



**REPI AND THE DOD CLIMATE  
 ADAPTATION PLAN**



**WHAT IS THE DOD CLIMATE  
 ADAPTATION PLAN?**

The Department of Defense’s (DoD) Climate Adaptation Plan<sup>1</sup> features key actions and strategies the Department will take to enhance resilience to the effects of climate change and reduce greenhouse gas emissions. The plan includes five lines of effort the Department will implement to preserve operational capabilities, enhance natural systems, and ensure the Military Services can operate under changing climate conditions. The Climate Adaptation Plan’s lines of effort and strategic outcomes cannot be achieved without four enablers. Together, the five lines of effort and four enablers create the Department’s Climate Adaptation Strategic Framework, which will allow DoD to prepare for future climate change threats and sustain military readiness.

**Lines of Effort**

1. Climate-Informed Decision-Making: Incorporate climate change factors into all threat assessments, cost-benefit analyses, and strategies and policies to prepare for future climate change impacts.
2. Train and Equip a Climate-Ready Force: Incorporate climate adaptation concepts into existing training methods and exercises to fit climate-related requirements.
3. Resilient Built and Natural Infrastructure: Incorporate built and natural infrastructure into natural resource plans to protect land near installations and preserve or expand ecosystems services.
4. Supply Chain Resilience and Innovation: Incorporate climate change considerations into all supply chain assessments to identify risks and corrective actions.
5. Enhance Adaptation and Resilience Through Collaboration: Incorporate stakeholder interests and priorities into resilience activities to promote common goals and preserve shared ecosystems.

**Enablers**

1. Continuous Monitoring and Data Analytics
2. Aligning Incentives to Reward Innovation
3. Climate Literacy
4. Environmental Justice

**HOW DO REPI AND SENTINEL LANDSCAPES  
 FACTOR INTO THE PLAN?**

The DoD Climate Adaptation Plan identifies the Readiness and Environmental Protection Integration (REPI) Program and Sentinel Landscapes Partnership as two valuable tools the Department will use to advance lines of effort three and five as well as the second strategic enabler, contributing to the expansion of resilient built and natural infrastructure and enhancing adaptation and resilience through collaboration.

Through the REPI program, the Military Services enter into cost-sharing agreements with state and local governments and private conservation organizations to remove or avoid land-use conflicts near installations and ranges, address regulatory restrictions that inhibit military activities, and maintain or improve military installation resilience to climate change and extreme weather events. To increase installation resilience and safeguard mission capabilities, installations work with partners to develop off-base natural infrastructure solutions.

**Off-Base Natural Infrastructure Solutions**



Conducting prescribed burns and removing hazardous fuels to reduce wildfire risk



Recharging aquifers and installing stormwater detention basins to reduce drought risk



Constructing living shorelines, restoring dunes and wetlands, and enhancing riparian buffers to reduce flood risk



Building retention berms to reduce impacts of thawing permafrost



Rehabilitating soil to reduce land degradation and desertification

<sup>1</sup> Department of Defense Climate Adaptation Plan, 1 September 2021: <https://www.sustainability.gov/pdfs/dod-2021-cap.pdf>



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In addition to precluding the listing of the gopher tortoise under the endangered species act, these resilience efforts, such as prescribed burning (left), support the critical patrol and maintenance missions of Ohio-class ballistic-missile submarines, such as the USS Alaska (right).

REPI partners can learn more about climate change impacts and natural infrastructure solutions in the REPI program's resilience primer, *Building Resilience to Climate Change: A REPI Guide for Installations and Partners*, and the corresponding resources library.<sup>2</sup> These materials, and the additional climate-related resources listed on the following page, can improve climate literacy and accelerate resilience project outcomes.

REPI also helps military installations and communities adapt to climate change and enhance resilience by collaborating with landscape partnerships, such as the Sentinel Landscapes Partnership. Within the Sentinel Landscapes Partnership, DoD works alongside the Department of the Interior (DOI) and the Department of Agriculture (USDA) to connect private landowners with government assistance programs that offset the cost of implementing sustainable management practices or conservation projects on their land. Through these mutually beneficial practices and projects, DoD, USDA, and DOI strengthen military readiness, conserve natural resources, bolster agricultural and forestry economies, increase access to public recreation, and enhance resilience to climate change.

For example, the Georgia Sentinel Landscape is home to several of the nation's most important military installations and ranges, including Naval Submarine Base (NSB) Kings Bay. At NSB Kings Bay, the primary mission is to service and refit Ohio-class ballistic missile submarines and guided missile submarines for deployment. The installation's shoreline-based mission is vulnerable to extreme weather events, coastal flooding, and dangerous wildfires which can be exacerbated by incompatible development adjacent to the base. To combat these threats, the Navy partnered

with numerous conservation organizations to preserve the coastal wetlands for threatened and endangered species and execute wildfire management practices next to the base, such as longleaf pine restoration and controlled burns. This large-scale land protection preserves the installation's mission and contributes to the strategic goals and objectives of the Georgia Sentinel Landscape.

### WHAT DOES THIS MEAN FOR THE FUTURE OF REPI AND SENTINEL LANDSCAPES?

As the climate continues to change and extreme weather events intensify, the REPI program and Sentinel Landscapes Partnership will continue working with dedicated partners to implement natural infrastructure solutions and promote resilience activities on farms, ranges, forests, and other compatible lands. These innovative partnerships and resilient solutions support the strategic initiatives in the DoD Climate Adaptation Plan and are integral to sustaining the Department's critical mission capabilities.

#### DoD Climate Change Resources:

- ★ REPI Resilience Primer: <https://repiprimers.org/resilience/>
- ★ REPI Resilience Resources Library: <https://repiprimers.org/resilience/resources/>
- ★ REPI Website: [www.REPI.mil](http://www.REPI.mil)
- ★ Sentinel Landscapes Website: [www.sentinellandscapes.org](http://www.sentinellandscapes.org)
- ★ DoD Climate Adaptation Plan: <https://www.sustainability.gov/pdfs/dod-2021-cap.pdf>
- ★ DoD Climate Adaptation Plan Companion Document: <https://media.defense.gov/2021/Nov/03/2002886171/-1/-1/0/HIGHLIGHTS-AND-EXAMPLES-FOR-DOD-CLIMATE-ADAPTATION-PLAN.PDF>

<sup>2</sup> *Building Resilience to Climate Change: A REPI Guide for Installations and Partners*, November 2021: <https://repiprimers.org/resilience/>