



How Climate Change Impacts National Security

Advisory Board

BG John Adams, USA (ret)

BG J. Robert Barnes, USA (ret)

ADM Frank Bowman, USN (ret)

Lt Gen John Castellaw, USMC (ret)

John Conger

BG Gerald Galloway, USA (ret)

Sherri Goodman

Lukas Haynes

RADM Len Hering, USN (ret)

Alice Hill

Lt Gen Dirk Jameson, USAF (ret)

GEN Ron Keys, USAF (ret)

Dr. Marcus King

ADM Sam J. Locklear, USN (ret)

Dr. Janne Nolan

VADM Dennis McGinn, USN (ret)

Col Mark Mykleby, USMC (ret)

RADM Ann Phillips, USN (ret)

RADM David Titley, USN (ret)

RADM Jonathan White, USN (ret)

CDR David Slayton, USN (ret)

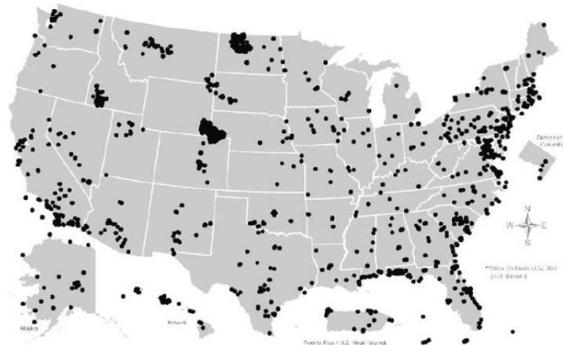
Dr. Troy Sternberg

Joan VanDervort

Swathi Veeravalli

GEN Anthony Zinni, USMC (ret)

Map 7 - Sites that Indicated Effects from Multiple Vulnerability Areas (Flooding, Extreme Temperatures, Wind, Drought, Wildfire)



SOURCE: DEPARTMENT OF DEFENSE, CLIMATE-RELATED RISK TO DoD INFRASTRUCTURE INITIAL VULNERABILITY ASSESSMENT SURVEY (SIVAS) REPORT, JAN. 2018, 6.

“Climate change is a direct threat to the national security of the United States...” - Public Law 115-91 (FY18 Defense Authorization Act), Signed by President Donald J. Trump, 12/12/2017

“I agree that the effects of a changing climate — such as increased maritime access to the Arctic, rising sea levels, desertification, among others — impact our security situation. I will ensure that the department continues to be prepared to conduct operations today and in the future, and that we are prepared to address the effects of a changing climate on our threat assessments, resources, and readiness.” - Secretary of Defense James Mattis, Response to Senate Armed Services Committee, 3/14/2017

Climate Change and Military Installations

- Sea-level rise, storm surge and flooding, leading to infrastructure damage, loss of utilities, and loss of operational capability -- a three foot sea-level rise would threaten 128 DoD bases.
- Expanded wildfire threat to ranges, transportation infrastructure, and utility lines.
- Thawing permafrost causing damage to foundations, and loss of Arctic sea-ice causing coastal erosion near critical facilities.
- Increased number of droughts, limiting the use of live-fire training.
- Increased number of ‘black flag’ (suspended outdoor training) or fire hazard days.

Climate Change and New Missions

- Melting of Arctic icecaps, leading to increased trade and requirements for Naval activity in the Arctic.
- Increased storm frequency and strength, leading to more requirements to provide humanitarian assistance and disaster relief around the world, and Defense Support to Civilian Authorities requirements at home.

Climate Change and Global Instability

- Increased drought and other extreme weather events leading to food and water shortages, and competition within and between nations for these resources.
- Economic costs, resulting from an increase in the frequency and intensity of extreme weather events, agricultural capacity reduction, increasing desertification, and sea-level rise's impact on coastal regions.
- Internal migration and unemployment, exacerbated by extreme weather, contributing to mass displacements of people, which lead to unrest and populations that may be susceptible to recruitment by violent extremist organizations.
- Existential threats to island nations, both from sea level rise and extreme weather.

