

2021 SENTINEL LANDSCAPES ACCOMPLISHMENTS REPORT

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Page 7: Fort Huachuca, Pacheco Conservation Easement photo by Arizona Land and Water Trust

Page 8: Gopher tortoise, Georgia Department of Natural Resources photo by Joe Burnam

Page 9: Stewart's Canal at Harriet Tubman Underground Railroad National Historical Park, photo by National Park Service

Page 10: (top) HH-60G Pave Hawk helicopter, U.S. Air Force photo by Staff Sgt. Jamal D. Sutter

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EXECUTIVE SUMMARY



The Sentinel Landscapes Partnership is a broad coalition of federal agencies, state and local governments, and non-governmental organizations that works with willing, private landowners to advance sustainable land management practices within designated sentinel landscapes anchored by military installations and ranges. The partnership was established in 2013 by the United States (U.S.) Department of Agriculture (USDA), Department of Defense (DoD), and Department of the Interior (DOI) with the strategic goals of strengthening military readiness, bolstering agricultural productivity, preserving natural resources, and increasing access to recreation. As of fiscal year (FY) 2020 there were seven federally designated landscapes across the U.S.: Joint Base Lewis-McChord, Washington; Fort Huachuca, Arizona; Middle Chesapeake, Maryland, Delaware, and Virginia; Avon Park Air Force Range, Florida; Camp Ripley, Minnesota; Eastern North Carolina; and Georgia.

This report outlines how USDA, DoD, and DOI are creating holistic, integrated solutions to complex land-use challenges by combining resources and aligning funding around mutually beneficial goals within these seven landscapes.

Through fiscal year 2020, projects across sentinel landscapes have attracted roughly \$178 million in DoD funds, \$250 million in USDA funds, \$57 million in DOI funds, \$230 million in state funds, \$16 million in local funds, and \$104 million in private funds. These contributions have permanently protected over 515,000 acres of land and enrolled 2.7 million acres of land in technical assistance programs.

In FY 2020, the Sentinel Landscapes Partnership increased its focus on enhancing resilience to climate change realizing that climate-related threats can exacerbate existing impacts to military readiness, agricultural productivity, and natural resources. In recent years, communities across the country have been witnessing the devastating effects of climate change.

Whether it's a catastrophic wildfire leveling neighborhoods and forests, extreme storms flooding coastal communities and damaging infrastructure, or severe droughts diminishing agricultural productivity, these climate-related events threaten public safety and exacerbate existing natural resource and encroachment challenges nationwide. In addition to strengthening military readiness, bolstering agricultural and forestry productivity, and conserving natural resources, the Sentinel Landscapes Partnership is uniquely positioned to address climate-related issues head on to help build community resilience to climate change at a landscape scale.



Staff from the Minnesota Department of Natural Resources and The Nature Conservancy help Camp Ripley workers conduct prescribed burns to combat wildland fires. Prescribed fires reduce fuel loads, enhance training, and sustain natural diversity (credit: U.S. Army).

PARTNERSHIP OVERVIEW



Founded in 2013 by the Department of Agriculture (USDA), Department of Defense (DoD), and Department of the Interior (DOI), the Sentinel Landscapes Partnership is a broad coalition of federal agencies, state and local governments, and non-governmental organizations that works to advance common land-use objectives in high-priority areas known as sentinel landscapes. Each sentinel landscape is anchored by one or more military installations and contains natural and working lands of high conservation value. Natural and working lands, such as cropland, grassland, pasture, and forest, make up 74%, or roughly 1.7 billion acres, of land use in the United States but are rapidly declining.¹

It is estimated that nearly 6,000 acres of open space in the United States are converted to other uses every day.² These open spaces include forests, grasslands, farms, ranches, streams, rivers, and parks, all of which are compatible with most military missions and provide vital ecological, agricultural, and recreational services to surrounding communities. Conversion and development of these lands not only causes light pollution, spectrum interference, and safety concerns resulting in less effective or restricted military training, testing, and operational activities, but also leads to increased habitat loss and natural resource degradation. These concerns make the protection or sustainable management of remaining natural and working lands a high priority for USDA, DoD, and DOI.

Conservation initiatives that occur on working lands tend to improve soil, air, and water health, which increases agricultural and forestry productivity. For DoD, farms, ranches, forests, and open spaces buffer military installations and ranges from incompatible development. Likewise, conservation projects can reduce the likelihood that habitat loss and fragmentation will cause threatened, endangered, and other at-risk species to migrate to DoD land. By protecting these natural amenities at the landscape scale, sentinel landscapes can strengthen

military readiness, bolster agricultural and forestry productivity, conserve natural resources, and increase access to recreation.

In addition to existing land-use challenges, communities across the country are experiencing an increase in extreme weather and climate-related threats such as wildfires, hurricanes, sea level rise, and drought. As the frequency and intensity of these events continue to increase, the focus on cooperation to build resilient communities is becoming more important. Climate change is a complex phenomenon that threatens every facet of our nation's security and exacerbates existing land-use and natural resource challenges relating to water resources, supply chains, biodiversity, and national defense. Preserving natural areas and sustainably managing them can help restore or enhance the natural systems and resilience of entire landscapes. For example, preserving shorelines and marshlands can reduce flood impacts on coastal and inland communities and military installations. Additionally, the sustainable management of forests can reduce wildfire risks, protecting public safety and infrastructure.

The Sentinel Landscapes Partnership addresses land-use, encroachment, and climate-related challenges and carries out its mission by connecting private landowners around military installations or ranges with voluntary government assistance programs that offset the cost of implementing sustainable management practices and conservation projects. While USDA, DoD, and DOI maintain oversight of the Partnership, sentinel landscapes are predominantly local enterprises. Each sentinel landscape is unique in its land cover, economic

“None of us can tackle this problem alone. We share this planet, and shared threats demand shared solutions.”

— Secretary of Defense Lloyd J. Austin III at the Leaders Summit on Climate, 2021

¹ Economic Research Service: “Major Uses of Land in the United States, 2012”: <https://www.ers.usda.gov/webdocs/publications/84880/eib-178.pdf?v=9562.2>

² <https://www.fs.usda.gov/science-technology/loss-of-open-space>

drivers, cultural heritage, and natural resource and climate challenges. Therefore, USDA, DoD, and DOI rely on networks of state agencies and local governments to inform land-use goals and carry out projects on the ground. Additionally, private organizations such as the U.S. Endowment for Forestry and Communities, National Fish and Wildlife Foundation, and The Nature Conservancy, participate at the federal and local level contributing to the administration of the Sentinel Landscapes Partnership and advancing projects within individual landscapes across the country. This collaborative model saves partners time and money and helps create resilient communities that balance the needs of humans and the environment.

As depicted in Figure 1, the Partnership has designated seven locations as sentinel landscapes, as of the end of fiscal year (FY) 2020:

- ★ Joint Base Lewis-McChord (JBLM), Washington, est. 2013
- ★ Fort Huachuca, Arizona, est. 2015
- ★ Middle Chesapeake, Maryland, Delaware, and Virginia, est. 2015
- ★ Avon Park Air Force Range (AFR), Florida, est. 2016
- ★ Camp Ripley, Minnesota, est. 2016
- ★ Eastern North Carolina, est. 2016
- ★ Georgia, est. 2018

Figure 1: Locations of Sentinel Landscapes



³ <https://www.congress.gov/bill/115th-congress/house-bill/2810/text>

FEDERAL COORDINATING COMMITTEE

Although the success of the individual sentinel landscapes is largely due to the work of the partners on the ground, organization at the federal level is integral to the operation of the Sentinel Landscapes Partnership. The Partnership was established in 2013 through a Memorandum of Understanding signed by representatives from USDA, DoD, and DOI and later affirmed in statute under the 2018 National Defense Authorization Act (NDAA).³ The 2018 NDAA authorizes the secretaries of the three departments to designate new sentinel landscapes and coordinate actions among their departments or with other agencies and organizations to accomplish the goals of the Partnership more efficiently.

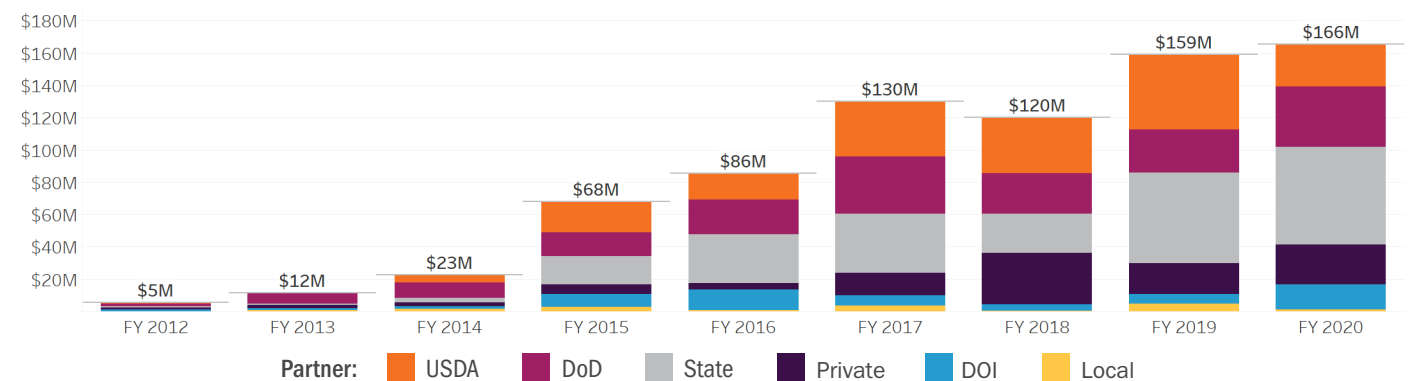
Representatives from DoD, the Natural Resource Conservation Service (NRCS), the U.S. Forest Service, the Farm Service Agency, the U.S. Fish and Wildlife Service, and the Bureau of Land Management make up the Sentinel Landscapes Federal Coordinating Committee (FCC) and manage coordination and designation at the national level. All designated sentinel landscapes share qualities that make them excellent sites

for USDA, DoD, and DOI to collaborate on projects. Sentinel landscapes are all anchored by at least one high-value military installation or range, encompass agricultural and forestry lands, and are the appropriate scale to address restoration objectives such as water quality and quantity improvement and wildlife habitat enhancement.

Once a location is designated as a sentinel landscape, the FCC works with local partners to develop land-use objectives and implementation plans that reflect USDA, DoD, DOI, and local priorities. Moving forward, the local partnership works with the FCC to execute projects and connect private landowners within the sentinel landscape with voluntary government assistance programs that could contribute to accomplishing the partnership's goals.

In total, through FY 2020, over \$178 million in DoD funds, \$249 million in USDA funds, and \$57 million in DOI funds have supported projects in sentinel landscapes. The Partnership also attracts funding from participating states—Arizona, Florida, Georgia, Maryland, Delaware, Virginia, Minnesota, North Carolina, and Washington—local governments, and private

Figure 2: Funding Committed to Sentinel Landscapes Through FY 2020 in Millions



Partner	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
USDA	\$0.6M	\$0.5M	\$4.8M	\$18.9M	\$16.5M	\$34.5M	\$34.8M	\$46.4M	\$26.4M	\$250M ⁶
DoD	\$1.5M	\$6.5M	\$9.6M	\$15.0M	\$21.7M	\$35.3M	\$25.0M	\$26.6M	\$37.2M	\$178M
DOI	\$1.2M	\$1.0M	\$1.5M	\$8.1M	\$13.0M	\$6.6M	\$4.0M	\$5.9M	\$15.6M	\$57M
Local	\$0.1M	\$1.0M	\$1.5M	\$2.8M	\$0.7M	\$3.4M	\$0.5M	\$4.8M	\$1.0M	\$16M
Private	\$1.2M	\$2.0M	\$2.8M	\$5.7M	\$3.7M	\$13.7M	\$31.6M	\$19.0M	\$24.7M	\$104M
State	\$0.8M	\$0.6M	\$2.6M	\$17.5M	\$30.1M	\$36.7M	\$24.3M	\$56.2M	\$60.6M	\$230M
Total	\$5.4M	\$11.7M	\$22.8M	\$68.0M	\$85.7M	\$130.2M	\$120.2M	\$159.0M	\$165.5M	\$835M

⁴ Protected acres are recognized as land acquisitions—fee simple or easement—that have completed the due diligence and closing actions necessary to obtain a real estate interest.

⁵ Land is considered enrolled if the property owner voluntarily participates in a federal or state land-management program that provides financial or technical assistance to promote sustainable agricultural practices, restore imperiled species and their habitat, or preserve critical natural resources; or if a landowner or an organization receives a federal or state grant to conduct a conservation project on said property.

⁶ USDA subtotals may not sum to combined total due to the addition of non-fiscal year funds contributed.

organizations. To date, Partnership efforts have received \$229 million in state funds, \$15 million in local funds, and \$104 million in private funds. These contributions have permanently protected⁴ over 515,000 acres of land within sentinel landscapes and enrolled⁵ an additional 2.7 million acres of land in technical assistance programs.

In FY 2020 there was an overall increase in federal, state, local, and private funding of over \$6 million that went directly towards projects within sentinel landscapes, as depicted in Figure 2. In total, this combination of funding represents a cost savings of \$590 million, \$711 million, and \$519 million for USDA, DoD, and DOI, respectively (Figure 3).

FEDERAL AGENCIES AND PROGRAMS ALIGNED

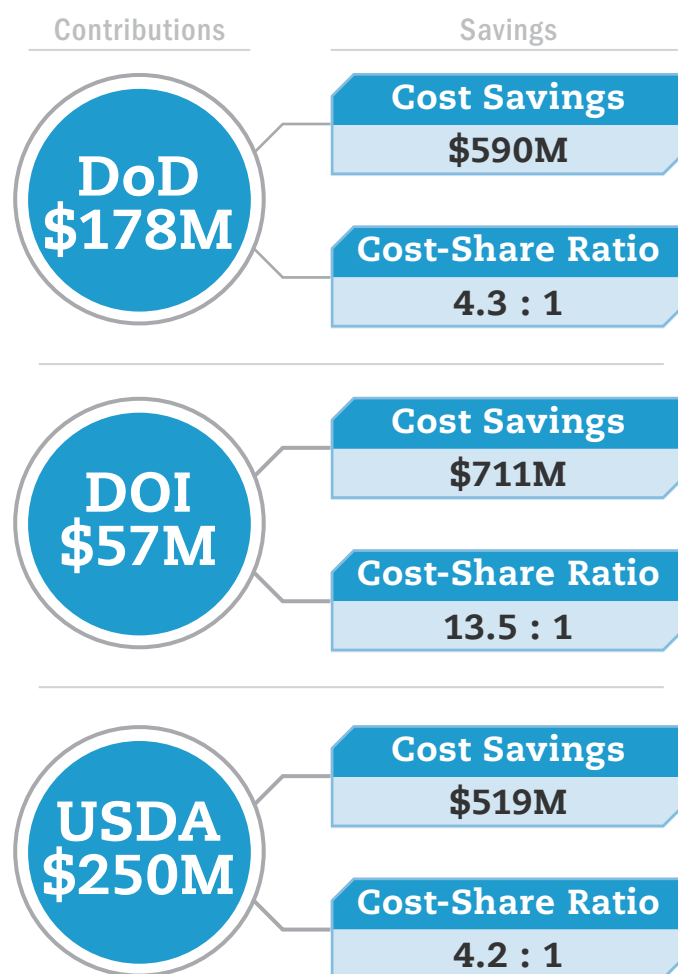
There are numerous land management and technical assistance programs within USDA, DoD, and DOI that support the sentinel landscapes' goals and objectives, for example, USDA's Agricultural Management Assistance Program, DoD's Military Installation Sustainability Program, and DOI's State, Tribal, Local, Plans & Grants Division of the National Park Service. These programs provide a range of complementary benefits including tax reductions, agricultural loans, disaster relief, educational opportunities, technical aid, and funding for conservation easements.

Aside from the services and programs represented on the FCC, many other federal departments, agencies, and programs have land-use missions related to conservation, agriculture, forestry, defense, and resilience that could contribute to the strategic goals of sentinel landscapes. Table 1 provides a list of federal agencies and programs currently involved in the Sentinel Landscapes Partnership and many that have not been utilized yet. This list is not comprehensive; however, it demonstrates the federal government's broad commitment to conservation and resilience within and outside of USDA, DoD, and DOI. The diversity of government programs listed below also represents the vast number of opportunities for inter-agency coordination and collaboration to better align funding and accomplish more within sentinel landscapes with fewer resources.

In addition to the programs listed in Table 1, there are many other federal, state, and local landowner assistance opportunities that can help private landowners manage their land sustainably, thereby contributing to the strategic goals of the Sentinel Landscapes Partnership. A variety of landowner assistance programs can be explored through the Interactive Landowner Resources Tool on the Sentinel Landscapes Partnership website at:

[HTTPS://SENTINELLANDSCAPES.ORG/LANDOWNER-RESOURCES/](https://sentinellandscapes.org/landowner-resources/).

Figure 3: Federal Cost Savings from the Sentinel Landscapes Partnership



An F/A-18 weapons systems officer conducts a landing zone brief with a UH-1Y Venom during Exercise Fireball Eagle at Marine Corps Air Station Cherry Point, North Carolina (credit: U.S. Marine Corps).

Table 1: Federal Agencies and Programs Aligned with Sentinel Landscapes Goals and Objectives

Agency	Agencies/Programs	About	Relevant Programs
 DoD	Readiness and Environmental Protection Integration Program (REPI)	The REPI Program protects these military missions by helping remove or avoid land-use conflicts near installations and addressing regulatory restrictions that inhibit military activities.	
	Office of Local Defense Community Cooperation (OLDCC)	OLDCC furthers the priorities of the National Defense Strategy by supporting the readiness and resiliency of military installations and defense communities across the country.	Compatible Use Program; Community Investment Program; Military Installation Sustainability Program
	Natural Resources (NR) Program	The DoD's NR Program supports the military's testing and training mission by protecting its biological resources through policy, guidance, and oversight of management of natural resources on military land, air, and water resources owned or operated by DoD.	Integrated Natural Resource Management Plans
	Legacy Resource Management Program	The Legacy Resource Management Program assists DoD in protecting and enhancing resources while enabling military readiness through projects involving regional ecosystem management initiatives, habitat preservation efforts, etc.	
 USDA	Natural Resources Conservation Service (NRCS)	NRCS provides America's farmers and ranchers with financial and technical assistance to voluntarily put conservation on the ground, not only helping the environment but agricultural operations, too.	Agricultural Management Assistance Program; Regional Conservation Partnership Program; Conservation Stewardship Program; Environmental Quality Incentives Program; Agricultural Conservation Easement Program
	Farm Service Agency (FSA)	FSA is equitably serving all farmers, ranchers, and agricultural partners through the delivery of effective, efficient agricultural programs for all Americans.	Incentives and Conservation Reserve Program; Emergency Conservation Program; Farmable Wetlands Program
	U.S. Forest Service (USFS)	The mission of the USFS is to sustain the health, diversity, and productivity of the Nation's forests and grasslands to meet the needs of present and future generations.	Forest Legacy Program; Farm Bill Programs
 DOI	U.S. Fish and Wildlife Service (USFWS)	USFWS is the premier government agency dedicated to the conservation, protection, and enhancement of fish, wildlife and plants, and their habitats.	North American Wetlands Conservation Act Grants; Partners for Fish and Wildlife Program; Cooperative Endangered Species Conservation Fund; Recovery Planning and Implementation; Recovery Challenge Grants; Wildlife and Sport Fish Restoration Program; Coastal Program; National Coastal Wetland Conservation Grant Program
	National Park Service (NPS)	NPS cares for our national parks, but also helps revitalize communities by preserving local history, celebrating local heritage, and creating close-to-home opportunities for kids and families to get outside.	Federal Lands to Parks Program; Land and Water Conservation Fund Program; Rivers, Trails, and Conservation Assistance Program
	Bureau of Land Management (BLM)	The mission of BLM is to sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.	Threatened and Endangered Species Program; Wildlife Program; Soil, Water, and Air Program; Rangeland Management Program; Riparian and Wetlands Program
	Bureau of Indian Affairs (BIA)	BIA's mission is to enhance the quality of life, promote economic opportunity, and carry out the responsibility to protect and improve the trust assets of American Indians, Indian tribes, and Alaska Natives.	Agriculture & Range Program; Wildlife and Parks Program; Endangered Species Program; Water Program
Additional Agencies	Environmental Protection Agency (EPA)	The mission of EPA is to protect human health and the environment through the development and enforcement of regulations.	Wetlands Program Development; Multipurpose Grants to States and Tribes
	Department of Commerce—National Oceanic and Atmospheric Administration (NOAA)	NOAA's mission is to understand and predict changes in climate, weather, oceans, and coasts, share that knowledge and information, and conserve and manage coastal and marine ecosystems and resources.	Coastal Estuarine Land Conservation Program
	Department of Homeland Security—Federal Emergency Management Agency (FEMA)	FEMA provides on-the-ground support in response to a disaster, makes available experts in specialized fields, and awards funding and grants for preparedness, hazard mitigation, and resilience.	Hazard Mitigation Grant Program; Flood Mitigation Assistance Program; Building Resilient Infrastructure & Communities; HMGP Post-Fire Grant; Pre-Disaster Mitigation Program

FISCAL YEAR 2020 PARTNERSHIP HIGHLIGHTS



Through FY 2020, the contributions and collaborative efforts of federal, state, local, and private partners across nine states have culminated in the protection of over 515,000 acres of land within sentinel landscapes and enrolled an additional 2.7 million acres of land in technical assistance programs, as depicted in Figure 4. This represents an increase in nearly 48,000 acres protected and 490,000 acres enrolled in FY 2020 alone.

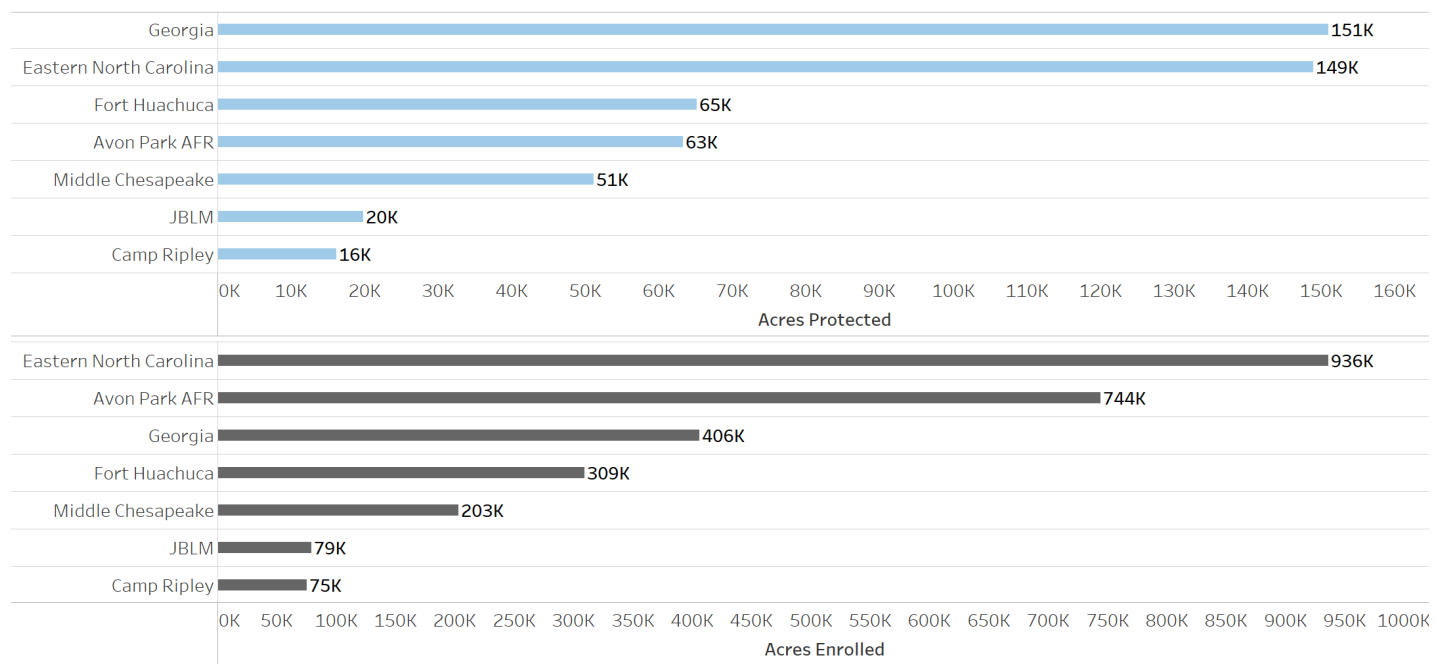
The following case studies are just two examples of how sentinel landscapes are advancing federal, state, and local natural resource and land-use goals using innovative strategies and effective collaboration. To learn more about other landscapes' accomplishments, view the individual landscape profiles at:

[HTTPS://SENTINELLANDSCAPES.ORG/](https://sentinel landscapes.org/).

PREScribed FIRE PROTECTS GEORGIA'S LONGLEAF PINES

One of the Georgia Sentinel Landscape's primary goals is the protection of longleaf pine forests. With an increase in development and a lack of consistent land management throughout the Southeast, longleaf pine forests have been degrading or disappearing. Concurrently, populations of important species that depend on these forests for habitat, such as the gopher tortoise, have also been declining drastically. As a keystone species,⁷ the success of gopher tortoise populations within longleaf pine forests is integral to the stability of the entire ecosystem, making their protection a high priority for not only state and local conservation organizations, but also federal agencies and programs.

Figure 4: Acres Protected and Enrolled within Each Sentinel Landscape from their establishment through FY 2020⁸



⁷ <https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/fl/technical/cp/cta/?cid=stelprdb1047006>

⁸ The values listed represent the acres protected and acres enrolled within the sentinel landscapes from the year of their federal designation through FY 2020. For that reason, within each landscape the total number of acres protected and enrolled may be higher than what is reported above.



Sustainable management of longleaf pine forests, which exist in both the Georgia and Eastern North Carolina Sentinel Landscapes, protect existing gopher tortoise populations and prevent potential restrictions on military training (credit: Joe Burnam, Georgia Department of Natural Resources).

If gopher tortoise populations decline to the point of being listed under the Endangered Species Act, DoD installations and ranges throughout the Southeast would potentially be subject to increased regulation leading to mission hindrance and added costs. By protecting this species proactively, DoD may avoid these potential impacts altogether.

In direct support of these goals, the Georgia Sentinel Landscape was allocated over \$2 million from USDA NRCS's Regional Conservation Partnership Program (RCPP) in FY 2020. RCPP promotes coordination between NRCS and its partners to deliver conservation technical and financial assistance to producers and landowners through partnership agreements, conservation program contracts, or easements. This award was combined with an additional \$2.2 million in partner contributions from the Georgia Conservancy, a state conservation organization dedicated to finding sustainable solutions to natural resource challenges. This project is using multiple strategies to promote working land conservation and compatible land use and to contribute to the Georgia Gopher Tortoise Initiative which aims to preclude the listing of the species under the Endangered Species Act through proactive protection and management.

In addition to acquiring traditional conservation easements, the Georgia Sentinel Landscape is using this funding to expand upon current prescribed burn efforts on private lands containing longleaf pine ecosystems. Prescribed burns enhance these ecosystems that serve as ideal habitats for the gopher tortoise and help reduce the risk of catastrophic wildfires by removing hazardous fuel loads. Additionally, longleaf pine forests naturally have a greater resilience to climate-

related threats such as wildfires, hurricanes, and drought compared to other tree species, making the protection of these ecosystems essential for maintaining the resilience of the surrounding communities.

These management efforts complement the ongoing work being carried out through NRCS's Agricultural Conservation Easement Program and DoD's Readiness and Environmental Protection Integration (REPI) program, both of which support the establishment of conservation easements across the Georgia Sentinel Landscape. The Georgia Sentinel Landscape is also using the RCPP funding for outreach and education, focusing on historically undeserved producers in specific counties, in hopes of garnering additional support from landowners interested in participating in these programs.

"Through collaboration and aligning our resources toward a common goal, the Georgia Conservancy and NRCS is making an impact for natural resource conservation that could never have been realized on our own."

— Terrance O. Rudolph, USDA, NRCS, Georgia State Conservationist

ENABLING MARSH MIGRATION IN MIDDLE CHESAPEAKE

Spanning the Chesapeake Bay and communities on either side, the Middle Chesapeake Sentinel Landscape includes a unique makeup of land uses and community dynamics and challenges. Just south of Washington, DC, and Baltimore, Maryland, the waterfront communities in the Middle Chesapeake Sentinel



A visitor looks out over Stewart's Canal at dusk at Harriet Tubman Underground Railroad National Historical Park within the Middle Chesapeake Sentinel Landscape. At the end of 2019, The Conservation Fund in partnership with the U.S. Fish and Wildlife Service completed the acquisition of 2,600 acres for the Blackwater National Wildlife Refuge, near Harriet Tubman Underground Railroad National Historical Park and beneath U.S. Navy airspace. The protection of this site allows for additional opportunities to learn more about the life of Harriet Tubman and the Underground Railroad. In the spring of 2021 historians found the home site of Tubman's father, Ben Ross, on the property. (credit: National Park Service).

Landscape are commonly used for weekend or summer homes causing an increase in development of natural wetlands and marshes.

During tidal changes or flood events, marshes and wetlands act as natural sponges, holding the water from flowing further inland. The more these natural areas are lost, the less resilient coastal communities and DoD installations and ranges are to climate-related threats and extreme storms, and the more susceptible they are to public safety threats and infrastructure damage.

To combat these threats, \$3 million was allocated to DoD's Atlantic Test Ranges and Naval Air Station Patuxent River through the 2020 REPI Challenge, an annual funding opportunity through DoD's REPI program. This program aims to cultivate projects that conserve land at a greater scale, test promising ways to finance land protection, and harness the creativity of the private sector and market-based approaches. This project, which also attracted \$5 million in partner funding, is an example of a unique opportunity where more resources can be leveraged to accelerate the rate of land conservation within the Middle Chesapeake Sentinel Landscape.

Middle Chesapeake Sentinel Landscape partners, including The Nature Conservancy, The Conservation Fund, Chesapeake

Conservancy, and the Maryland Department of Natural Resources, along with federal partners such as the U.S. Fish and Wildlife Service, U.S. Forest Service, and the U.S. Navy, are using this funding to contribute to an initiative to create a 4,000-acre marsh migration climate resilience corridor under Atlantic Test Ranges' Special Use Airspace. The protection of this land allows for the unhindered continuance of the Navy's manned and unmanned aircraft test operations and supports existing and future marshlands. It may also lead to future projects, including consideration of a potential microgrid system to support the Navy's infrastructure located on the Eastern Shore of Maryland to help improve energy resilience.

"These efforts are helping to ensure the vitality of the range by permanently preserving swaths of land beneath the 2,300 square miles of restricted airspace that is essential for naval aviation testing. Our REPI program has made significant strides to protect the mission...We are looking forward to continuing these partnerships in the future to benefit both the Navy and our community."

— Rob Vargo, Director, Naval Air Warfare Center Aircraft Division, Atlantic Ranges and Targets Department

PARTNERSHIP OUTLOOK



SENTINEL LANDSCAPES 2021 APPLICATION CYCLE

The Sentinel Landscapes FCC was thrilled to initiate a new designation cycle in 2021 and build on the success of the existing seven sentinel landscapes. Any entity whose mission aligns with or otherwise supports the goals of the Sentinel Landscapes Partnership was eligible to apply with pre-proposals due in March and full proposals due in August 2021. The FCC anticipates announcing the newly designated sentinel landscapes in late 2021. The 2021 application window is now closed, but the FCC anticipates continuing to open a new designation cycle on a biennial basis.

Throughout the 2021 application process, the FCC was exposed to numerous innovative and inspiring partnerships across the country already advancing the shared goals of DoD, USDA, DOI, and local partners. Although not every applicant will be designated as a sentinel landscape, the growing interest in the Partnership demonstrates the universal importance of strategic coordination to accomplish shared land-use, conservation, and resilience goals.

Parties interested in applying to be designated as a sentinel landscape in the future are encouraged to begin coordinating locally before submitting a proposal. Any questions about the application process can be directed to the FCC on the Contact Us page of the Partnership's website.

ENHANCING RESILIENCE TO CLIMATE CHANGE ACROSS SENTINEL LANDSCAPES

Moving into the future, the Sentinel Landscapes Partnership will continue to prioritize building resilience to climate change and extreme weather events within sentinel landscapes in addition to other strategic priorities. Changes in atmospheric conditions and weather patterns can alter the natural balance of ecosystems across the country. Climate-related threats such as drought, flooding, and desertification limit access to fresh water, disrupt food supplies, hinder military training, and degrade wildlife habitats, while the increase in frequency and intensity

of wildfires and hurricanes creates public safety concerns and damages critical infrastructure. To address and mitigate these increasingly complex problems, cooperation among federal, state, and local agencies and organizations is imperative.

Having already established such partnerships, sentinel landscapes are uniquely equipped to effectively plan and implement projects to help enhance communities' and ecosystems' resilience to climate change. Many of the protection efforts already underway within sentinel landscapes are contributing to this goal. For instance, preserving and strengthening wetlands protects coastal communities from erosion and flooding; sustainably managing croplands and rangelands conserves water, mitigating the effects of drought; and clearing brush and fuel loads from forests can reduce the risk of extreme wildfires.

Through these collective actions, the Sentinel Landscapes Partnership can advance its strategic goals of strengthening military readiness, supporting the long-term viability of agricultural and forestry operations, enhancing wildlife habitat, and increasing access to recreation while simultaneously creating communities and landscapes resilient to the dangerous effects of climate change.



View of wetland from boardwalk at Blackwater National Wildlife Refuge within the Middle Chesapeake Sentinel Landscape. Maryland's Lower Eastern Shore is home to more than 75% of Maryland's remaining tidal wetlands, which provide critical habitat for a variety of commercially and recreationally important fish, bird, and shellfish species that state and local economies depend on. Coastal marshes also provide a defense against coastal hazards, protecting communities by reducing wave heights and erosion along shorelines, thereby reducing emergency recovery expenses (credit: USFWS).





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