

**U.S. House of Representatives**  
**Committee on Natural Resources**  
**Washington, DC 20515**

January 14, 2013

The Honorable Jane Lubchenco  
Undersecretary for the Oceans and Atmosphere and  
Administrator, National Oceanic and Atmospheric Administration  
U. S. Department of Commerce  
1401 Constitution Avenue, N.W.  
Washington, D.C. 20230

Dear Administrator Lubchenco:

According to the State of the Climate report, 2012 was the warmest year on record for the continental United States.<sup>1</sup> The report found that the average temperature was over 3°F above the 20<sup>th</sup> century average with a record warm spring, second warmest summer, and record warm July.<sup>2</sup> Average precipitation for the continental United States was 2.57 inches below average, making it the 15<sup>th</sup> driest year on record.<sup>3</sup> 2012 was also the second most extreme year on record having 9.2 million acres burned in wildfires and 11 disasters with \$1 billion or more in losses.<sup>4</sup>

One of the consequences of the warmer and drier weather that our nation has been experiencing has been an increase in dust storms across the Great Plains. Just last month, a dust storm in West Texas killed one person, injured 17, and forced large portions of a major highway to close.<sup>5</sup> In addition to causing fatal accidents and road closures, dust storms are known to incite asthma attacks, spread toxic materials, and hasten the spread of diseases.<sup>6</sup> Many have drawn comparisons between these recent events and the infamous “Dust Bowl” of the 1930’s; where an extensive drought, paired with poor farming practices, led to hundreds of dust storms across the Great Plains.

Much of the continental United States has recently experienced drought conditions on par with the worst months of the Dust Bowl. In mid-September, the height of the drought, more than 65% of the contiguous United States was enduring moderate to extreme drought conditions. As of

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<sup>1</sup> <http://www.ncdc.noaa.gov/sotc/national/2012/13>

<sup>2</sup> <http://www.ncdc.noaa.gov/sotc/national/2012/13>

<sup>3</sup> <http://www.ncdc.noaa.gov/sotc/national/2012/13>

<sup>4</sup> <http://www.ncdc.noaa.gov/sotc/national/2012/13>

<sup>5</sup> [http://articles.washingtonpost.com/2012-12-19/national/35929720\\_1\\_dust-storm-accidents-west-texas](http://articles.washingtonpost.com/2012-12-19/national/35929720_1_dust-storm-accidents-west-texas)

<sup>6</sup> [http://www.huffingtonpost.com/2012/08/11/dust-storms-health-disease\\_n\\_1764246.html](http://www.huffingtonpost.com/2012/08/11/dust-storms-health-disease_n_1764246.html)

January 1<sup>st</sup>, 61% of the continental United States was still experiencing drought.<sup>7</sup> The Great Plains region has been among the hardest hit. The period from December 2011 to November 2012 was the driest on record for Montana and Nebraska, and among the driest on record for Colorado and South Dakota.<sup>8</sup> At the same time, states throughout the region experienced their warmest January to November on record.<sup>9</sup> The heat, combined with low precipitation, drives moisture out of the soil and creates ideal conditions for dust storms.

The Dust Bowl lasted for several years, but eventually the rains returned and the region recovered. Unfortunately, our current drought may be more than a passing natural phenomenon. It could be a symptom of anthropogenic climate disruption, which could mean more dust storms on the horizon. Given that the National Oceanic and Atmospheric Administration (NOAA) is charged with understanding and predicting changes in climate and weather, I would appreciate answers to the following questions by February 1, 2013:

1. What is NOAA's doing to better understanding the conditions that are leading to increased dust storm activity in the United States?
2. Are NOAA scientists able to predict when and where dust storms will occur? If so, how far in advance? How accurate are these predictions? How does NOAA disseminate this information? How does NOAA work with other parts of the federal government to reduce the risk of severe dust storms?
3. What is the scientific understanding of the relationship between climate change and severe dust storms in the United States?
4. Is there sufficient funding to research and monitor dust storms? Is NOAA conducting or funding research to investigate the relationship between climate change and dust storms?

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<sup>7</sup> [http://droughtmonitor.unl.edu/DM\\_tables.htm?conus](http://droughtmonitor.unl.edu/DM_tables.htm?conus)

<sup>8</sup> <http://www1.ncdc.noaa.gov/pub/data/cmb/sotc/drought/2012/11/st-pcp-ranks-201112-201211.gif>

<sup>9</sup> <http://www1.ncdc.noaa.gov/pub/data/cmb/sotc/drought/2012/11/st-tmp-ranks-201201-201211.gif>

The Honorable Jane Lubchenco  
Page 3 of 3

Thank you for your assistance and cooperation in responding to this request. Should you have any questions, please have your staff contact Dr. Ana Unruh Cohen of the Committee's Democratic Staff at 202-225-6065.

Sincerely,



Edward J. Markey

Ranking Democratic Member

Committee on Natural Resources