



JULY 2021

REPI

UNITED STATES DEPARTMENT OF DEFENSE
READINESS AND ENVIRONMENTAL
PROTECTION INTEGRATION PROGRAM

2021 REPI CHALLENGE RECIPIENTS



The Readiness and Environmental Protection Integration (REPI) Program fosters multi-agency initiatives and collaboration to preserve compatible land uses near military installations and ranges. These efforts preserve and enhance Department of Defense (DoD) assets and capabilities in support of military readiness through the creation of unique cost-sharing partnerships with state and local governments and private conservation organizations. The REPI Program designed the REPI Challenge to help meet its ambitious goals while also aiming to:



Cultivate projects that conserve land at a greater scale and test promising ways to finance land protection.



Achieve benefits not obtainable by typical REPI projects in order to protect critically important military missions.



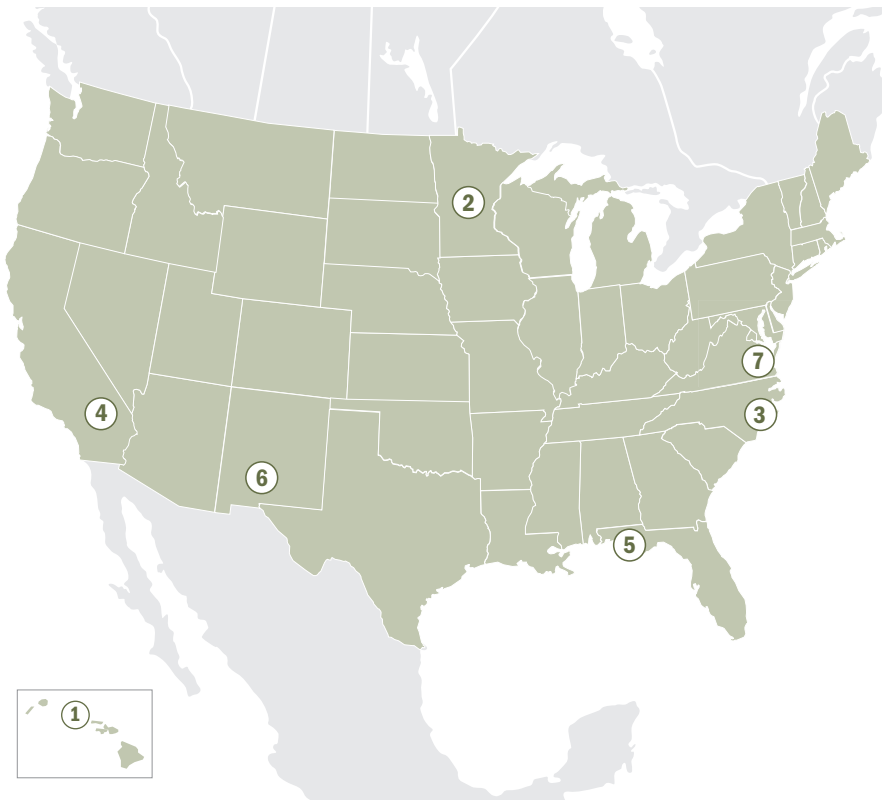
Harness the creativity of the private sector to access and leverage unconventional sources of funding and market-based approaches.



Help the REPI program meet its ambitious goals.

2021 REPI Challenge Highlights Innovative Solutions to Preserve and Enhance Readiness

This year, the REPI Challenge will award **\$15.6 million** in program funds to be coupled with nearly **\$21.6 million** in partner contributions to implement seven projects that limit incompatible development, enhance military installation resilience to climate change and extreme weather events, and protect local habitat to preserve and enhance key mission capabilities. By spreading funding across seven projects, the 2021 REPI Challenge will be able to contribute to initiatives benefitting 12 installations and their communities across the country.



LEGEND INFORMATION

1. U.S. Army Garrison, Hawaii: Pohakuloa Training Area, Makua Military Reservation, and Schofield Barracks, HI. Wildfire mitigation management and restoration. **\$1.1M.**
2. Camp Ripley, MN. Resilience and implementation strategic planning. **\$0.2M.**
3. Seymour Johnson Air Force Base, Marine Corps Base Camp Lejeune, Marine Corps Air Station Cherry Point, NC. Protection of family farms and forests. **\$1.0M.**
4. Marine Corps Air Ground Combat Center Twentynine Palms, National Training Center Fort Irwin, CA. Desert tortoise habitat restoration and management. **\$1.5M.**
5. Tyndall Air Force Base, FL. Living shoreline construction and coastal restoration. **\$4.8M.**
6. White Sands Missile Range, NM. Compatible land protection. **\$5.1M.**
7. Naval Weapons Station Yorktown, VA. Living shoreline construction and coastal restoration. **\$2.0M.**



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U.S. Army Garrison, Hawaii: Pohakuloa Training Area, Makua Military Reservation, and Schofield Barracks Hawaii

- As part of U.S. Army Garrison, Hawaii, Pohakuloa Training Area on Hawaii and Makua Military Reservation and Schofield Barracks on Oahu service the Army, Marine Corps, Air Force, and National Guard and host key capabilities such as live-fire and maneuver training. U.S. Army Garrison, Hawaii contains **the largest maneuver area in the Pacific** for joint, interagency, and multinational forces.
- In recent years, **wildfires** have caused severe disruptions to military training, damage to property, and safety concerns for DoD personnel and local residents while also presenting a substantial hazard to endangered plant and animal species in the area.
- The project design is focused around **wildfire management tools** with an emphasis on firebreak development and road improvement necessary for site access adjacent to the Army locations. The project partners will work with local landowners to encourage strategic fire risk mitigating landscaping. Additionally, the installation of exclusion fencing will minimize disturbance to biological and cultural resources contained on protected lands.



U.S. Soldiers move through Makua Valley during a training exercise near Makua Military Reservation. (U.S. Army photo by Sgt. Brian C. Erickson/Released)



REPI Funds:
\$1,080,592

Partner Contributions:
\$1,451,736

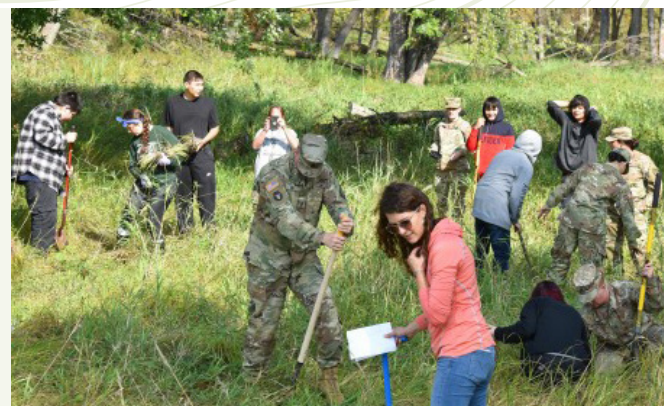
Total: \$2,532,328

NOMINATING PARTNER



Camp Ripley Minnesota

- Camp Ripley, the anchor installation of the **Camp Ripley Sentinel Landscape**, supports ground vehicle maneuver, live-fire artillery, and bombing training and is the primary winter training site for the National Guard within the U.S.
- Camp Ripley's unique location along an ecoregional divide makes it particularly vulnerable to the effects of **climate driven impacts** relating to species composition, habitat, and landscape connectivity.
- This project will implement the primary goal of the Camp Ripley Sentinel Landscape strategic plan to protect forward force maneuver training and promote resilience through a multi-agency protection and restoration strategy. This initiative will use **nationally recognized climate data** to better inform **resiliency and mitigation strategies** for the surrounding habitat and endangered species.



The Natural Resources Conservation team at Camp Ripley hosts thousands of visitors throughout the year for educational and recreational activities demonstrating ongoing commitment to fostering environmental conservation throughout the community. (U.S. Army photo by Staff Sgt. Anthony Housey/Released)

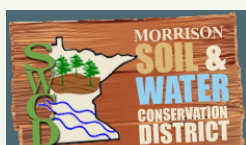


REPI Funds:
\$200,000

Partner Contributions:
\$225,000

Total: \$425,000

NOMINATING PARTNER





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UNITED STATES DEPARTMENT OF DEFENSE
2021 REPI CHALLENGE RECIPIENTS



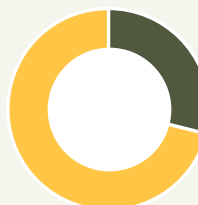
Seymour Johnson Air Force Base, Marine Corps Base Camp Lejeune, Marine Corps Air Station Cherry Point North Carolina

- All three of these installations are located within the **Eastern North Carolina Sentinel Landscape**. Together, these three installations support training and development for F-15E aircrew, F-35 aircraft operations, and Marine Expeditionary Force ground and air components.
- Due to the attractive coastal location of these installations, they are all facing an increase in **incompatible commercial and residential development**, as well as climate driven impacts such as **sea-level rise and coastal erosion**. These threats to both land and airspace cause operations, infrastructure, and mission limitations while also reducing neighboring farmland, forestland, and natural areas.
- Through coordinated partner efforts, this project will complement ongoing conservation efforts in the area, support an **agricultural easement** to prevent incompatible development, and bolster resiliency efforts surrounding the installations. The project will also manage and **protect wildlife habitats** including the longleaf pine ecosystem and large expanses of coastal marsh which support many endangered and at-risk species, such as the red-cockaded woodpecker.

NOMINATING PARTNER **North Carolina Sentinel Landscape Committee**



A crew chief rides in the back of a UH-1Y Venom as it approaches a landing zone during a training exercise near Camp Lejeune. (U.S. Marine Corps photo by Lance Cpl. Aaron K. Fiala/Released)



REPI Funds:
\$1,000,000

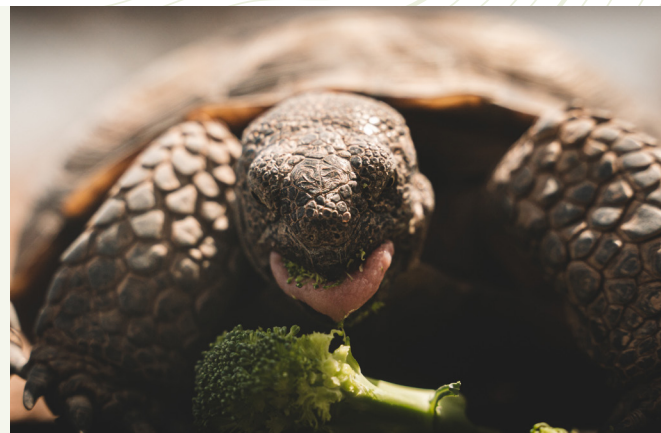
Partner Contributions:
\$2,458,600

Total: \$3,458,000

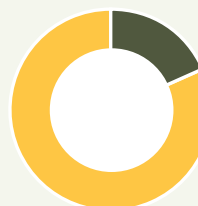
Marine Corps Air Ground Combat Center (MCAGCC) Twentynine Palms, National Training Center Fort Irwin California

- Both MCAGCC Twentynine Palms and Fort Irwin host mission critical testing and training for the Marine Corps, Army, and U.S. allies. These training capabilities promote Fleet Marine Force readiness at MCAGCC and include live-fire training, combined arms training, urban operations, and joint and **coalition level training**. Additionally, Fort Irwin hosts joint and combined arms training as well as **F-35 training**.
- Regulatory restrictions related to the **threatened desert tortoise** populations cause training limitations and place pressure on current and future mission capabilities at these installations.
- This project will establish **protective measures for the desert tortoise**, including highway fencing, habitat restoration, and reserved land that may remain relatively buffered from climate change impacts for the desert tortoise. The project will also support research for long-term measures to enhance the installations' military capabilities while preserving the desert tortoise population.

NOMINATING PARTNER



A Desert Tortoise, a protected species, eats a broccoli floret on MCAGCC Twentynine Palms. (U.S. Marine Corps photo by Lance Cpl. Colton Brownlee/Released)



REPI Funds:
\$1,500,000

Partner Contributions:
\$6,600,000

Total: \$8,100,000



Tyndall Air Force Base

Florida

- Located on Florida's Gulf Coast, Tyndall Air Force Base hosts **fifth-generation aircraft training** and development with direct access to training airspace over the Gulf of Mexico. The base is currently home to a number of U.S. Air Force organizations and units, including the 325th Fighter Wing that trains F-22 Raptor pilots, intelligence officers, and maintainers.
- This critical Air Force training location is highly susceptible to **hurricanes, storm surge, sea-level rise, and coastal erosion**. The base is still rebuilding and repairing the damages from Category 5 Hurricane Michael that hit in 2018 causing over \$3 billion in damage.
- This project will support a multifaceted approach to improve the resiliency of the base, including constructing up to **1,000 feet of living shorelines** and up to **3,500 feet of submerged shoreline**. Additionally, the project will create **1,500 feet of oyster reef habitat** and protect or enhance the shoreline habitat adjacent to Tyndall's drone runway, a critical base operation. These nature-based coastal resilience solutions will also improve water quality and overall ecosystem health and provide new habitats for local endangered species such as the southeastern beach mouse.

NOMINATING PARTNER



An F-22A Raptor from the 43rd Fighter Squadron at Tyndall Air Force Base flies over the Emerald Coast joined by an F-35A Lightning II joint strike fighter from the 33rd Fighter Wing at Eglin Air Force Base. (U.S. Air Force photo/Master Sgt. Jeremy T. Lock/Released)



REPI Funds:
\$4,800,000

Partner Contributions:
\$5,250,000

Total: \$10,050,000

White Sands Missile Range

New Mexico

- White Sands Missile Range is the largest overland test range in the U.S. and hosts 100% of the military's **Remote Pilot Aircraft training** and 70% of **F-22 and F-16 pilot training**. White Sands Missile Range is the largest fully instrumented open-air range and includes invaluable airspace to the DoD and its partners.
- There is an increased pressure for **incompatible commercial development** surrounding White Sands Missile Range that could compromise critically important current and future training and testing operations.
- This project has a multifaceted approach to **protect over 300,000 acres** surrounding White Sands Missile Range. The first phase will target more than 120,000 acres and will include creating conservation easements over private lands and executing Land Use Restriction of Condition agreements across New Mexico State Trust lands. Preventing development on this land will preserve White Sands Missile Range's critical mission capabilities and protect habitat for several wildlife populations in the area.

NOMINATING PARTNER



Conserving Land. Preserving Heritage.



A 54th Fighter Group pilot prepares for takeoff during a night flying training over the White Sands Missile Range's 10,000 square mile range. (U.S. Air Force photo by Airman 1st Class Aaron Montoya/Released)



REPI Funds:
\$5,069,408

Partner Contributions:
\$5,610,000

Total: \$10,679,408



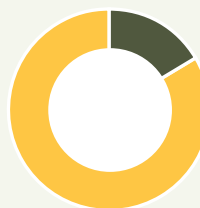
Naval Weapons Station Yorktown Virginia

- Naval Weapons Station (NWS) Yorktown is a premier receipt, storage, segregation, and issue ordnance facility supporting the **Atlantic Fleet and Joint Commands** by facilitating ordnance management, research development, expeditionary warfare training, and industrial and inert storage.
- NWS Yorktown's coastal location makes it vulnerable to **coastal erosion, sea-level rise, and degradation of natural resources**.
- This project represents Phase II of the 2020 REPI Challenge project and will restore about three acres of Navy land by constructing **shoreline protection structures along about 2,000 feet of shoreline** to help prevent erosion. The structures will also serve as artificial oyster reefs contributing to **oyster restoration** efforts and creating shallow water habitat for juvenile fish and crabs. These land conservation and management activities will improve military readiness, training, coastal resilience, and water quality within the unique York River ecosystem.

NOMINATING PARTNER



Naval Weapons Station Yorktown Security Forces participate in Citadel Shield Solid Curtain 2020 on the York River. (U.S. Navy photo by Petty Officer 2nd Class Grant Grady/Released)



■ REPI Funds:
\$2,000,000
■ Partner Contributions:
\$10,180,000*

Total: \$12,180,000

*Note: The partner funding for this year's project is a continuation on the FY20 REPI Challenge project and is not counted in the overall totals but is included here for reference.

REPI CHALLENGE ACCOMPLISHMENTS TO DATE

Ten years of the REPI Challenge have resulted in the following benefits in 32 locations addressing incompatible development, habitat protection, and installation resilience:

\$89.0M

in REPI funds invested to protect key military missions

\$322.2M

in partner contributions attracted to leverage DoD funds over 3:1

32 locations

protecting working lands, habitat, and open spaces

REPI Challenge Advances Sentinel Landscapes

Of these 12 installations, four are located within sentinel landscapes and will contribute directly to the strategic goals of the Eastern North Carolina and Camp Ripley Sentinel Landscapes. More information on DoD's partnership with the Departments of Agriculture and Interior can be found at www.sentinellandscapes.org.