

**House Committee on Homeland Security
Subcommittee on Oversight and Management Efficiency
Hearing on “Examining DHS’s Misplaced Focus on Climate Change”
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Testimony of

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Good morning Chairman Perry, Ranking Member Watson Coleman, and members of the Subcommittee. My name is Marc Levy, and I am Deputy Director of the Center for International Earth Science Information Network, which is a unit of the Earth Institute at Columbia University. I appear before you in my personal capacity.

I have been studying the interactions between environmental change and national security for over twenty years, with a particular focus on climate change. I served as a lead author on the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report’s chapter on Human Security (Adger et al 2014) and have regularly provided expert advice to U.S. government bodies.

I will show that the premise of this hearing is backwards. The Department of Homeland Security (DHS) is not doing *enough* to prepare the country for security threats from climate change.

Consider threats to the homeland.

Last year a careful analysis of the economic risks that climate change poses for the US, overseen by a bipartisan commission, found that the US economy faces potential losses of tens of billions of dollars over the next 5-25 years as a result of increased storm damage, large-scale crop losses, and disruptions to the energy system (Risky Business Project 2014). In addition, heat waves

threaten to kill tens of thousands Americans per year. The US National Climate Assessment found similar dangers looming. Some risks are with us now: in Alaska climate change impacts are already rendering entire towns virtually unlivable (Melillo, Richmond and Yohe 2014).

A group that adopted the goal of inflicting such harm on the homeland would immediately jump to the top of our terrorist threat list.

Those charged with defending US national security abroad have also converged around a view that extreme events from climate change are likely to create security problems that could require deployment of US forces or provide openings for the expansion of influence of organizations and governments hostile to our vital interests.

This view emerged rapidly and without partisan divisions, with a 2003 DoD study (Schwartz and Randall 2003) and a 2008 National Intelligence Assessment (Fingar 2008) key initial milestones. Since 2009 every National Threat Assessment by the Director of National Intelligence has pointed to climate change as a major security threat. The Department of Defense (2014) has identified climate change as an immediate threat. A complete list of U.S. government assessments of climate-security risks can be found at <http://climateandsecurity.org/resources/u-s-government/>.

The speed and depth of the transformation in our thinking that I have outlined is analogous to the way George Kennan's famous "Long Telegram" came to reorient US foreign policy after WWII around the strategic goal of containing Soviet expansionism. In both cases initial skepticism gave way to both the strength of the logic and the power of the evidence that unfolding events provided.

We are far from alone. Our allies see things the same way (American Security Project 2014). The most recent IPCC report says that "human security will be progressively threatened as the climate changes" (Adger et al 2014, p. 758). A G7-commissioned study concludes categorically that "Climate change is a global threat to security in the 21st century" (Rüttinger et al 2015).

This is not mass hysteria. Three central developments explain the remarkable convergence.

1. A rapidly expanding set of scientific studies has examined the historical data and shown that climate stress is very strongly statistically associated with political violence and instability (Hsiang et al 2013).
2. The climate stresses that historically have elevated security risks are manifesting with higher frequency, higher magnitudes, and even in new alarming forms (McElroy and Baker 2012).
3. There are global changes underway that are making security more tenuous even before climate change enters the picture, making the incremental effect of climate stress more dangerous. For example, the number of partially democratic regimes, which are at very high risk of instability, is at an all-time high (Goldstone et al 2010, Center for Systemic Peace 2014). Food prices, also a major risk factor, have jumped about 60% above their long-term average (Bellemare 2014, Food and Agricultural Organization 2015). And uncertainty over the evolving balance of power is triggering more conflict over territorial access and control (Mead 2014).

These risks affect the homeland. Terrorist organizations are more likely to succeed where weak governments have low authority. The loss of such authority can be accelerated by the dynamics associated with climatic stress (NRC 2013, 75-96).

It is now time to shift gears and focus on the hard task of mounting an effective response. And this is where the administration is failing to meet the challenge.

Consider some core recommendations made by a National Research Council (2013) study on climate and security, carried out at the request of the US intelligence community, which was released two and half years ago.

- Improve the ability to quantify the risk of disruptive climate events, including single extreme climate events as clusters and sequences of events (7).
- Improve understanding of the conditions under which climate impacts lead to security breakdowns (8).
- Develop a whole-of-government strategy for monitoring threats linked to climate change (10).

Establish a system of regular “stress testing” to identify potential problems concerning the ability of countries and global systems to manage disruptive climate events (11).

The need for an operational capability to understand and respond to climate-triggered security problems abroad was identified as far back as a 2003 in a DoD study (Schwartz and Randall 2003).

But the White House has not responded. In fact, if one examines publicly accessible information it seems that we are moving backwards in some critical areas. The CIA’s Center for Climate Change was closed in 2012 (Broder 2012), and MEDEA, a program that enabled university scientists to work with intelligence data to deepen understanding of the security aspects of climate change, has since also shut down (McDonnell 2015). In my view, it is imperative that MEDEA be reinstated.

In this context, what the Quadrennial Homeland Security Review (DHS 2014) says about climate change is far too tame. Our knowledge of the threat is growing, the risks are rising, and government responses are weak and uncoordinated. Someone should be ringing alarm bells.

In summary, the reason DHS is obligated to incorporate climate change into its risk framework is simple: climate change is endangering Americans and disrupting our economy. It threatens to destabilize regions of high national interest. This logic justifies all the high-level statements about climate as a national security threat. The same logic renders inexcusable the slow pace of meaningful action.

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