



from the  
**DESK OF Ed Golding**  
Principal Deputy Assistant Secretary for Housing and Head of the FHA



Dear Stakeholder,

Today, I am writing to begin a discussion about a long-term issue: increasing risks of property damage due to natural disasters that will adversely affect the mortgage market, unless we take steps to address it now.

On September 12, 2016, the Washington Post carried an article about the town of Barrow, Alaska. According to the Post, “warming air and rising sea levels are threatening Barrow’s coastline.” The article went on to illustrate how researchers predict that, “by 2050, the homes, schools, and land around Barrow will be literally underwater.”<sup>1</sup> Reading this, I couldn’t help but wonder, what will happen to these homes and the mortgages that finance them?

Barrow is not the only American community on the front lines of climate change. Scientists predict similar impacts in many U.S. coastal areas. Moreover, climate change has effects beyond coastal communities. Wildfires, tropical storms, and riverine flooding have all been linked to climate change. In 2012, climate change exacerbated nearly half of the extreme weather events occurring that year.<sup>2</sup>

Experts predict that special flood hazard areas will cover approximately 40-50 percent more land by the year 2100.<sup>3</sup> These areas have a one percent chance of flooding each year. That equates to a 26 percent chance of flooding over the life of a 30-year mortgage. About 10 million homes in this country (7.5 percent of homes) are vulnerable to hurricanes, and another 40 million (a third of all homes in the U.S.) are subject to the risk of tornadoes, hail, or high wind events.<sup>4</sup>

Because there appears to be no immediate danger, it is easy to ignore these risks or rationalize that the risk will increase slowly with plenty of time to adjust. Often in our industry, risk management is about looking back. We review historical default risk to underwrite and price our products. However, climate change is altering the risk profile. As recent flooding in Louisiana indicates, we must begin taking the risk of disaster events into account. Forward-looking projections of risk are available and should be factored into our decision-making.

Some particularly at-risk areas may soon experience a tightening of credit access due to climate change. We’re already starting to see underwriting in the municipal debt market factor in the risk related to climate change. Access to affordable financing may be in jeopardy as the mortgage and insurance industries begin to factor in these risks. Ultimately, without taking action to prepare for these

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<sup>1</sup> [https://www.washingtonpost.com/national/health-science/above-the-arctic-circle-climate-change-closes-in-on-the-remote-town-of-barrow/2016/09/12/512c859a-43aa-11e6-8856-f26de2537a9d\\_story.html](https://www.washingtonpost.com/national/health-science/above-the-arctic-circle-climate-change-closes-in-on-the-remote-town-of-barrow/2016/09/12/512c859a-43aa-11e6-8856-f26de2537a9d_story.html)

<sup>2</sup> <http://grist.org/climate-energy/climate-change-exacerbated-half-of-recent-extreme-weather-events-study-says/>

<sup>3</sup> <http://www.aecom.com/fema-climate-change-report/>

<sup>4</sup> <https://disastersafety.org/ibhs-news-releases/ibhs-addresses-white-house-forum-smart-finance-disaster-resilience/>

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changes, there will almost certainly come a time when some markets simply lose access to financing because of the additional risk associated with events such as floods, sea level rise, wildfires,

The mortgage market is simply not prepared to mitigate or manage these risks. Building codes and enforcement are often inadequate. Consumers and markets lack awareness of the benefits of retrofitting existing housing to more resilient standards. Unless we begin to think about how to manage these risks systematically, climate change and related weather events will lead to increased housing costs for homeowners and increased risk for lenders, insurers, and ultimately taxpayers.

At FHA we are proactively promoting resilience. We are partnering with other federal agencies to advance resilience and sustainability standards in residential housing. We are encouraging energy efficiency and resilient improvements by providing financing to residential homes with Property Assessed Clean Energy (PACE) assessments, and exploring ways to encourage the industry to adopt a wind resilience standard—a set of building requirements aimed at better protecting property from hail, high wind, and hurricane damage.

FORTIFIED Home™ is just one example of a robust resilient wind standard validated by third parties. Recent academic research shows that the Fortified Home designation increases home resale values by seven percent. Additionally, some states require insurers to provide discounts for homes that meet resilience standards, which can lead to cost savings on hazard insurance.

Water efficiency is another area where there is ample opportunity to improve. The EPA *WaterSense*® program is a water-saving program similar to the EnergyStar program for electronic products. *WaterSense*® helps consumers make choices that save water and money, and maintain high environmental standards. *WaterSense*® products are certified to be at least 20 percent more efficient than average, without sacrificing performance. Upgrading to *WaterSense*® products can save billions of gallons of water. It is time that we start to seriously consider encouraging the adoption of these kinds of changes in the residential housing market.

FHA offers a variety of mortgage insurance programs that support resilience – including the 203(k) program, which can be used to rehabilitate single-family homes and add resilient improvements such as wind-resistant roofs or home elevation to protect from flooding.

As an industry, we can begin leading the way in thinking about and devising methods that directly address these increasing risks and help protect the housing stock from extreme weather events. For example, is it time to consider underwriting for or pricing this risk of damage done by extreme weather events? Homes built to resilient standards would decrease risk for all involved in the process—consumers, lenders, and insurers. Underwriting that accounts for possible damage is just one example of a way in which we can begin to address the emerging risks.

I look forward to hearing from you about these and other potential approaches to mitigating risks related to climate change. We simply cannot continue to act as if these risks do not exist. To that end, I plan to host a series of stakeholder meetings to continue the conversation. Stay tuned.