



COMMONWEALTH OF VIRGINIA

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COMMITTEE ON HOMELAND SECURITY

Subcommittee on Emergency Preparedness, Response, and Recovery

Examining Climate Change: A Threat to the Homeland

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Good Afternoon Committee Chairman Thompson, Committee Ranking Member Katko, Subcommittee Chairwoman Demings, Subcommittee Ranking Member Cammack, and members of the Subcommittee. My name is Curtis Brown, and I serve in Governor Ralph Northam's Administration as State Coordinator of Emergency Management at the Virginia Department of Emergency (VDEM). Additionally, I am the co-founder of the Institute for Diversity and Inclusion in Emergency Management (I-DIEM). I-DIEM's mission is to serve as a resource and an advocate for the value of diversity and inclusion in emergency management (EM). I-DIEM serves as the conduit for research on diversity and inclusion (D&I), social equity, and the practical application of equitable EM practices to improve outcomes and build resilience.

It is a pleasure to provide testimony before the Subcommittee. As a former professional staff member working on Chairman Thompson's staff, I understand the critical oversight role of the House Committee on Homeland Security. It was truly one of the highlights of my career to staff this Subcommittee and support the Legislative Branch's important responsibility of influencing a range of emergency management and homeland security issues to support the American people. The perspective gained in that role has been useful in serving within a state emergency management agency.

The decision to hold today's hearing is an acknowledgment of the serious need to focus attention on the threat of climate change on the homeland, in particular on our most vulnerable communities. The Biden Administration, Congress, Department of Homeland Security, Federal

Emergency Management Agency (FEMA), State, local, non-profit, and private sector partners must all work together to respond to this threat. Thank you for your service and all the efforts of the Congressional staffers who do the hard work in the background.

I appreciate the opportunity to participate in this panel to provide the perspective of an emergency manager and as an advocate for disaster equity. Emergency managers must deal with the consequences of climate change. Across the country, emergency managers are responsible for preparing communities for, mitigating against, responding to, and recovery from disasters. These critical responsibilities help to save lives and reduce the negative short- and long-term impacts on people and communities. The repeated impacts of climate change on the homeland require additional emergency management resources, especially at the State and local levels. This includes, but is not limited to increased numbers of personnel, enhanced capabilities, funding to support mitigation and adaptation, and the prioritization of marginalized communities that are most at risk of climate change impacts.

Climate Change and Global Warming Impacts

Climate change is real and its impacts are being experienced annually. As the Intergovernmental Panel on Climate Change states, "Scientific evidence for warming of the climate system is unequivocal." Additionally, scientific research and data confirms that the cause of warming trends is related to human activity. This scientific data affirms the need for courageous efforts from across the globe to address the climate crisis. It is possibly the most pressing issue for the rest of the 21st century and the impacts are being experienced now.

Climate change has resulted in more frequent and impactful disasters including droughts, wildfires, hurricanes, and flooding events. The last several years have been non-stop with multiple, and in some cases, simultaneous disasters. The attention over the last year was rightfully focused on the on-going response to the unprecedented deadly impacts of COVID-19. 2020 also represented a historic year for extreme weather events. Wildfires ravaged communities in California, hurricanes battered the Gulf and Southeast, flooding events are becoming more frequent and deadly disaster has continued to rise. According to the Fourth National Climate Assessment, U.S. coastal flooding has doubled in the last few decades.

In Virginia, we have seen a significant increase of events requiring the issuance of State of Emergency Declarations. State and local government public safety officials work closely with impacted communities. For major events, impacting larger regions or multiple states, full engagement of the emergency management enterprise (FEMA, State, local, non-profit, and private) is required. The National Oceanic and Atmospheric Administration (NOAA) reports that the 2020 hurricane season experienced 29 named storms in the Atlantic season breaking the record for the highest number of tropical/subtropical storms in a single year. This year, 2021, is also anticipated to be an above-normal season with a likely range of 13 to 20 named storms, of which 6 to 10 could become hurricanes. The increase in extreme weather and natural disasters has a profound impact that threatens public health and safety, natural resources, and our communities. It also affects the economic wellbeing of the Commonwealth, including the port,

military installations, and critical infrastructure. It is clear the impacts of climate change have stretched already limited resources within State and local emergency management agencies. Last year, 22 extreme weather events resulted in losses of over \$1 billion each.

The Need for Equity: Disproportionate Impacts on Marginalized Communities

Climate change impacts are being experienced across the country, but are disproportionately felt by marginalized communities. Numerous natural disasters have indiscriminately impacted large swaths of the United States over the last decade. Communities of color and other underserved or underrepresented populations are disproportionately impacted by extreme weather and other emergencies due to inadequate infrastructure, limited financial resources, and poor environmental conditions. The factors contributing to increased vulnerabilities within communities of color during disasters have been caused by decades of institutional racism, divestment, environmental injustices, and other discriminatory policies that contribute to widening inequities.

Marginalized communities suffer greater loss of life, physical injuries, economic loss, and mental health after disasters. Disaster planning efforts fail to fully consider our most vulnerable populations such as communities of color, women, low-income individuals, people with access and functional needs, and other underserved individuals. A review of past and present inequities helps explain the myriad issues underlying these negative outcomes. Historical and existing exclusionary and discriminatory practices increase the risks and impacts of disasters on specific individuals and communities which heightens vulnerability. Disasters act as “shocks” to communities, amplifying and exacerbating the existing inequities experienced by those lacking resources.

Several studies have highlighted inequities in disaster impacts related to heatwaves, hurricanes, flooding, and other extreme weather events. The disaster inequities are not solely due to weather itself but the systems, policies, and programs are also inequitable. FEMA, other federal agencies, and policy makers need to intentionally and dramatically change policies and programs to prioritize those most vulnerable and ensure equity is a primary performance measure. By doing so, we can begin to equitably support communities that are on the frontline of climate change threat. The Fourth National Climate Assessment echoed the need to prioritize marginalized communities and promote equitable mitigation and adaptation practices.

“Prioritizing adaptation actions for populations that face higher risks from climate change, including low-income and marginalized communities, may prove more equitable and lead, for instance, to improved infrastructure in their communities and increased focus on efforts to promote community resilience that can improve their capacity to prepare for, respond to, and recover from disasters.” (Fourth National Climate Assessment, Volume II Impacts, Risks, and Adaptation in the United States, Page 55).

Virginia Efforts to Address Climate Change and Integrating Equity

Governor Northam's Administration and the Commonwealth of Virginia have taken significant steps to address the challenge of climate change. Utilizing a "whole of government approach," Virginia has taken bold actions to support our communities, to ensure a continued thriving economy, and to protect critical infrastructure. Virginia is leading the way in combating this rapidly evolving threat. The Secretary of Natural Resources advises the Governor on natural resources issues and works to advance top environmental priorities. The Commonwealth also has a Special Advisor to the Governor for Coastal Adaptation and Protection. This role addresses the effects of sea-level rise and land subsidence along Virginia's coast, and spans across numerous Commonwealth agencies to ensure a consistent and streamlined effort. Virginia continues to introduce policies focused on slowing climate change and its impacts, mitigation, and adaptation.

An innovative, science-based approach uses cost-effective, nature-based, and equitable strategies to protect our people, communities, infrastructure, and economy. The guidelines and planning of one of the most groundbreaking, comprehensive actions to champion coastal resilience are enshrined in:

- Executive Order 24: also known as the Master Planning Framework (Framework), the Framework was initiated to lead the Commonwealth in making the coast more resilient to the impacts of climate change and sea-level rise. It details the core principles of Virginia's approach to coastal adaptation and protection and calls for implementation of Virginia's first Master Plan by the end of this year 2021.
- Executive Order 71: establishing the Virginia Coastal Resilience Technical Advisory Committee (TAC) which will create and implement a Coastal Resilience Master Plan. TAC has representatives of state agencies, coastal planning districts and regional commissions, and academic advisors, among others who facilitate the coordination and the development of the Master Plan.
- Executive Directive 13: integral in the Virginia Coastal Zone Management (CZM) Program's support of the Coastal Resilience Master Planning Framework, and
- The Virginia Coastal Policy Center (VCPC) at William & Mary Law School assists in support of the Framework, working with state offices and agencies. VCPC also works with scientists, local and state political figures, community leaders, the military, and others to integrate the latest science with legal and policy analysis to solve coastal resource management issues. In 2015, Virginia successfully competed and was awarded \$120.5 million from the National Disaster Resilience Competition (NDRC) grant through the U.S. Department of Housing and Urban Development awarded to the Virginia Department of Housing and Community Development in 2017. The grant serves to implement innovative solutions to combat sea-level rise in the Hampton Roads area. \$5.25 million portion of the grant award established the nation's first-of-its-kind resilience innovation

hub (RISE), a City of Norfolk, VA-based nonprofit incubating resilience-building solutions for coastal communities.

Integrating Equity in Emergency Management

Due to the disproportionate impact on marginalized communities, Virginia is intentionally focused on embedding equity into emergency management by taking full advantage of one of FEMA's resilience funding opportunities through the Hazard Mitigation Assistance (HMA) Grants programs; specifically, the grant program known as Building Resilient Infrastructure and Communities (BRIC). Since 2017, Virginia Department of Emergency Management (VDEM) has made an intentional effort to utilize the HMA funding opportunity to benefit Virginia's most vulnerable communities. Purposefully holistic solutions to flooding issues have led to larger, more comprehensive projects. In 2020, we revised our grant priorities to reduce inequities that were unintentionally embedded within the scoring criteria. Fortunately, the BRIC priorities as announced by FEMA encompassed many of the key priorities on which Virginia had already been focused.

VDEM partnered with the Virginia Health Equity Leadership Task Force to support and empower local governments by performing an equity analysis of localities across the Commonwealth. As part of the Hazard Mitigation Equity Analysis, a vulnerability score for Virginia households was developed and used to identify Virginia's most vulnerable populations across the Commonwealth in the event of an environmental disaster. Population vulnerability was determined by several factors including:

1. Communities of color
2. Elevated health risk
3. Low income
4. # of people in the household
5. # of children in the household
6. Lack of English in the primary language
7. Unemployment risk
8. Age (older adults)
9. Mobile homes
10. Lack of vehicle access

The equity analysis encompassed population vulnerability plus hazard risk (which accounts for households within a flood or hurricane zone) plus past mitigation projects. Upon identifying the top 40 localities with the highest average of household vulnerability in a flood or hurricane zone, VDEM will host 13-subregional hazard mitigation workshops focused on equity throughout the summer. The 13-subregional workshops will provide local governments with an opportunity to share their knowledge on flood risk in vulnerable communities and further explore how the Commonwealth can provide support through technical assistance in scoping relevant projects. Last year, Virginia was one of five states to submit over \$200 Million in projects for the 2020 BRIC Grant Program. Thirteen of the 33 projects submitted by Virginia were from localities with

the highest vulnerability according to the equity analysis. The Commonwealth is dedicated to equitably leveraging BRIC and other mitigation funding to support our most at-risk communities.

Biden Administration Efforts

President Biden's recent announcement of allocating \$1 billion in 2021 BRIC funding for communities, states, and tribal governments to support pre-disaster mitigation efforts is a great step in the right direction. There are numerous Biden Administration priorities and investments to support climate resilience. As I've presented, the threat of climate change to the Homeland is significant and stretches the limited capabilities and resources of state and local emergency management agencies. Support from the Federal Government is needed in order to mitigate and adapt to climate change. The Biden Administration's commitment and focus on equity are the bold steps needed to face this threat head-on. FEMA Administrator Criswell has prioritized diversity, equity, and inclusion and the agency has released a Request for Information to identify ways to integrate equity. These are welcomed steps that will hopefully further disaster equity. But integrating equity in emergency management will not be a quick fix and requires a long-term, sustainable commitment and willingness to support innovation to solve complex and deeply rooted inequitable programs. I encourage FEMA to leverage disaster equity leaders, empower marginalized communities and frontline organizations, and support efforts to diversify the emergency management enterprise to mirror the nation's diverse communities.

Conclusion

The threat of climate change presents a great challenge to the nation. Marginalized communities are most at-risk for disaster impacts and should be empowered and prioritized in all our efforts. Policy-makers and emergency officials must be willing to take bold and equitable steps to respond to climate change and make investments in mitigation and adaptation. Doing so will help us better prepare for the years ahead which will continue to test us. For marginalized communities, equitable investments will save lives and improve disaster outcomes by focusing resources where they are needed most. Thank you for this opportunity to discuss these important topics and I look forward to answering the Members' questions.