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, 5, 6	< value> ft. (Display to 0.1) (Clickable GRID value)	(BFE Restudy) In future may include A Zones	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 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/AFHhandout.pdf	
2	Base Flood Elevation (Non-Restudy) Updated AE Grid	AE Zones Flood Zone Statuses 1, 2, 8	< value> ft. (Display to 0.1) (Clickable value)	(BFE Non- Restudy)		
3	Base Flood Elevation (Non-Restudy)	AE Zones Flood Zone Statuses 1 & 2	no value	Refer to FIS report for BFE		
4	Advisory Flood Height AFH Grid or BFE-P Grids	A Zones Flood Zone Statuses 4, 5, 6, & 9. Possible status 10.	About < value> ft. (Display to 0.1) (Clickable value)	(AFH)	Restudy and Non-Restudy AE Zones: To validate base flood elevations refer to the Flood Profiles and Flood Elevation Tables in the FIS Report. Vertical Datum for Flood Heights: The vertical datum of Base Flood Elevations (BFEs) for AE Zones recorded on official FIRMs in West Virginia is NAVD 88, except for the following counties where the FIRMs are referenced to the NGVD 29 Datum: Hampshire, Logan, McDowell, Mercer, Monroe, Ohio, and Putnam. The vertical datum of all Advisory Flood Height values for Approximate A Zones in West Virginia is NAVD 88, except for McDowell County which is NGVD 29. More information.	
5	Preliminary Flood Height <mark>(BFE-P)</mark>	Flood Zone Statuses 5 to 7. BFE Preliminary Grid takes priority.	5a, 6a, <mark>7 = value</mark> 5b, 6b = no value	 a) Grid value (BFE Preliminary), then BFE-R, BFE-NR, AFH b) No Value. "See FEMA Change Viewer link for Prelim. BFE" 		
6	No Flood Height Information	Flood Zone Statuses 3 and 4; 9 through 13	no value	None (Status 3 or 4) N/A (Statuses 9-13)		

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) BFE Restudy WSEL BFE Grid (WSEL_1PCT_BFE_1m); Updated AE/BFE Non-Restudy (WSEL_1PCT_Updated_AE)

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 Flood Heights available)	Location is WITHIN the FEMA 100-year floodplain. Advisory Flood Heights available.	Effective 100 yr Zone A <i>and</i> Advisory Zone A	AFH or BFE-P	High	Red
<mark>5</mark>	Preliminary NFHL 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 or A (Shaded X not displayed or shown on Flood Query Results Panel)	<mark>BFE-P</mark> , then BRE-R, BFE-NR, AFH	High	Orange
<mark>6</mark>	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	BFE-P, then BFE-R, BFE-NR, AFH	High	Orange
<mark>7</mark>	Draft NFHL Flood Zone (NEW)	Location is WITHIN an updated FEMA 100-year flood hazard zone. The flood zone is DRAFT and under review to become PRELIMINARY.	Draft 100 yr Zone AE or A	BFE-P (A or AE Zones only)	High	Orange
8	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
9	Advisory A	Location is WITHIN an advisory floodplain but NOT a FEMA 100-year effective floodplain.	Advisory Zone A	AFH	High	Orange
10	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
11	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
12	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
13	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, Draft (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)

Water Depth: about <<value>>

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

A statewide "composite" Flood Risk Assessment Depth Grid is created from model-backed *effective* and *advisory* depth grids at a 1-meter 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.

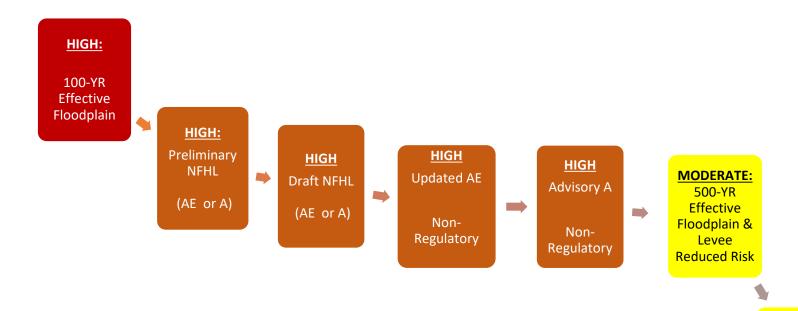
Depth grids a source of credits for CRS communities.

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

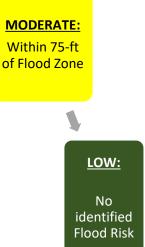
https://www.fema.gov/media-library-data/1469146645661-

31ad3f73def7066084e7ac5bfa145949/Flood Risk Assessment Guidance May 2016.pdf

Flood Zone Determination Sequence



- Flood zone determination sequence important for programming logic
- WV Flood Tool first checks query location for High Risk effective flood zones (red warning color), High Risk advisory flood zones (orange), then Moderate Risk flood zones (yellow)

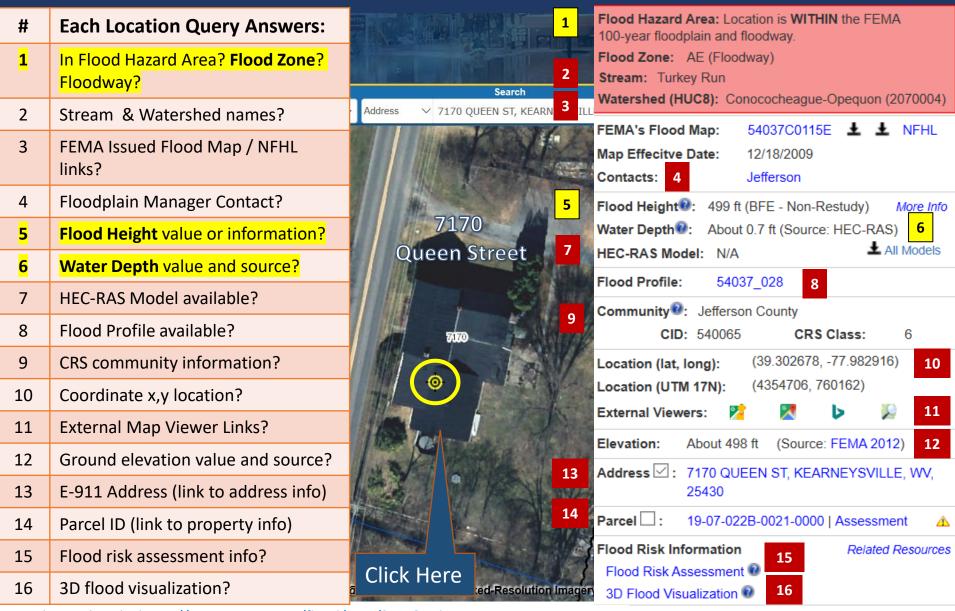


Flood Query Results Panel

Programming Logic Determinations for Flood Query Results Panel

- Flood Zones 13 zone status conditions
- Flood Heights Base Flood Heights, Advisory Flood Heights, Preliminary Flood Heights – 5 status conditions
- Depth Grid HEC-RAS 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

