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

Chairman Bill Foster (D-IL)
of the Subcommittee on Investigations and Oversight

Joint Environment and Investigations & Oversight Subcommittee Hearing:
An Examination of Federal Flood Maps in a Changing Climate

Thursday, February 27, 2020

Thank you, Chairwoman Sherrill.

The nuts and bolts of the National Flood Insurance Program are something I've spent a lot of time on in the Financial Services Committee. There are a lot of factors that go into the insurance side of the program that we won't get into today. But I'm glad the Science Committee is taking a look at the whole federal enterprise of flood prediction and decision support tools. This is one of those policy topics where the scientific inputs have a direct impact on the daily lives of millions of Americans. If we don't prioritize accuracy, precision and granularity in mapping and forecasting flood hazards, the insurance requirements we apply to American businesses and homeowners will never be fair.

And the changing climate throws a curveball into the quest for quality maps. The National Flood Insurance Act became law in 1968. Back then, anthropogenic climate change was not yet a part of the public discourse and federal policymakers saw the global climate as static. It made sense to create a program that would evaluate risk and designate premiums on a simple one-year annual outlook, because it was believed that the climate in 2020 would look more or less like 1968.

But now we know better. Global concentrations of carbon dioxide in the air in 1968 were 320 parts per million. Today we are at 413. Setting aside the influence of methane and other greenhouse gases -- that's 30% more heat-trapping gases in the atmosphere. Global average temperatures have gone up by 1.4 degrees Fahrenheit since 1968. The incidence and severity of flooding has increased as a result, and by no means are flood risks limited to coastal zones.

Extreme rainfall events are driving record river overflows and urban flooding in the Midwest. Last May, Governor Pritzker had to activate the Illinois National Guard to address the historic flood conditions. Illinois farmers saw so much hardship as a result that USDA issued an agricultural disaster declaration. My hometown of Naperville saw the DuPage River overflow and swallow parts of the riverwalk. And it's not just homes and businesses that are being

affected - just last week I visited Offutt Airforce Base which flooded last spring and the cleanup is estimated cost almost one billion dollars.

We can't ignore the fact that climate change is here today, it is affecting our homes and our livelihoods, and the federal government needs to deploy new tools to address it.

I look forward to hearing today about the opportunities to use more advanced technologies and models to evaluate present-day flood risk that is more accurate and more detailed than the status quo. Advancements in LIDAR, lower cost flood sensors, drones, and artificial intelligence can all help FEMA map more acreage more effectively, and perhaps at a lower cost. Perhaps there are ways to leverage new applications for flood evaluation and prediction using the existing network of earth monitoring satellites and supercomputers like Aurora, which is being built at Argonne National Lab as we speak. The hydrology and climate data products put out by Mr. Osler's team and NOAA are first-rate, and maybe there are more effective ways to leverage those resources. Yes, there will tough questions anytime FEMA makes changes in their methods that affect the rates that people pay under the National Flood Insurance Program. We can't resolve all those issues today, but I think we can all agree that a sophisticated scientific foundation is the best place to start.

I also want to think about the art of the possible for providing forward-looking decision support tools that will help property buyers understand their flood risk over the life of a 30-year mortgage. FEMA's flood maps are an insurance product that aren't designed to show future conditions. We need to acknowledge that people may be counting on FEMA's maps for things they weren't meant for. We need to acknowledge that homebuyers want to make informed decisions about future flood risks when they take on a mortgage – and also that most homebuyers can't afford to pay a fancy private mapping firm in order to do that.

Thank you to our witnesses for making the time today and I look forward to a productive conversation. I yield back.