



REPI

UNITED STATES DEPARTMENT OF DEFENSE
READINESS AND ENVIRONMENTAL
PROTECTION INTEGRATION PROGRAM

FISCAL YEAR 2023
INSTALLATION RESILIENCE CASE STUDIES



EXECUTING INSTALLATION RESILIENCE PROJECTS THROUGH THE REPI PROGRAM

The Department of Defense (DOD) plays a critical role at the intersection of national security and conservation. Climate change and extreme weather events continue to alter the Department's training environments and create new constraints for the warfighter. To respond to the rapidly changing climate, DOD has developed strategic plans that outline requirements and lines of effort for reducing the adverse impacts of climate change on military operations. The **2021 DOD Climate Adaptation Plan (CAP)** serves as a key roadmap for DOD and the Military Services to enhance resilience across installations and their neighboring communities. The DOD CAP details five lines of effort DOD will support to ensure the Department can operate under changing climate conditions, including:

1. Promoting climate-informed decision-making
2. Training and equipping a climate-ready force
3. Creating resilient built and natural infrastructure
4. Ensuring supply chain resilience
5. Enhancing adaptation and resilience through collaboration

To create resilient natural infrastructure and enhance adaptation and resilience through collaboration, DOD leverages the Readiness and Environmental Protection Integration (REPI) Program. Through the REPI Program, military installations and ranges work with conservation partners to preserve compatible land uses, protect critical habitats for endangered species, and enhance installation resilience to climate change. Under **10 U.S. Code (U.S.C.) § 2684a**, the Military Services can plan, design, and implement nature-based solutions outside military installations and ranges to protect critical mission capabilities. These solutions are complementary to other activities eligible for funding through the REPI Program, including conserving natural habitats and safeguarding areas of cultural or historical importance.

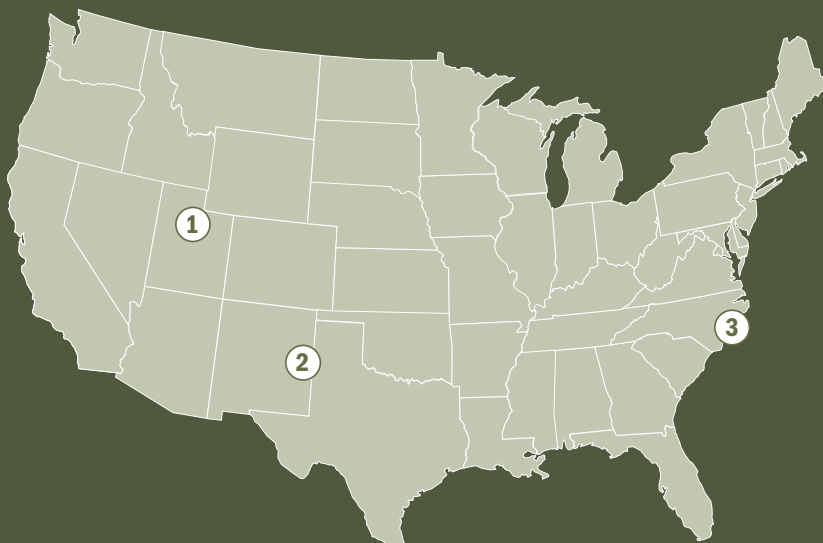
CASE STUDIES FOR CONSERVATION AND CLIMATE SOLUTIONS

To learn more about how installations are creating innovative solutions through the REPI Program, members of the REPI office interviewed installations with innovative ideas for protecting infrastructure, missions, and other assets from climatic conditions and landscape changes outside the installation.

THE THREE INSTALLATIONS SHOWCASED IN THIS SERIES INCLUDE:

- 1 Camp Williams, Utah
- 2 Cannon Air Force Base, New Mexico
- 3 Marine Corps Air Station Cherry Point, North Carolina

For each installation, the REPI office selected a specific authority, activity, or other creative project component to focus on for the interview. Interviewees then shared information on how they developed the project idea, any challenges they have overcome to date, and advice for other installations interested in creating similar REPI projects.





MARINE CORPS AIR STATION CHERRY POINT DEVELOPING LARGE-SCALE LIVING SHORELINES

Interviewee: Jessica Guilianelli, Natural Resources Manager for Marine Corps Air Station Cherry Point

OVERVIEW

Marine Corps Air Station (MCAS) Cherry Point is home to the 2nd Marine Aircraft Wing and Fleet Readiness Center East, which support several airborne missions for the Marine Corps and help repair critical aircraft. Its range complex includes Piney Island Bombing Range, whose land and water ranges provide electronic and special warfare training. There are no other water-based ranges in the United States so close to nearby stationed aircraft along with ground-based units within flight range to off-shore operating areas.

Q: What are the threats to MCAS Cherry Point's mission?

A: MCAS Cherry Point is surrounded by water on three sides, which is critical for the mission but also creates vulnerabilities for the installation's infrastructure and personnel. In 2018, Hurricane Florence, a powerful Category 4 hurricane, struck the North Carolina coast and damaged more than 60% of the 6,200 homes across MCAS Cherry Point, MCAS New River, and Marine Corps Base Camp Lejeune.

Q: What steps is the installation taking to help reduce risks from coastal flooding and extreme weather events?

A: Using a combination of \$8 million in Hurricane Florence relief funds from the State of North Carolina and over \$1 million in REPI funding, the installation and partners at the North Carolina Coastal Federation are developing a large-scale living shoreline along the neighboring and eroding Neuse River. This REPI funding will create 2,100 linear feet of living shoreline, and the goal is to extend that living shoreline an additional 5,600 linear feet.

Q: How did the installation complete the National Environmental Policy Act (NEPA) requirements for this project? Did the installation face any challenges with obtaining the project permits?

A: The project required a NEPA Environmental Assessment before construction could begin. As part of this assessment, the installation and partner needed to submit project design paperwork for the assessment to the U.S. Army Corps of Engineers. For future NEPA consultations, the installation and partners plan on including regulators early in the design process so that compliance-related revisions can be made throughout the design process as opposed to after the final design is complete. By incorporating regulator feedback during the review process, installations and partners could help accelerate the final review and acceptance at the end of the design.

Q: What aspects of the project are you still working on?

A: The Neuse River is home to several endangered and threatened species. Therefore, the installation is continuing to work with the National Oceanic and Atmospheric Administration's Office of Protected Resources to comply with all requirements under Section 7 of the Endangered Species Act (ESA). The ESA requires federal agencies to complete a consultation that addresses any threats to endangered species that might result from a federal project or action.