

United States Senate

WASHINGTON, DC 20510

March 11, 2025

The Honorable Peter Hegseth
Secretary of Defense
Department of Defense
1000 Defense Blvd
Washington, VA 20301

Dear Secretary Hegseth:

We write regarding our concerns that your threats to cut climate programs at the Department of Defense (DoD) will jeopardize our national security, putting thousands of American lives and billions of American taxpayer dollars at risk.

You recently suggested that the DoD will cut “climate programs,” implying that these programs do not contribute to the “business of deterring and winning wars.”¹ But surely, as a Secretary of Defense that claims to be “laser focused on warfighting,”² you are aware that military experts have highlighted the security implications of climate change and the threat it poses to future operations for years.

Since the 1990s, across Democratic and Republican administrations, including during President Trump’s first administration, countless military officials, generals, and admirals have explained the extent to which climate change affects the military’s operations and defense strategies.³ In 2007, a group of 11 retired three- and four-star generals released a report warning that:

The consequences of climate change can affect the organization, training, equipping, and planning of the military services. The U.S. military has a clear obligation to determine the potential impacts of climate change on its ability to execute its missions in support of national security objectives. Climate change can act as a threat multiplier for instability in some of the most volatile regions of the world, and it presents significant national security challenges for the United States.⁴

In 2017, the Republican-controlled Congress declared that “it is the sense of Congress that... climate change is a direct threat to the national security of the United States...”⁵ During the first

¹ Reuters, “Pentagon's Hegseth sees growth in defense spending despite Musk review,” Phil Stewart and Idrees Ali, February 11, 2025, <https://www.reuters.com/world/us/pentagons-hegseth-sees-growth-defense-spending-despite-musk-review-2025-02-11/>.

² Senate Armed Services Committee, “Opening Statement, Secretary of Defense Nomination Hearing,” Pete Hegseth, January 14, 2025, https://www.armed-services.senate.gov/imo/media/doc/hegseth_opening_statement.pdf.

³ Yale Climate Connections, “The long history of climate change security risks,” Dana Nuccitelli, April 8, 2019, <https://yaleclimateconnections.org/2019/04/the-long-history-of-climate-change-security-risks/>.

⁴ The CNA Corporation, “National Security and the Threat of Climate Change,” 2007, p. 3, https://www.cna.org/archive/CNA_Files/pdf/national%20security%20and%20the%20threat%20of%20climate%20change.pdf.

⁵ National Defense Authorization Act for Fiscal Year 2018, Public Law 115-91.

Trump Administration, over 20 senior officials at the DoD also raised concerns about the security implications of climate change, including Secretary of Defense James Mattis who recognized 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.”⁶ These warnings are based on the very real and expensive impacts that climate change has already caused.

Over the past decade, extreme weather exacerbated by climate change has caused billions of dollars of damage to DoD installations⁷ and degraded operational readiness.⁸ In 2018, hurricanes caused over \$8 billion in damage to Camp Lejeune and Tyndall Air Force Base,⁹ while flooding at Offutt Air Force Base in 2019 has cost over \$1 billion and counting.¹⁰ The Air Force estimates that rebuilding Andersen Air Force Base in Guam, which was struck by Typhoon Mawar in 2023, will cost nearly \$9.7 billion.¹¹ These costs do not even account for the training time lost or the man-hours expended by the DoD on recovery operations. Just last year, more than 6,500 National Guard members, 250 members of the Army Corps of Engineers, and 100 Marines mobilized to recovery efforts after Hurricanes Helene and Milton devastated the Florida Gulf Coast,¹² while many more responded to fight fires in Oregon, Tennessee, West Virginia, Massachusetts, Texas,¹³ and California.¹⁴

In addition to threatening an estimated \$387 billion worth of military infrastructure,¹⁵ failing to mitigate climate impacts also risks the increasingly brittle¹⁶ defense industrial base.¹⁷ As the

⁶ The Center for Climate & Security, “UPDATE: Chronology of U.S. Military Statements and Actions on Climate Change and Security: 2017-2019,” Caitlin Werrell and Francesco Femia, February 16, 2019, <https://climateandsecurity.org/2019/02/update-chronology-of-u-s-military-statements-and-actions-on-climate-change-and-security-2017-2019/>.

⁷ Council on Strategic Risks, “Climate Security Policy Recommendations for the New Administration,” Erin Sikorsky, Caroline Baxter, Siena Cicarelli, John Conger, and Tom Ellison, January 13, 2025, <https://councilonstrategicrisks.org/2025/01/13/climate-security-policy-recommendations-for-the-new-administration>.

⁸ U.S. Department of Defense, “Hicks Defines Need to Focus DOD on Climate Change Threats,” Jim Garamone, August 30, 2023, <https://www.defense.gov/News/News-Stories/Article/Article/3510772/hicks-defines-need-to-focus-dod-on-climate-change-threats/>.

⁹ Congressional Research Service, “Climate Change and Adaptation: Department of Defense,” Kelley M. Sayler, April 6, 2023, <https://crsreports.congress.gov/product/pdf/IF/IF12161>.

¹⁰ Air & Space Forces Magazine, “Cost of Rebuilding Offutt Will Top \$1B, Congressman Says,” Greg Hadley, January 5, 2022, <https://www.airandspaceforces.com/rebuilding-offutt-cost-1-1-1-2-billion-congressman/>.

¹¹ Pacific Daily News, “A year and nearly \$10B in damage later, Andersen Air Force Base is recovering,” Nestor Licanto, May 24, 2024, https://www.guampdn.com/news/a-year-and-nearly-10b-in-damage-later-andersen-air-force-base-is-recovering/article_f91da86c-1816-11ef-a280-a3162d8cf15f.html.

¹² Air & Space Forces Magazine, “MacDill Ends Evacuation Order After Moderate Hurricane Damage,” John A. Tirpak, October 11, 2024, <https://www.airandspaceforces.com/macdill-milton-evacuation-order-ends/>.

¹³ National Guard Bureau, “The Guard in 2024: Deployments, hurricanes, wildfires and new leadership,” Sgt. 1st Class Jon Soucy, December 27, 2024, <https://www.nationalguard.mil/News/Article-View/Article/4016955/the-guard-in-2024-deployments-hurricanes-wildfires-and-new-leadership/>.

¹⁴ National Guard Bureau, “National Guard Members Continue LA Wildfire Response,” Sgt. 1st Class Jon Soucy, January 21, 2025, <https://www.nationalguard.mil/News/Article-View/Article/4034416/national-guard-members-continue-la-wildfire-response/>.

¹⁵ Bloomberg Law, “Rising Seas Imperil US Sites, Military Bases Worth \$387 Billion,” Stephen Lee, Paul Murphy, Athar Mirza, and Jon Meltzer, September 21, 2023, <https://news.bloomberglaw.com/environment-and-energy/rising-seas-imperil-us-sites-military-bases-worth-387-billion>.

¹⁶ Center for Strategic & International Studies, “Industrial Mobilization: Assessing Surge Capabilities, Wartime Risk, and System Brittleness,” Mark F. Cancian, January 2021, p. 50, https://csis-website-prod.s3.amazonaws.com/s3fs-public/publication/210108_Cancian_Industrial_Mobilization.pdf.

¹⁷ Government Accountability Office, “Climate Resilience: Actions Needed to Ensure DOD Considers Climate Risks to Contractors as Part of Acquisition, Supply, and Risk Assessment,” Elizabeth A. Field, June 2020, <https://www.gao.gov/assets/gao-20-511.pdf>.

Government Accountability Office reported, “excluding climate change and extreme weather considerations will limit DOD’s ability to anticipate and manage climate-related risks faced by its contractors so as to build resilience into its [acquisition and supply] processes, and could jeopardize its ability to carry out its missions.”¹⁸ Storms like Hurricane Katrina, which decimated Ingalls Shipbuilding in Pascagoula,¹⁹ where *Arleigh Burke*-class (DDG 51) destroyers are assembled, and Hurricane Matthew, which damaged Norfolk Naval Shipyard,²⁰ highlight the precarious positions of many critical links in the defense industrial base.

Climate change poses significant operational risks as well. A recent RAND study on the effects of climate change on operational risk in INDOPACOM found, “even mild degradation could make a pronounced difference in warfighting outcomes.”²¹ In the Western Pacific, climate change is creating challenges for the United States’ efforts to project force and credibly deter Chinese aggression. For example, critical locations in the Second Island Chain, such as Kwajalein Atoll, home to the brand new billion dollar “Space Fence” surveillance system,²² face sea level rise and overwash that may render the atoll uninhabitable within 20 years.²³ Simultaneously, the intensity of tropical cyclones like the one that struck Guam,²⁴ is growing.²⁵ China is taking advantage of the economic strain that climate change is putting on Pacific Island nations to claw away support for Taiwan, further eroding U.S. influence and operational flexibility in the region.²⁶

As Secretary of Defense, your first duty is to the United States and the Soldiers, Sailors, and Airmen you now lead, not any political mission. As experts on our nation’s defense policy have concluded, “it is vital for the joint force to be informed by the best available climate science about the acute and chronic effects of climate change.”²⁷ We urge you to listen to them, and to

¹⁸ *Id.*

¹⁹ HII, “Huntington Ingalls Industries Announces Plan to Reactivate East Bank Facilities at Ingalls Shipbuilding,” April 12, 2018, <https://hii.com/news/photo-release-huntington-ingalls-industries-announcesplan-to-reactivate-east-bank-facilities-at-ingalls-shipbuilding/>.

²⁰ NBC News, “Rising seas threaten Norfolk Naval Shipyard, raising fears of ‘catastrophic damage,’” Nicholas Kusnetz, November 19, 2018, <https://www.nbcnews.com/news/us-news/rising-seas-threaten-norfolk-naval-shipyard-raising-fears-catastrophic-damage-n937396>.

²¹ RAND, “Ho’okele Mua II, a Wargame on Climate Change and Operational Risk in INDOPACOM,” Bryan Rooney, Flannery Dolan, M. Scott Bond, Nicholas Johnson, Alisa Laufer, Clare Porter, David A. Shlapak, Scott R. Stephenson, Sam Wallace, Vanessa Wolf, et al., January 16, 2025, https://www.rand.org/pubs/research_reports/RRA470-8.html.

²² National Defense Authorization Act for Fiscal Year 2018, Public Law 115-91, <https://www.congress.gov/bill/115th-congress/house-bill/2810/text>.

²³ The Washington Post, “The military paid for a study on sea level rise. The results were scary.,” Chris Mooney and Brady Dennis, April 27, 2018, <https://www.washingtonpost.com/news/energy-environment/wp/2018/04/25/climate-change-could-make-thousands-of-tropical-islands-uninhabitable-in-coming-decades-new-study-says/>.

²⁴ Pacific Daily News, “A year and nearly \$10B in damage later, Andersen Air Force Base is recovering,” Nestor Licanto, May 24, 2024, https://www.guampdn.com/news/a-year-and-nearly-10b-in-damage-later-andersen-air-force-base-is-recovering/article_f91da86c-1816-11ef-a280-a3162d8cf15f.html.

²⁵ Nature Communications, “Increasing tropical cyclone intensity in the western North Pacific partly driven by warming Tibetan Plateau,” Jing Xu, Ping Zhao, Johnny C. L. Chan, Mingyuan Shi, Chi Yang, Siyu Zhao, Ying Xu, Junming Chen, Ling Du, Jie Wu, Jiaxin Ye, Rui Xing, Huimei Wang and Lu Liu, January 5, 2024, <https://www.nature.com/articles/s41467-023-44403-8>.

²⁶ United States Institute of Peace, “Financially Weak Pacific Island States Are Vulnerable to China,” Gordon Peake, Ph.D. and Camilla Pohle, January 18, 2024, <https://www.usip.org/publications/2024/01/financially-weak-pacific-island-states-are-vulnerable-china>.

²⁷ RAND, “Ho’okele Mua II, a Wargame on Climate Change and Operational Risk in INDOPACOM,” Bryan Rooney, Flannery Dolan, M. Scott Bond, Nicholas Johnson, Alisa Laufer, Clare Porter, David A. Shlapak, Scott R. Stephenson, Sam Wallace, Vanessa Wolf, et al., January 16, 2025, p. 66, https://www.rand.org/content/dam/rand/pubs/research_reports/RRA400/RRA470-8/RAND_RRA470-8.pdf.

provide answers to the following questions on how you will address the threat that climate change poses to the Department’s warfighting mission by no later than March 26, 2025:

1. How do investments in resilient infrastructure, energy independence, and operational agility in changing climates make the U.S. armed forces less lethal?
2. The DoD Directive 4715.21, Climate Change Adaptation and Resilience, requires mission planning and execution to include: (1) Identification, assessment, and monitoring of the effects of climate change on the DoD mission, (2) Taking those effects into consideration when developing plans and implementing procedures, (3) Anticipating and managing any risks that develop as a result of climate change to build resilience.²⁸ How will eliminating these requirements increase the DoD’s capacity to deter and win wars?
3. The DoD’s Climate Adaptation Plan lays out the DoD’s strategy to “ensure the DOD can operate under changing climate conditions, preserving operational capability and enhancing the natural and man-made systems essential to the Department’s success.”²⁹ How will your cuts to these initiatives facilitate a lethal force?
4. How do you intend to enable an operationally relevant future force in the Western Pacific without accurate climate assessments of the battlespace?
5. Bloomberg estimates that \$387 billion worth of military infrastructure will be imperiled by climate changes within the next 25 years.³⁰ How do you plan to:
 - a. Prevent the reduction of operational capacity associated with the loss of that infrastructure?
 - b. Mitigate these losses?
6. Will the DoD support initiatives by partners in the defense industrial base to become more climate-resilient?
7. Since 2015, how many members of the National Guard have been engaged in disaster relief operations?

Sincerely,



Elizabeth Warren
United States Senator



Mazie K. Hirono
United States Senator

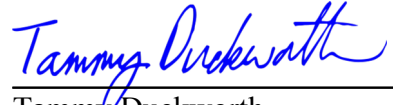
²⁸ DoD Directive 4715.21 “Climate Change Adaptation and Resilience,” January 14, 2016, <https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodd/471521p.pdf>.

²⁹ “Department of Defense Climate Adaptation Plan 2024-2027,” September 5, 2024, <https://www.sustainability.gov/pdfs/dod-2024-cap.pdf>.

³⁰ Bloomberg Law, “Rising Seas Imperil US Sites, Military Bases Worth \$387 Billion,” Stephen Lee, Paul Murphy, Atthar Mirza, and Jon Meltzer, September 21, 2023, <https://news.bloomberglaw.com/environment-and-energy/rising-seas-imperil-us-sites-military-bases-worth-387-billion>.



Richard Blumenthal
United States Senator



Tammy Duckworth
United States Senator