



FEMA

## Flood Risk Review Meeting Notes Jefferson County, West Virginia

April 17, 2024  
3:00 – 4:30 p.m.

### Welcome and Introductions

- Introductions were made for the presenters of the meeting:
  - Vinod Mahat, FEMA Region 3 Project Office / Engineer
  - Jason Sevanick Durant, Mapping Partner
  - Megan Stevenson, Mapping Partner
  - Tim Keaton, State NFIP / CTP
- Agenda Overview
  - Welcome & Introductions
  - Where We Are – Draft Maps
  - Flood Study Update
  - Using Flood Risk Data to Reduce Risk
  - Map Changes and Flood Insurance
  - Discussion
- There were 6 local community representatives, and 7 State and Federal partners – please refer to the attendee list at the end of this document.

### Presentation

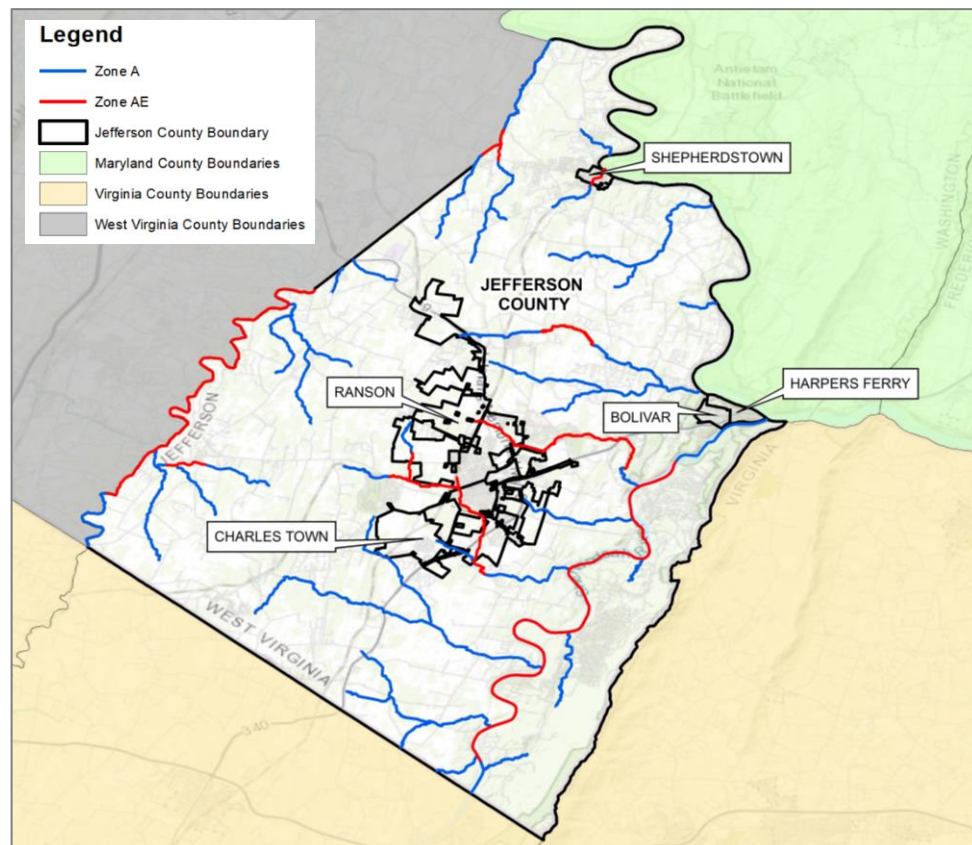
#### *Where We Are - Draft Maps*

- Timeline for Jefferson County:
  - Effective FIRMs – 2009
  - Advisory Flood Height (AFH) Data – 2012 – non-regulatory data
  - Risk MAP Kickoff Meeting – September 2021
  - Notice of Proposed Engineering Methods – 2021
  - Flood Risk Review (FRR) Meeting – April 2024
  - Preliminary Products – Fall 2024
  - Community Coordination and Outreach (CCO) Meeting – ~30 days following Preliminary Maps
  - Appeal Period – Spring 2024
  - FEMA issues Letter of Final Determination (LFD) – Summer 2025
  - Final Maps Become Effective – 6 Months after (LFD)

- The Flood Risk Review (FRR) meeting gives local officials an opportunity to examine draft study results (including new study reaches), discuss how the analysis and mapping have changed since the previous FIRM, and work collaboratively to ensure that the needs of the community and its partners are met.
- Preliminary flood maps are scheduled to be released in the Fall of 2024, and another meeting will be scheduled to help County and community representatives prepare for outreach to property owners affected by the preliminary maps. Afterwards, a 90-day appeal period for all new or modified flood hazard information will start (anticipated for Winter/Spring 2025).
- Maps are expected to be finalized through a Letter of Final Determination (LFD) around Summer 2025 and will become effective six months later. However, if appeals are received the process may take longer.

### **Flood Study Update**

- The forthcoming Preliminary FIRMs and associated products will follow a new format (including symbology, labeled elevations on modeled cross-sections, and more).
- Summary of primary FIRM features was presented, such as definition of the regulatory 1% annual chance flood hazard (aka Special Flood Hazard Areas (SFHAs) and different zone designations such as Zone AE / Zone A.
- Riverine Hydrologic and Hydraulic Analyses, including:
  - Utilization of high-resolution topographic data (for modeling and mapping)
  - Detailed 'Zone AE' Studies – 47.4 miles
  - Model-backed Approximate 'Zone A' Studies – 104.1 miles
  - Scope refinement for Town Run 2D analysis in Shepherdstown
  - Evaluation of Letters of Map Change
  - Development of accompanying non-regulatory Flood Risk Products (FRP)
  - The Potomac River has NOT been restudied.



Hydrologic Study Method	Study Type	Stream Names	Reach Lengths (Miles)
HEC-HMS 4.9	AE	Town Run (Lower Reach)	0.7
HEC-HMS 4.9	A	Town Run (Upper Reach)	1.5
USGS 2010 Regression Equations	AE	Elk Branch, Elk Branch (Lower Lateral Divert), Elk Branch (Upper Lateral Divert), Evitts Run (Middle Reach), Evitts Run Tributary 2, Evitts Run Tributary 3 (Lower Reach), Flowing Spring Run (Upper Reach), Rockymarsh Run (Middle Reach), Rockymarsh Run Tributary 1 (Lower Reach), Turkey Run (Middle Reach)	18.3
USGS 2010 Regression Equations	A	All Remaining Zone A Studies	82.3
Gage Analysis weighted with USGS 2010 Regression Equations	AE	Opequon Creek (Lower Reach), Shenandoah River (Middle Reach)	28.4
Gage Analysis weighted with USGS 2010 Regression Equations	A	Bullskin Run, Opequon Creek (Upper Reach), Rockymarsh Run (Lower Reach), Shenandoah River (Lower Reach), Shenandoah River (Upper Reach)	20.4

### Study Impacts

- Compared to effective NFHL, widening and narrowing of the 1-percent-annual-chance floodplain (SFHA) extent was observed throughout the county.
- Extended study reaches (with drainage areas of 2 square mile and greater, and not on current effective FIRM) result in new properties within the SFHA.
- Most streams experienced both increases and decreases when comparing the computed model WSELs to the current regulatory base flood elevations.
- Basic analysis of impacted buildings indicate more will be mapped out (-350) than mapped in (+120)
- **Refined analysis of impacted buildings by WVGIS TC:**

No Change to SFHA	Mapped Into SFHA	Mapped Out of SFHA	Total Structures
343 (+30 Floodway)	122 (+3 Floodway)	276	774

- Dashboards were presented and discussed, including a countywide roll-up and by individual community.

### Data Accessibility

- The draft data can be accessed by the following platforms:
  - The WV Flood Tool is available at [WV Flood Tool \(mapwv.gov\)](http://mapwv.gov) and shows information on individual properties and the flood zone. Use the draft data now that it is available. The expert view shows the Effective and Draft information cross sections for comparison. There is the ability to turn layers on and off in WV Flood Tool and examine information locally.
    - Significant change in Shepherdstown WV.
    - The link button in the WV Flood Tool can be used to make a comment on the map linked to a map location. Jason encouraged use of this comment tool.
  - FEMA Region 3 Changes Since Last FIRM (CSLF) Viewer at <https://arcg.is/1GS0T80>.
  - National Flood Hazard Layer at <https://msc.fema.gov/draft> and <https://www.fema.gov/national-flood-hazard-layer-nfhl>

### **Using Flood Risk Data to Identify and Reduce Risk**

- Changes Since Last FIRM, Water Surface Elevation Grids, and Depth Grids will be available on WV Flood Tool and NFHL for use.
- This information is available to use for Hazard Mitigation Plan update and mitigation projects in your community.
- It is important to emphasize that anywhere it can rain, it can flood.

### **Hazard Mitigation and Flood Management**

- Now is the time for communities to start assessing the impacts of the new floodplain boundaries
- Permits are Required for all development in the regulatory floodplain
- Communities can regulate to standards higher than the NFIP minimum standards. For additional information and resources, visit: <https://www.fema.gov/floodplain-management/manage-risk/local>
- Risk Rating 2.0: Considers more flood risk variables to more accurately reflect property-specific flood risk [www.fema.gov/NFIPtransformation](http://www.fema.gov/NFIPtransformation)
- The process for updating and adopting a compliant floodplain ordinance will be a featured topic in the subsequent “CCO Meeting” that will take place after the release of Preliminary Maps.

### **Discussion**

- The revisited Project Timeline and contact information for FEMA R3, State NFIP, and the Study Partner was shared as part of the FRR conclusion.

## **Questions/Comments**

- Will the communities be able to request the data?
  - Yes, beyond viewing the draft data on the WV Flood Tool and FEMA viewer, communities with GIS capabilities can request and receive the database for review within their own systems.
- Tim Keaton shared the Swift Current grant is available in WV due to a Disaster Declaration. The State sent letters to all RL and SRL properties in state. If you receive letters from property owners about this grant, please forward to state. The deadline is just 6-months to apply for grant.
- Jefferson County shared that the county staff map was recently updated with Letter of Map Change information.
  - County representative asked if the LOMCs will be re-issued. Jason Sevanick explained that the LOMCs will be summarized on the Summary of Map Actions (SOMA) showing how each LOMC is impacted by the new study data. LOMCs will be grouped on the SOMA, and for any LOMCs that remain valid in the context of the new study, a single Revalidation Letter will be issued to communities (and posted to the FEMA Map Service Center) in conjunction with new effective maps.
- Kurt Donaldson observed that a good degree of development will have occurred since 2012 (the date of the LiDAR / topographic data used for modeling / mapping). Jason Sevanick explained that site plans or other certified representations of newer or higher resolution topographic data can be submitted to support site-specific adjustments (via comments related to the FRR / Draft Data review period, or subsequently as an appeal during the 90-day appeal period that will follow the release of Preliminary Maps).
- *Q: Tim Keaton asked if there was a new Chesapeake Bay study that impacted Potomac River.*
  - A: Jason Sevanick shared that, several years ago, FEMA Region 3 had prepared a unified profile for the Potomac to resolve some historic data discrepancies (e.g. elevations/zone designations) between adjacent county / community boundaries. New hydrologic and hydraulic analysis for the Potomac has not yet been performed.
- *Q: Will the Potomac be a detailed study?*
  - A: It is not scoped at this time.

- Why did Shepherdstown go from AO to AE?
  - Change from AO zone has been informed by community input.
  - New 2D analysis typically results AE or A zone designations.
  - Shepherdstown concerned about properties newly mapped in.
    - Gaps in the Effective SFHA are now filled by Draft 2D modeling/mapping which result in buildings being newly added.
- Kurt Donaldson shared that there are FEMA publications focused on historic properties.
- *Q: Will the HEC-RAS be available to review?*
  - A: Yes, ask the contacts in the presentation. The models are subject to change so they are not released publicly but can be shared with communities for review.
- Communities can submit Elevation Certificates for hosting on the WV Flood Tool with parcel identification information. It is helpful to have on state tool so that it is never lost.
  - It is helpful to have this information ready for the Substantial Damage Estimator (SDE).
- CRS is being re-vamped so that there may be some delays in upcoming reviews/audits.
  - Review of properties in the National Violation Tracker is going to be important for review and mitigation.
- *Q: There are some large solar farms in the county (existing and planned, covering hundreds of acres), and there is concern about the collective impact of run-off.*
  - A: Run-off from solar panels was not directly factored into the hydrologic analysis of this study. Solar installations are typically managed under stormwater regulations. The impact is conventionally managed at the site level, rather than at the watershed scale - like other land development projects. While there is potential for the collective impact of large solar installations to increase runoff, it is not being proactively accounted for.

Over time, changes may become evident in the stream gage records, or the county could potentially evaluate modified land use / Manning's roughness coefficients in stream overbanks. If the county's evaluation would determine a measurable increase in flows or hydraulic response, then the county may submit the corresponding technical data in support of an appeal or at any time outside of the current project timeline via a Letter of Map Revision.

## Attendee List

Name	Community / Agency	Title	Email	Attended
Vinod Mahat	FEMA	FEMA Project Officer	<a href="mailto:Vinod.mahat@fema.dhs.gov">Vinod.mahat@fema.dhs.gov</a>	Yes
Tim Keaton	WVEM	State NFIP Coord.	<a href="mailto:Timothy.w.keaton@wv.gov">Timothy.w.keaton@wv.gov</a>	Yes
Ruthie Maniscalchi	WVEM	CTP Project Officer	<a href="mailto:Ruthie.a.mansicalchi@wv.gov">Ruthie.a.mansicalchi@wv.gov</a>	No
Eric Hopkins	WVGISTC	GIS Specialist	<a href="mailto:Eric.hopkins@mail.wvu.edu">Eric.hopkins@mail.wvu.edu</a>	Yes
Kurt Donaldson	WVGISTC	GIS Senior PM	<a href="mailto:Kurt.Donaldson@mail.wvu.edu">Kurt.Donaldson@mail.wvu.edu</a>	Yes
Jason Sevanick	WSP	Study Contractor	<a href="mailto:jason.sevanick@wsp.com">jason.sevanick@wsp.com</a>	Yes

Name	Community / Agency	Title	Email	Attended
Megan Stevenson	WSP	Study Contractor	<a href="mailto:megan.stevenson@wsp.com">megan.stevenson@wsp.com</a>	Yes
Sarah Bowen	WSP	Study Contractor	<a href="mailto:Sarah.K.Bowen@wsp.com">Sarah.K.Bowen@wsp.com</a>	Yes
Steve Stolipher	Jefferson Co.	President, Commissioners	<a href="mailto:stolipherjcc@gmail.com">stolipherjcc@gmail.com</a>	No
Mason Carter	Jefferson Co.	Ordinance Compliance Officer	<a href="mailto:engineering@jeffersoncountywv.org">engineering@jeffersoncountywv.org</a>	No
Dick Myers	Jefferson Co.	OHSEM Deputy Director	<a href="mailto:dmyers@jeffersoncountywv.org">dmyers@jeffersoncountywv.org</a>	Yes
Jessica Gormont	Jefferson Co.	GIS Coordinator	<a href="mailto:jgormont@jeffersoncountywv.org">jgormont@jeffersoncountywv.org</a>	Yes
Stephen Paradis	Bolivar	Mayor	<a href="mailto:bolivarth@frontiernet.net">bolivarth@frontiernet.net</a>	No
Brian Trainor	Charles Town	Mayor	<a href="mailto:btrainor@charlestownwv.us">btrainor@charlestownwv.us</a>	No
James Newman	Charles Town	City Planning & Zoning/FPA	<a href="mailto:jnewman@charlestownwv.us">jnewman@charlestownwv.us</a>	Yes
Gregory Vaugh	Harpers Ferry	Mayor	<a href="mailto:mayor@harpersferrywv.us">mayor@harpersferrywv.us</a>	No
Steve Paradis	Harpers Ferry	FPA		No
Storm DiCostanzo	Harpers Ferry	FPA		No
Keith D. Pierson	Ranson	Mayor	<a href="mailto:dpierson@ransonwv.us">dpierson@ransonwv.us</a>	No
Tod Wilt	Ranson	City Manager	<a href="mailto:twilt@ransonwv.us">twilt@ransonwv.us</a>	No
Darla Armstrong	Ranson	City Clerk		No
Mark Phillips	Ranson (Kimley-Horn)	Engineer	<a href="mailto:mark.phillips@kimley-horn.com">mark.phillips@kimley-horn.com</a>	Yes
Reiley Stanley	Ranson	Community Development Dir.	<a href="mailto:rstanley@ransonwv.us">rstanley@ransonwv.us</a>	Yes
Jim Auxer	Shepherdstown	Mayor	<a href="mailto:jimauxer@yahoo.com">jimauxer@yahoo.com</a>	No
Andy Beall	Shepherdstown	Planning & Zoning Admin/FPA	<a href="mailto:Abeall@shepherdstown.us">Abeall@shepherdstown.us</a>	Yes