



Climate Change and the National Defense Authorization Act

An often-overlooked area of bipartisan collaboration in Washington revolves around the security threat of climate change, with Republicans and Democrats agreeing on legislation to highlight and respond to the threat, and putting forward bills that have become law. More must be done to reduce the scale and scope of the threat, but as Congress develops the FY2023 National Defense Authorization Act (NDAA), it is worth looking back at the progress the United States has seen over the past several years, much of which aligns with the priorities described in the [Climate Security Plan for America](#) and the follow up report, [Challenge Accepted](#).

Below, we track key provisions that have been included in NDAA's from Fiscal Year (FY) 2018 through FY 2022, building from the initial, bipartisan declaration in 2017 that climate change was a direct threat to national security, to requirements for vulnerability assessments, resilience authorities, strategy requirements, and mainstreaming consideration of climate impacts on mission.

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2017

FY18 NDAA ENACTED DECEMBER 12, 2017

Declaring Climate Change a Direct Threat: *“It is the sense of Congress that...climate change is a direct threat to the national security of the United States and is impacting stability in areas of the world both where the United States Armed Forces are operating today, and where strategic implications for future conflict exist...”* (Sec 335b)

Assessing DoD’s Most Vulnerable Bases: Requirement for the Department of Defense (DoD) to identify the ten installations per service that were most vulnerable to climate change. In January 2019, [DoD responded with a report](#) on installation vulnerability without the prioritized list, so the military services followed up with their own individual submissions ([Army](#), [Navy/Marine Corps](#), [Air Force](#)). (Sec 335c)

2018

FY19 NDAA ENACTED AUGUST 13, 2018

Improving Installation Resilience: Though the top ten lists of vulnerable installations from 2017 had not yet been developed, Congress included multiple additional provisions strengthening installation resilience to climate impacts, including:

- Requirement for new construction to identify whether the project location is in the 100-year floodplain, and if so, it must not only include mitigation plans, but be designed to assume an additional 2 feet above the base flood elevation (3 feet for mission critical facilities). (Sec 2805)
- Incorporation of changing environmental conditions into Unified Facilities Criteria (i.e. military construction design requirements). (Sec 2805)
- Inclusion of energy and climate considerations into installation master plans (which govern how a base is laid out and where new construction will occur). (Sec 2805)
- A formal definition of military installation resilience that includes resilience to changes in environmental conditions. (Sec 2805)
- Authority to expend Readiness and Environmental Protection Initiative funds to protect military installation resilience. (Sec 312i)
- Authority to spend economic adjustment funds on military installation resilience. (Sec 2805)
- Expanding Defense Access Roads authority to improve critical roads outside a base that are impacted by sea-level rise and recurrent flooding. (Sec 2865)

2018 CONTINUED:

Focus on Arctic Security: At the same time, Congress increased attention to the security challenges posed by a warming Arctic. Key Arctic provisions included:

- A requirement for an updated Arctic Strategy by June 2019. (Sec 1071)
- Incorporation of China's Arctic activities into a new Strategy on China. (Sec 1261)
- Authority to procure six new icebreakers for the Coast Guard, expressing the intent that they be in the inventory within 10 years. (Sec 151)
- Funding of \$15.5M for a replacement F-35 munitions maintenance facility at Eielson Air Force Base, AK, as the existing facility suffered extensive damage from settlement caused by permafrost thaw. The Senate Report also required DoD to perform an assessment of all structures in permafrost regions to anticipate future building losses and to evaluate the adequacy of construction standards in these regions given anticipated warming.

2019 FY20 NDAA ENACTED DECEMBER 20, 2019

Improving Installation Resilience: Building on the bipartisan progress of 2018, the defense authorization bill included a wide range of provisions to increase emphasis on installation resilience, including:

- Requirement to incorporate military installation resilience into each installation's Master Plans, specifically to assess vulnerabilities both to installations and surrounding communities, identify missions that would be affected by those vulnerabilities, and propose projects to address those vulnerabilities. (Sec 2801a)
- Requirement for Improved Building Codes, called Unified Facilities Criteria in DoD, to promote resilience in new construction. (Sec 2804)
- Requirement for use of the Navy's Climate Change Installation Adaptation and Resilience planning handbook by the entire DoD, ensuring that guidance is available for all installation officials that pursue resilience measures. (Sec 2804)
- Extension of restrictions on construction in floodplains to cover projected sea level rise over the projected life of a building. (Sec 2806)
- Direction to create a Climate Vulnerability and Risk Assessment Tool by DoD to inform mitigation planning and infrastructure development. (Sec 326)

2019 CONTINUED:

- Requirement to Consider Sites for a Strategic Port in the Arctic, with a report due in 180 days. (Sec 1752)
- Amended Defense Access Roads authority to incorporate the impacts of current or anticipated changes in environmental conditions, and expanded scope to include roads to air or sea ports necessary for deployment. (Sec 2808)
- Funding to address climate change concerns. Specifically, it included a \$49 million project at the Portsmouth (VA) Naval Shipyard to increase the height of floodwalls around its drydocks, driven by sea-level rise concerns, and authorized \$150 million for the Energy Resilience and Conservation Investment Program, which addresses projects at multiple locations.

Climate and the Intelligence Community: The bill incorporated the Intelligence Authorization Act, which included a provision to create a Climate Security Advisory Council within the Intelligence Community to ensure that intelligence analysis is informed by the best possible science and projections (Sec 5321). This was consistent with the recommendation in the [Climate Security Plan for America](#) for a Climate Security Crisis Watch Center, led by the Office of the Director of National Intelligence, to facilitate an annual interagency assessment, drawing from analysis across the intelligence community and beyond, of the risks that climate change poses to U.S. national security.

2020 [FY21 NDAA ENACTED JANUARY 1, 2021](#)

Climate Strategy: Requirement to update the 2014 Climate Change Adaptation Roadmap (very similar to the plan called for in the [Climate Security Plan for America](#)). This requirement provided an opportunity to the DoD leadership to outline its climate security plans and strategy and to lay out actions and metrics. (Sec 327)

Reestablishment of the Assistant Secretary of Defense for Energy, Installations & Environment:

Creation of an Assistant Secretary of Defense (Energy, Installations & Environment) which would increase the focus on the climate resilience of installations. (Sec 904)

Improving Installation Resilience: Congress continued to build on previous efforts to expand installation resilience to climate impacts, including:

- Authorization for the DoD to fund projects that improve military installation climate resilience even when they are outside the borders of the installation or on land the DoD does not control. (Sec 315)

2020 CONTINUED:

- Direction to the US Coast Guard to assess its vulnerabilities and to, among other requirements, identify the ten sites most vulnerable to climate change impacts. This requirement echoes the requirement passed for DoD in the Fiscal Year 2018 NDAA. (House Sec 8250)
- Requirement to improve water management and security on military installations, a challenge that will only increase over time with climate change. (House Sec 2827)
- Requirement for an assessment of the impact of permafrost thaw on DoD assets and operations. (Conference Report language)
- An assessment building upon DoD's 2018 vulnerability report that would focus exclusively on extreme weather vulnerability of installations and combatant commander requirements. (Conference Report language)
- Elevation of military installation resilience as an evaluation factor in awarding Defense Community Infrastructure Program (DCIP) funds. (Sec 2882)

Climate and the Intelligence Community: Establishment of a National Academies Climate Security Roundtable, to create a mechanism for climate science stakeholders to provide information to the Climate Security Advisory Council (CSAC) which was established within the Intelligence Community in last year's bill. (Sec 1622)

2021

FY22 NDAA ENACTED DECEMBER 27, 2021

Several of the provisions from the FY22 bill reflected recommendations from the [Climate Security Plan for America](#), and are denoted with CSPA and the respective recommendation number.

Climate Impacts on Mission: Notably, Congress incorporated the National Security Climate Resilience Act into the measure, focused on mainstreaming climate and assessing the impacts of climate on operational missions, not just installations. Provisions included:

- Requirement for DoD to conduct Climate Resilience Mission Impact Assessments to assess the implications not only on installations but on operations and warfighting capability. (Sec 334 / CSPA 2.3)
- Requirement for a threat assessment of the impacts of extreme weather, drought, and desertification on regional stability. (Sec 334)

2021 CONTINUED:

- Requirement for the Office of Net Assessment to conduct a long-term assessment of the implications of climate change on DoD. (Sec 334 / CSPA 2.3)
- Requirement for the development of wargames and exercises focused on climate-driven crises. (Sec 334 / CSPA 2.3)
- Requirement for DoD to analyze climate risks to the deployment of forces—specifically assessing impacts to the strategic highway and rail networks and strategic air and seaports. (Sec 334)
- Requirement for a review of the research and development needed to ensure resilience of military equipment and capabilities to future climate conditions. (Sec 334 / CSPA 2.5)
- Requirement for a review and enhancement of existing authorities for using Air Force and Air National Guard airborne firefighting systems and other DoD assets to fight wildfires. (Sec 1065)

Improving Installation Resilience:

- Requirement for DoD to develop a framework for installation commanders to engage with local communities to improve preparation for and response to extreme weather and climate events. (Sec 332)
- Requirement for DoD to ensure at least 10 percent of major military installations achieve energy net-zero and water or waste net-zero by fiscal year 2035. (Sec. 319)
- Established a new program administered by the Office of Local Defense Community Cooperation (OLDCC) to make grants, conclude cooperative agreements, and supplement other federal funds for planning and implementing projects to maintain or improve military installation resilience. (Sec 313)
- Established a new program for projects on and outside installations to manage increasing stormwater impacts. (Sec 2803)
- Extended existing installation resilience programs focused on facilities to DoD testing and training ranges. (Sec. 332)
- Requirement for each Secretary of a military department to identify at least two major military installations at risk from extreme weather events within 30 days of enactment, and to ensure that resilience plans are complete for those installations within one year. (Sec 2833)

2021 CONTINUED:

- Requirement for DoD to perform detailed assessments of the climate vulnerabilities of installations to climate change. (Sec 335 / CSPA 2.2)
- Strengthened requirements to address the risks of flooding. (Sec 2805)

Climate Education, Training, and Support to Allies and Partners: The Senate included an extensive section of directive report language in its committee report that directs DoD to include military installation resilience into professional military education and training courses for those officers selected to become installation commanders (CSPA 4.9). It also encouraged DoD to incorporate climate resilience into International Military Education and Training (IMET) programs and to conduct joint security training exercises on these issues with partner militaries (CSPA 3.3).