

U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON SCIENCE, SPACE, & TECHNOLOGY

Opening Statement

Chairwoman Mikie Sherrill (D-NJ) of the Subcommittee on Environment

Subcommittee on Environment Hearing: What's the Forecast: A look at the Future of Weather Research June 14, 2022

Good morning, and welcome to today's hearing on the future of weather research. I am especially pleased to welcome all our esteemed witnesses to today's hearing in person after two years of virtual and hybrid testimony.

Weather forecasting plays an integral role in society, and a crucial role in protecting lives during extreme weather events. You may not realize it, but each and every American benefits from the federal investments made to support the National Weather Service every day. Whether you are using a weather app on your phone, or watching your local meteorologist on the evening news, these products and services depend on federal weather data. Weather forecasting is consistently relied on to guide planning across the US – whether it's deciding whether to take an umbrella on a work commute, planning an outdoor gathering with friends and family, or determining a seasonal crop plan.

My district has first-hand experience in the devastation that can be caused from extreme weather. The effects of Hurricane Sandy are still being felt by my constituents a decade later. The Hudson Tunnel remains compromised, and a project to rehabilitate the tunnel began only as recently as last year. While the Weather Service has significantly improved the accuracy of the hurricane track forecasts since Hurricane Sandy, there remains a need to improve intensity forecasts as well. I'm looking forward to hearing from Dr. Scott Glenn of Rutgers University on how funding from the Sandy Supplemental was critical to his research to better predict and understand hurricanes, and why robust and consistent federal funding is necessary to support the transition from weather research to operations.

When considering the future of forecasting, it is crucial that long-term forecasting is also part of the conversation. The Northeast Regional Climate Center reports that over the past 20 years, New Jersey has had an increase in extreme precipitation. The report further predicts that precipitation intensity will continue to increase in my district by up to 50% over the next eighty years from what was observed at the end of the 20th century as a result of climate change. In a region that has seen the impacts of localized flooding events cause hard hits to homes and businesses, this report is alarming. Just last September, we lost 27 lives across New Jersey in the wake of Tropical Storm Ida. The sudden intensity and precise location of rainfall and flooding

was difficult to predict. Emergency responders rescued people from roadways and homes where they did not expect flooding to impact them. I heard from a mother in my district who, along with her young children, had to be rescued from her home at night during Hurricane Ida. She said that she had been told at 5 pm that the storm would pass to the west. Empowering residents with accurate long-term and short-term precipitation models will give them the information they need when planning a move or new business location or preparing for an acute weather event like Ida.

Improving our understanding of precipitation trends and hurricane intensity is not just important for my constituents, but for all Americans. The accuracy of short-term weather forecasts in the range of a few days to two weeks has improved significantly in recent decades. However, there remain gaps in our ability to provide subseasonal to seasonal forecasts. Improved longer-term forecasts, that are on the order of weeks to months would support the resiliency of critical infrastructure sectors, like transportation, utility, and energy sectors, that we rely on every day.

To better understand what is needed to improve weather forecasting, Congress requested a report to identify necessary weather research investments. The Priorities for Weather Research, or PWR, report is a compilation of expert recommendations from across the U.S. Weather Enterprise, made up of public, private, and academic partners. This report highlights the investments needed over the next decade in weather research, observations, modeling, forecasting, and dissemination. It takes into consideration how federal investment in weather research supports the private and academic sectors of the Weather Enterprise. We are fortunate that our witness panel today includes not only the co-leads of this report, but perspectives from across the Weather Enterprise.

In the midst of another Atlantic Hurricane season predicted to have above normal activity, accurate forecasts coupled with timely dissemination will be necessary to ensure the safety, and protect the livelihoods, of Americans along the Gulf and East Coasts. I look forward to hearing more from our witnesses today on how Congress can support the U.S. Weather Enterprise through federal investments in weather research that will benefit all Americans.