>Model-Backed Depth Grids: Engineering Studies using modeling software like HEC-RAS:         <ul> <li>RiskMAP Restudy (Effective and Preliminary)</li> <li>Non-Restudy Updated AE Zones</li> <li>Advisory Flood Heights (Approximate A Zones)</li> </ul> </li> <li>Other Depth Grids         <ul> <li>HAZUS generated</li> <li>USGS Inundation Layers</li> </ul> </li> </ul>

A statewide "composite" Flood Risk Assessment Depth Grid is created from model-backed *effective* and *advisory* depth grids at a 5-foot cell resolution.

Water Depth Grids are a *flood risk assessment* product – *not a flood regulatory* product. Water depths are important for flood loss damages and by flood visualizations of site-specific structures.

Depth grids a source of credits for CRS communities.

See FEMA's Flood Risk Assessment Guidance (May 2016) for guidance on composite depth grids:

https://www.fema.gov/media-library-data/1469146645661-

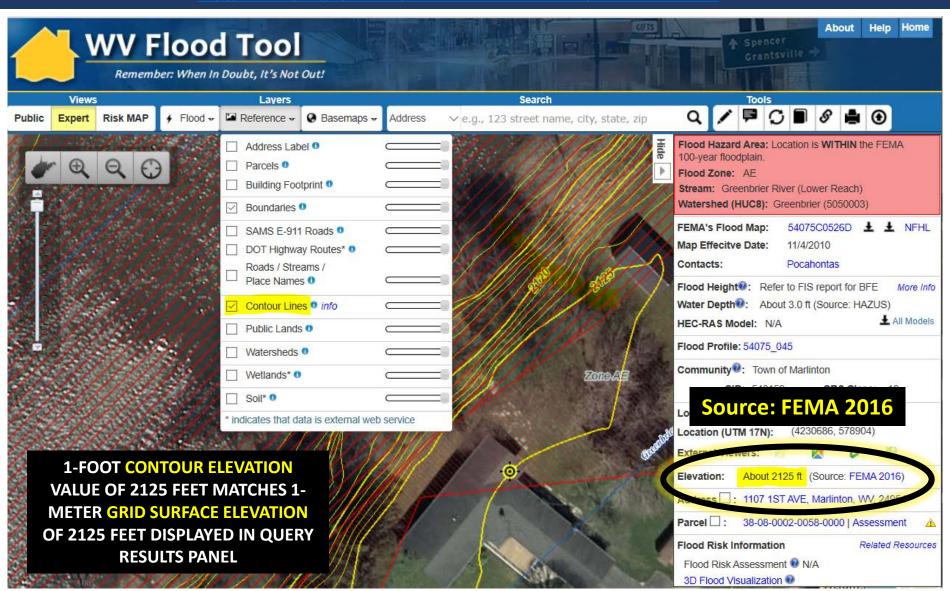
31ad3f73def7066084e7ac5bfa145949/Flood Risk Assessment Guidance May 2016.pdf

### WV Flood Tool

#### **Ground Elevatoin**

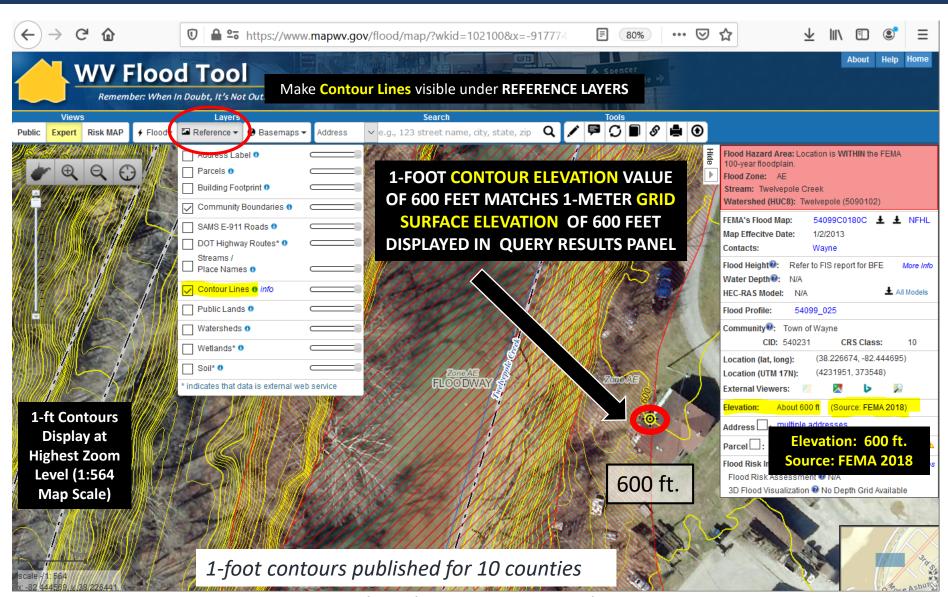
#### **Ground Elevation**

http://www.mapwv.gov/floodtest/?wkid=102100&x=-8916536&v=4610651&l=13&v=1

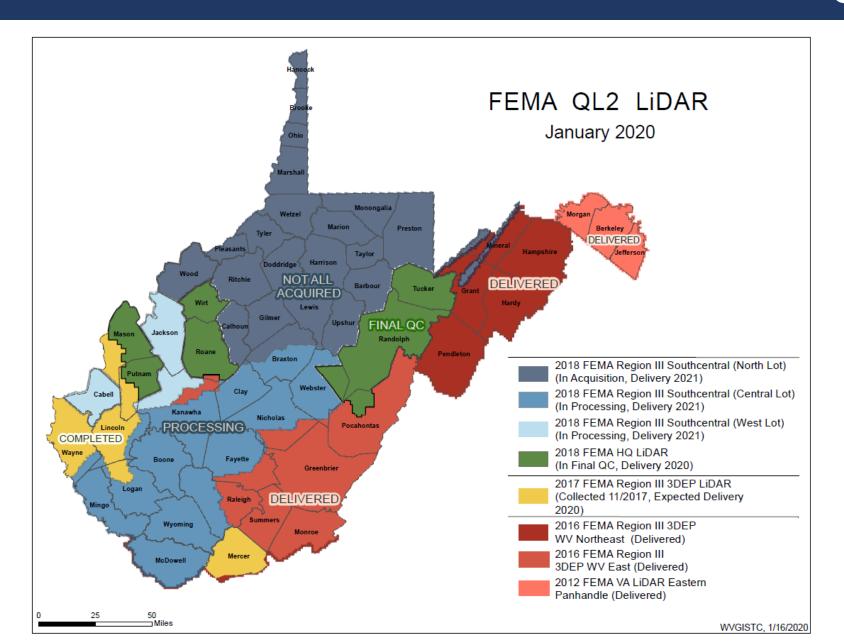


#### Ground Elevation: 1-ft. Contours

https://www.mapwv.gov/flood/map/?wkid=102100&x=-9177701&y=4611497&l=13&v=1

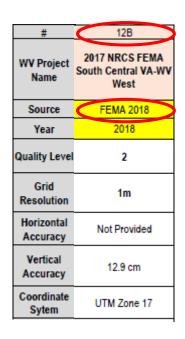


# FEMA Purchased LiDAR Coverage

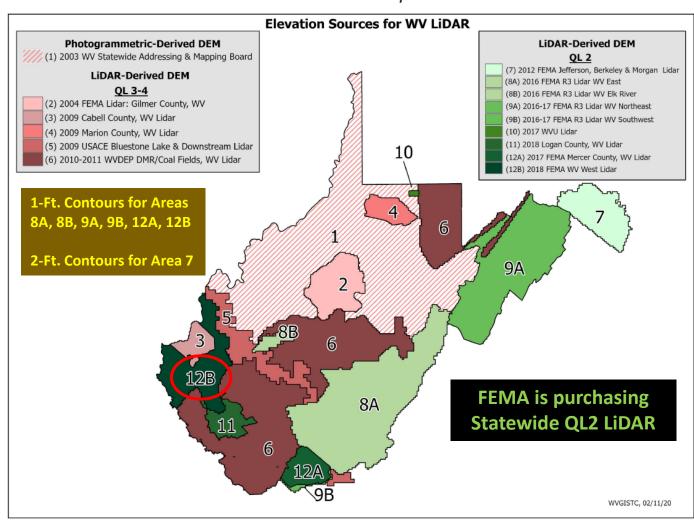


#### **Elevation Data Sources**

#### Source Graphic



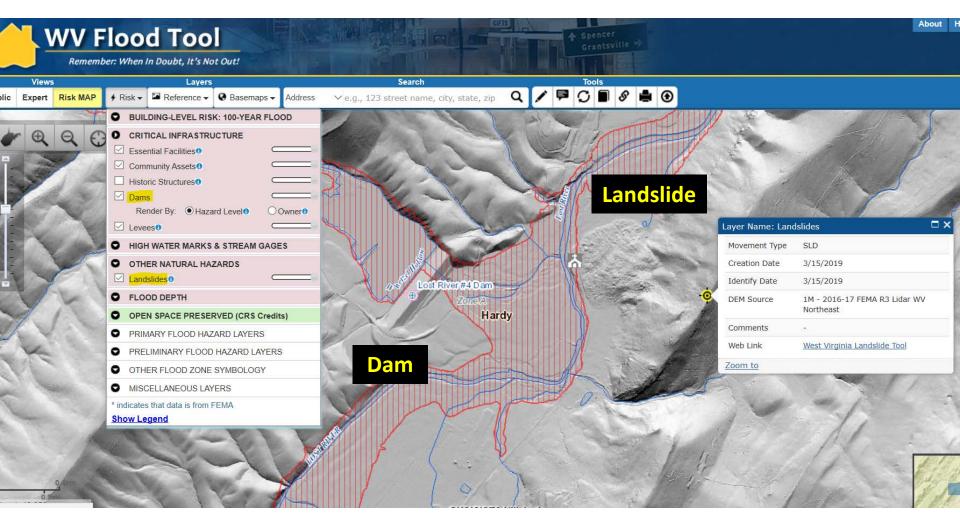
Elevation Metadata



### WV Flood Tool

#### **Dams and Landslides**

#### Dams and Landslides



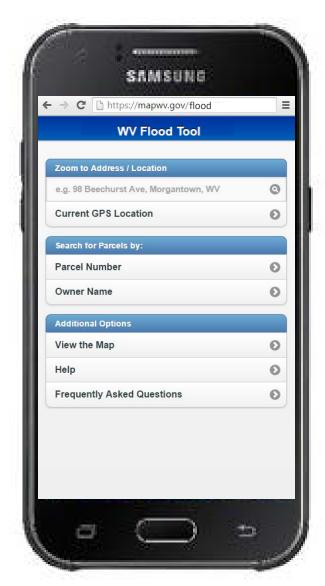
https://www.mapwv.gov/flood/map/?wkid=102100&x=-8771562&y=4715438&l=7&v=2

Dam and Landslide Risk Layers in RiskMAP View
Hardy County, West Virginia

# WV Flood Tool Updates

# Mobile Application

- Added Search by Property Owner Name
- Added Search by Parcel Identifier



Mobile Home Page

# WV Flood Tool (Mobile)

SAMSUNG ← → C https://mapwv.gov/flood WV Flood Tool Zoom to Address / Location e.g. 98 Beechurst Ave, Morgantown, WV 682 Killarney Drive, Morgantown, WV Search for Parcels by: Parcel Number Owner Name **Additional Options** View the Map Help Frequently Asked Questions

www.mapwv.gov/flood



SAMSUNG A https://www.mapwv.₁ □ ☆ **♦** Back Map Property Info Address Numbers Flood Zones

Mobile Home Page

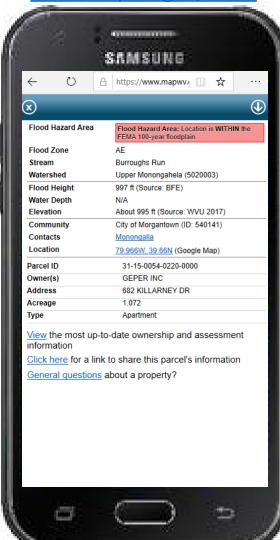
Zoom to E-911 Address

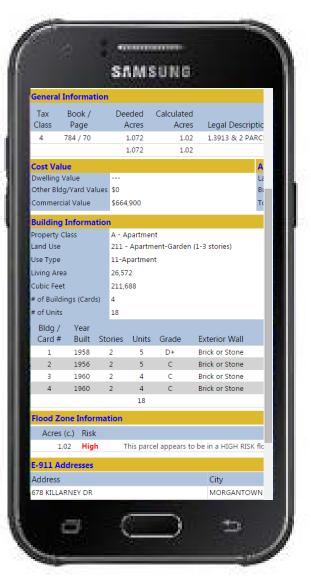
Toggle Layers of Interest

# WV Flood Tool (Mobile)









Touch Parcel for Flood Info

View Flood Report

View Parcel Report

#### WV Flood Tool

## **WV Property Viewer**

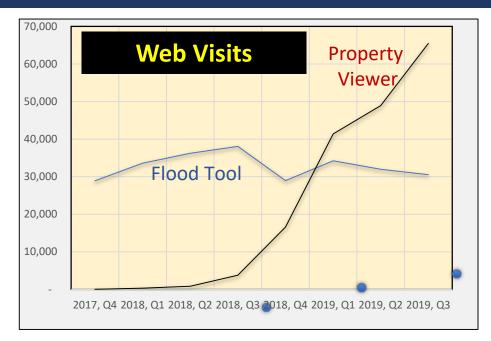
www.mapwv.gov/property

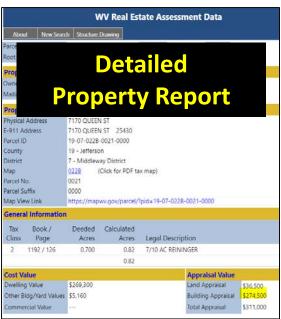
Companion Product to WV Flood Tool

Powerful compound query searches can be performed on flood hazard zones and state assessment records:

- New Development in Floodplains
- **Prior Ownership** (Deed Book, Previous Owner, Legal Description). Online search of the parcel history of deed book/page numbers and other ownership information to identify the correct positional location of LOMAs and Buyout Properties.

### WV Property App (Companion Product)







WV Assessment		ABOUT	FAQ	RESOURCES	
Property Search	<b>Property Searcl</b>	n Tool			
Search Options: ○ Hide	isal/Sales O Advanced (Hovero	over input fields to view h	ielp)		
County: All	District: All ∨	Full Parcel ID: 19	-07-022B-	0021-0000	
Owner Name:	Map Number:	Property Class: R	- Residen	tial ∨	
Street Name:	Parcel:	Tax Class: 2	~		
	Sub-Parcel:	Land Use A	11		
Search Reset Lines per page: 15					

#### **WV Property Viewer**

www.mapwv.gov/parcel

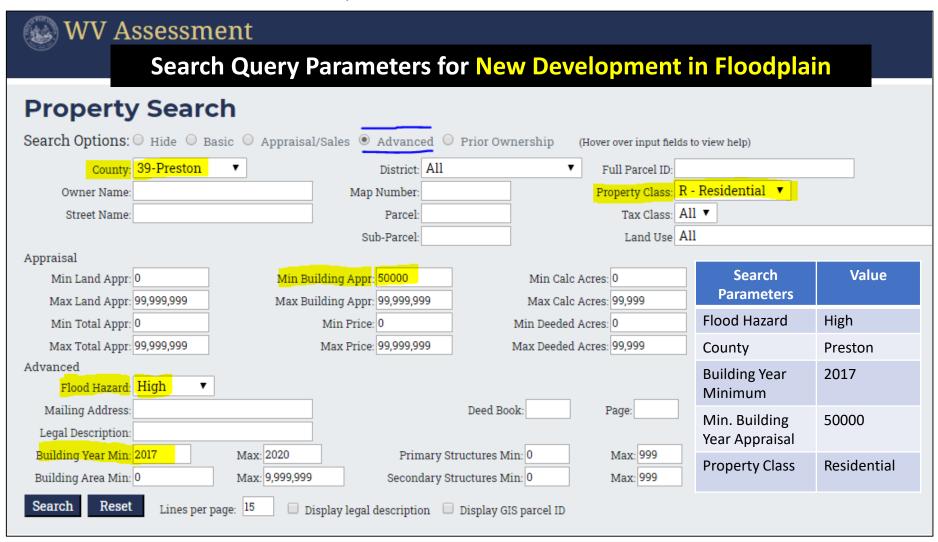
#### **WV Property Search**

www.mapwv.gov/ property

### WV Property Search: New Development

"Advanced" WV Property Search: www.mapwv.gov/property

Companion Product to WV Flood Tool



### WV Property Search: New Development

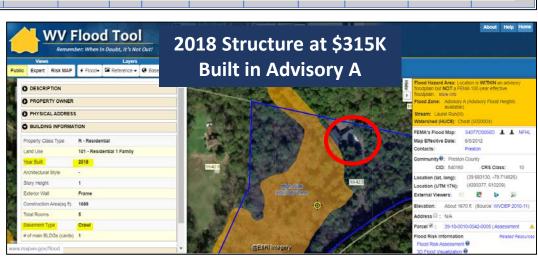
#### **Query Results for New Development in Floodplain**

Property Address ÷	County 🚊	District ÷	Map ÷	Parcel ÷	Map Link	Flood Tool	Deeded Acres ÷	Property Class ÷	Land Use Code ÷	Tax Class ÷	Building Appraisal	Land Appraisal ÷	Total Appraisal ÷
2768 HILEMAN RD	39-Preston	10-Grant District	<u>10</u>	42.5	GIS Map	<u>FT</u>	11.03	R	101	2	\$315,300	\$32,000	\$347,300
4089 MOYERS RD	39-Preston	10-Grant District	<u>14</u>	32.10	GIS Map	<u>FT</u>	16.63	R	101	2	\$145,100	\$41,000	\$186,100
600 EISENTROUT RD	39-Preston	8-Pleasant District	<u>13</u>	12.0	GIS Map	<u>FT</u>	14.34	R	101	2	\$125,400	\$33,800	\$159,200
429 OAK ST	39-Preston	11-Kingwood Corp	2	6.0	GIS Map	<u>FT</u>	0.17	R	101	2	\$121,000	\$6,600	\$127,600
144 LAUREL RUN RD	39-Preston	10-Grant District	<u>27</u>	16.0	GIS Map	<u>FT</u>	1.00	R	101	2	\$103,800	\$19,700	\$123,500
323 S PRESTON HWY	39-Preston	4-Reno District	<u>11</u>	34.0	GIS Map	<u>FT</u>	0.28	R	101	2	\$97,800	\$8,100	\$105,900
3737 SALTLICK RD	39-Preston	5-Union District	4	10.4	GIS Map	<u>FT</u>	3.12	R	101	2	\$92,000	\$21,600	\$113,600
141 GRAPETHICKET RD	39-Preston	11-Kingwood Corp	<u>23</u>	1.12	GIS Map	<u>FT</u>	2.24	R	101	2	\$78,000	\$22,100	\$100,100
421 BIRDS CREEK RD	39-Preston	1-Kingwood District	<u>18</u>	22.0	GIS Map	<u>FT</u>	6.82	R	101	2	\$77,600	\$25,300	\$102,900
205] https://www.mapwv.go	ov/assessment	/Assessment?Cou	nties=3	9&Propert	yClass=R	&Minin	numBuild	lingValue=	:50000&Bu	ıildingYe	arMin=2017	&FloodRisk=	=High ,100

Search Parameters	Value
Flood Hazard	High
County	Preston
Building Year Minimum	2017
Min. Building Year Appraisal	50000
Property Class	Residential

### WV Property Search:

www.mapwv.gov/property

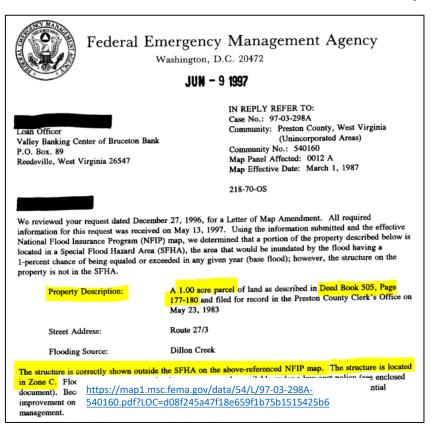


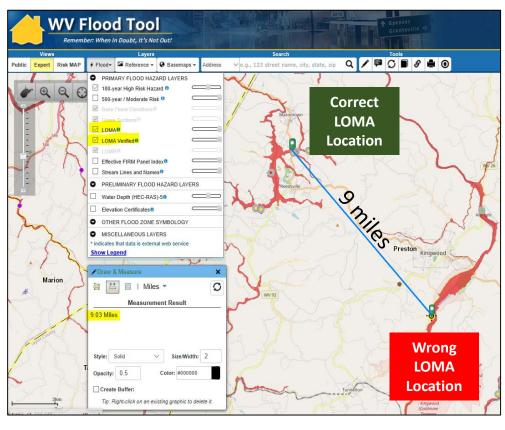
https://mapwv.gov/flood/map/?wkid=102100&x=-8873789&y=4820097&l=13&v=0

"Prior Ownership" WV Property Search: www.mapwv.gov/property

Search Query Parameters for Prior Ownership using Deed Book/Page No.

LOMA 97-03-298A, Project ROUTE 27/3 - DILLON CREEK



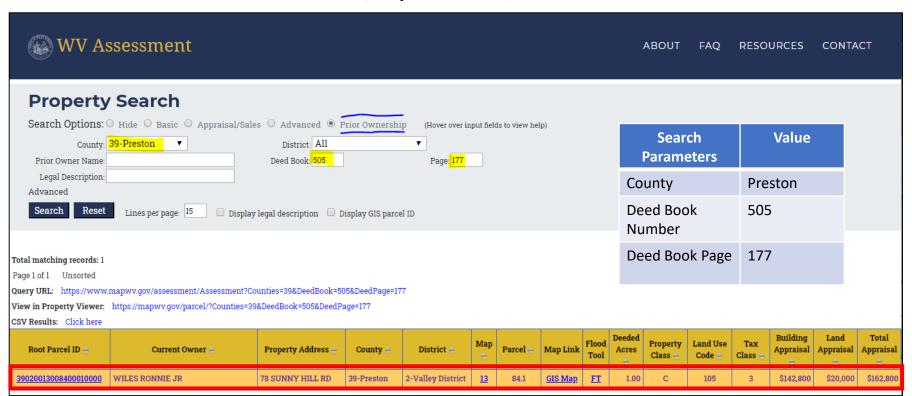


LOMA 97-03-298A is not located south of Kingwood, but 9 miles to the northwest in Preston County. The WV Property Search Tool located the correct parcel through a **Deed Book Number** and **Page** search.

"Prior Ownership" WV Property Search: www.mapwv.gov/property

Search Query Parameters for Prior Ownership using Deed Book/Page No.

LOMA 97-03-298A, Project ROUTE 27/3 - DILLON CREEK



LOMA 97-03-298A is not located south of Kingwood, but 9 miles to the northwest in Preston County. The WV Property Search Tool located the correct parcel through a **Deed Book Number** and **Page** search.

#### LOMA 97-03-298A, Project ROUTE 27/3 - DILLON CREEK

		١	VV Real Es	state As	sessme	nt Data				
Abou	ut New Sean	ch Structure	Drawing							
Parcel III		39-02-0013		Tax Year	2019	County Pr	eston			
	ty Owner and	_								
Owner(s	•	WILES RON								
Mailing	Address	10351 VETE	RANS MEMOR	IAL HWY, N	/ASONTO\	WN, WV 26542				
Proper	ty Location									
Physical	Address	78 SUNNY I	HILL RD							
E-911 A			HILL RD 26542	MASONTO	WN WV 2	5542				
Parcel II		39-02-0013								
County		39 - Prestor								
District		2 - Valley District								
Map		0013 (Click for PDF tax map)								
Parcel N Parcel S	-	0084								
Map Vie		https://mapwv.gov/parcel/?pid=39-02-0013-0084-0001								
	al Information		ww.gov/parce/	.piu=33-0	2-0013-00	04-0001				
		_								
Tax	Book /	Deeded	Calculated							
Class	Page	Acres	Acres		Descriptio	_				
3	682 / 763	1.000	1.00	SUR 1	DILLONS C	K.				
			1.00							
Cost V						ppraisal Value				
Dwellin	_					nd Appraisal	\$20,000			
	ldg/Yard Values	\$0				uilding Appraisal	\$142,800			
Comme	rcial Value	\$142,800 Total Appraisal \$162,800								
Buildir	ng Informatio	n								
Property	y Class	C - Comme	C - Commercial							
Land Us	e	105 - Mixed Residential/Commercial								
Use Typ	e	11-Apartme	11-Apartment, 83-Multi-Use - Sales							
Living A	rea	11,475								

Bldg/ Card		r t Stories	Units	CG	Exterior Wal	I C	onstruction Type		ommercial Basement	Square Feet	Building Value
1	198	3 2	0	1P	Frame	Woo	od frame/Joist/Be	am Firs	st Basement	11,475	\$142,800
			0							11,475	\$142,800
Floor	Zon	e Informa	tion						Learn n	nore at WV F	lood Tool
Ac	res (c.	) Risk									
710	1.00	•	This	s parcel	appears to be in	a HIGH	RISK flood hazare	d zone.			
Sales		ory									earn More
	Date		Price		le Type	Source (		y Code	Book	Pag	e
-,-	5/2007		20,000		nd Buildings	3	C		682	763	
5/1	1/1983		\$7,500	La	nd only	4	3	}			
Parce	l Hist	ory									
Tax	Tax					Book/					
Year	Class	Owner		Owne	er Address	Page	Legal Descripti	on	Land	Building	Total
2019	3	WILES ROI	NNIE JR	MEM	VETERANS DRIAL HWY, DNTOWN, WV	682/ 763	SUR 1 DILLONS	CR	\$20,000	\$142,800	\$162,800
□ Show/	Hide Pa	arcel History	Prior to 2	015							
2014	3	WILES RON	INIE JR	MEMO	VETERANS RIAL HWY, NTOWN, WV	682/ 763	SUR 1 DILLONS	CR	\$20,000	\$127,800	\$147,800
2013	3	WILES RON	NIE JR	MEMO	VETERANS RIAL HWY, NTOWN, WV	682/ 763	SUR 1 DILLONS	CR	\$12,500	\$123,800	\$136,300
2012	3	WILES RON	INIE JR	MEMO	VETERANS RIAL HWY, NTOWN, WV	682/ 763	Deed Bo		\$12,500 <b>505/1</b> 7	\$106,800	\$119,300
2008	2	NUCE DAV NETTIE A	ID P &		X 159, NTOWN, WV	505/ 177	SUR 1 DILLONS PORTION)	CR (RES	\$6,250	\$51,450	\$57,70
2008	3	NUCE DAV NETTIE A	ID P &		X 159, NTOWN, WV	505/ 177	DAVES TRACTOI EQUIPMENT (OI DILLONS CR)		\$6,250	\$51,450	\$57,70

https://mapwv.gov/assessment//Detail/?PID=39020013008400010000

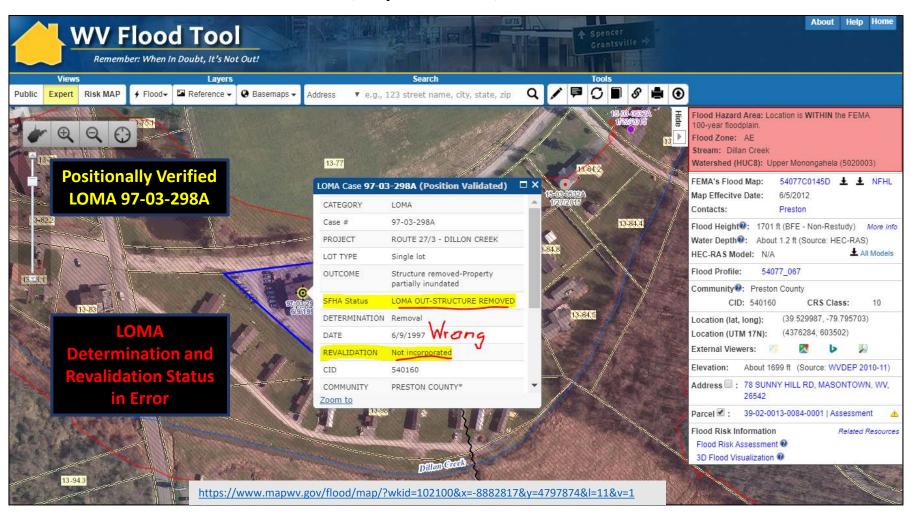
Correct parcel location of LOMA 97-03-298A was identified by a prior owner and **Deed Book Number 505/177** back to year 2008

"Prior Ownership" WV Property Search: www.mapwv.gov/property

LOMA 97-03-298A, Project ROUTE 27/3 - DILLON CREEK About Help Hom **WV Flood Too** https://www.mapwv.gov/flood/map/?wkid=102100&x=-8882817&y=4797874&l=11&v=1 Q / F C B 8 4 0 lood Hazard Area: Location is WITHIN the FEMA Flood Zone: AF 13-77 Watershed (HUC8): Upper Monongahela (5020003) 54077C0145D ± ± NFHL **Route 27/3 Positionally Verified** Flood Height®: 1701 ft (BFE - Non-Restudy) More Info LOMA 97-03-298A Water Depth : About 2.3 ft (Source: HEC-RAS) HEC-RAS Model: N/A 54077 067 Community@: Preston County Parcel Location (lat. long) DESCRIPTION 02 13008400010000 (Detailed Report IAS Parcel ID About 1698 ft (Source: WVDEP 2010-11) GIS Parcel ID 39-02-0013-0084-000 Address : 78 SUNNY HILL RD, MASONTOWN, WV. **Parcel** County ID 39 - Preston Parcel : 39-02-0013-0084-0001 | Assessment **Detailed** District Name 2 - Valley District 13 (click map # for a P Report Flood Risk Asse Make sure the popup See Parcel 3D Flood Visuali Parcel Number History in Parcel Suffix **Dillan Creek** Legal Description SUR 1 DILLONS CR. **Assessment** 1 Acre Acreage (deed) Report 2019 **Prior Deed** Deed Book 505 / 177 @WVGISTC Leaf-Off Mixed-Resolution Imagery

Correct positional location of LOMA 97-03-298A verified with LOMA Document by Deed Number (505/177), Parcel Size (1 acre), Flood Source (Dillon Creek), and Highway Number 27/3.

LOMA 97-03-298A, Project ROUTE 27/3 - DILLON CREEK



FEMA LOMA 97-03-298A: Positional Accuracy, Determination Status, and Revalidation Status in Error

# Flood Tool Applications

#### ☐ Floodplain Management

- Property Identification
- Property Search Tools
- Flood Determinations
- NFIP / Community Rating System



#### ☐ Risk Mapping, Assessment, and Planning

- Risk Identification and Mapping
- Risk Assessment
- Risk Mitigation & Planning
- Risk Communications



Disaster Assessment



#### WV Flood Tool

#### **Disaster Assessments**

Subject: Letter of Appreciation for Support to FEMA-4331-DR-WV

I want to personally thank you and your colleagues at the West Virginia GIS Technical Center for the outstanding support your website <a href="https://www.mapwv.gov/flood/map/">https://www.mapwv.gov/flood/map/</a> provided to the Individual Assistance Program as part of the Federal Emergency Management Agency (FEMA) response to July's Severe Storms and Flooding in northern West Virginia.

Our IA teams were able to match Preliminary Damage Assessment (PDA), 911

addresses, and registration data sets to your parcel data to ensure all impacted individuals and families were contacted by our Disaster Survivor Assistance Teams and registered for assistance. Once registered, we were able to assist in resolving a myriad of issues, including property ownership and property mapping location.

My staff remarked the website was easy to navigate, and the ultimate compliment, "it got the job done". We were able to respond more quickly to the needs of the survivors in a more timely manner. Your support to the whole community partnership has allowed the FEMA team to support the residents of West Virginia efficiently and effectively. We are fortunate to have you as a team partner. Your dedication is much appreciated by FEMA as well as the communities who were affected by this most recent disaster.

U.S. Department of Homeland Security Federal Emergency Management Agency West Virginia Joint Field Office 426 Leon Sullivan Way Charleston, WV 25301



Thank you for your continued support.

Steven S. Ward

Sincerg

Federal Coordinating Officer FEMA-4331-DR-WV FEMA Letter dated September 29, 2017, about WV Flood Tool support for Disaster Assessments

# Flood Risk Development Team

Full and Part-Time Staff



Kurt Donaldson Manager



Maneesh Sharma GIS Analyst / Flood Risk Specialist



Xiannian Chen GIS Programmer



Jim Schindling Database Programmer



Kevin Kuhn GIS Analyst / Address-Parcel Specialist



Frank LaFone Systems Administrator





Yibing Han GIS Programmer



Eric Hopkins GIS Analyst / Flood Risk Specialist



Behrang Bidadian GRA Shelter Models



Kevin Shrader GRA Building Inventory, Flood Visualization

#### Contact Information

#### WVU GIS Technical Center, West Virginia University

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Eric Hopkins, GIS Analyst Eric.Hopkins@mail.wvu.edu, phone: (304) 293-9463