

# American Security: The Impact of Climate Change

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Climate change is scientific fact; it is real and poses a clear threat to national security.

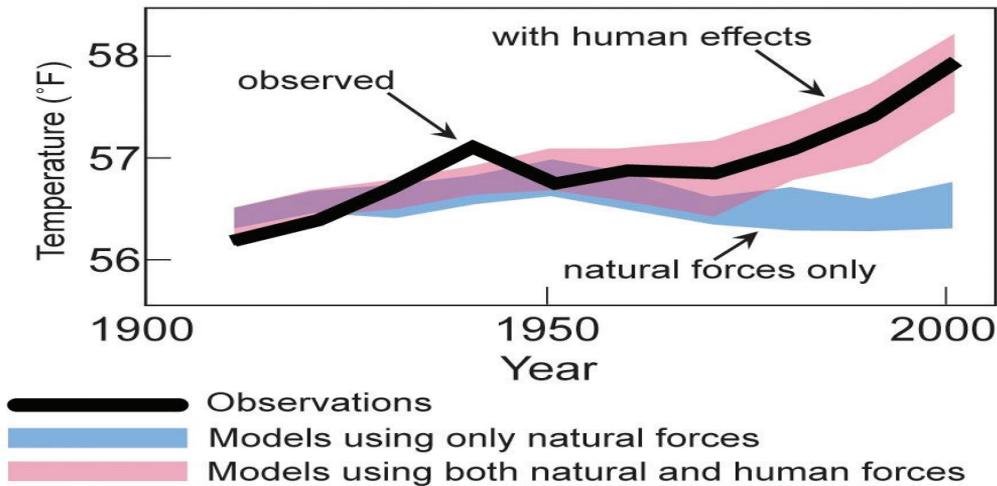
A changing climate will harm the stability of America's global allies and it will have direct effects on America's domestic agriculture, infrastructure, and economy.

Climate change presents deep and broad challenges to U.S. security, like unprecedented droughts, extreme flooding, wildfires, reductions in food supplies, and changes in water availability.

This fact sheet provides basic information about the relationship between climate change and security. All of the references and data presented below are expanded in the accompanying paper by Andrew Holland and Catherine Foley, the "Climate Security Report."

## What is Climate Change?

- The climate has a direct influence on human beings, from the crops we grow to the livestock we raise to where we choose to live.
- A phenomenon known as the "greenhouse effect" naturally traps and absorbs thermal radiation, elevating the surface temperature of our planet and creating the conditions necessary for human habitation.<sup>1</sup>
- Throughout history, the Earth's climate has undergone periods of fluctuation, ranging from decades to millions of years.
- This episode of warming is different. Man-made emissions of greenhouse gases since the industrial revolution is causing an acceleration of warming far beyond earlier periods of climate change.<sup>2</sup>
- Because this change is unprecedented, the effects – whether storms, drought, ice sheet melting, or disease – are unpredictable based on past climate behavior.



## The Connection between Climate Change and National Security

- Security cannot be defined in purely military terms. Instead, governments must prepare for threats to the security of people, not just states.
- Climate change does not respect political borders. Just because a nation has secured its territorial integrity does not mean it has ensured the security of its citizens.
- States that are secure can have insecure people. No one would characterize Russia or the United States as states at risk of failure. However, they present examples of insecure people in secure states:
  - The Russian wildfires of 2010 caused 55,736 deaths and food price shocks around the world.<sup>3</sup>
  - In 2012, 1,100 Americans died and more than 8,800 others were injured in natural disasters while weather-related damages in the United States totaled nearly \$24 billion.<sup>4</sup>
- Developing nations have less capacity to prepare for and adapt to climate change. A large-scale disruption such as a flood or wildfire is more likely to cause government instability and unrest in those states.



## Climate Change and Global Security

- A changing climate acts as an accelerant of instability around the world, exacerbating tensions related to water scarcity and food shortages, natural resource competition, underdevelopment and overpopulation.<sup>5</sup>
- These disruptions will burden civilian and military institutions around the world, including the U.S. military.<sup>6</sup>
- By 2025, unprecedented economic growth, coupled with 1.5 billion more people, will put pressure on resources – particularly energy, food, and water – raising the specter of scarcities emerging as demand outstrips supply.<sup>7</sup>
- Though climate change will have global implications, there are specific “hot-zones” that national security planners should focus on. These include Sub-Saharan Africa, South Asia, the Middle East, Latin America, the East Asia-Pacific, and the Arctic.
- Resilience and an ability to adapt will be key methods for preventing the real impacts of climate change from causing a collapse in security.



## Climate Change and Homeland Security

- Extreme weather across the U.S. – including storms, droughts, floods, or heat waves – is likely to be the most acute threat to infrastructure and the livelihood of American citizens.
- U.S. military forces may be required to fulfill a new, domestic responsibility to respond to natural disasters and other effects of climate change.
- 2012 is an example of extremes to come. The first quarter of 2012 was the warmest on record, breaking 15,000 warm weather records. By July 10, 61% of the country faced moderate to extreme drought conditions, which devastated corn crops and put pressure on food prices.<sup>8</sup>
- America’s military bases, both at home and abroad, are directly threatened by the extreme weather that will grow in frequency and severity as the climate continues to change.<sup>9</sup>
- Threats to physical, economic and health infrastructure have already begun and will continue to affect American transportation, businesses and the well-being of private citizens.<sup>10</sup>
- The U.S. government has begun the process of preparing for climate change, but a lack of political consensus and foresight is holding back efforts to strategically prepare for the long-term effects of climate change.<sup>11</sup>

## Conclusion

**Climate change is a very real and serious threat to the security of the United States and other nations around the world.**

**The negative effects of climate change vary around the world and can cause disruptions to American physical, economic, and military infrastructure.**

**Although addressing climate change as a security issue has been difficult in the past, it is not too late to do so now.**

**The U.S. government has a variety of ways to prepare for climate change including greater collaboration with local agencies, strengthening energy and physical infrastructure, and promoting awareness of the effects of climate change.**

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### Endnotes

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4. Summary of Natural Hazard Statistics for 2011 in the United States, National Weather Service. <http://www.nws.noaa.gov/os/hazstats/sum11.pdf>
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11. JoAnn Carmin, Nikhil Nadkarni, and Christopher Rhie. "Progress and Challenges in Urban Climate Adaptation Planning: Results of a Global Survey." ICLEI: Local Governments for Sustainability. [www.icleiusa.org/action-center/learn-from-others/progress-and-challenges-in-urban-climate-adaptation-planning-results-of-a-global-survey](http://www.icleiusa.org/action-center/learn-from-others/progress-and-challenges-in-urban-climate-adaptation-planning-results-of-a-global-survey) (accessed August 2, 2012).

## **Building a New American Arsenal**

The American Security Project (ASP) is a nonpartisan initiative to educate the American public about the changing nature of national security in the 21st century.

Gone are the days when a nation's strength could be measured by bombers and battleships. Security in this new era requires a New American Arsenal harnessing all of America's strengths: the force of our diplomacy; the might of our military; the vigor of our economy; and the power of our ideals.

We believe that America must lead other nations in the pursuit of our common goals and shared security. We must confront international challenges with all the tools at our disposal. We must address emerging problems before they become security crises. And to do this, we must forge a new bipartisan consensus at home.

ASP brings together prominent American leaders, current and former members of Congress, retired military officers, and former government officials. Staff direct research on a broad range of issues and engages and empowers the American public by taking its findings directly to them.

We live in a time when the threats to our security are as complex and diverse as terrorism, the spread of weapons of mass destruction, climate change, failed and failing states, disease, and pandemics. The same-old solutions and partisan bickering won't do. America needs an honest dialogue about security that is as robust as it is realistic.

ASP exists to promote that dialogue, to forge consensus, and to spur constructive action so that America meets the challenges to its security while seizing the opportunities the new century offers.



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