
CLIMATE SECURITY CONSENSUS PROJECT

We the undersigned members of the U.S. national security community conclude that the effects of climate change present a strategically-significant risk to U.S. national security and international security, and that the U.S. must advance a comprehensive policy for addressing this risk. Our conclusion is due in part, but not limited to, the following determinations:

- Climate change increases stress on water, food and energy security both in the U.S. and globally, resulting in unique and hard-to-predict security risks, based on a combination of rapidly changing physical, environmental, economic, social and political conditions;
- Stresses resulting from climate change can increase the likelihood of intra or international conflict, state failure, mass migration, and the creation of additional ungoverned spaces, across a range of strategically-significant regions, including but not limited to the Middle East and North Africa, Central Asia, the Indo-Asia-Pacific, and the Arctic regions;
- Climate change is causing significant change in our oceans. These changes will impact maritime activity and associated maritime security across the globe, including in strategically-significant waterways, such as the Arctic Ocean and the South China Sea;
- The impacts of climate change present significant and direct risks to the U.S. homeland, including to critical energy and military infrastructure, the populations of coastal and water-stressed regions, economic hubs on the coasts and inland, and essential agricultural lands;
- The impacts of climate change present significant and direct risks to U.S. military readiness, operations and strategy;
- The impacts of climate change will increase the likelihood of more frequent and elaborate Humanitarian Assistance and Disaster Relief (HADR) mission requirements;
- Risk managers across institutions of national and international security, as well as intelligence agencies, industries and banks, have consistently identified climate change as a “high impact, high likelihood” risk;
- The impacts of climate change will place significant strains on international financial stability through contributing to supply line disruptions for major global industries in the manufacturing, energy, agriculture and water sectors, disrupting the viability of the insurance industry, and generally increasing the political and financial risks of doing business in an increasingly unstable global environment.

Our determinations above are based on the impacts of the most likely case. There is a small chance that the impacts will be less than expected. There is a greater chance that the impacts will be even worse. It is therefore of critical importance that the United States addresses climate change in a way that is commensurate with this risk profile. In this context, the United States will need to “manage the unavoidable and avoid the unmanageable.” This requires a robust agenda to both prevent and prepare for climate change risks, and avoid potentially unmanageable climate-driven scenarios. Failing to do so will magnify and amplify risks to existing and future U.S. national security objectives.

There are few easy answers, but one thing is clear: the current trajectory of climatic change presents a strategically-significant risk to U.S. national security, and inaction is not a viable option.

Signed:

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Appendix: Quotes¹

Climate change increases stress on water, food and energy security both in the U.S. and globally, resulting in unique and hard-to-predict security risks, based on a combination of rapidly changing physical, environmental, economic, social and political conditions;

“Whatever the root cause, climate change’s potential impacts are sobering and far-reaching...Glaciers are melting at a faster rate, causing water supplies to diminish in Asia. Rising sea levels could lead to a mass migration and displacement similar to what we saw in Pakistan’s [2010] floods.”

– **Mike Mullen**, Admiral, US Navy, (Retired), Rostov Lecture on International Affairs, Johns Hopkins University, Then-Chairman of the Joint Chiefs of Staff

“Risks to freshwater supplies due to shortages, poor quality, floods, and climate change are growing. These forces will hinder the ability of key countries to produce food and generate energy, potentially undermining global food markets and hobbling economic growth. As a result of demographic and economic development pressures, North Africa, the Middle East, and South Asia will particularly face difficulty coping with water problems. Lack of adequate water is a destabilizing factor in developing countries that do not have the management mechanisms, financial resources, or technical ability to solve their internal water problems.”

– **James R. Clapper**, US Director of National Intelligence

Stresses resulting from climate change can increase the likelihood of intra or international conflict, state failure, mass migration, and the creation of additional ungoverned spaces, across a range of strategically-significant regions, including but not limited to the Middle East and North Africa, Central Asia, the Indo-Asia-Pacific, and the Arctic regions;

“The issue of climate change is foremost in our minds at NORTHCOM. We’re going to have more intense, more frequent and more dramatic events caused by weather on large populations, large geographic areas than we’ve had in the past. Because we define our interests globally, we have to take these things into account. Many conflicts throughout our history have been based on resource competition. Increasingly in the future we’ll be defining some of our national security interests in those resource contests.”

– **Charles H. Jacoby**, General, US Army (Retired), Then- Commander, US Northern Command

“While the Indo-Asia Pacific today is relatively at peace, I am concerned by a number of security challenges that have the possibility to impact the security environment...Examples include, climate change, where increasingly severe weather patterns and rising sea levels, along with inevitable earthquakes and tsunamis’ and super-typhoons, and massive flooding threaten today and will continue to threaten populations in the future in this region.”

– **Samuel Locklear**, Admiral, US Navy (Retired), Then-Commander, US Pacific Command

¹ This is a list of supporting quotes from senior military and national security officials, business leaders and key documents.

“If the destabilizing effects of climate change go unchecked, we can expect more frequent, widespread, and intense failed state scenarios creating large scale humanitarian disasters and higher potential for conflict and terrorism.”

– **The Honorable Dennis McGinn**, Assistant Secretary of the Navy, Energy, Installations and Environment

“The geopolitical importance of the Arctic has never been greater, because as far as we know, the natural environment in the Arctic in civilized times has never changed faster.”

– **Admiral James Winnefeld, Jr.**, US Navy (Retired), Then-Commander, US Northern Command

“[M]any developing and fragile states—such as in Sub-Saharan Africa—face increasing strains from resource constraints and climate change, pitting different tribal and ethnic groups against one another and accentuating the separation of various identities.”

– **National Intelligence Council’s Global Trends 2030 report**

Climate change is causing significant change in our oceans. These changes will impact maritime activity and associated maritime security across the globe, including in strategically-significant waterways, such as the Arctic Ocean and the South China Sea;

“We can be certain that within this century climate change is going to cause us to deal with maritime security in a profoundly different way. We are going to have to anticipate, we are going to have to plan how we go about doing this, and we have to act in a deliberate manner.”

– **Jonathan Greenert**, Admiral, US Navy (Retired), Then-Vice Chief of Naval Operations

“The effects of climate change continually reshape our strategic environment... Climate change in the Arctic is impacting the land and seascape, creating opportunity for increased human activity and presenting a new set of regional vulnerabilities and potential resource competitions. Emerging Arctic challenges require deliberate preparation to ensure economic access and freedom of maneuver, and to prevent irresponsible actions.”

– **Charles Jacoby**, General, US Army (Retired), Then-Commander of US Northern Command

The impacts of climate change present significant and direct risks to the U.S. homeland, including to critical energy and military infrastructure, the populations of coastal and water-stressed regions, economic hubs on the coasts and inland, and essential agricultural lands;

“The present day effects of climate change are being felt from the Arctic to the Midwest. Increased sea levels and storm surges threaten coastal regions, infrastructure, and property.”

– **2015 National Security Strategy**

“The approximately 20 centimetres of sea-level rise at the southern tip of Manhattan Island increased Superstorm Sandy’s surge losses by 30% in New York alone. Further increases in sea level in this region may non-linearly increase the loss potential from similar storms.”

– **Lloyd’s of London**, [Catastrophe Modelling and Climate Change](#)

“The loss of glaciers will strain water supplies in several areas of our hemisphere. Destruction and devastation from hurricanes can sow the seeds for instability. Droughts and crop failures can leave millions of people without any lifeline, and trigger waves of mass migration. We have already seen these events unfold in other regions of the world, and there are worrying signs that climate change will create serious risks to stability in our own hemisphere. Two of the worst droughts in the Americas have occurred in the past ten years...droughts that used to occur once a century.”

– **Chuck Hagel**, Former Secretary of Defense, Conference of Defense Ministers of the Americas, Arequipa, Peru

The impacts of climate change present significant and direct risks to U.S. military readiness, operations and strategy;

“The changing climate will affect operating environments and may aggravate existing or trigger new risks to U.S. interests... sea level rise may impact the execution of amphibious landings; changing temperatures and lengthened seasons could impact operation timing windows; and increased frequency of extreme weather could impact overflight possibility as well as intelligence, surveillance and reconnaissance capability.”

– **Department of Defense** [2014 Climate Change Adaptation Roadmap](#)

The impacts of climate change will increase the likelihood of more frequent and elaborate Humanitarian Assistance and Disaster Relief (HADR) mission requirements;

“...From a Marine Corps perspective, we view that [climate change] as certainly one of the sources of conflict...it creates an increased requirement for humanitarian assistance & disaster relief operations...the kind of things that we’ve done in the Pacific over the last several years are probably a prologue for what might have to be done in the wake of the climate change you describe.”

– **Joe Dunford**, General, US Marine Corps, Then-Commandant of the Marine Corps

Risk managers across institutions of national and international security, as well as intelligence agencies, industries and banks, have consistently identified climate change as a “high impact, high likelihood” risk;

“The risks considered high impact and high likelihood are mostly environmental and economic in nature: greater incidence of extreme weather events, failure of climate change mitigation and adaptation, water crises....”

– **The World Economic Forum**, [Global Risks 2014](#)

The impacts of climate change will place significant strains on international financial stability through contributing to supply line disruptions for major global industries in the manufacturing, energy, agriculture and water sectors, disrupting the viability of the insurance industry, and generally increasing the political and financial risks of doing business in an increasingly unstable global environment.

“Given the range and extent of the climate risks the American economy faces, it is clear that staying on our current path will only increase our exposure. The U.S. climate is paying the price today for business decisions made many years ago, especially through increased coastal storm damage and more extreme heat in parts of the country. Every year that goes by without a comprehensive public and private sector response to climate change is a year that locks in future climate events that will have a far more devastating effect on our local, regional, and national economies. Moreover, both government and the private sector are making investment decisions today— whether in property, long-term infrastructure or regional and national supply chains—that will be directly affected by climate change in decades to come.”

– **The Risky Business Project**, [2014 National Report](#)

“The insurance industry has in recent years incurred major losses as a result of extreme weather. 2011 is regarded as a record year for natural catastrophe, with insured losses costing the industry more than \$127 billion.”

– **Lloyd’s of London**, [Catastrophe Modelling and Climate Change](#)

“A NUMBER of major companies — from PepsiCo to Walmart to U.P.S. — have recognized that corporations have a responsibility to address the causes of climate change before it is too late. We do not have to wait for an international treaty or new regulations to act..”

– **Joe Kaeser**, CEO of Siemens

‘Van Beurden said Shell, along with “a majority of society”, acknowledged that climate change was a real and serious issue. He said it was highly undesirable that the world move beyond 2C.’

– **Ben van Beurden**, CEO of Shell

“[The] long-term consequences of not addressing climate are huge.”

– **Tim Cook**, CEO of Apple