



# Department of Defense 2024-2027 Climate Adaptation Plan Highlights

## Fact Sheet: Highlights from the *Department of Defense 2024-2027 Climate Adaptation Plan*

### Climate-Informed Decision-Making

The Department of Defense (DOD) uses best available and actionable climate information to develop tools and resources, most notably the DOD Climate Assessment Tool (DCAT). DCAT supports climate-informed decision-making to increase resilience against climate hazards while preserving operational capability and enhancing the natural and man-made systems essential to the Department's success.



DOD Climate Assessment Tool

### Train and Equip a Climate-Ready Force

The DOD Climate Wargaming Sub-Working Group, led by the Joint Staff, advocates for the inclusion of appropriate climate change data into operationally-focused wargames, tabletop exercises (TTXs), and studies to inform future planning and capability development. In the past year alone, six combatant commands actively pursued climate-informed TTXs or studies. For 2024, the Department will use the Wargame Incentive Fund to conduct additional wargames, TTXs, and studies that address challenges identified in the National Defense Strategy through a climate security lens.



Climate Wargaming Sub-Working Group

### Resilient Built and Natural Installation Infrastructure

The Department of the Army is employing nature-based solutions (NBS) at installations ranging from the Kwajalein Atoll to sites across the continental U.S., Puerto Rico, and Alaska to reduce wildfire and flooding risks, stabilize permafrost, and improve at-risk species habitat. Many of these projects also provide direct resilience benefits to surrounding communities.

Tyndall Air Force Base has several NBS pilot projects, including a living shoreline, oyster reefs, and saltwater marsh enhancement to reduce erosion and wave energy, and coastal dune restoration using sand accretion processes. MacDill Air Force Base created oyster reefs off the coastline to counteract rapid erosion near the vulnerable West Indian manatee critical habitat and several important Native American burial sites. The oyster reefs also help safeguard the nearby commercial shipping lane.



Army and Air Force  
Nature-Based Solutions

### Supply Chain Resilience and Innovation

The Defense Logistics Agency (DLA) uses a Supply Chain Risk Management approach to illuminate risk across the various supply chains. The approach enables the DLA to prioritize efforts and resources to reduce impact. Then, the DLA reviews and updates policies accordingly to align with DOD resilience policies, goals, and initiatives. The DLA continues to update its design directive to include updated energy codes, OSD electrification memorandum, and the Federal Building Performance Standards.



DLA Supply Chain Alliance Conference

### Enhance Adaptation and Resilience Through Collaboration

Through the Office of Local Defense Community Cooperation Port of San Diego Installation Resilience project, Naval Base Coronado, Naval Base Point Loma, Naval Base San Diego, and the San Diego Unified Port District collaborate to identify opportunities for improved installation resilience via sustainable restoration, enhancement, or retrofitting of local shorelines. The project will result in a digital planning tool that identifies shoreline vulnerabilities and provides alternative site-specific, resilient solutions. It will also enable stakeholders to improve strategic collaboration and partnerships to pursue funding opportunities for the design, construction, and implementation of shoreline projects throughout San Diego Bay.



Navy Shoreline Restoration  
Partnership

### Climate Literacy

DOD personnel experience the impacts of a changing climate every day. These effects complicate already complex operations and exacerbate risks to Joint Force readiness, lethality, and mission execution. In the 2021 Climate Adaptation Plan, the DOD identified climate literacy as a key enabler integral to the success of all DOD climate adaptation efforts. The Department's almost 3 million-member workforce of active-duty, civilian, National Guard and Reserve personnel, and support contractors underpin DOD's ability to address the risks associated with a changing global climate. The knowledge, skills, and capabilities required to address the impacts of a changing climate depend on the unique mission, function, and role of each member of this workforce. Therefore, the climate literacy effort is developing appropriate and tailored information allowing the workforce to understand when, why, and how to apply climate considerations.



# Department of Defense 2024-2027 Climate Adaptation Plan Overview

## Fact Sheet: Overview of the *Department of Defense 2024-2027 Climate Adaptation Plan*

### DEPARTMENT OF DEFENSE (DOD) CLIMATE ADAPTATION END STATE:

Ensure the Department of Defense can operate under changing climate conditions, preserving operational capability and enhancing the natural and man-made systems essential to the Department's success.

Climate change continues to increase the demand and scope for military operations at home and around the world, and climate adaptation efforts must align with and support the Department's warfighting requirements. Reducing climate risks and bolstering installation resilience is critical to prevent disruptions to DOD operational plans, enable rapid recovery, and maintain mission readiness. The DOD is invested in increasing its resilience and improving combat capability, all while reducing the Department's own contributions to climate change.

## DOD adaptation efforts continue to be driven by the LOEs established in the 2021 Climate Adaptation Plan:

### 1 Climate-Informed Decision-Making

DOD considers the effects of climate change, based on the best available, validated, and actionable science, in all relevant plans, processes, and decisions to ensure it can continue to meet National Defense requirements. All other climate adaptation actions are dependent on this line of effort.

**"The Department will include the security implications of climate change in all our risk analyses, strategy development, and planning. These are essential steps to defend the nation under all conditions."**

— Lloyd J. Austin III, Secretary of Defense



### 2 Train and Equip a Climate-Ready Force

To successfully accomplish our mission, DOD must prepare combat forces to operate under the most extreme and adverse weather and terrain conditions, equipping the force to face emerging conditions that differ from the range of environments known today.



### 3 Resilient Built and Natural Installation Infrastructure

Built and natural infrastructure serve as the platforms from which the DOD executes its mission, sustains forces, maintains mission readiness and resilience, and also cares for its people. DOD is working to achieve healthy, safe, functional, and resilient spaces that enhance the quality of life and readiness of its Service members, families, civilian workforce, and defense communities. See the [Resilient and Healthy Defense Communities \(RHDC\) Strategy](#) for guiding actions to improve the built and natural environment on installations.



### 4 Supply Chain Resilience and Innovation

DOD intends to use the flexible framework outlined in the 2024 National Defense Industrial Strategy to help achieve supply chain optimization, innovation, and resilience, lessening the vulnerability of missions, installations, and operations to both the effects of a changing climate and our adversaries.

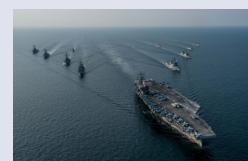
**"We will prioritize coordinated efforts with the full range of domestic and international partners in the defense ecosystem to fortify the defense industrial base, our logistical systems, and relevant global supply chains against subversion, compromise, and theft."**

— 2022 National Defense Strategy



### 5 Enhance Adaptation and Resilience Through Collaboration

To be effective globally, climate adaptation efforts need to be done in collaboration with allies and partners. DOD continues to leverage interagency and academic partnerships, forums, programs, and climate-informed funding to external parties to facilitate this critical coordination.



## DOD climate adaptation efforts continue to address the Department's climate risks and increase climate literacy:

DOD is committed to addressing climate hazard impacts to missions, operations, built and natural infrastructure, and cultural resources. For the personnel experiencing these impacts every day, climate literacy is a key enabler integral to achieving DOD's climate adaptation end state.





# Department of Defense 2024-2027 Climate Adaptation Plan

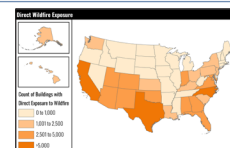
## Progress and Implementation

### Fact Sheet: Progress to date and implementation of the *Department of Defense 2024-2027 Climate Adaptation Plan*

The 2024-2027 Climate Adaptation Plan (CAP) covers the period 2024 through 2027 and builds on the 2021 CAP and previous years' Progress Reports. The Department has taken significant steps to address climate-related threats since the 2021 CAP publication. The DOD invested in increasing its resilience and improving combat capability, all while reducing the Department's contributions to climate change. This plan further underscores our commitment 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. To train, fight, and win in an increasingly complex threat environment, we must consider the effects of extreme weather and climate change at every level of the enterprise.

### Addressing Climate Hazard Impacts and Exposures

DOD used best available, validated, and actionable climate data to assess the exposure of our missions, operations, built and natural infrastructure, and cultural resources to five climate hazards: extreme heat, extreme precipitation, sea level rise, flooding, and wildfire risk.<sup>1</sup>

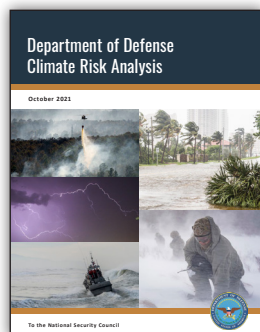


### Incorporating Climate Risk Into Reporting, Policy, Programs, And Planning

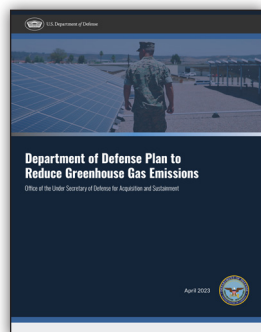
DOD is taking bold steps to accelerate integrated installation resilience to meet current and future all-hazards challenges through policy and programs. These efforts align policy and guidance with strategic objectives and mission requirements so our military can continue to deter aggression and defend the Nation under all conditions. For example, DOD policy requires all operations, planning activities, business processes, and resource allocation decisions, to consider climate change. In addition, the Department is committed to integrating climate considerations and metrics into the highest-level strategic objectives and performance goals, including the Department's *Strategic Management Plan for Fiscal Years 2022-2026* and Agency Priority Goals (APG). For example, incorporating climate risk into policies and technical guidance is a performance goal within the DOD APG "Improve Resilience of DOD Installations."

### Spotlight On Key Policy And Plans

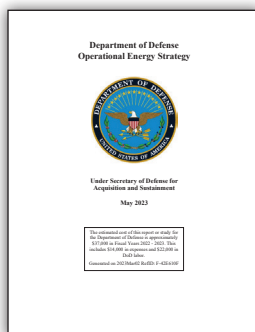
As a result of these integration efforts, since 2021, DOD released more than 15 climate-related strategies and plans, including:



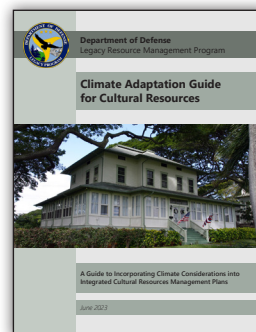
DOD Climate Risk Analysis



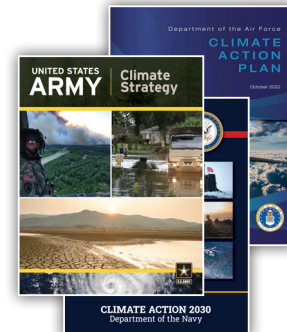
DOD Greenhouse Gas Reduction Plan



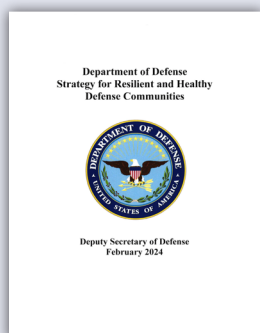
DOD Operational Energy Strategy



DOD Climate Adaptation Guide for Cultural Resources

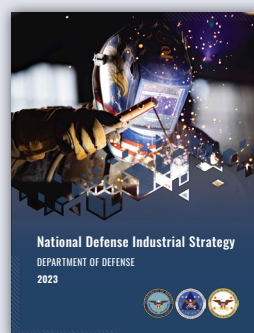


DOD Component Climate Strategies and Plans



### Department of Defense Strategy for Resilient and Healthy Defense Communities

The 2024 *Resilient and Healthy Defense Communities Strategy* will guide the Department's actions to achieve healthy, safe, functional, and resilient spaces that enhance the quality of life and readiness of our Service members, families, and civilian workforce.



### National Defense Industrial Strategy

The 2024 *National Defense Industrial Strategy* is one of DOD's primary strategies to ensure supply chain security, including from the effects of climate change. It lays out a flexible framework of actions to achieve resilient supply chains, regardless of the type of shock.

See the Timeline Summary for Major Milestones in the 2024-2027 DOD CAP for a full list of strategies and plans.

<sup>1</sup> The assessment leveraged the DOD Climate Assessment Tool, Climate Mapping for Resilience and Adaptation data, the Federal Emergency Management Agency National Flood Hazard Layer, and U.S. Forest Service Wildfire Risk to Communities data.

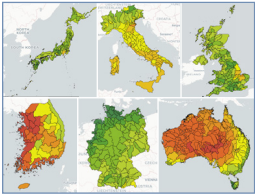


# Department of Defense 2024-2027 Climate Adaptation Plan Progress and Implementation

## Fact Sheet: Progress to date and implementation of the *Department of Defense 2024-2027 Climate Adaptation Plan*

### Tools and Capabilities to Support Climate-Informed Decision-Making

The Department has developed several tools and resources, including the DOD Climate Assessment Tool (DCAT), to incorporate the best available and actionable climate information into its risk assessments. DCAT addresses statutory and Office of Management and Budget (OMB) requirements for use in assessing climate considerations and risks. DCAT supports climate-informed decision-making to increase resilience against climate hazards while preserving operational capability and enhancing the natural and man-made systems essential to the Department's success.



#### EXPANDING DCAT TO PARTNER NATIONS

In FY 2023, the DOD produced stand-alone versions of DCAT to support Partner Nation (PN) use of climate information in long-term planning and international decision-making. The PN Climate Assessment Tools (CATs) use globally available data and authoritative information on past extreme weather events and projected climate information to identify PN exposure to climate hazards over time. Using the PN CAT as part of a comprehensive analysis will help Joint Force and international decision-makers determine where best to apply resources to improve climate adaptation and resilience.

In addition to DCAT, DOD continues to enhance and develop actionable tools and resources for climate-informed planning and decision-making across the Department:

#### ARMY PILOTS INSTALLATION CLIMATE RESILIENCE PLANS

The Army piloted Installation Climate Resilience Plans (ICRPs) in 2022 and 2023 at seven installations using authoritative climate data from DCAT, the National Climate Assessment, and NOAA. The ICRPs help installations ensure they meet critical missions under current and future weather conditions.

#### AIR FORCE INTEGRATES CLIMATE INFORMATION INTO RISK REPORTING

The Department of the Air Force (DAF) incorporates climate and severe weather hazards and controls into its Mission Sustainment Risk Report database and reporting framework, to consider holistic current and future risk for DAF locations and missions.

#### NAVY CLIMATE CHANGE PLANNING HANDBOOK

The Navy shore enterprise has held multiple training sessions annually to ensure installation personnel understand new requirements and how to use the [\*Installation Adaptation & Resilience Climate Change Planning Handbook\*](#) to identify relevant hazards and plan and implement resilience measures.



To maximize the utility of climate-informed decisions, the Department must know what information to use at the right timescale. The weather-to-climate continuum infographic (left) is a visual representation of DOD activities, planning timeframes, policies, authoritative climate information sources and relative confidence levels, and typical analyses across time. To learn more about the weather-to-climate continuum and view the full-size graphic, visit [climate.mil](https://climate.mil).

### Partnerships to Strengthen Built and Natural Infrastructure Resilience

#### SENTINEL LANDSCAPES PARTNERSHIP

The Sentinel Landscapes Partnership, founded in 2013 by DOD, the U.S. Department of Agriculture (USDA), and the Department of the Interior (DOI), works to advance sustainable land use practices around military installations and ranges. In 2023, the Partnership designated three new sentinel landscapes. The new South Carolina Lowcountry Sentinel Landscape supports immense biodiversity, encompassing more than 2.2 million acres of longleaf pine forest, ranchlands, salt marsh, forested wetlands, and wildlife corridors. The two Potomac and Tidewater Sentinel Landscapes make up more than 2.9 million acres of land and water in Virginia's "Golden Crescent," an area of high military concentration, agricultural lands, and complex marsh and riverine systems that connect to the Chesapeake Bay.

#### FUNDING CONSERVATION AND RESTORATION VIA THE AMERICA THE BEAUTIFUL CHALLENGE

Through the National Fish and Wildlife Foundation's America the Beautiful Challenge (ATBC), DOD, USDA, and DOI invest in watershed restoration, climate resilience, equitable access, workforce development, and more. Since 2022, DOD's Readiness and Environmental Protection Initiative (REPI) Program dedicated nearly \$7 million to the ATBC to support nine projects across areas of strategic importance for DOD, USDA, and DOI. These projects are increasing climate resilience and supporting national conservation goals by preserving critical habitats for endangered species, implementing nature-based solutions, and establishing new local partnerships to streamline landscape-scale efforts.

### Increasing Climate Literacy

In 2022 and 2023, DOD issued voluntary Climate Literacy Pulse Checks, reaching a broad cross section of military and civilian personnel across the Department. The Department also conducted Climate Literacy Focus Groups, issued data calls to military education institutions, and launched the DOD Climate Resilience Portal ([climate.mil](https://climate.mil)). Cumulatively, these efforts provided important indicators of climate education, training, and resources needed across DOD Components, career fields, and professional rank and grades. DOD senior leadership used the findings from these efforts to develop data-informed recommendations for DOD-wide initiatives to strengthen military and operational resilience to climate change.