REPI AND MILITARY INSTALLATION RESILIENCE

The REPI program has the authority to address climate change hazards and increase military installation resilience under 10 U.S. Code (U.S.C.) § 2684a(a)(2)(B)(ii). This authority allows the Military Services and partners to develop off-base natural infrastructure solutions designed to protect critical infrastructure, military personnel, and testing or training operations from climate change impacts. DoD recognized the REPI program in the 2021 Climate Adaptation Plan as one of the key programs that will be used to ensure the Military Services can operate under changing climate conditions.

Natural infrastructure solutions, such as wildfire risk mitigation, living shoreline construction, or habitat restoration, create an initial line-of-defense for installations and communities, enhance natural habitats, and help installations prevent, prepare for, and recover from anticipated or unanticipated changes in environmental conditions.

When executing a resilience project, installations may also leverage the Sikes Act (16 U.S.C. § 670c-1), and Intergovernmental Support Agreements (10 U.S.C. § 2679). The Sikes Act allows the Military Services to enter into cooperative agreements for the management of natural resources both on and off installations to “relieve or eliminate current or anticipated challenges that could restrict, impede, or otherwise interfere with, whether directly or indirectly, current or anticipated military activities” (16 U.S.C. § 670c–1(a)(2)).

Intergovernmental Support Agreements (IGSA) allow DoD to receive services, supplies, and resources from a state or local government that increase climate change resilience.

Within this statutory framework, the REPI Program is exploring new opportunities to protect range assets and capabilities through enhanced installation resilience. Several DoD installations are using the resilience authority to preserve coastal wetlands, mangroves, and oyster reefs to reduce storm surge and flooding; manage forest lands to reduce wildfire risks to infrastructure; and protect upstream water resources to minimize likelihood of drought and consequent constraints on installation missions. REPI projects to promote military installation resilience must meet the applicable requirements of 10 U.S.C. § 2684a and support installation training, testing, and operations.

COMPLEMENTARY RESILIENCE PROGRAMS

In addition to the REPI Program, there are several other programs and awards focused on improving resilience. Please visit https://repiprimers.org/resilience/ to learn more about resilience programs offered by other federal agencies and non-governmental organizations.

What are Climate Change Impacts?

- Sea Level Rise and Recurring Flooding
- Increase Drought Conditions
- Extreme Weather
- Increased Wildfires
- Inland Flooding
- Increased Precipitation
- Impacts on Protected Species or Habitat
- Thawing Permafrost

Read more about the impacts of climate change at https://repiprimers.org/resilience/.

For more information about the REPI program and supportive DoD efforts, please visit http://www.repi.mil
REPI SUCCESS STORIES

Installations across the country are leveraging the 10 U.S.C. § 2684a authority to address climate change impacts and protect mission priorities.

NAVAL WEAPONS STATION EARLE, NEW JERSEY: Enhancing Readiness and Building Resilience to Extreme Weather and Water Shortages

After Hurricane Sandy struck the New Jersey coastline in 2012, Naval Weapons Station (NWS) Earle and the surrounding community sustained catastrophic damage that cost roughly $50 million to repair. To mitigate future costs from storm damage, NWS Earle—the Navy base tasked with providing ordnance for all Atlantic Fleet Carrier and Expeditionary Strike Groups—is leveraging the 10 U.S.C. § 2684a authority to improve installation resilience. In partnership with Monmouth County, NWS Earle is preserving wetlands, coastal buffer areas, groundwater recharge zones, and land around the local reservoir to prevent future damage from storm surges and protect the community’s drinking water sources.

To complement these efforts, NWS Earle and a consortium of DoD installations and ranges were allocated $2 million through the 2020 REPI Challenge and $1 million in Fiscal Year 2021 REPI funds to develop IGSAs under 10 U.S.C. § 2679 with the State of New Jersey and Monmouth County. These agreements support beach nourishment, living shoreline establishment, storm surge protection, stormwater management and storage capacity enhancement, and wildfire mitigation. By improving and maintaining New Jersey’s coastal and inland waterways, this project will enhance the resilience of the DoD installations and ranges and their communities.

FORT HUACHUCA, ARIZONA: Wildfire Risk Reduction and Water Security Through Resilience Partnerships

Fort Huachuca is home to premier restricted military airspace for unmanned aircraft system training in the Western United States and the Buffalo Soldier Electronic Test Range and electromagnetic complex, supporting training for U.S. Army, Air Force, Marine Corps, and Border Control personnel. An increase in urban sprawl, electronic interference, dangerous wildfires, and drought has stressed the installation’s water supply and overall mission.

To improve Fort Huachuca’s groundwater resilience to drought and overdraft, the Arizona Land and Water Trust conducted a Water Supply and Use Assessment pilot on the 1,150-acre Rose Tree Ranch. The assessment included an analysis of groundwater levels and surface flows, a survey of current irrigation and water use, and a comprehensive review of historic pumping records and water rights. It provided several recommendations to address groundwater deficits in the Upper San Pedro Basin, which will strengthen water security for Fort Huachuca and the surrounding communities.

In 2020, Fort Huachuca received over $2 million in REPI Challenge funding to protect more than 2,000 acres of working ranches and forests and mitigate wildfire risk. Portions of this land will contribute to existing hazardous fuels reduction projects occurring in adjacent forests, including U.S. Forest Service lands used for important testing activities.

HOW TO DEVELOP A REPI RESILIENCE PROJECT

The graphic below provides guidance on the potential steps that installations and their partners should take to pursue funding from the REPI program for a climate resilience project. Learn more about each of these steps at https://repiprimer.org/resilience/.