STATEMENT

OF

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"Weathering the Storm: Reauthorizing the National Windstorm Impact Reduction Program"

Submitted

By

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Chair Stevens, Ranking Member Waltz, and members of the Subcommittee: My name is Michael Grimm, and I am the Assistant Administrator for Risk Management for the Federal Insurance and Mitigation Administration (FIMA). Thank you for the opportunity to discuss FEMA's supporting role within the National Windstorm Impact Reduction Program (NWIRP).

FEMA's mission is helping people before, during, and after disasters. Mitigating the impact of windstorm damages from events such as hurricanes, tornadoes, and derechos is an important aspect of this responsibility. Although the risk of extreme windstorms varies across the country, no state, tribal nation, locality, or territory is immune. As a result of climate change, natural disasters are more frequent, more intense, and more destructive. In 2020, a powerful derecho swept across the Midwest with hurricane force winds, impacting communities throughout the region. Earlier this year, Hurricane Ida's wind speeds intensified from 85 to 150 miles per hour in less than 24 hours due to abnormally warm waters in the Gulf of Mexico. When Ida made landfall, it retained much of its strength as it crossed over nine states in four days – leaving a path of damage from the Gulf Coast to New England.

To help address the nationwide risk posed by windstorm damages, Congress authorized the creation of NWIRP. The NWIRP's objective is to achieve major measurable reductions in the losses of life and property from windstorms through a coordinated federal effort, in cooperation with other levels of government, academia, and the private sector. These efforts are aimed at improving the understanding of windstorms and their impacts and developing and encouraging the implementation of cost-effective mitigation measures to reduce those impacts.

FEMA is working to support these goals in coordination with the National Institute of Standards and Technology (NIST), the National Science Foundation (NSF), and National Oceanic and Atmospheric Administration (NOAA). FEMA's supporting role within the NWIRP includes the development of risk assessment tools and effective mitigation techniques; windstorm-related data collection and analysis; public outreach and dissemination; the promotion of the adoption of windstorm preparedness and mitigation measures; and the improvement and promotion of better building and retrofit practices through the implementation of research into codes and standards.

Although FEMA does not receive appropriations specifically for its contributions to the NWIRP, the Agency is actively working to support the program's objectives. For example, to improve windstorm safety protection measures, FEMA issued saferoom guidance publications leading to the development of a storm shelter design and construction standard that is used by design professionals across the Nation. NIST and FEMA coordinated and submitted dozens of successful change proposals to the standard, thereby increasing the safety and reliability for occupants taking shelter from extreme winds.

FEMA also participates in the International Code Council's (ICC) building code development process to promote the inclusion of wind-resistant provisions. Many of FEMA's proposals to update the building codes are based on Mitigation Assessment Team (MAT) findings from observations in the field after a wind event. Many MAT field activities are conducted in coordination with the other NWIRP agencies, such as NIST and NSF-supported post-disaster reconnaissance teams. These technical field teams study the impact of disasters and compile

lessons learned, which can be applied across the Nation to other disaster-prone regions through MAT building performance assessment reports, Technical Bulletins, fact sheets, and support for impacted communities, such as training and subject matter expert assistance. This guidance is necessary for engineers, architects, building officials, and building owners to understand why wind damages happened and to learn how to prevent those damages from reoccurring. Some of the outreach and training is directed at building owners and homeowners themselves to demonstrate steps which improve wind resilience, such as the installation of storm shutters on openings, reroofing using proper wind rated shingles, and adding hurricane connecters to wall connections during remodeling.

One of the most cost-effective ways to safeguard our communities against future natural disasters is to adopt hazard-resistant building codes. These codes help protect people both physically and financially by reducing damages to buildings and minimizing interruptions to daily life. Hazard-resistant building codes are a low-cost, high-impact solution that can help break cycles of disaster damage and reconstruction. A 2019 study by the National Institute of Building Sciences found that adopting the latest building codes save eleven dollars for every dollar invested. However, 64 percent of communities across the country have not adopted the latest building codes. As our Nation's risks grow, such investments will become even more valuable.

In addition to FEMA's work on NWIRP efforts with our federal partners, FEMA is actively involved in several wind-related standards committees, including the Wind Loads Subcommittee under the American Society of Civil Engineers (ASCE) for minimum design loads. FEMA's efforts on the Wind Loads Subcommittee with our associated partners led to the first tornado design load requirements. FEMA is also working to improve the Enhanced Fujita (EF) Scale to better measure and categorize tornado intensities in coordination with the ASCE, the American Meteorological Society (AMS) Wind Speed Estimation Committee, NIST, NOAA, and several other organizations. These improvements will help NOAA's National Weather Service teams to better estimate tornado wind speeds, which will lead to a better understanding of tornado wind fields through improved data.

Beyond FEMA's direct contributions through NWIRP, the Agency has other programs and activities that address the risks posed by extreme wind hazards. For example, after Hurricane Maria, FEMA published guidance on wind vulnerability assessments of critical facilities and developed a job aid to assist architects and engineers on determining the best available refuge area in existing buildings in Puerto Rico, where people cannot easily evacuate from incoming extreme windstorms. FEMA also led the development of micro-zone wind field maps for Puerto Rico, the U.S. Virgin Islands, and the Commonwealth of the Northern Mariana Islands. Such maps allow design professionals to design for wind loads more accurately at a specific site, enabling more wind resistant rebuilding efforts throughout the islands.

FEMA also promotes the goals of NWIRP by providing grant funding for eligible projects through our Hazard Mitigation Assistance (HMA) grants. HMA grants provide our state, local, tribal, and territorial partners with a reliable stream of funding for larger mitigation projects through nationwide grant programs. While we will always be ready to respond when disasters

occur, we recognize that true success rests in mitigating the worst impacts of disasters before they happen. Developing resilient communities ahead of an incident reduces both the loss of life and economic disruption.

At FEMA, a cornerstone of our mitigation efforts is the Building Resilient Infrastructure and Communities (BRIC) program. The BRIC program provides a critical opportunity for state, territorial, tribal, and local governments to invest in a more resilient nation, reduce disaster-related suffering, and lessen future disaster costs. Earlier this year, President Biden visited FEMA to announce that he was increasing the funding available for the BRIC program to $1 billion for the FY 2021 application period. This investment will protect lives and property in the face of future storms and is being used to support projects which improve wind resilience such as the construction of community safe rooms and the retrofitting of facilities.

Another important element of FEMA's mitigation effort is the Hazard Mitigation Grant Program (HMGP). In August, President Biden approved more than $3.46 billion for the HMGP program for the COVID-19 disaster declarations. As a result, every state, tribe, and territory that received a major disaster declaration in response to the COVID-19 pandemic will be eligible to receive substantial levels of funding to invest in mitigation projects that reduce risks from natural disasters, including severe windstorms.

Mitigation is particularly important for underserved communities that are most vulnerable to the impacts of climate change. In administering our mitigation programs, FEMA will keep equity considerations top of mind, and will include them in the competitive scoring process for programs such as BRIC. Equity is one of the top priorities at FEMA, and the intersection of climate change and equity is a particular concern for our agency, as the impacts are worse for vulnerable communities.

As we look to the challenges ahead, such as those posed by climate change and severe windstorms, FEMA looks forward to working with both our NWIRP partners and the Members of this Committee to build a more resilient nation. Thank you for the opportunity to testify. I look forward to answering your questions.