



REPI UNITED STATES DEPARTMENT OF DEFENSE
 READINESS AND ENVIRONMENTAL
 PROTECTION INTEGRATION PROGRAM

**2023 AMERICA THE BEAUTIFUL CHALLENGE
 DEPARTMENT OF DEFENSE RECIPIENTS**



The America the Beautiful Challenge

The National Fish and Wildlife Foundation (NFWF) established the America the Beautiful Challenge in 2022 to advance ecosystem restoration projects that invest in watershed restoration, resilience, equitable access, workforce development, corridors and connectivity, and collaborative conservation. Through NFWF, applicants can receive funding from multiple Federal agencies, including the Department of the Interior (DOI), the U.S. Department of Agriculture (USDA), and the Department of Defense (DOD) for activities that restore, protect, and conserve critical landscapes. By combining funding from multiple Federal agencies and private organizations, the America the Beautiful Challenge provides applicants with a streamlined application process for developing innovative projects that protect critical natural resources.

The America the Beautiful Challenge seeks to advance conservation and restoration projects that focus on at least one of the following core areas of need:



Conserving and restoring rivers, coasts, wetlands, and watersheds.



Conserving and restoring forests, grasslands, and other important ecosystems that serve as carbon sinks.



Connecting and reconnecting wildlife corridors, large landscapes, watersheds, and seascapes.



Improving ecosystem and community resilience to coastal flooding, drought, and other climate-related threats.



Expanding access to the outdoors, particularly in underserved communities.

The REPI Program's Contributions to the America the Beautiful Challenge

As one of the America the Beautiful Challenge partners, DOD is contributing funding to projects through the Readiness and Environmental Protection Integration (REPI) Program. The REPI Program protects military missions by helping promote compatible land uses near installations, address endangered species restrictions that inhibit military activities, and enhance military installation resilience to climate change.

REPI projects align with the core focal areas for the America the Beautiful Challenge by protecting open, natural landscapes outside DOD installations and ranges and improving installation resilience to climate change through the development of nature-based solutions. The REPI Program safeguards military missions by working in close collaboration with local, state, and Federal partners to develop mutually beneficial projects near military installations. For example, DOD works alongside USDA and DOI through the Sentinel Landscapes Partnership to strengthen military readiness, conserve natural resources, bolster agricultural and forestry economies, increase public access to recreation, and enhance resilience to climate change.

Established in 2013, the Sentinel Landscapes Partnership mitigates land-use, encroachment, and climate-related challenges by connecting willing landowners around military installations or ranges with voluntary government assistance programs that offset the cost of implementing conservation projects. Read more about the Sentinel Landscapes Partnership at <https://sentinellandscapes.org/>.

The Sentinel Landscapes Partnership

The Sentinel Landscapes Partnership is a coalition of Federal agencies, state and local governments, and non-governmental organizations that works to advance mutually beneficial land-use goals in project areas known as sentinel landscapes.



For more information about the REPI Program, please visit repi.mil.

For more information about the Sentinel Landscapes Partnership, please visit sentinellandscapes.org.



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2023 ATBC Projects Enhance Capacity Across Multiple States and Territories

In its second year, the REPI Program will contribute over \$5.2 million to seven projects that benefit eight designated sentinel landscapes and two landscapes pending formal designation from the Federal Coordinating Committee. These seven projects are receiving nearly \$2.2 million in funding from the DOI U.S. Fish and Wildlife Service for a total Federal investment of over \$7.4 million. Project applicants are also leveraging nearly \$787K in non-Federal partner contributions to bring the total conservation impact over \$8.2 million.

2023 ATBC Project Locations

1. Southeastern Sentinel Landscapes (Georgia, Northwest Florida, Avon Park Air Force Range, South Carolina Lowcountry, and Eastern North Carolina) | REPI Funds: \$814K
2. Avon Park Air Force Range Sentinel Landscape | REPI Funds: \$1.4M
3. Fort Huachuca Sentinel Landscape | REPI Funds: \$1.1M
4. Camp Bullis Sentinel Landscape | REPI Funds: \$723K
5. Guahan Sentinel Landscape* | REPI Funds: \$506K
6. Southern Indiana Sentinel Landscape | REPI Funds: \$501K
7. Hawai'i Sentinel Landscape* | REPI Funds: \$250K



* This sentinel landscape has not received formal designation from the Sentinel Landscape Federal Coordinating Committee.

Project Summaries

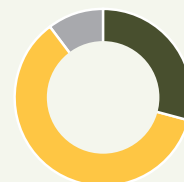
1. Southeastern Sentinel Landscapes

Building Resiliency of Longleaf Pine Ecosystems in Southeastern Sentinel Landscapes

- The five Southeastern Sentinel Landscapes, including Georgia, Northwest Florida, Avon Park Air Force Range, South Carolina Lowcountry, and Eastern North Carolina, are home to several of DOD's vital installations and ranges. Spanning across nearly 30 installations, the five sentinel landscapes host every Military Service and encompass large swaths of longleaf pine forests.
- To protect the fire-dependent longleaf pine forests from future degradation, this project will execute prescribed burns on over 42,000 acres. The project activities also include several measures to protect threatened species across the four states, such as planting over 300 acres of trees and restoring 100 acres of wetlands.
- This project supports the goals of all five sentinel landscapes by retaining working forestry lands, increasing the resiliency and sustainability of natural systems, and improving habitat for endangered species outside installations and ranges.



A wildland fire fighter examines a test fire at Tyndall Air Force Base, Florida. (U.S. Air Force photo by Airman 1st Class Zachary Nordheim)



- REPI Funds: \$814K
- DOI Funds: \$1.7M
- Partner Contributions: \$284K

Total: \$2.8M

PARTNER ORGANIZATION
North Carolina Wildlife
Resources Commission



For more information about the REPI Program, please visit repi.mil.

For more information about the Sentinel Landscapes Partnership, please visit sentinellandscapes.org.



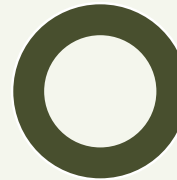
2. Avon Park Air Force Range

Working Rangelands Resiliency in the Avon Park Air Force Range Sentinel Landscape

- The Avon Park Air Force Range Sentinel Landscape has an active base area of over 108,000 acres and is home to portions of the Everglades Headwaters National Wildlife Refuge and Conservation Area, one of the last remaining grassland and longleaf pine savanna landscapes in Eastern North America.
- One of the primary goals of the Avon Park Sentinel Landscape is to support the long-term viability of working agricultural lands through coordination with partners and willing private property owners. This project will directly support the Sentinel Landscape's goals by recruiting landowners to develop individualized climate-smart management plans for future land protection efforts and quantifying the economic and environmental impacts of those land management practices on the 27,000-acre DeLuca Preserve.
- By providing technical and financial assistance to landowners across 40,000 acres, this project will help maintain the viability of working rangelands, create invasive species control measures, reestablish native species, and quantify the benefits of these practices by monitoring species diversity, endangered species populations, and hydrological conditions.



U.S. Air Force Airmen assigned to the 823rd Base Defense Squadron, Moody Air Force Base, Georgia, guard the perimeter during Mosaic Tiger 22-1 at Avon Park Air Force Range, Florida. (U.S. Air Force photo by Airman 1st Class Courtney Sebastianelli)



REPI Funds: \$1.4M

Total: \$1.4M

PARTNER ORGANIZATION
University of Florida



3. Fort Huachuca Sentinel Landscape

Adaptive Management of Water Resources in the Fort Huachuca Sentinel Landscape

- Fort Huachuca is predominantly surrounded by cattle ranges and native grasslands, which create ideal locations for the installation's unmanned aerial vehicle training. The Fort has 964 square miles of restricted airspace and one of the Army's busiest airfields, Libby Army Airfield.
- Prolonged drought and rising temperatures across the Colorado River Basin have reduced water availability and limited groundwater resources in the San Pedro River that Fort Huachuca and the surrounding communities depend on for fresh water. The changing climate also impacts threatened and at-risk species in the San Pedro River and San Pedro Riparian National Conservation Area, which are home to 50 special status species, such as the endangered Huachuca water umbel and Southwestern willow flycatcher.
- To protect and restore groundwater along 43 miles of the San Pedro Riparian National Conservation Area, this project will fund staff necessary for coordinating collaborative restoration planning efforts, a hydrogeologic site investigation, and a funding strategy for long-term recharge projects.



Unmanned aerial systems maneuver during Vanguard at Fort Huachuca, Arizona. (U.S. Army photo by Aaron Duerk)



REPI Funds: \$1.1M

Total: \$1.1M

Partner Organization
City of Sierra Vista





4. Camp Bullis Sentinel Landscape

Enhancing Capacity of the Camp Bullis Sentinel Landscape Partnership

- Camp Bullis provides medical training for all DOD enlisted Service Members and is part of the largest joint installation, Joint Base San Antonio (JBSA). JBSA supports over 266 mission partners and provides all Air Force security forces ground combat, military operations in Urban Terrain, physical security, and weapons training.
- The installation relies on two aquifers, the Edwards and Trinity Aquifers, for their primary source of water. However, there is limited data on the water levels in the Edwards and Trinity Aquifers, which limits sentinel landscape's understanding of how to effectively protect this critical resource.
- To fill the data gap, this project will create a new web mapping application that combines groundwater data, climate data, mission training data from JBSA, ecological data for the Air Force Civil Engineering System, and wildfire risk data into a single application. The project will also conduct water-level surveys to understand the groundwater flow paths within the aquifers and water levels during peak demand in the summer.



Instructors check targets during the firing range portion of the Army Basic Officer Leadership course at Joint Base San Antonio-Camp Bullis, Texas. (U.S. Air Force photo by Taylor Curry)



- REPI Funds: \$723K
- Partner Contributions: \$14K

Total: \$737K

PARTNER ORGANIZATION
Texas A&M AgriLife
Extension Service



5. Guahan Sentinel Landscape*

Eradicating Little Fire Ants within the proposed Guahan Sentinel Landscape in Guam

- The Guahan Sentinel Landscape anticipates including Naval Base (NB) Guam and Marine Corps Base (MCB) Camp Blaz. NB Guam is home to dozens of Pacific Command, Pacific Fleet, and Seventh Fleet units and hosts the Commander Submarine Squadron 15, which consists of three Los Angeles-class submarines.
- The Little Fire Ant (LFA) is a pest ant species that was first detected in Guam in 2011. According to the [Global Invasive Species Database](#), the species one of the top 100 worst invasive species worldwide and has moved rapidly through Guam's forests, jungles, and neighborhoods.
- Using methods developed by the University of Hawai'i, this project will treat LFA infestations across multiple priority sites, including portions adjacent to NB Guam and MCB Camp Blaz, where DOD teams have already initiated LFA treatment to protect the listed species on site and provide relief to neighboring landowners who have been impacted by LFA.



The ballistic missile submarine USS Kentucky arrives at Naval Base Guam, Aug. 28, 2023. (U.S. Navy photo by Petty Officer 3rd Class Darek Leary)



- REPI Funds: \$506K
- DOI Funds: \$500K
- Partner Contributions: \$272K

Total: \$1.28M

Partner Organization
Guam Department of Agriculture,
Biosecurity Division



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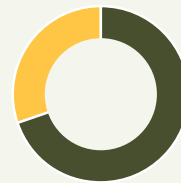
6. Southern Indiana Sentinel Landscape

Working Lands Invasive Species Management in the Southern Indiana Sentinel Landscape

- The Southern Indiana Sentinel Landscape is anchored by four critical DOD installations and ranges: Naval Support Activity Crane, the Lake Glendora Test Facility, Atterbury-Muscatatuck Training Center, and the Indiana Air Range Complex.
- Invasive plants in the sentinel landscape are overtaking the native habitats that provide shelter for endangered species, including two federally listed bat species, the Indiana bat and the northern long-eared bat. The presence of federally listed species outside these four installations and ranges presents a future risk to the installation's operations and readiness.
- This project will leverage multiple outreach and engagement tools to support the removal of invasive species in the region, including planning 40 Weed Wrangle events, hosting six invasive management workshops for local landowners, developing two new Cooperative Invasives Species Management Areas outside Lake Glendora Test Facility and Muscatatuck Training Center, and surveying over 1,200 acres with invasive species management to test the effectiveness of different management practices.



Atterbury Muskatatuck Training Center, Indiana: A Naval Special Warfare (NSW) operator participates in field training for a sniper course at Advanced Training Command, a component of Naval Special Warfare Center (NSWCEN). (U.S. Navy Photo by Bradley Houshour)



■ REPI Funds: \$501K
 ■ Partner Contributions: \$217K
Total: \$718K

PARTNER ORGANIZATION

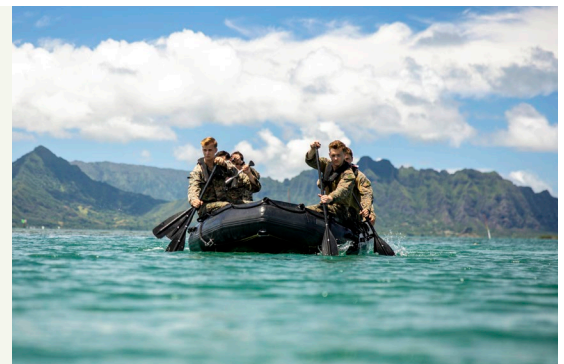
Southern Indiana Cooperative Invasives Management



7. Hawai'i Sentinel Landscape*

Leveraging Active Conservation Partnerships for Hawai'i Sentinel Landscape Planning

- The Hawai'i Sentinel Landscape anticipates including multiple installations of strategic importance for the Navy, Army, Marine Corps, and Air Force, such as Joint Base Pearl Harbor-Hickam, MCB Hawai'i, and Pōhakuloa Training Area. MCB Hawai'i alone supports over 25,000 personnel and offers many exclusive opportunities desired by the Marine Corps' Future Force, such as littoral maneuver training, energy generation and storage, artificial intelligence experimentation, and expeditionary logistics.
- The Hawai'i Sentinel Landscape will help protect vital military missions while enhancing local partnership networks. To help with generating new partnerships and creating a plan for the landscape, this project will provide critical capacity for engaging partners, landowners, and resource managers to implement future on-the-ground actions.
- Working in partnership with 27 organizations, this project will work to identify best management practices for the landscape, create new geospatial data to inform collective actions, and develop a communications strategy for engaging key partners, building trust, and raising awareness of the landscape's goals.



Marines paddle in a combat rubber raiding craft during Pololu Strike at Marine Corps Base Hawai'i, Sept. 6, 2023. (U.S. Marine Corps photo by Sgt. Israel Chincio)



■ REPI Funds: \$250K
Total: \$250K

Partner Organization
Hawai'i Conservation Alliance Foundation



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