

**WEST VIRGINIA
FLOOD RESILIENCY
FRAMEWORK
SYMPOSIUM
SUMMARY**



MARCH 2024

Created as part of the West Virginia Flood Resiliency Framework

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OPENING REMARKS SENATOR JOE MANCHIN III

Joe Manchin III
WEST VIRGINIA



United States Senate
WASHINGTON, DC

GREETINGS FROM JOE MANCHIN III UNITED STATES SENATOR

On behalf of the citizens of the Mountain State and as your United States Senator, it is my distinct honor to join you for this symposium: Building Flooding Resiliency in West Virginia Communities.

If we expect to protect the health and well-being of our communities, it is essential to initiate efforts that will shelter our citizens from the effects of devastating natural disasters. As we all know, flooding can wreak havoc on the communities we call home, especially high-risk flood zone areas. Resiliency upgrades do more than protect against property damage – they bring comfort and stability to local residents.

As West Virginians, we know that we must be prepared for any weather-related storm that comes our way. This symposium helps us accomplish just that. Together, you are bringing all aspects of flood recovery together in one room. As your former Governor and now as your United States Senator, I will continue advocating for resources to protect the health and safety of our loved ones. Alone we can do so little, together we can do so much.

I thank all those here today who work to implement long-term, productive, problem-solving solutions for West Virginia. Your time, energy and resources are greatly valued. Please accept my best wishes for what is sure to be a wonderful symposium. May God bless you and may God continue to bless the Great State of West Virginia.

With warmest regards,

A handwritten signature in blue ink, reading "Joe Manchin III".

Joe Manchin III
United States Senator

SENATOR SHELLEY MOORE CAPITO

SHELLEY MOORE CAPITO
WEST VIRGINIA

United States Senate
WASHINGTON, DC 20510-4805

COMMITTEE
APPROPRIATIONS
COMMERCE, SCIENCE,
AND TRANSPORTATION
ENVIRONMENT AND PUBLIC WORKS
RULES AND ADMINISTRATION

March 12, 2024

Greetings from United States Senator Shelley Moore Capito

It is my honor as United States Senator for West Virginia to discuss flood resiliency in West Virginia. Thank you to Dr. Jamie Shinn and the research team for hosting this symposium and spearheading the creation of the West Virginia Flood Resiliency Framework to benefit our great state.

Previous flooding has impacted West Virginians in disastrous ways. Catastrophic floods, like those our state experienced in 2016, gained attention across West Virginia and the nation. West Virginia has historically been prone to flooding, both on a large and small scale, especially in rural communities. Many of these same communities have a difficult time recovering from flood damage. Today, this symposium represents a key part of bringing hope and assistance to the victims of floods. The new ability to have an online, free resource to support residents is just the beginning of a great change.

The creation of the West Virginia Flood Resiliency Framework will bring the state together, helping the communities most in need of relief and protection. Following these tragedies, I watched West Virginians band together for the good of the state and those in need. Moments like those make me proud to serve you in the United States Senate.

Sincerely,

Shelley Moore Capito
United States Senator

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CONGRESSWOMAN CAROL MILLER

CAROL D. MILLER
10th District, West Virginia



COMMITTEE ON WAYS AND MEANS
SUBCOMMITTEE ON TRADE
SUBCOMMITTEE ON HEALTH

Congress of the United States House of Representatives

March 11, 2024

Dear Friends:

I was honored by your invitation to participate in today's symposium. I regret that I am unable to be with you, but know how much I appreciate the important work you are doing.

West Virginia has experienced flooding for a long time. It is a downside of our beautiful mountains and topography. I don't need to tell you how devastating the impacts of flooding can be. The flooding events of 2016 are cemented in every West Virginian's mind and heart. We remember those lost and continue to pray for their families.

The resilience that our state has shown long before 2016 and will continue to show inspires me. We work together and help our neighbors, that is the West Virginian way. The people in this room understand that more than most. You are the group that steps up when flooding and natural disasters occur to help those in need.

I am so thrilled that you are conducting this symposium to discuss ways we can mitigate, prepare, and research to minimize the impacts that these events have on our communities. The work you are doing is so vitally important and has the potential to save so many lives.

When Congress brought back Community Project Funding or earmarks as we know them, I prioritized water and sewer projects. Upgrading and building on our aging water infrastructure is so important to me. I have secured over a dozen water projects and millions of dollars to help communities in my district.

It is an honor to serve as your Representative in Congress and know that I am fighting every day for southern West Virginia.

God bless you!

Sincerely,

Carol D. Miller
Member of Congress

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SYMPOSIUM SUMMARY

The Building Flooding Resiliency in West Virginia Communities Symposium was held on March 12-13, 2024 in Charleston, WV. This event brought together 117 members of the network of people working on flood-related issues at all levels in WV, from local community organizations to state and federal agencies. Over the course of two days, symposium attendees took part in a scenario-based tabletop exercise and other activities in order to meet four goals:

1. Gain a common understanding of who the main players are and the capabilities they provide before, during, and after a flood;
2. Have a better understanding of how participants and their organizations can coordinate their efforts in each phase of a disaster;
3. Identify barriers to coordination between agencies and organizations; and
4. Identify those considerations that contribute to or detract from individual and/or community resiliency.

On the first day of the symposium, attendees learned about the research project, state resiliency plan, flood risk assessments, and visualizations. Attendees also participated in a “How to Plan for Everything” activity that provided participants with a simple, step-by-step approach to prepare themselves and their neighbors for



emergencies and accidents. In the afternoon, they attended three different concurrent sessions on the National Flood Insurance Program (NFIP), tools for comprehensive flood planning, and lessons from the Williamsburg Area Response Team (WART). Panel discussions included planning for the disaster response cycle and building community resiliency.

During the second day of the symposium, attendees also participated in a disaster simulation activity. The Cross-Sector Disaster Simulation Game simulates cross-sector collaboration and coordination before, during, and after such disasters (Day, n.d.). Each person was assigned a role, such as government, for-profit company, non-profit organization, or community member. They coordinated on the local, state, and national level prior to the disaster. Once the disaster happened, everyone needed to work together to ship food, water, and medicine within three days. Each "day" was just a few minutes long, creating a high-stress, chaotic environment. Afterward, participants debriefed and analyzed outcomes.

After the simulation, attendees were divided into tables with 6 to 7 people per table. Each table was asked to discuss the following questions:

1. Who are the main players and what are their capabilities before, during, and after a flood?
2. What are the barriers to coordination between agencies and organizations in each phase of a disaster?
3. How can we overcome these barriers?
4. What are key attributes of individual and/or community flood resiliency?
5. How can we build these attributes?
6. What do you want to see included in the West Virginia Flood Resiliency Framework?

When asked who the main players are and what their capabilities are, most attendees frequently brought up the same organizations and individuals. For example, government entities and individuals, like county commissions, mayors, city managers, floodplain managers, code enforcement officers, state/house representatives, and the federal emergency management association (FEMA) played a major role in leadership throughout the disaster cycle. On the emergency management side, coordination, response, relief, and communication were key capabilities. Other players included citizens, non-governmental organizations, faith-based organizations, and private entities, including media companies. Each of these entities had different capabilities, ranging from materially oriented ones, such as medicine, food, and shelter, to immaterial capacities like spiritual services and providing directives.

When assessing the barriers to coordination between agencies and organizations in each phase of a disaster, communication was the most frequently mentioned barrier. Other commonly mentioned barriers included communication, funding/resources, turnover, ego, training/education, roles/responsibilities, planning/preparedness, and cultural limitations. Solutions to improving communication

included marketing, networking (especially before emergencies), direct communication during crises, and improved coordination through Emergency Operations Centers (EOCs). Regular training sessions and exercises and education about roles and responsibilities



within organizations also would help to overcome these barriers. Memorandums of Understanding (MOU) are a key component of the planning and preparedness stage and help to integrate planning strategies.

Planning was the most commonly mentioned method for overcoming barriers. Both in respect to developing written plans, like standard operating procedures (SOPs) and comprehensive plans, but also with other planning efforts like staging resources in advance, maintaining flexibility, raising public awareness, centralizing and updating datasets, sound fiscal planning, and securing funding to support disaster preparedness. Conducting educational outreach and regular training sessions will help to improve communication and ensure transparency among stakeholders. Moreover, building relationships through these meetings and other networking opportunities before disasters occur and during “blue sky” days will improve and clarify role responsibilities.

Similar to the question before, attendees described key attributes of individual and/or community flood resiliency. While many attendees noted previously mentioned attributes like preparation, planning, education, communication, and relationships, new responses described effective leaders. Personal attributes

included maintaining a positive attitude, confidence, willingness to listen, being open to change, advocating for and pushing past political barriers, and building consensus within the community. Mitigation and risk management also became a central attribute, such as elevating buildings, floodproofing, code enforcement, and understanding individual and community risks.

To build attributes for individual and community flood resiliency, education and training was mentioned among almost all groups. New insights that were not mentioned in the previous questions included conducting exercises and practice sessions for real-world scenarios, using media and outreach programs to disseminate information, and encouraging community participation to build trust and address community needs. Within media and outreach, maintaining consistency in messaging and ensuring accountability among leaders were key components.

To inform the West Virginia Flood Resiliency Framework (WVFRF), attendees suggested that the following be incorporated into the framework. This included 1) current comprehensive and accessible resources, case studies, research data, and bibliographies; 2) educational materials and guides: how-to guides and applicant guides, glossary of acronyms, lesson plans for K-12 teachers to teach disaster preparedness; 3) mitigation and planning tools: flood resiliency plans, hazard mitigation plans, comprehensive plans, and emergency action plans; 4) practical examples and templates: mitigation fact sheets, policy guides, toolkits, and templates for plans; 5) communication and outreach: contact lists, public comment section, crowdsourcing community knowledge, and educational flyers; 6) policy and governance: state and regional involvement, defined roles and responsibilities, and examples of statute language; 7) funding and support: disaster trust fund and list of available grants; and 8) technical and operational tools: stream cleaning and debris management and continuity documents for personnel turnover.

References

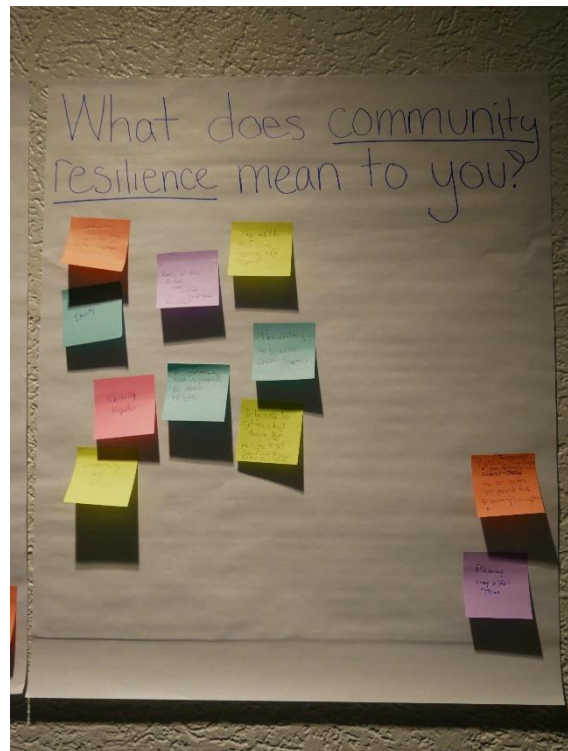
Day, J. (n.d.). *Cross-Sector Disaster Simulation Game*.
http://www.aidforum.org/docs/Jamison_Day.pdf

INTERACTIVE QUESTIONS AND RESPONSES - POST-IT NOTE ACTIVITY

During the symposium, there were numerous opportunities for participants to answer interactive questions for using Post-it notes. Below are the questions and responses from the attendees.

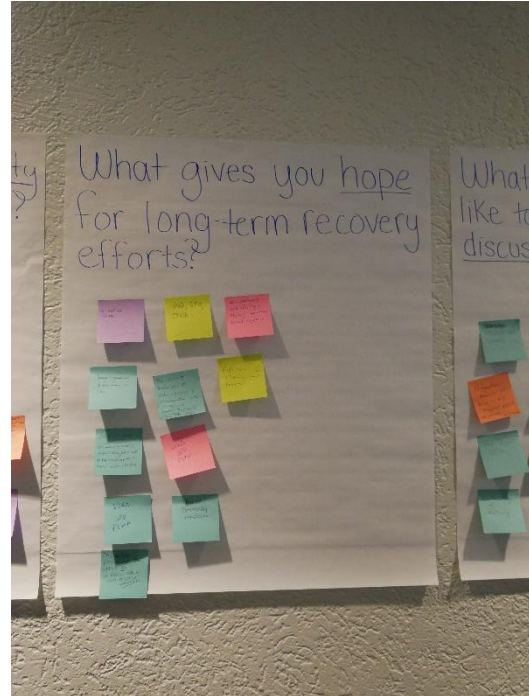
What does community resiliency mean to you?

- The ability to come together and respond
- Working together
- A community that is prepared for their floods
- To be able to get knocked down, but be able to get back up again better equipped
- Ability to get knocked down and still have the resources to get up again
- Community self-reliance
- Planning long + short term
- Increased public awareness and actions to be better prepared for disasters/disruptions
- The ability to bounce back better
- Having a fully funded state resilient fund that has money!
- Identity
- Communities having the ability to come together
- GRIT sharing resources



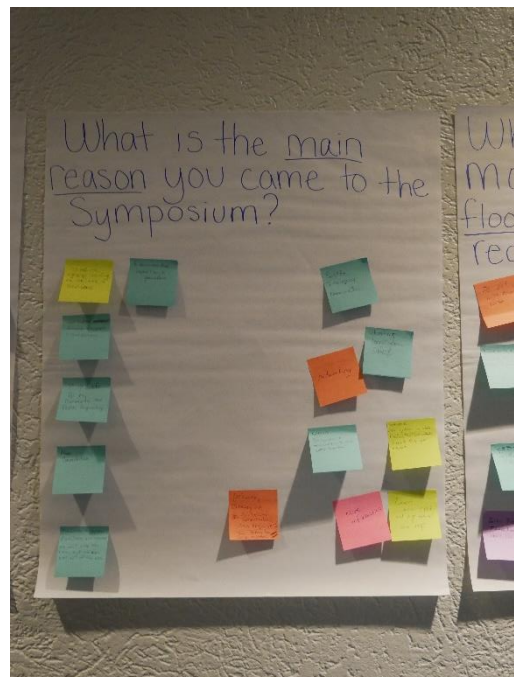
What gives you hope for long-term recovery efforts?

- A robust VOAD!
- VOAD, SRO, FEMA
- WV community and identity is strong. We always stand together
- Younger generations finding careers in EM
- The current leadership at state agencies & at communities with interest in economic development “long term” ideas
- People can change and learn
- Personal preparedness is difficult today, but we need to keep educating people to prepare themselves & families
- Events like this and improved collaboration
- Informed community members
- Collaborative partnerships that involve all in decision making and engaged



What is the main reason you came to the symposium?

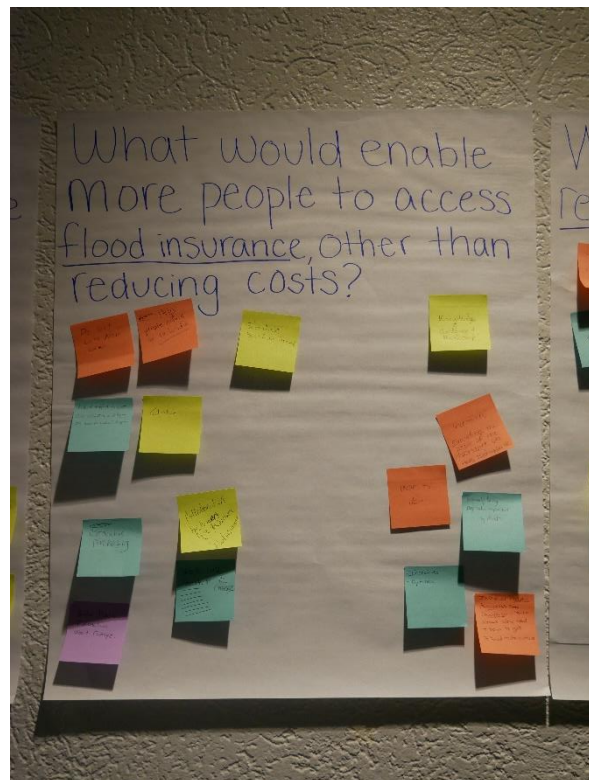
- To help the agencies working on resilience in their work
- To learn more on flood impacts & how to prevent them
- Get better partnerships w/ key people in Flood Resilience
- Make Connections
- To get info for my community that floods frequently



- Hazards happen; disasters are caused. We can't stop the rain, but we can get out of the way
- Network, clarity on patrons/stakeholders, roles + responsibility, how better to work together.
- Networking and education
- Always learning
- Facilitate Inter-agency Communication
- Networking, Learn from others
- Learn how my network and I can help
- Network, get updates on state flooding/resiliency efforts, Support this NSF project
- Network, get counties & municipalities to work better together
- More information

What would enable more people to access flood insurance, other than reducing costs?

- Do not live near water ← Help people afford to relocate
- Actual effort to get cost estimates and figure out how to make it happen
- Subsidize based on income
- Knowledge and Guidance and Mentorship
- Education
- Incentives, Educating the people of the importance via news, social media, etc Door to Door
- Incorporating in Social Sciences (vulnerable populations don't have assets)



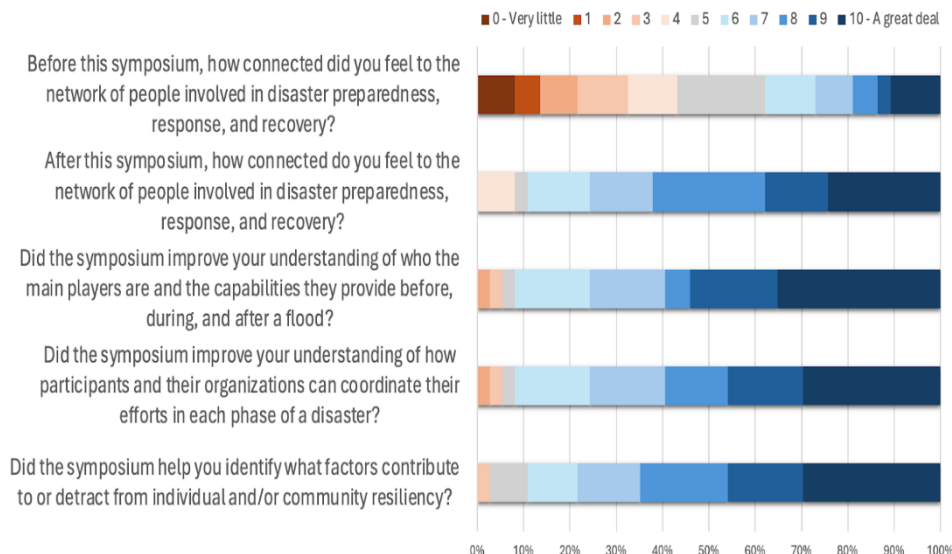
- Collaboration between fire insurance and flood insurance
- Cooperative purchasing
- Better Public Education about coverage
- Increase Public Awareness Campaign- learn about why need and how to get Flood Insurance
- Education
- Incentives, options
- Personally, being negatively impacted by floods
- Truly understands risks and options
- Education on ICC Coverage

POST SYMPOSIUM SURVEY SUMMARY

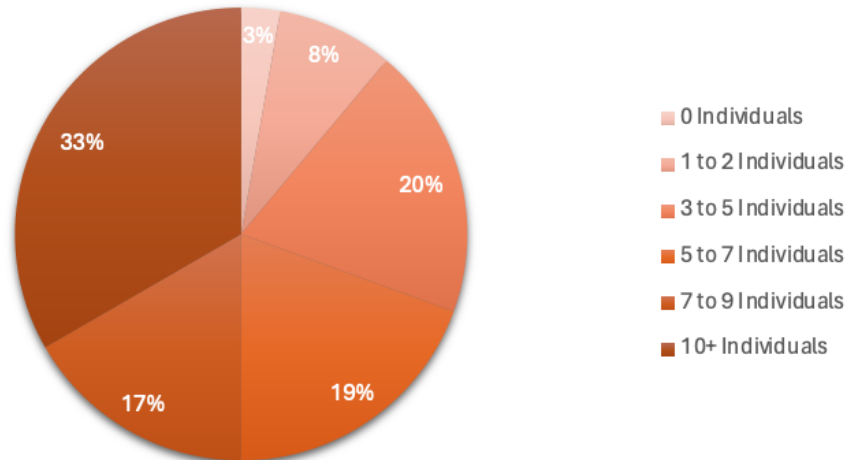
Out of the 117 attendees, 37 people participated in the post-symposium survey. Team members involved in planning the symposium did not take the survey (~20 people). Therefore, this data represents about 40% of the attendees' experience. During the symposium, participants engaged in discussions and activities related to disaster preparedness, response, and recovery. One outcome of the symposium was the significant increase in participants' sense of connectedness within the disaster preparedness network. Before the event, many felt moderately connected to the network, with an average rating of 4.91 out of 10. However, this number increased to 7.87 post-symposium, reflecting a 60.28% increase in network connections among attendees as a result of the symposium.

The symposium provided opportunities for attendees to share and expand their understanding of the complexity of disaster management. We asked participants if the symposium improved their understanding of the main players and their capabilities in flood preparedness, response, and recovery. On a scale from 0 to 10 (0 = Very Little to 10 = A Great Deal), the average rating stood at 7.99, demonstrating participants felt like the symposium significantly increased their understanding of the main players and their capabilities. Using the same scale, we asked participants if the symposium

Post-Symposium Results



New Connections Post-Symposium

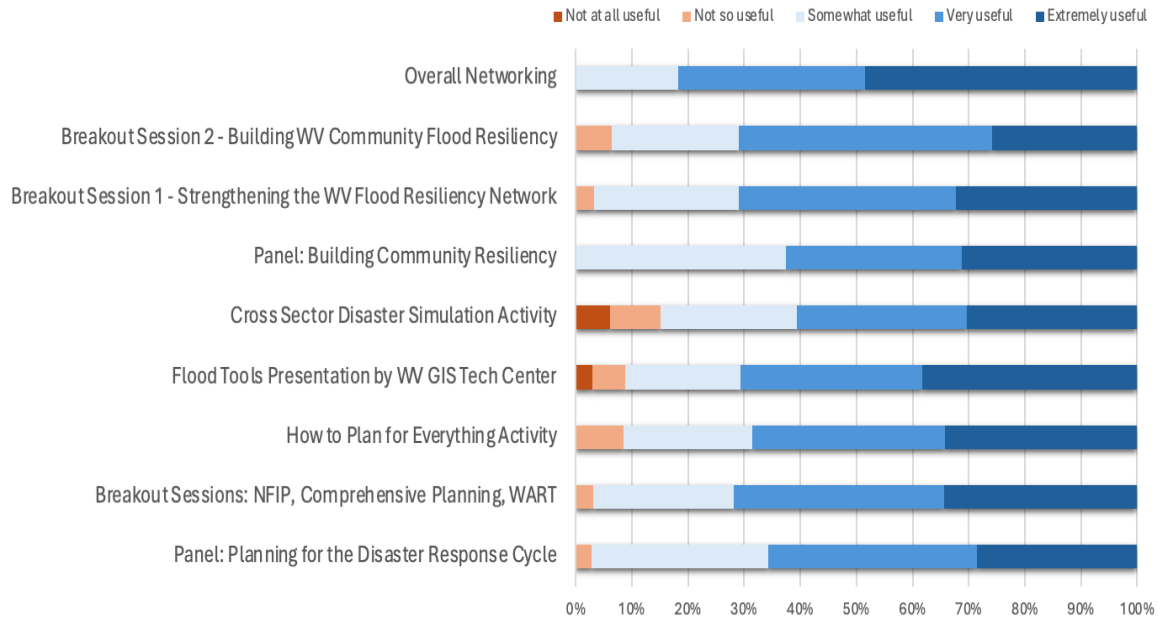


improved their understanding of how participants and their organizations can coordinate their efforts across different phases of a disaster. The average answer was approximately 8.84, indicating the symposium increased understanding of coordinating efforts.

Regarding identifying factors contributing to or detracting from individual and community resiliency, participants rated their understanding at approximately 7.14 out of 10 as a result of the symposium. One participant said, “Thank you, Dr. Shinn, for your point about meeting communities where they are. I don’t know that some folks in the day-to-day “work” of floodplains etc., really understand some of the issues faced at the community level concerning capacity and funds.” This anecdote captures the sentiment of resiliency at the community level.

Additionally, networking emerged as one of the most useful aspects of the symposium, with participants valuing the opportunity to interact and work with others to increase flood resiliency. The survey responses made clear that attendees were proactive in creating new relationships, with an average of seven new connections made per attendee. Notably, twelve individuals answered that they formed connections with 10 or more attendees after the symposium.

How useful did you find the following aspects of the symposium?



When considering the West Virginia Flood Resilience Framework (WVFRF), some attendees expressed certain changes that could be added to the framework. One attendee emphasizes the importance of incorporating information from the US Army Corps of Engineers (USACE) that can help communities. Another attendee stated that there should be an acknowledgment of the voluntary organizations' roles in recovery. Also, there should be a strong emphasis on encouraging broader community engagement. The insights provide valuable guidance for shaping the WVFRF to address the needs of those involved. However, of those who responded to the open-response question asking if they understood how the WVFRF can benefit your work/community, all responses said yes, indicating a clear conveyance of the framework.

Following the symposium, several key topics emerged that warrant further exploration post-symposium through follow-up meetings, workshops, and discussion. One topic was that the collaboration with the WVU land clinic should focus on innovative land use planning beyond comprehensive plans. Additionally, attendees noted that collecting data on the capacity of relief organizations (asset mapping) is crucial in decision-making. Moreover, brainstorming sessions should be organized to explore collaborative opportunities to submit grants like PROTECT or HMGP grants. These follow-up initiatives can build on progress made at the symposium and help further efforts towards enhancing disaster preparedness and resilience within the community.

A P P E N D I X I : L I N K S T O R E S O U R C E S

- [Building Flood Resiliency Symposium Welcome PowerPoint](#)
- [Building Flood Resiliency Symposium Recap Video](#)
- [West Virginia Flood Resiliency Framework Website](#)

A P P E N D I X I I : A G E N D A

Symposium: Building Flood Resiliency in West Virginia Communities

March 12-13, 2024
 Holiday Inn & Suites, 400 2d Ave SW, Charleston WV 25303
 Detailed Agenda



Tuesday, March 12, 2024

Day	Time	Session	Location	Presenter(s)
Tuesday	8:00 – 9:00	Registration Opens		
Tuesday	9:00 – 9:15	Welcome and Introductions	Centennial	Jamie Shinn , Assistant Professor at SUNY College of Environmental Science and Forestry (SUNY-ESF) and West Virginia Flood Resiliency Framework Project Team
Tuesday	9:15 – 9:30	Overview of NSF Study & Symposium Goals	Centennial	Jamie Shinn , SUNY-ESF and WVFRF Project Team
Tuesday	9:30 – 10:00	State Flood Resiliency Plan	Centennial	Robert Martin , Director of the West Virginia State Resiliency Office (SRO) Edwin Martin , Deputy Director of the West Virginia State Resiliency Office (SRO)
Tuesday	10:00 – 10:15	Coffee & Tea Break		
Tuesday	10:15 – 12:00	How to Plan for Everything Activity There are an endless number of disasters to worry about. Preparing	Centennial	Aaron Titus , Executive Director of Crisis Cleanup

for every possible disaster leaves you with a long, disorganized list of things to buy or do, which may not match personal needs. Preparation can seem unattainable. We check off the first few items from our list, give up, and hope the zombies eat us first.

It's time to start preparing with two simple changes: First, Prepare for disruptions, not disasters. It doesn't matter whether a power outage was caused by a flood, backhoe, or someone backing into a pole. Just prepare for the power outage!

Preparing for a few disruptions will prepare you for any disaster. You really can prepare for everything. Second, prepare together. We prepare better when we prepare together. How to Prepare for Everything gives you a simple, step-by-step approach to prepare yourself

		and your neighbors for emergencies, accidents, adventures, and life's ups and downs.		
Tuesday	12:00 – 1:00	Lunch (provided)	Reception Hall	
Tuesday	1:00 – 2:00	<p>Panel: Planning for the Disaster Response Cycle</p> <p>Panelists:</p> <p>Debbie Sizemore, President of Williamsburg Area Emergency Response Team (WART)</p> <p>Paula Brown, Deputy Director of Greenbrier County Homeland Security and Emergency Management</p> <p>Dave Lumsden, Disaster Response Coordinator for Episcopal Diocese of West Virginia</p> <p>Cathy Rennard, Former Disaster Case Management Supervisor for West Virginia Voluntary Organizations Active in Disaster (WV VOAD)</p> <p>James Young, Disaster Field Coordinator for the</p>	Centennial	Julian Levine (moderator), Director of Population Health & Community Engagement at West Virginia School of Osteopathic Medicine, Center for Rural and Community Health (WVSOM CRCH) and WVFRF Project Team

		<p>Federal Emergency Management Agency,</p> <p>Tim Keaton, NFIP/CTP Coordinator at West Virginia Emergency Management Division</p> <p>Tammy Tinchler, President County Commissioner for Greenbrier County</p>	
Tuesday	2:00 – 3:00	National Flood Insurance Program (NFIP)	<p>Montgomery</p> <p>Tim Keaton, National Flood Insurance Program (NFIP)/Cooperating Technical Partner (CTP) Coordinator at West Virginia Emergency Management Division (WVEMD)</p>
Tuesday	2:00 – 3:00	<p>Tools for comprehensive flood planning</p> <p>This session will briefly introduce legal and planning tools effective at reducing impacts from flooding. Tools include floodplain overlays, setbacks, floodplain ordinances, and non-regulatory tools such as deed restrictions. After introducing a variety of tools,</p>	<p>Capitol</p> <p>Katherine Garvey, Director of Land Use Law Clinic at West Virginia University (WVU)</p> <p>Jared Anderson, Land Use Attorney, Land Use Law Clinic at West Virginia University (WVU)</p>

		<p>hypotheticals will be discussed covering common questions. In addition, the panel will discuss HB 171 impacting the regulation of agriculture with flood regulation as an example.</p>		
Tuesday	2:00 – 3:00	<p>Williamsburg Area Response Team (WART)</p> <p>Nominated for two awards in the area of disaster response, the Williamsburg Area Emergency Response Team model is a program designed to help rural communities establish a local emergency crisis team. This nuts-and-bolts session aimed specifically at small towns and communities, will help participants think through what is needed before, during, and after a disaster. The session will describe one very rural community's effort to build and sustain capacity in the area of emergency response and will provide practical tips on how</p>	Centennial	<p>Debbie Sizemore, President of Williamsburg Area Emergency Response Team (WART)</p>

		participants can build their own teams prior to a catastrophic event.		
Tuesday	3:00 – 3:15	Coffee & Tea Break		
Tuesday	3:15 – 4:15	<p>WV Flood Risk Assessment and Visualization Tools</p> <p>The West Virginia GIS Technical Center will provide background on flood-related tools, such as the West Virginia Flood Tool, and in-progress data, mapping efforts, and application development as part of the West Virginia Flood Resiliency Framework. The Center hopes to encourage feedback and discussion on existing tools and needs for landowners, flood mitigation professionals, and community leaders to understand risk and resiliency to flooding and plan for mitigation. They will generally discuss their</p>	Centennial	<p>Kurt Donaldson Director of the West Virginia GIS Technical Center (WVGISTC)</p> <p>Aaron Maxwell Faculty Director for the WVGISTC, faculty member in the Department of Geology and Geography at WVU, and WVFRF Project Team</p> <p>Behrang Bidadian, Research Associate and GIS Analyst at the WVGISTC</p> <p>Annie Mahmoudi, Graduate Research Assistant and PhD student funded by the WVGISTC</p>

		contributions to the West Virginia Food Resiliency Framework and work moving forward.		
Tuesday	4:15 – 4:45	National Weather Service Flood Inundation Mapping Service	Centennial	Nicholas Webb , Senior Service Hydrologist/Meteorologist National Weather Service
		The longstanding demand for event-driven flood inundation mapping (FIM) has increased dramatically in recent years as a high value source of actionable information for emergency and water resource managers to prepare, mitigate, and respond to flood impacts. In response, the National Water Center of the National Weather Service has developed and demonstrated high-resolution inundation modeling capabilities which complement and expand upon existing static FIM libraries providing geo-referenced		

		<p>visualizations of forecast flooding extent at the continental scale. These new inundation mapping capabilities translate analysis and forecasts of streamflow into operational maps that communicate impact by showing where flooding may occur.</p>		
Tuesday	4:45 – 5:00	Daily Recap, Reflections, Wednesday Agenda Preview	Centennial	<p>Jamie Shinn, SUNY-ESF and WVFRF Project Team</p> <p>Aaron Titus, Executive Director of Crisis Cleanup</p>
Tuesday	5:15 – 6:30	Social Event (appetizers provided)		

Wednesday, March 13, 2024

Day	Time	Session	Location	Presenter(s)
Wednesday	9:00 – 9:15	Day 1 Observations Summary	Centennial	<p>Jamie Shinn, SUNY-ESF and WVFRF Project Team</p> <p>Aaron Titus, Executive Director of Crisis Cleanup</p>
Wednesday	9:15 – 10:15	<p>Cross Sector Disaster Simulation</p> <p>The Cross-Sector Disaster Simulation Game simulates cross-sector collaboration and coordination before, during,</p>	Centennial	Aaron Titus , Executive Director of Crisis Cleanup

and after such disasters. Each person is assigned a role, such as government, for-profit company, non-profit organization, or community member. We coordinate on the local, state, and national level prior to the disaster. Once a disaster happens, everyone needs to work together to ship food, water, and medicine within three days. Each "day" is just a few minutes long. The fun (and anxiety) starts when plans, relationships, and competing priorities are challenged in a high-stress, chaotic environment. Afterward, we debrief and analyze the outcomes.

Wednesday	10:15 – 10:30	Coffee & Tea Break		
Wednesday	10:30 – 11:00	Cross Sector Disaster Simulation Debrief	Centennial	Aaron Titus , Executive Director of Crisis Cleanup
Wednesday	11:00 – 12:00	Panel: Building Long-term	Centennial	Julian Levine (moderator),

Community
Resiliency

WVSOM CRCH and
WVFRF Project Team

Panelists:

Sarah Riley,
Executive Director
of High Rocks

Brian Farkas,
Federal
Emergency
Management
Agency
Interagency
Recovery
Coordinator with
WV FEMA
Integration Team
Office (WVFIT)

Debbie Sizemore,
WART

Jenny Gannaway,
Executive Director
of West Virginia
Voluntary
Organizations
Active in Disaster
(WV VOAD)

Dave Lumsden,
Episcopal Diocese
of WV

Robert Martin, SRO

Tim Keaton,
NFIP/CTP
Coordinator at
WVEMD

Wednesday	12:00 – 1:00	Lunch (provided)	Reception Hall
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Wednesday	1:00 – 2:00	Breakout Session 1 - Strengthening the	Jamie Shinn (moderator), SUNY-
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		WV Flood Resiliency Network		ESF and WVFRF Project Team Julian Levine (moderator), WVSOM CRCH and WVFRF Project Team Aaron Maxwell (moderator), WVGISTC, WVU, and WVFRF Project Team
Wednesday	2:00 – 2:15	Coffee & Tea Break		
Wednesday	2:15 – 3:15	Breakout Session 2 - Building WV Community Flood Resiliency		Jamie Shinn (moderator), SUNY- ESF and WVFRF Project Team Julian Levine (moderator), WVSOM CRCH and WVFRF Project Team Aaron Maxwell (moderator), WVGISTC, WVU, and WVFRF Project Team
Wednesday	3:15 – 3:45	Presentation with Q&A: Building & Maintaining the West Virginia Flood Resiliency Framework	Centennial	Jamie Shinn , SUNY- ESF and WVFRF Project Team Robert Martin , SRO Aaron Maxwell , WVGISTC, WVU, and WVFRF Project Team
Wednesday	3:45 – 4:00	Closing Remarks	Centennial	Jamie Shinn , SUNY- ESF and WVFRF Project Team

Thank you for coming! Please take our post-symposium survey by scanning the QR code or visiting <https://tinyurl.com/WVFRFsymposium>.



A P P E N D I X I I I : A T T E N D E E S

<u>Name</u>	<u>Affiliation</u>
Aaron Maxwell.....	West Virginia GIS Technical Center (WVGISTC)
Aaron Titus.....	Crisis Cleanup
Adam Stollings	USDA Rural Development
Alan Harris.....	USDA Rural Development
Albert Ray Perry.....	West Virginia Floodplain Managers Association
Alex Ellis.....	Wyoming County 911
Allison Hoosier.....	Wyoming County 911
Amanda Smarr.....	Region 4 Planning and Development Council
Amberlea Perks.....	West Virginia Emergency Management Division (WVEMD)
Amy Clark.....	State of West Virginia Department of Commerce
Andrea Cass.....	SUNY College of Environmental Science & Forestry
Annalee Posey.....	Appalachia Service Project
Annie Mahmoudi.....	WVGISTC
April Knight.....	West Virginia 211
Behrang Bidadian.....	West Virginia GIS Technical Center
Betsy Morris.....	Region 4 Planning and Development Council
Bo Belshee.....	City of White Sulphur Springs
Bob Martin.....	West Virginia State Resiliency Office (WVSRO)
Brady Shrader.....	West Virginia University (WVU)
Brandon Moore.....	West Virginia Department of Highways (WVDOH)
Brendan Muckian-Bates.....	Appalachian Citizens' Law Center
Brian Aluisse.....	Senator Manchin's Office
Brian Farkas.....	Federal Emergency Management Agency (FEMA)
Cameron Boggs.....	West Virginia Voluntary Organizations Active in Disaster (WV VOAD)
Cathy Colby.....	West Virginia Housing Development Fund
Cathy Rennard.....	WV VOAD
Chris Schroeder.....	Appalachian Service Project
Christi Hicks.....	USDA Natural Resources Conservation Service (NRCS)
Chuck Grishaber.....	CFM City of Charleston
Clayton Scott.....	USDA NRCS
Cory Clay.....	WVEMD
Dale McEwuen.....	Wood County, WV E911

Dara Vance.....West Virginia School of Osteopathic Medicine (WVSOM)

Darian David.....Congresswoman Carol D. Miller Office

Dave Lumsden.....Episcopal Diocese of West Virginia

Debbie Sizemore.....Williamsburg Area Emergency Response Team (WARTS)

Direl Baker.....Lincoln County 911/OES

DJ Morgan.....WV House of Delegates

Douglas Kirk.....WVDOH

Ed Martin.....WVSRO

Emily Brammer.....WVU

Eric Hopkins..... WVGISTC

Eric S. Duff..... Town of Alderson

Forrest Palmer..... Presbyterian Disaster Assistance and WV VOAD

Francis Holton..... Lincoln County Office of Emergency Services(OES)

Gabriel Reed.....WVEMD

George Eidel.....Doddridge County Commission

Gina Namay.....Volunteer WV

Ginger Barnett.....WVEMD

Haidyn DePinho.....WV Department of Environmental Protection (WVDEP)

Hannah Thacker.....Natural Resources Conversation Service

Jacob Kravetz.....National Science Foundation (NSF)

James Young.....FEMA

Jamie Shinn.....SUNY ESF

Jamie Wolfe.....Resiliency Center at Marshall University

Jared Anderson.....WVU College of Law, Land Use and
Sustainable Development Law Clinic (LULC)

Jennifer Berryman.....National Weather Service Charleston, WV

Jenny Gannaway.....WV VOAD

Jim McCune.....United Methodist Church

Judith Lyons.....WV Conservation Agency

Julian Levine.....WVSOM Center for Rural and Community Health

Julie Alston.....US Department of Housing and Urban Development (HUD)

Julie Sears.....State of WV NFIP

Kase Poling.....WVU Tech

Katherine Garvey.....WVU College of Law

Kate Cruickshank.....WVDEP

Keith A. Gunnoe.....Mercer County

Kelly Banton.....Greenbrier County
 Kevin King.....Mennonite Disaster Service
 Khristina Jones.....WV VOAD
 Kurt Donaldson.....WVGISTC
 Lexi Browning.....WV Grant Resource Centers
 Lindsey Hanks.....WV SRO
 Lora Pierce.....Catholic Charities WV
 Mark Lambert.....WV State Fire Training Academy
 Mark Swiger.....WVU Extension
 Mary Poke.....WV VOAD
 Mary Saunders.....Community Lutheran Partners
 Marilyn Lynch.....WVEMD
 Matthew Blackwood.....WVEMD
 Matthew Williams.....WVSOM
 Megan Frampton.....WV Community Advancement and Development (CAD)
 Megan Kruger.....WVU Extension
 Melanie Boothe.....WVCAD
 Melanie Neal.....US Army Corps of Engineers
 Melisa Winburn.....Appalachia Service Project
 Melynda Sampson.....WV 211
 Morgan A. Saunders.....The West Virginia Grant Resource Centers
 Nazma Ahmed.....WVU
 Nick Webb.....National Weather Service Charleston, WV
 Nico Zegre.....Mountain Hydrology Lab WVU
 Olivia Hensley.....US Department of HUD
 Paula Brown.....Greenbrier County Homeland Security & Emergency
 Management
 Rebecca Chestnutt.....The Salvation Army
 Richard Begley.....Marshall University
 Ruthana Beezley.....Greenbrier Valley Economic Development Corporation
 Ruthie Maniscalchi.....WVEMD
 Ryan Halsey.....WVCAD
 Sandy Keener.....WV VOAD
 Sara Dyer.....WV House of Delegates
 Sara Hambrick.....SBP
 Sarah Woody.....Greenbrier County Health Department
 Scott Smith.....West Virginia Housing Development Fund
 Senator Chandler Swope.....WV State Senate
 Sherry Risk.....SBP
 Tammy Tincher.....Greenbrier County

Taryn Moser.....WV Geological & Economic Survey
Terri Jo Bennett.....County Government
Thomas Smith.....Senator Capito's Office
Tigra Yang.....Department of Civil Engineering, WVU TECH
Tim Ellison.....Wyoming County 911
Tim Keaton.....WVEMD
Tom Hansen.....FEMA
Ty Smith.....City of Princeton
Wesley A. Smith.....Kanawha County Commission
William Kuhn.....FEMA
Vivian Wood.....WVEMD
Xzavier Morgan.....WVEMD