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| West Virginia Flood Resiliency Framework Symposium Summary | Olson Harris Ltd. |
| **MARCH 2024**  **Created as part of the West Virginia Flood Resiliency Framework** | |

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# **sENATOR sHELLEY mOORE CAPITO**



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| **cONGRESSWOMAN cAROL mILLER** |  |

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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.

A group of people sitting at tables

Description automatically generatedWhen 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-word 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

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| 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 |
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| **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.    A graph of different colors  Description automatically generated with medium confidenceThe 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 A pie chart with text with Crust in the background  Description automatically generatedimproved their understanding of how participants and their organizations cancoordinate 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.  A graph with numbers and text  Description automatically generated with medium confidence  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. Appendix I: Links to Resources  * [Building Flood Resiliency Symposium Welcome PowerPoint](https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fdata.wvgis.wvu.edu%2Fpub%2FRA%2F_resources%2FOutreach%2FRiskReduction%2F2024_WVFRF%2FFlood_Symposium_Welcome_Powerpoint_2024.pptx&wdOrigin=BROWSELINK) * [Building Flood Resiliency Symposium Recap Video](https://data.wvgis.wvu.edu/pub/RA/_resources/Outreach/RiskReduction/2024_WVFRF/WVFRF-Symposium-Video_RECAP_2024.mp4) * [West Virginia Flood Resiliency Framework Website](http://wvfrf.org/)  Appendix II:agenda **A logo of a house and a river  Description automatically generatedSymposium: 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 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. | Centennial | **Aaron Titus**, Executive Director of Crisis Cleanup | | Tuesday | 12:00 – 1:00 | **Lunch (provided)** | Reception Hall | | | Tuesday | 1:00 – 2:00 | Panel: Planning for the Disaster Response Cycle  Panelists:  **Debbie Sizemore**, President of Williamsburg Area Emergency Response Team (WART)  **Paula Brown**, Deputy Director of Greenbrier County Homeland Security and Emergency Management  **Dave Lumsden,** Disaster Response Coordinator for Episcopal Diocese of West Virginia  **Cathy Rennard,** Former Disaster Case Management Supervisor for West Virginia Voluntary Organizations Active in Disaster (WV VOAD)  **James Young**, Disaster Field Coordinator for the Federal Emergency Management Agency,  **Tim Keaton**, NFIP/CTP Coordinator at West Virginia Emergency Management Division  **Tammy Tincher**, President County Commissioner for Greenbrier County | 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 | | Day | **Time** | **Concurrent Sessions (3)** | **Location** | **Presenter(s)** | | Tuesday | 2:00 – 3:00 | National Flood Insurance Program (NFIP) | Montgomery | **Tim Keaton**, National Flood Insurance Program (NFIP)/Cooperating Technical Partner (CTP) Coordinator at West Virginia Emergency Management Division (WVEMD) | | Tuesday | 2:00 – 3:00 | Tools for comprehensive flood planning  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, 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. | Capitol | **Katherine Garvey**, Director of Land Use Law Clinic at West Virginia University (WVU)  **Jared Anderson**, Land Use Attorney, Land Use Law Clinic at West Virginia University (WVU) | | Tuesday | 2:00 – 3:00 | Williamsburg Area Response Team (WART)  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 participants can build their own teams prior to a catastrophic event. | Centennial | **Debbie Sizemore**, President of Williamsburg Area Emergency Response Team (WART) | | Tuesday | 3:00 – 3:15 | **Coffee & Tea Break** |  |  | | Day | **Time** | **Session** | **Location** | **Presenter(s)** | | Tuesday | 3:15 – 4:15 | WV Flood Risk Assessment and Visualization Tools  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 contributions to the West Virginia Food Resiliency Framework and work moving forward. | Centennial | **Kurt Donaldson** Director of the West Virginia GIS Technical Center (WVGISTC)  **Aaron Maxwell** Faculty Director for the WVGISTC, faculty member in the Department of Geology and Geography at WVU, and WVFRF Project Team  **Behrang Bidadian**, Research Associate and GIS Analyst at the WVGISTC  **Annie Mahmoudi**, Graduate Research Assistant and PhD student funded by the WVGISTC | | Tuesday | 4:15 – 4:45 | National Weather Service Flood Inundation Mapping 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 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. | Centennial | **Nicholas Webb**, Senior Service Hydrologist/Meteorologist National Weather Service | | Tuesday | 4:45 – 5:00 | Daily Recap, Reflections, Wednesday Agenda Preview | Centennial | **Jamie Shinn**, SUNY-ESF and WVFRF Project Team  **Aaron Titus**, Executive Director of Crisis Cleanup | | 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 | **Jamie Shinn**, SUNY-ESF and WVFRF Project Team  **Aaron Titus**, Executive Director of Crisis Cleanup | | Wednesday | 9:15 – 10:15 | **Cross Sector Disaster Simulation**  The Cross-Sector Disaster Simulation Game simulates cross-sector collaboration and coordination before, during, 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. | Centennial | **Aaron Titus**, Executive Director of Crisis Cleanup | | 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 Community Resiliency  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 | Centennial | **Julian Levine** (moderator), WVSOM CRCH and WVFRF Project Team | | Wednesday | 12:00 – 1:00 | **Lunch (provided)** | Reception Hall | | | Wednesday | 1:00 – 2:00 | Breakout Session 1 - Strengthening the WV Flood Resiliency Network |  | **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 | 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 |   A qr code on a white background  Description automatically generatedA close up of logos  Description automatically generated**Thank you for coming! Please take our post-symposium survey by scanning the QR code or visiting https://tinyurl.com/WVFRFsymposium.**  A close-up of a seal  Description automatically generated |

# Appendix III: ATTENDEEs

**Name Affiliation**

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 Aluise………………………………………………………….………….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