

WRITTEN TESTIMONY OF STEPHEN A. CHENEY to U.S. House Committee on
Financial Services; Subcommittee on National Security, International
Development and Monetary Policy
RETIRED BRIGADIER GENERAL, UNITED STATES MARINE CORPS
PRESIDENT, AMERICAN SECURITY PROJECT
SEPTEMBER 11, 2019

Chairman Cleaver, Ranking Member Stivers, members of the Committee, thank you for inviting me to testify about the financial threats posed by climate change to our national security.

I'm honored to provide testimony about this critical threat. A non-partisan, non-profit, the American Security Project has worked tirelessly on this issue since our founding in 2006. As President of ASP, I have presented around the world on this subject and spent much of the last 5 years traveling the United States, everywhere from Ohio to Virginia to Washington state, engaging with local business, and community leaders on the risk of climate change. I often call on my experience in the Marine Corps to illustrate the threat climate change poses to our military and national security around the globe. Today, I am not here to discuss specific legislation or technology solutions, I am here to explain the national security threats of climate change.

Through my 30-year long career in the United States Marine Corps, I learned the importance of preparation. In order to achieve the mission, the United States

military must be prepared for all potential threats, whether its terrorism, near-peer states, or climate and weather-related. In regard to climate in particular, the military cannot afford to delay planning. As retired U.S. Army General Gordon Sullivan once commented, “We never have 100 percent certainty. We never have it. If you wait until you have 100 percent certainty, something bad is going to happen on the battlefield.”

This should be familiar in the financial sector. Risk management is as important for the military as it is for banking. We can’t afford to ignore the risk of climate change, just as bankers can’t ignore risks to their business. Unfortunately, today we are not sufficiently prepared for climate risk and have failed to respond to changes already occurring.

Dating back to the George H.W. Bush Administration in 1992, intelligence and national security professionals warned us that climate change posed a direct threat to U.S. national security. This work has been informed by U.S. scientists telling us that a melting Arctic, more frequent droughts and floods, and extreme weather are all examples of the changing climate in the United States and the world.

We don't need to wait for more sophisticated climate models to project the security consequences of climate change. The impacts of climate change are clear today and threaten our military installations and investments around the globe.

As members on this committee know, the U.S. Department of Defense (DoD) maintains installations worldwide; together that property is worth over \$1.2 trillion and critical to U.S. national security. Extreme weather, rising sea levels, and increasing global instability are all consequences of climate change and each threatens national and financial security.

This past year's extreme weather has seriously affected our military readiness and national security. In September 2018, Hurricane Florence decimated Camp Lejeune and caused damage to Fort Bragg and military installations across North Carolina.

A few weeks later, Hurricane Michael leveled Tyndall Air Force Base on Florida's Panhandle, causing damage to 17 F-22 stealth fighters and major structural damage throughout the base.

Estimates of the cost of these disasters to the military are significant. The Marines have requested \$3.6 billion to rebuild their North Carolina operations, while the Air Force has requested an initial \$5 billion for Tyndall and Offutt.

While the bases may rebuild over time, the loss of training and readiness cannot be recovered. In a February letter to the Secretary of the Navy, General Neller, Commandant of the Marine Corps, wrote that because of the damage from the storms, “The combat readiness of Marine Expeditionary Force – 1/3 the combat power of the Marine Corps – is degraded and will continue to degrade.” He specifically noted that he was forced to curtail or cancel several training exercises to free up funds for hurricane repair.

In addition to extreme weather events, sea level rise is threatening some of our most vital military installations. Norfolk Naval Station is predicted to see 2-5 feet of sea level rise by 2100, maybe up to 11 feet. Even 5 feet of sea level rise would completely submerge the Navy’s piers and significant sections of runway at neighboring Langley Air Force Base. The base has already begun to build new, double decker piers to allow maintenance workers to reach electrical cables, countering the sinking ground and rising seas. Each new pier costs over [\\$100 million](#).

Similarly, in the Arctic, Cape Lisburne in Point Hope, Alaska is home to the Long Range Radar program which detects foreign aircraft entering U.S. airspace. Coastal erosion is expected to have a significant impact on infrastructure by 2040. The station is already investing in fortifying its runway.

Clearly, the U.S. military will have to invest large sums into rebuilding and recovery at home. ASP is tracking these impacts to our military infrastructure on our new website www.militarybaseresiliency.org. I encourage you to review the content and examples there.

Beyond physical damage and financial burdens to military infrastructure, climate change will increase global instability. A common example of this is the Lake Chad Basin in Africa. Following year-after-year of devastating drought, driven in part by climate change, the lake has decreased dramatically. Previously the main source of water and livelihood, the drying of the lake has forced communities to search for alternative occupations. Boko Haram has leveraged the sudden influx in unemployed individuals for recruiting. Climate change may not have been the sole cause of instability, but it certainly contributed to it.

Growing instability creates additional demand for U.S. military support. This will require more troops and more deployments. A larger, more expensive military adds financial burdens on the U.S. and its citizens.

Climate change will also undermine the global economy as instability makes continuing business as usual challenging. While important to model the potential economic impacts of climate change, I would note that there are some impacts that are not quantifiable by models. The difference between war and peace may not show up in an equation, but it affects people's ability to survive. What would economic models have predicted for Syria's future over the last decade? Stability and security may not be fully quantifiable but both are valuable on their own right.

The massive cost of recovering from extreme weather every year and persistent degrading of installations undermines our ability to respond and compromises our readiness. In a time of increasing competition and aggression by both Russia and China, the U.S. cannot afford to ignore this threat. If the United States hopes to seriously combat the influence of bad actors around the globe, we must begin by investing in resiliency and recovery at our military installations and in our communities.

Climate change is already impacting our military readiness and we need additional investment to combat this risk. There needs to be further monitoring of the impacts of climate change and the cost incurred by military infrastructure and

personnel. Tracking the cost will aid in developing plans to build resiliency against future disasters.

Further, there needs to be additional investment and allocation of funds towards “building back better.” Current levels of investment will not be enough to rebuild after disasters. The U.S. Air Force went into a \$4 billion deficit this past year in part due to costs of recovery at Tyndall Air Force Base after Hurricane Matthew and at Offutt Air Force Base in Nebraska after severe flooding. Storms and extreme weather are predicted to only intensify, and funds should be allocated to rebuild stronger and more durable infrastructure.

Finally, we need substantial investment in zero-carbon, clean energy systems. Without investing in clean energy, all of the money spent rebuilding will be for naught as coastal military installations go underwater and stronger storms level our critical infrastructure.

Now is the time to invest in solutions. The United States has the most powerful military in the world. We have the opportunity to maintain that prowess but only if we invest and prepare for the future that lies ahead.

Thank you for the opportunity to testify today. I look forward to your questions.