

## Federal Disaster Assistance - Are We Weather-Ready?

### *Witnesses*

**Kathryn D. Sullivan**

Assistant Secretary of Commerce for Environmental Observation and Prediction, National Oceanic and Atmospheric Administration, U.S. Department of Commerce

**James Rivera**

Deputy Associate Administrator, Office of Disaster Assistance, U.S. Small Business Administration

**David C. Trimble**

Director, Natural Resources and Environment, U.S. Government Accountability Office

**Donald J. Wuebbles**

Professor of Atmospheric Sciences, University of Illinois

**Franklin W. Nutter**

President, Reinsurance Association of America

### *Subcommittee Members Present*

Dick Durbin, Chairman (D-IL)

Jerry Moran, Ranking Member (R-KS)

The Senate Committee on Appropriations Subcommittee on Financial Services and General Government held a hearing on July 28, 2011 discussing federal disaster assistance. The hearing focused on ways to improve federal disaster assistance allocation and perhaps ways to mirror private insurance methods.

Chairman Dick Durbin (D-IL) introduced the hearing with a quote from Bob Dylan, "You don't have to be a weather man to know which way the wind blows," acknowledging that the public is aware of the natural disasters that continue to occur. In the first half of 2011, federal assistance totaled \$1 billion for eight disasters. He stated weather patterns are becoming "worse, violent, and even catastrophic." Durbin said that federal government funding for catastrophic events has been "sporadic" and not strategically focused on the changing weather patterns. He cited that government disaster relief could total \$7 trillion (with inflation) over the next 75 years. Durbin also submitted for the record an article published on July 22, 2011 in *Science Magazine*, "Redesigning Flood Insurance." In his opening statement, Ranking Member Jerry Moran (R-KS) stated the need to "carefully review how government plans for disasters," doing so in a "fiscally responsible way."

David Trimble testified that in the past 40 to 50 years, heat waves, regional droughts and other climate events have been increasing. He urged the need for a better risk management strategy in order to adapt to these changes, saying "the cost of inaction could be greater." Trimble summarized the main points of the Government Accountability Office (GAO) report on climate change adaptation. The GAO reported that the federal government is increasing their focus on climate change adaptation; past decision methods are not effective; effective government efforts must be coordinated among agencies; and adaptation requires legislation that cuts across traditional boundaries.

In her testimony, Kathryn Sullivan spoke on the role of the National Oceanic and Atmospheric Administration (NOAA). She stated their purpose is to predict climate events, observe them in real time, and prepare the public for those events. Sullivan testified NOAA has made "enormous strides" in weather and climate prediction. Improvements in numerical modeling have been very beneficial, yet she mentioned changing population trends have presented challenges in improving predictions. She told the committee how the cities of Chicago and New York City are adapting and preparing for climate change using data provided by NOAA. She stressed NOAA works closely with the U.S. Geological Survey (USGS), Federal Emergency Management Agency (FEMA), and the U.S. Army Corp of Engineers (USACE) to reduce redundancy in data acquisition.

James Rivera testified on his experience administering the Office of Disaster Assistance (ODA) in providing loans for small businesses, homeowners, and renters after a disaster. He described that since the office was formed in 1953, they have given 1.9 million loans for more than \$4.9 billion. As a result of the recent spring floods and tornado events, the Small Business Administration (SBA) has given out \$220 million in low interest loans. He explained that the Federal Credit Reform Act of 1990 ( 2 U.S.C. 661-661f

) requires the president to include in the annual budget long term estimates for federal loans. The estimates for disaster loans are created based on data from historical disasters. Current models use data from 1992 to present to determine future loan needs. SBA also receives estimates from NOAA and their predictions for upcoming disaster seasons. Rivera cited improvements in the office's efforts to increase the public's disaster preparedness through monthly webinars and online resources. They have also increased the number of staff at disaster centers and have updated their cyberinfrastructure. Additionally, they have reduced the time required to process claims.

In his testimony, Donald Wuebbles spoke on the current research within academia and the scientific community. He cited that \$32 billion in damages have been attributed to disasters that occurred from January 2011 to mid June. Wuebbles indicated that the U.S. is seeing more extreme weather events in recent decades than in the past and that analysis is beginning to show a much stronger link between changing severe weather patterns and overall climate change. Furthermore, climate analyses indicate that extreme weather is likely to become more frequent if reductions in greenhouse gasses are not made. He reminded the subcommittee scientists agree climate change is happening largely because of human activity. He further stated "there is not debate in the scientific community, based on peer reviewed literature" regarding the validity of climate change and the impact of human activities. He urged the committee to recognize that the "future lies largely in our hands" and the choice to act upon climate change or to standby, "is ours."

Franklin Nutter testified on behalf of the private sector reinsurance industry. He spoke of the industry's shift towards a "forward looking and more proactive approach" to disaster insurance. Nutter said that while the increases in claims due to weather catastrophes can be attributed to changing climate patterns, it is important to note that a major factor is also the changing demographics. The public is continuing to move to areas most prone to hazards. Nutter also stated the insurance industry's belief that long-term solutions should be lead by "mitigation and adaptation" efforts. The insurance industry has found that retrospective loss-modeling is ineffective and that a proactive future modeling is needed. It has now shifted towards a proactive probabilistic model which includes a hazard component populated by teams of scientists (from National Science Foundation and NOAA); an engineering component specifying what structures are in the region of interest; and a financial component that provides cost analysis on potential losses. Nutter recommended this type of approach to the committee and the federal government.

To clarify a chart Nutter submitted which projected spring 2011 could become the ninth most costly world insurance loss event adjusted for inflation, Durbin asked how Nutter believed these recent events will affect the way insurance is written. Nutter described that some insurance agencies have "pulled back" from high risk areas, denied coverage, or did not reinsure customers. Additionally, the insurance industry is not seeing these extreme weather events as outliers, but rather acknowledges them as a pattern along with the movement of people to the high risk areas. Rivera explained that the funds allocated to SBA disaster loans are primarily based on short-term seasonal and annual predictions. However, SBA does consider historical data to do long term assessments. Unlike the private sector, SBA cannot price risk; it is held to a maximum four percent interest by statute.

Durbin explained that currently, the government resolves incorrect predictions through deficit emergency funds. However, in order to reduce deficit spending on disasters, the National Commission on Fiscal Responsibility and Reform suggests that predictions should be based on the past 10 years, excluding the highest and lowest outliers. If disaster spending for any given year is less than predicted, the funds "roll-over" to the next fiscal year. Durbin asked witnesses if the proposed method is effective. Nutter answered that the insurance industry "has learned some time ago that that's not an adequate way" of doing business. Furthermore, he said, private industry cannot afford to hold \$18 billion in debt like the National Flood Insurance Program and must therefore rely on forward thinking and predictions rather than historical data. He also cited that national crop insurance has been profitable because of its alliance between the private sector and government.

In an attempt to cast aside the political climate change debate, Durbin was looking to see whether academia has a consensus about man's impact on global warming. Wuebbles stated that there is agreement within the scientific community. He cited specifically that scientists agree that over 90 percent of glaciers are melting. Additionally, "the data is very strong" that weather patterns are changing. Wuebbles also said that within peer-reviewed papers there is agreement on the fact that humans are having an impact on climate; any papers that argue differently do not make it through the review process because they have typically misinterpreted the data. Following this, Durbin asked, "Mr. Nutter, do you buy that?" Nutter responded that he did, citing that many insurance companies are "pulling back" from high risk areas or are increasing insurance premiums. Wuebbles added that oceans have a large heat capacity therefore they react much slower to climate change. Keeping that in mind, he stressed that the current changes are from emissions years ago and warned that the emissions of today will still have an affect years to come.

Durbin expressed frustration that "we've stopped talking about this on Capitol Hill. We decided that the debate over global warming was too contentious, too politically charged, and too divided for us to have any meaningful conversation about what to do with it." He felt it is "a big mistake" to step away from those conversations, saying Capitol Hill is "overlooking the obvious" and he hopes the subcommittee was able to raise an issue the rest of Capitol Hill is not discussing.

An archived webcast of the hearing can be found on the committee's website, though no written testimonies or opening statements are available.

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