



# 2023 SENTINEL LANDSCAPES ACCOMPLISHMENTS REPORT

*Cover photo credits: (clockwise from top right)*

*Marine 2<sup>nd</sup> Lt. Gregory Jones and 2<sup>nd</sup> Lt. Austin Kaulius, with 6<sup>th</sup> Platoon, Echo Company, The Basic School, provide security during a field exercise on Marine Corps Base Quantico, VA. (U.S. Marine Corps photo by Lance Cpl. D'Angelo Yanez); Retired Lt. Col. Gerald Harper paddles his way up the New River while enjoying a summer sunset, North Carolina. (U.S. Marine Corps photo by Cpl. Damany Coleman); Land use agreements allow cattle grazing on land managed by Avon Park Range. (U.S. Air Force photo by Tech. Sgt. Perry Aston); An American oystercatcher explores the saltmarsh, Chincoteague, Virginia in June of 2019. (Photo by Greg Bilyeu); Quantico Fire & Emergency Services and Natural Resources Environmental Affairs (NREA) conduct "Controlled Burns" at Marine Corps Base Quantico, Virginia. (U.S. Marine Corps photo by Cpl. Webster Rison); Sunset hiking at the Coronado National Forest, Fort Huachuca, Arizona. (Photo by Reggie Hall)*

*Chapter photo credits:*

*Page 1 (top): Naval Support Activity (NSA) Crane/ Southern Indiana Sentinel Landscape (U.S. Navy photo)*

*Page 3 (top): Marines with 3<sup>rd</sup> Battalion, 6<sup>th</sup> Marine Regiment, 2<sup>nd</sup> Marine Division, exit a CH-53 Super Stallion helicopter during Exercise Deep Water at Camp Lejeune, NC (U.S. Marine Corps photo by Cpl. Elijah J. Abernathy)*

*Page 7 (top): Pair of spoonbills in marsh, Northwest Florida Sentinel Landscape (Justin Grubb/Running Wild Media)*

*Page 10 (top): U.S. Marine Corps amphibious assault vehicles move into position at Camp Lejeune, NC (credit: U.S. Navy photo by Petty Officer 2<sup>nd</sup> Class Tom Gagnier)*

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# EXECUTIVE SUMMARY



The Sentinel Landscapes Partnership celebrates its 10-year anniversary in 2023, marked by the first sentinel landscape designation at Joint Base Lewis-McChord in 2013. With 13 sentinel landscapes currently designated, the past decade of success proves the power of unconventional partnerships in advancing valuable landscape-scale outcomes. The 2023 Sentinel Landscapes Accomplishments Report celebrates this milestone by highlighting the progress of the partnership and exploring how capacity-building and funding resources available to the sentinel landscapes are supporting the next decade of impact.

The Sentinel Landscapes Partnership is a coalition of federal agencies, state and local governments, and non-governmental organizations that work with landowners and land managers to advance mutually beneficial land-use goals in sentinel landscapes. The partnership was established through a Memorandum of Understanding (MOU) in 2013 (updated in 2022) by the U.S. Department of Agriculture (USDA), Department of Defense (DOD), and Department of the Interior (DOI) with the shared strategic goals of strengthening military readiness, conserving natural resources, bolstering agricultural and forestry economies, increasing public access to outdoor recreation, and enhancing resilience to climate change.<sup>1</sup>

The partnership was affirmed in statute under the 2018 National Defense Authorization Act (NDAA), which authorizes the secretaries of the three departments to designate new sentinel landscapes and to coordinate actions among their departments or with other agencies and organizations to accomplish the goals of the partnership more efficiently.<sup>2</sup>

Sentinel landscapes are anchored by at least one high-value military installation or range and contain lands that are of high importance to the missions of the USDA, DOD, and DOI. These landscapes encompass agricultural and/or forestry lands and

are delineated to match the necessary size and scale (as agreed upon by federal agency and local partners) to address ecological restoration objectives such as wildfire management, water quality and quantity improvement, or wildlife habitat enhancement.



*The Middle Chesapeake Sentinel Landscape encompasses the Nanticoke River, a historically significant waterway that extends over 65 miles and supports numerous threatened and endangered species. Since its designation, the Middle Chesapeake Sentinel Landscape partners have pursued projects that collectively preserve natural resources, protect agricultural land, and strengthen military readiness. (credit: Matt Rath/Chesapeake Bay Program)*

<sup>1</sup> The 2022 Sentinel Landscapes Partnership MOU is available here: [https://sentinellandscapes.org/media/3bppnifl/2022\\_sl\\_mou\\_signed\\_02142022.pdf](https://sentinellandscapes.org/media/3bppnifl/2022_sl_mou_signed_02142022.pdf)

<sup>2</sup> H.R.2810–115<sup>th</sup> Congress (2017-2018): National Defense Authorization Act for Fiscal Year 2018. (2017, December 12). <http://www.congress.gov/>

As established by the Sentinel Landscapes Partnership MOU, the Federal Coordinating Committee (FCC) coordinates the partnership at the national level and designates new sentinel landscapes that deliver opportunities for the FCC member agencies to collaborate on natural resource conservation and management. The FCC comprises representatives from the USDA Natural Resources Conservation Service (NRCS) and the U.S. Forest Service (USFS), the DOD Readiness and Environmental Protection Integration (REPI) Program, and the DOI U.S. Fish and Wildlife Service (USFWS).

Through fiscal year (FY) 2022, \$1.1 billion in conservation funds have been committed to projects in sentinel landscapes, with \$133 million committed in FY 2022 alone. The number of acres protected increased from the previous FY by over 67,000 acres. In FY 2022, the number of acres enrolled in financial and technical assistance programs totaled over 4.4 million acres, a 44 percent increase over FY 2021 (3.1 million acres). These increases illustrate the sustained growth of the Sentinel Landscapes Partnership's impact.

This report outlines how the Sentinel Landscapes Partnership enables the USDA, DOD, DOI, and their on-the-ground partners to collaboratively solve complex land-use challenges by combining resources and aligning funding across the 13 sentinel

landscapes. Case studies detailing the engagement of expert partner organizations including the Conservation Finance Network (CFN), LegacyWorks Group, and Quantified Ventures further illustrate how the FCC contributes capacity-building support to advance and expand work within sentinel landscapes.

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**Through FY 2022, projects across sentinel landscapes have attracted approximately \$335 million in USDA funds, \$233 million in DOD funds, \$92 million in DOI funds, \$341 million in state funds, \$26 million in local funds, and \$142 million in private funds. These contributions have permanently protected 677,100 acres of land through FY 2022 and enrolled over 4.4 million acres of land in financial and technical assistance programs in FY 2022 alone.**

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Looking ahead, the FCC is exploring further strategies to coordinate funding opportunities across its agencies. These strategies include continued participation in the America the Beautiful Challenge as well as the provisioning of new funding to support climate resilience coordinators and the launch of the Readiness and Recreation Initiative. In May 2023, the FCC also launched the 2024 Sentinel Landscape Designation Cycle, with the goal of designating new sentinel landscapes in Spring 2024.



*U.S. Air Force Airmen sweep an area during convoy training at Joint Base San Antonio-Camp Bullis, Texas. (credit: David Terry)*

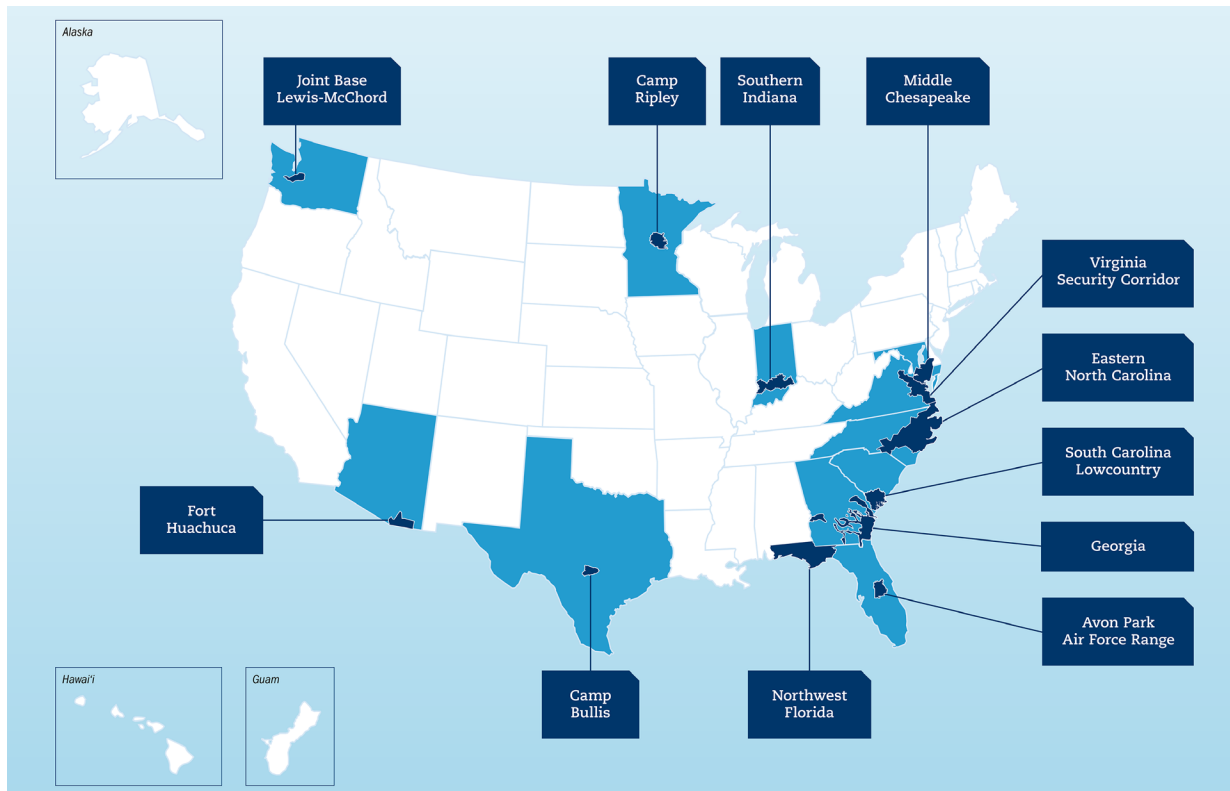
# PARTNERSHIP IMPACT



The Sentinel Landscapes Partnership enables enhanced collaboration among the USDA, DOD, and DOI for greater impact in locations where significant agricultural and natural resources, species habitat, and military testing and training needs intersect. The partnership and the FCC rely on collaboration from state, municipal, and tribal governments, nonprofit organizations, and private landowners and land managers to develop and implement projects within the sentinel landscapes. This collaborative structure enables the Sentinel Landscapes Partnership to consider the unique geography, economic drivers, cultural heritage, and natural resource challenges of each individual sentinel landscape.<sup>3</sup>

As of 2023, the FCC has designated 13 sentinel landscapes across the United States: Avon Park Air Force Range (Florida), Camp Bullis (Texas), Camp Ripley (Minnesota), Eastern North Carolina, Georgia, Fort Huachuca (Arizona), Joint Base Lewis-McChord (Washington), Middle Chesapeake (Maryland, Delaware, and Virginia), Northwest Florida, South Carolina Lowcountry, Southern Indiana, and Virginia Security Corridor (made up of the Potomac and Tidewater Sentinel Landscapes). The newest sentinel landscapes are South Carolina Lowcountry and Virginia Security Corridor, which received designation in 2023.

**Figure 1:** Locations of Sentinel Landscapes



<sup>3</sup> A full list of partners working within each sentinel landscape can be found in the sentinel landscape profiles on the Sentinel Landscapes Partnership website at: <https://sentinellandscapes.org/landscapes>

## 2023 OUTCOMES BY THE NUMBERS

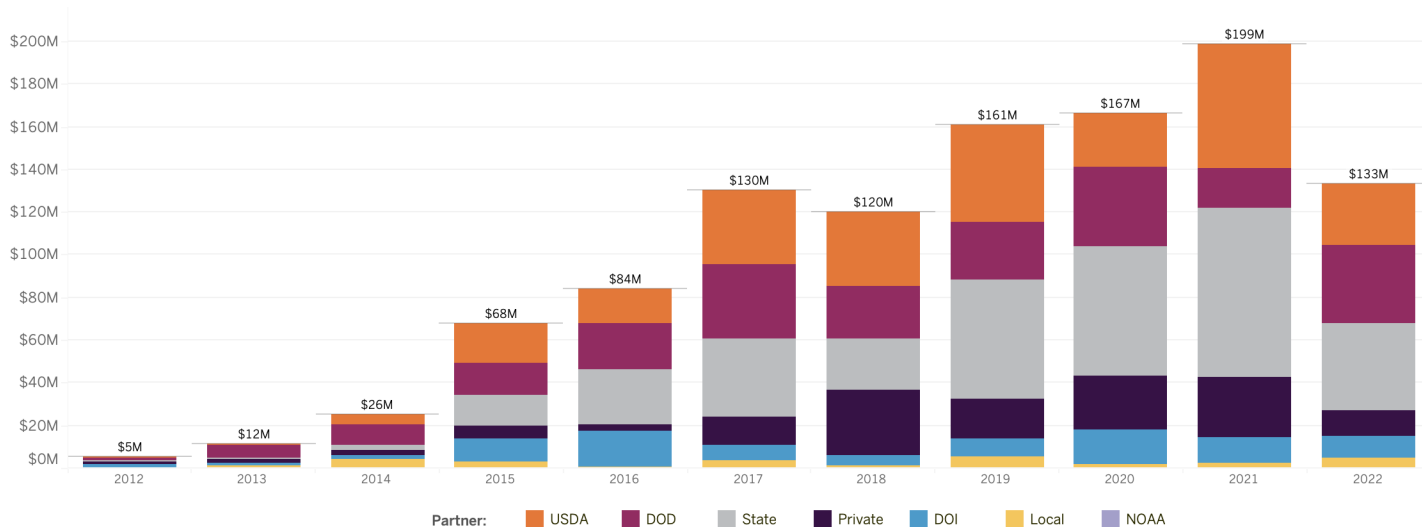
Through FY 2022, roughly \$335 million in USDA funds, \$233 million in DOD funds, and \$92 million in DOI funds have supported projects in sentinel landscapes. The partnership also attracts funding from participating states,<sup>4</sup> local governments, and private organizations.

To date, the partnership's efforts have received \$341 million in state funds, \$26 million in local funds, and \$142 million in private funds. These contributions represent a 6 percent increase in federal, state, local, and private funding—about \$509 million in total—that went directly toward projects within

sentinel landscapes in FY 2022 (as compared to FY 2021), as depicted in Figure 2.

From the founding of the partnership through FY 2022, the contributions and collaboration of federal, state, local, and private partners across 11 states have culminated in the protection<sup>6</sup> of 677,100 acres of land within sentinel landscapes, as depicted in Figure 3.<sup>7</sup> In addition, in FY 2022, 4.4 million acres of land were enrolled in financial and technical assistance programs.<sup>8</sup>

**Figure 2:** Funding Committed to Sentinel Landscapes Through FY 2022 in Millions<sup>5</sup>



Partner	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
USDA	\$0.6M	\$0.5M	\$4.8M	\$18.9M	\$16.5M	\$34.5M	\$34.8M	\$46.4M	\$25.8M	\$58.4M	\$28.8M	\$335.6M
DOD	\$1.5M	\$6.5M	\$9.6M	\$14.9M	\$21.7M	\$35.3M	\$25.0M	\$26.6M	\$37.2M	\$18.6M	\$36.2M	\$233.2M
DOI	\$1.2M	\$1.0M	\$1.5M	\$8.1M	\$13.0M	\$6.6M	\$4.0M	\$7.4M	\$15.9M	\$10.7M	\$10.5M	\$92.3M
Local	\$0.1M	\$1.0M	\$4.2M	\$2.8M	\$0.7M	\$3.4M	\$0.5M	\$4.8M	\$1.0M	\$2.9M	\$4.6M	\$26.6M
Private	\$1.2M	\$2.0M	\$2.8M	\$5.7M	\$3.7M	\$13.7M	\$31.6M	\$19.0M	\$26.9M	\$28.0M	\$11.9M	\$142.2M
State	\$0.8M	\$0.6M	\$2.6M	\$18.5M	\$31.1M	\$38.7M	\$25.3M	\$64.6M	\$60.6M	\$81.4M	\$41.1M	\$341.1M
USDA	\$0.6M	\$0.5M	\$4.8M	\$18.9M	\$16.5M	\$34.5M	\$34.8M	\$46.0M	\$25.7M	\$58.3M	\$28.8M	\$335.6M
<b>Total</b>	<b>\$5.4M</b>	<b>\$11.7M</b>	<b>\$25.5M</b>	<b>\$68.0M</b>	<b>\$84.2M</b>	<b>\$130.2M</b>	<b>\$120.2M</b>	<b>\$161.1M</b>	<b>\$166.6M</b>	<b>\$199.0M</b>	<b>\$133.1M</b>	<b>\$1.1B</b>

<sup>4</sup> As of 2023, participating states in the Sentinel Landscapes Partnership include Arizona, Delaware, Florida, Georgia, Indiana, Maryland, Minnesota, North Carolina, South Carolina, Texas, Virginia, and Washington.

<sup>5</sup> USDA subtotals may not sum to combined total due to the addition of non-fiscal year funds contributed.

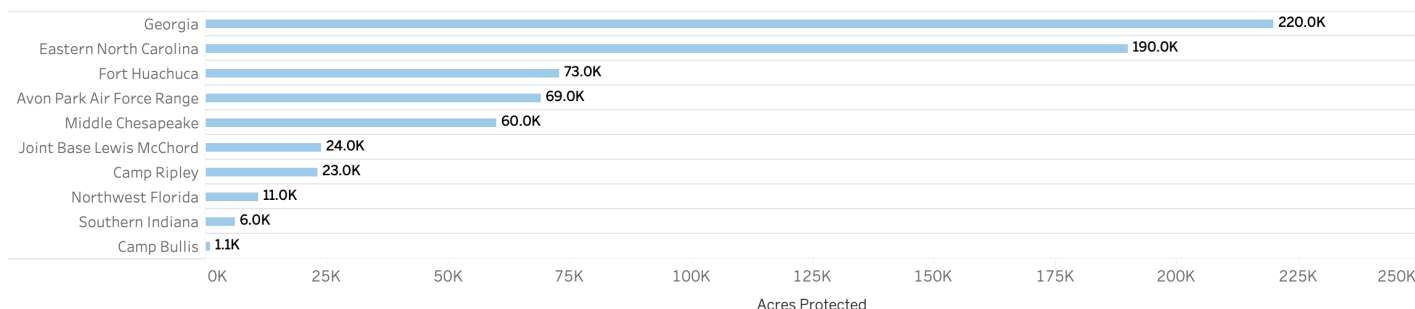
<sup>6</sup> Protected acres are recognized as land acquisitions—fee simple or easement—that have completed the due diligence and closing actions necessary to obtain a real estate interest.

<sup>7</sup> 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.

<sup>8</sup> The values listed represent the acres protected and acres enrolled within the sentinel landscapes from the year of their federal designation through FY 2022. For that reason, within each sentinel landscape the total number of acres protected and enrolled may be higher than what is reported above.



**Figure 3:** Acres Protected Within Each Sentinel Landscape from Their Establishment through FY 2022

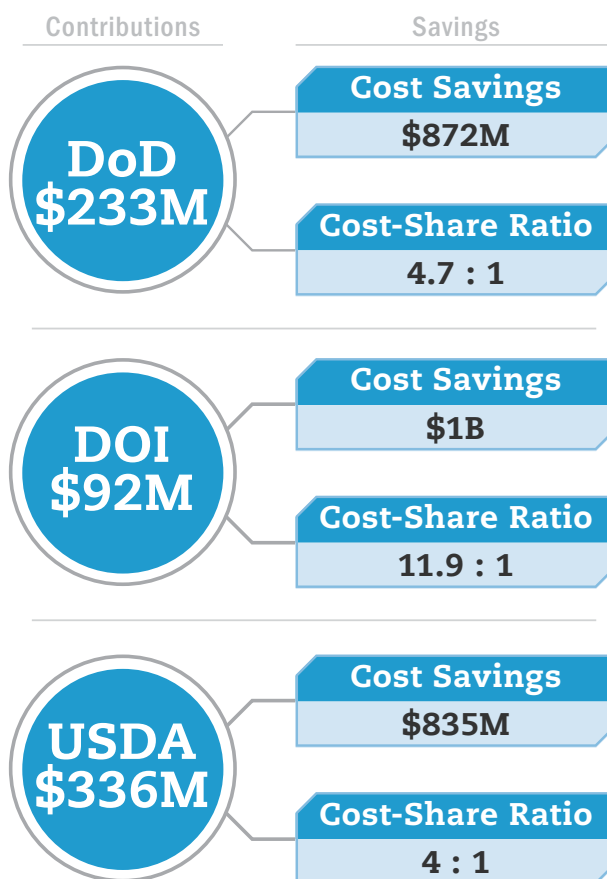


Participation in the Sentinel Landscape Partnership is an opportunity for the FCC’s members to collaborate on achieving their shared goals within the sentinel landscapes. Through funding projects that address the strategic goals of different sentinel landscapes, members contribute to landscape-level outcomes that are desirable for each agency in the partnership and that likely could not have been achieved independently.

To illustrate this shared benefit, Figure 4 represents the funding contributions of each FCC member as a ratio of overall funding committed to the Sentinel Landscapes Partnership. On top of their own individual contributions to projects in sentinel landscapes, in FY 2022 USDA, DOD, and DOI benefited from approximately \$335 million, \$233 million, and \$92 million, respectively, in funding from other federal agencies, states, and local and private organizations spent in sentinel landscapes.

The contribution ratios in Figure 4 illustrate how the cooperation established through the Sentinel Landscapes Partnership enables the dollars spent by each agency partner to go further toward achieving their goals within the sentinel landscapes. For a list of supporting federal programs that can be applied to projects in sentinel landscapes, see Appendix B.

**Figure 4:** Federal Contribution Ratios in the Sentinel Landscapes Partnership



Steven Toro, a firefighter supplied by the U.S. Air Force Wildland Fire Branch, uses a drip torch to apply fire in a planned pattern during a prescribed burn, April 4, 2019, at Grand Bay Wildlife Management Area, Moody Air Force Base, GA. (credit: Staff Sgt. Janiqua P. Robinson)

## FCC DESIGNATES NEW SENTINEL LANDSCAPES

In 2023, the FCC designated three new sentinel landscapes: South Carolina Lowcountry and the Potomac and Tidewater (collectively referred to as the Virginia Security Corridor). Following the designation of a new sentinel landscape, the FCC develops land-use objectives and implementation plans alongside local partners, aligning the priorities of the USDA, DOD, DOI, and state and local entities. The local partners then work with the FCC to execute projects and coordinate landowner and land manager connections with voluntary state and federal assistance programs. These programs may provide tax reductions, agricultural loans, disaster relief, educational opportunities, technical aid, and funding for conservation easements and nature-based solutions.

### South Carolina Lowcountry Sentinel Landscape

The South Carolina Lowcountry Sentinel Landscape supports immense biodiversity, encompassing more than 2.2 million acres of longleaf pine forest, ranchlands, salt marsh, forested wetlands, and unbroken wildlife corridors in the southeastern corner of South Carolina. The landscape actively supports training activities for Marine Corps Air Station Camp Beaufort, Marine Corps Recruit Depot Parris Island, and Naval Support Facility Beaufort, contributing \$2.2 billion to the regional economy and providing nearly 20,000 jobs. The installation missions include recruiting and training U.S. Marines, supporting operations for the 2<sup>nd</sup> Marine Aircraft Wing, and delivering essential medical services for active-duty Navy and Marine Corps personnel. The partnership will support natural resource conservation efforts, water quality enhancement, local agriculture, climate resilience, and long-term military readiness.



*The U.S. Department of Defense and Beaufort County have purchased 2,068 acres of waterfront property and uplands at Oak Point near Beaufort. (Credit: Caylor Romines)*



*U.S. Army Pfc. Diana Fenner, 510<sup>th</sup> Human Resource Company human resource specialist, plants salt meadow cordgrass along the James River as part of Earth Week at Fort Eustis, VA. (credit: U.S. Air Force photo by Staff Sgt. Wesley Farnsworth)*

### Virginia Security Corridor Sentinel Landscapes

The Virginia Security Corridor is comprised of two sentinel landscapes: Potomac and Tidewater. This region encompasses over 2.9 million acres of land and water in Virginia’s “Golden Crescent,” an area of high military concentration, population growth, urban sprawl, and a growing technology industry. It is also home to some of the Commonwealth’s most abundant resources, including intact forests, open and agricultural lands, and complex marsh and riverine systems that connect to the Chesapeake Bay, the nation’s largest estuary.

The Virginia Security Corridor supports numerous military installations, representing every branch of the U.S. Armed Forces. Specifically, the Potomac Sentinel Landscape is anchored by Marine Corps Base Quantico, and the Tidewater Sentinel Landscape is anchored by Joint Base Langley-Eustis.

Partners established the Virginia Security Corridor to address three distinct lines of effort: 1) prevent encroachment on military testing and training activities while supporting Virginia’s working lands, 2) build resilience against climate-induced hazards, and 3) conserve and restore key habitats to benefit water quality and protected species. These sentinel landscapes will also provide a connection between the Middle Chesapeake and Eastern North Carolina Sentinel Landscapes, enabling coordination of opportunities at a regional scale.

## 2023 PARTNERSHIP HIGHLIGHTS: CAPACITY BUILDING IN SENTINEL LANDSCAPES



Designation as a sentinel landscape confers numerous benefits to local partnerships. These benefits include funding to hire a local sentinel landscape coordinator (SLC)<sup>9</sup> and improved recognition at the local, state, and national levels for projects within a sentinel landscape. In some cases, benefits may also include program-specific funding or priority consideration in existing funding processes to landowners and land managers within sentinel landscapes.

In addition, local sentinel landscape partnerships have access and exposure to the national Sentinel Landscapes Network, that is, the community of organizations, agencies, advisors, and individuals who contribute to the Sentinel Landscapes Partnership and implement local sentinel landscape partnerships across the nation. This network actively promotes the exchange of ideas and lessons learned through regular meetings, trainings, site visits, and other forums.



*Combined arms live-fire exercise with a Stryker Combat Vehicle crew at Joint Base Lewis-McChord in Washington. (credit: U.S. Army photo by Capt. Brian Harris)*

The following section shares case studies of the capacity-building opportunities the FCC makes available to local sentinel landscapes partnerships. These resources are critical to accelerating the land conservation and sustainable land management accomplishments of partners within sentinel landscapes.

### LegacyWorks Group Planning Support

All sentinel landscapes are expected to create an implementation plan within one year of designation. Recognizing the unique convening role that sentinel landscapes play, one of the FCC's goals for 2023 was to provide new capacity-building resources to sentinel landscape partners that will help them develop robust implementation plans to best target and leverage partner resources. These implementation plans can then evolve as the needs, goals, and threats to military and partners' missions change.

As part of this effort, in late 2022 the FCC partnered with LegacyWorks Group to support each of the SLCs in a strategic review of implementation plans across each of the designated sentinel landscapes. LegacyWorks Group is a nonprofit that catalyzes and facilitates collaborative initiatives that enable foundations, nonprofits, impact investors, and government agencies to partner to address critical conservation needs.<sup>10</sup>

In an initial rapid assessment of each sentinel landscape, LegacyWorks Group surveyed the SLCs to understand the common challenges their partners faced across their landscapes. These included—but were not limited to—urban development, encroachment on military installations, water and drought management, endangered species management, and securing of funding. LegacyWorks Group also sought to understand what additional capacity the SLCs needed to scale up their work.

<sup>9</sup> The SLC serves as a liaison between local stakeholders and agency headquarters, with the principal duty of facilitating and coordinating the activities of the local sentinel landscape partnership to achieve objectives and key results. The SLC also works to build relationships among local defense, conservation, and agricultural partners.

<sup>10</sup> For more information on LegacyWorks Group, see: <https://legacyworksgroup.com/>

In 2024, LegacyWorks Group will engage individually with each SLC and their partners to help them build out actionable, quantifiable goals for their implementation plans based on the challenges their landscapes face. LegacyWorks Group will also consult closely with the FCC on opportunities for providing additional capacity support to the SLCs. As LegacyWorks Group's support of the SLCs continues into 2024 and beyond, the FCC is excited to build the capacity of sentinel landscapes to engage new collaborators and resources in pursuit of achieving landscape-level conservation results.



*The Bureau of Land Management San Pedro Riparian National Conservation area on the Fort Huachuca Sentinel Landscape, which provides a swath of wildlife super highway (and super habitat) from the border to the Gila River. (credit: June Lowery, BLM)*

## Conservation Finance Network Coaching

While conservation easements remain a powerful tool for ensuring compatible land use around military installations and ranges, there are a range of conservation funding and financing opportunities—such as private philanthropy, bridge financing, ecosystem service markets, and blended capital—that partners in sentinel landscapes are well-positioned to pursue in support of sustainable land management.

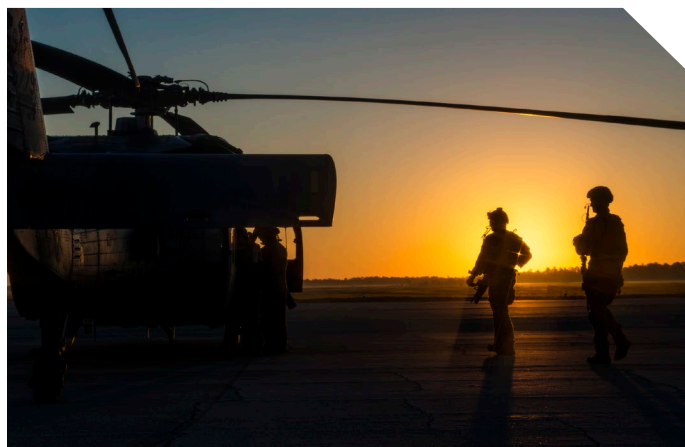
Since 2019, the FCC has engaged the nonprofit Conservation Finance Network (CFN) to provide specialized education and training opportunities to SLCs and partners, focusing on innovative conservation funding and financing opportunities.<sup>11</sup> This has included supporting sentinel landscape partner attendance at CFN's annual Conservation Finance Boot Camp as well as in-depth coaching engagements.

From 2021 to 2022, CFN worked in close collaboration with partners in the Fort Huachuca Sentinel Landscape to formulate funding strategies for priority project work meant to enhance climate adaptation strategies and increase installation resilience. Guided by CFN's expertise, the group coalesced around the opportunity to advance aquifer recharge in the San Pedro River basin. This initiative involved securing adequate and reliable funding for aquifer recharge project installation, operations, and maintenance.

During this process, the coalition of partners determined that, while the project targets within the San Pedro River National Conservation Area (governed by an MOU between municipal and county government and federal agencies like the DOI Bureau of Land Management [BLM]) were well-prioritized and strongly aligned, there was no plan or pathway for finding and securing the financial resources necessary for implementation.

CFN contributed by pinpointing the types of funding sources the Fort Huachuca Sentinel Landscape could explore and advising on how to translate its funding needs into short-, mid-, and long-term goals. This effort led to the creation of a funding guide for the Fort Huachuca Sentinel Landscape, which can serve as a template for other sentinel landscapes.

CFN's two-year engagement with the Fort Huachuca Sentinel Landscape partners not only supported the development of a successful 2023 REPI Challenge funding proposal<sup>12</sup> and a funding plan, but also built collaboration, trust, and an openness to new opportunities across the partnership.



*Air Force pararescuemen walk toward an HH-60G Pave Hawk helicopter at Avon Park Air Force Range, FL. (Credit: U.S. Air Force photo by Airman 1<sup>st</sup> Class Ryan Callaghan)*

<sup>11</sup> For more information on the Conservation Finance Network, see <https://www.conservationfinancenetwork.org/>

<sup>12</sup> For more information on the 2023 REPI Challenge recipients, see [https://www.repi.mil/Portals/44/2023\\_REPI\\_Challenge\\_Package\\_20230524.pdf?ver=sBwrAu2CY1GP7WwNlyYvkw%3d%3d](https://www.repi.mil/Portals/44/2023_REPI_Challenge_Package_20230524.pdf?ver=sBwrAu2CY1GP7WwNlyYvkw%3d%3d)

## Clean Water State Revolving Funds Financing Challenge

Building on the education and coaching provided by CFN to help SLCs explore new sources of funding and financing, the FCC identified clean water state revolving funds (CWSRFs) as a funding opportunity ripe for application in sentinel landscapes. The CWSRF program is a federal-state partnership through which the U.S. Environmental Protection Agency (EPA) provides low-cost financing to communities for a wide range of water quality infrastructure projects. These projects include municipal wastewater facilities, nonpoint source pollution control, decentralized wastewater treatment systems, stormwater runoff mitigation, green infrastructure, estuary protection, and water reuse.<sup>13</sup>

Historically, the vast majority of CWSRF financing has gone toward “grey” or built infrastructure projects. However, EPA received a \$2 billion funding influx from the Bipartisan Infrastructure Law in 2022 toward funding CWSRFs. This funding has increased interest in applying CWSRF financing toward “green infrastructure” projects that conserve and restore natural landscapes in support of controlling nonpoint source pollution and increasing water storage.

In 2023, the FCC supported Quantified Ventures in launching the CWSRF Sentinel Landscapes Financing Challenge. Quantified

Ventures works with organizations to design, capitalize, and scale investible solutions to address conservation challenges.<sup>14</sup> This challenge aims to provide additional planning capacity and finance expertise to SLCs in identifying, structuring, and launching natural infrastructure projects in or around sentinel landscapes with CWSRF funding. The U.S. Endowment for Forestry and Communities, which administers funding for the SLCs, was instrumental in building this new partnership and connecting the SLCs to this new capacity-building opportunity.

Quantified Ventures has worked with the SLCs to identify high-impact natural and working lands projects that support important national defense and conservation priorities. Once potential projects have been identified, Quantified Ventures provides project development and financial structuring services to ensure these projects are submitted to be considered for CWSRF loans or grants.

Quantified Ventures is piloting initial capacity support to the Camp Bullis, Fort Huachuca, and Joint Base Lewis McChord Sentinel Landscapes. While the primary focus of this work will be CWSRFs, Quantified Ventures will also be supporting SLCs in pursuing funds from other state revolving loan funds such as FEMA’s Safeguarding Tomorrow Revolving Loan Fund Program.



Airmen from the 148<sup>th</sup> Security Forces Squadron patrol a simulated forward operating base during a field training exercise (FTX) at Camp Ripley Training Center, Minnesota. (credit: U.S. Air National Guard photo by Audra Flanagan)

<sup>13</sup> For more information on the clean water state revolving funds, see <https://www.epa.gov/cwsrf>

<sup>14</sup> For more information on Quantified Ventures, see <https://www.quantifiedventures.com/>

# PARTNERSHIP OUTLOOK



Over the next year, the FCC will focus on two key activities: growing the number of sentinel landscapes through the 2024 Sentinel Landscape Designation cycle and coordinating funding opportunities among federal agency partners.

## 2024 SENTINEL LANDSCAPE DESIGNATION CYCLE

On May 25, 2023, the FCC launched the 2024 Sentinel Landscape Designation Cycle.<sup>15</sup> Occurring in conjunction with the 10-year anniversary of the Sentinel Landscapes Partnership, the 2024 Designation Cycle will be informed by 10 years of lessons learned in building innovative connections among partners in conservation, working lands, climate resilience, and national defense.

Specifically, in developing the application guidance for the 2024 Designation Cycle, the FCC identified multiple “success factors” that have been demonstrated by strong local sentinel landscape partnerships for applicants to consider as they complete their proposals. These factors include buy-in from military installation and range leadership, a committed and collaborative local landscape governance team, and achievable goals and objectives that are grounded by a well-defined landscape boundary.

The FCC anticipates announcing new sentinel landscapes in Spring 2024, with the goal of using these new designations to set the stage for the partnership’s next decade of impact in sentinel landscapes.

## FEDERAL FUNDING COORDINATION

Over the next year, the Sentinel Landscapes Partnership will work to identify further opportunities to coordinate funding across FCC member programs. This process will ensure that federal funding from each FCC member is fully realized and leveraged against other funding sources. Increasing

coordination of different funding opportunities will allow FCC member programs to have greater reach and impact, enabling individual sentinel landscapes to pursue more comprehensive projects in support of the partnership goals.

Highlighted below are several federal funding priorities available during 2024—specifically, funding through the America the Beautiful Challenge, DOD Readiness and Recreation Initiative, and onboarding of climate resilience coordinators on sentinel landscapes.

### Climate Resilience Coordinators

Following the successful climate resilience coordinator pilot in the Eastern North Carolina Sentinel Landscape, NRCS is contributing funding to facilitate the hiring additional climate resilience coordinators starting in 2024.

Over the upcoming year, the FCC and LegacyWorks Group will work with the SLCs from each currently designated sentinel landscapes to assist them in identifying key capacity and skillset needs to accelerate climate resilience-focused planning and implementation across their respective landscapes. These identified needs will inform the development of position descriptions for new climate resilience coordinators in each landscape. These roles will prioritize partnership development and funding coordination to address climate change-exacerbated threats, such as wildfire, sea level rise, extreme weather, and drought.

The sentinel landscape climate resilience framework developed by Chris Baillie—the Eastern North Carolina Sentinel Landscape climate resilience coordinator—will serve as a valuable resource in this effort. The framework lays out a nested approach to advancing climate resilience at multiple spatial scales: installation-level, defense supporting community-level, and regional/landscape-scale. It then identifies resources that are best suited to advancing resilience planning and implementation

<sup>15</sup> The FCC is responsible for running sentinel landscapes designation cycles on a biannual basis. This includes drafting the designation cycle application materials, reviewing proposals, and recommending final landscape designations to the Sentinel Landscapes Principals. The 2026 Sentinel Landscape Designation Cycle is expected to launch in Spring 2025.

at each of these scales. This focused effort to increase the resilience capacity and skillsets supporting local sentinel landscape partnerships exemplifies the FCC's dedication to climate-resilient installations, natural and operational lands, and the well-being of human and ecological communities.

### America the Beautiful Challenge

FCC members also continue to contribute funding to the National Fish and Wildlife Foundation's America the Beautiful Challenge, which streamlines grant-funding opportunities for new voluntary conservation and restoration projects across the United States.

DOD plans to commit \$25 million to the America the Beautiful Challenge through the REPI Program over five years (beginning in 2022), subject to the availability of funds, to specifically support activities within sentinel landscapes that promote military installation resilience to climate change. The USDA and DOI are also making significant contributions to the America the Beautiful Challenge, which offers great potential to further the goals of the Sentinel Landscapes Partnership. For the 2023 application cycle, DOI is contributing \$100 million, USFS is contributing \$10 million, and NRCS is contributing \$1 million (this funding is subject to change for future cycles).

### Readiness and Recreation Initiative

In March 2023, DOD and DOI jointly announced the launch of the Readiness and Recreation Initiative. Through this initiative, the DOI National Park Service will provide approximately \$40 million in funding from unobligated balances in the Land and Water Conservation Fund (LWCF), matched by \$40 million in funds from the DOD REPI Program.

The LWCF was established by Congress in 1964 and permanently funded by the 2020 Great American Outdoors Act. It has provided more than \$5 billion in matching grants for projects in every state and territory to safeguard natural areas, water resources, and cultural heritage and provide recreation opportunities for the public. DOD and DOI will work with states to identify and support eligible REPI projects that will expand public outdoor recreational opportunities that are compatible with military operations. States will apply for funding through a competitive process, and the funding could support projects on private, state, or local lands.<sup>16</sup>

The Readiness and Recreation Initiative provides the basis for enhanced engagement between DOD and DOI to work toward the Sentinel Landscapes Partnership's goal of increasing public access to outdoor recreation. Increasing coordination of different funding opportunities will allow FCC member programs to have greater reach and impact, enabling individual sentinel landscapes to pursue more comprehensive projects in support of the partnership goals.

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**“Through LWCF, these grants will allow DOD’s REPI Program to support on-the-ground partners to fund projects that enhance access to conserved land for local communities and military families, while ensuring the resilience of our military installations and ranges across the country.”**

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– Brendan Owens, Assistant Secretary of Defense for Energy, Installations, and Environment, DOD



*Mortar soldiers fire an 81-mm mortar round at Fort Benning, Georgia. Sustaining natural, resilient landscapes allows for uninterrupted training across the installation. (credit: U.S. Army photo)*

<sup>16</sup> For more information on the Readiness and Recreation Initiative, see <https://www.doi.gov/pressreleases/interior-and-defense-departments-launch-readiness-and-recreation-initiative-preserve>

## APPENDIX A: ACRONYMS

- BIA:** Bureau of Indian Affairs
- BLM:** Bureau of Land Management
- CFN:** Conservation Finance Network
- DOD:** U.S. Department of Defense
- DOI:** U.S. Department of the Interior
- EPA:** U.S. Environmental Protection Agency
- FCC:** Sentinel Landscapes Federal Coordinating Committee
- FEMA:** Federal Emergency Management Agency
- FSA:** Farm Service Agency
- FY:** Fiscal Year
- HMGP:** Hazard Mitigation Grant Program
- IGSA:** Intergovernmental Support Agreement
- MOU:** Memorandum of Understanding
- NDAA:** National Defense Authorization Act
- NOAA:** National Oceanic and Atmospheric Administration
- NPS:** National Park Service
- NR:** Natural Resources
- NRCS:** Natural Resources Conservation Service
- OLDCC:** Office of Local Defense Community Cooperation
- REPI:** Readiness and Environmental Protection Integration
- SLC:** sentinel landscape coordinator
- USDA:** U.S. Department of Agriculture
- USFS:** U.S. Forest Service
- USFWS:** U.S. Fish and Wildlife Service



## APPENDIX B: SUPPORTING FEDERAL PROGRAMS

FCC members administer many financial and technical assistance programs that sentinel landscapes partners use to meet their goals and objectives. Some examples include the NRCS Agricultural Conservation Easement Program, Regional Conservation Partnership Program, Environmental Quality Incentives Program, and Conservation Stewardship Program; the USFS Forest Legacy Program; the DOD Office of Local Defense Community Cooperation’s (OLDCC) Installation Resilience Program; and the USFWS Cooperative Endangered Species Conservation Fund.

Aside from the services and programs represented by FCC members, many other federal departments, agencies, and programs have land-use missions related to conservation, agriculture, forestry, defense, and resilience that could contribute to strategic goals for sentinel landscapes. A list of federal agency programs that have been or can be applied in sentinel landscapes to meet the partnership’s objectives is found in Table 1. These programs provide a range of complementary benefits including tax reductions, agricultural

loans, disaster relief, educational opportunities, technical aid, and funding for conservation easements and nature-based solutions.

This list is not comprehensive; however, it demonstrates the Federal Government’s broad commitment to conservation and resilience within and beyond the USDA, DOD, and DOI. The diversity of federal programs listed also represents a significant opportunity for interagency coordination and collaboration to align funding and more efficiently achieve greater outcomes within sentinel landscapes.



In addition to the programs listed in Table 1, state and local government agencies administer many other landowner assistance opportunities that can help private landowners manage their land sustainably. 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/>.

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

Agency	Agencies/Programs	About	Relevant Programs
 DOD	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.	
	Army, Air Force, Navy Community Partnership Programs	The use of Intergovernmental Support Agreements (IGSAs) under 10 U.S.C. 2679 allows military services to create formal partnerships with local and state governments for the provision, receipt, or sharing of installation and community support services, including land preservation and environmental stewardship.	Army, Air Force, Navy Community Partnership Programs
	Natural Resources (NR) Program	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
	OLDCC	OLDCC furthers the priorities of the National Defense Strategy by supporting the readiness and resilience of military installations and defense communities across the nation.	Community Noise Mitigation Program; Defense Community Infrastructure Program; Installation Resilience Program
	REPI Program	The REPI Program protects military missions by helping remove or avoid land-use conflicts near military installations, addressing regulatory restrictions that inhibit military testing and training activities, and enhancing long-term climate resilience.	

(Continued on following page)

**Table 1:** Federal Agencies and Programs Aligned with Sentinel Landscapes Goals and Objectives (Continued)

Agency	Agencies/Programs	About	Relevant Programs
 DOI	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 and Range Program; Endangered Species Program; Water Program; Wildlife and Parks Program
	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.	Rangeland Management Program; Riparian and Wetlands Program; Threatened and Endangered Species Program; Soil, Water, and Air Program; Wildlife 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 children and families to get outside.	Federal Lands to Parks Program; Land and Water Conservation Fund Program; Rivers, Trails, and Conservation Assistance Program
	USFWS	USFWS is the premier government agency dedicated to the conservation, protection, and enhancement of fish, wildlife and plants, and their habitats.	Coastal Program; Cooperative Endangered Species Conservation Fund; National Coastal Wetland Conservation Grant Program; North American Wetlands Conservation Act Grants; Partners for Fish and Wildlife Program; Recovery Challenge Grants; Recovery Planning and Implementation; Wildlife and Sport Fish Restoration Program
 USDA	Farm Service Agency (FSA)	FSA equitably serves all farmers, ranchers, and agricultural partners through the delivery of effective, efficient agricultural programs for all Americans.	Emergency Conservation Program; Farmable Wetlands Program; Incentives and Conservation Reserve Program
	NRCS	NRCS provides America's farmers and ranchers with financial and technical assistance to voluntarily put conservation on the ground, helping not only the environment but also agricultural operations.	Agricultural Conservation Easement Program; Agricultural Management Assistance Program; Conservation Stewardship Program; Environmental Quality Incentives Program; Healthy Forest Reserve Program; Regional Conservation Partnership Program
	USFS	The mission of 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.	Farm Bill Programs; Forest Legacy Program
Other Agencies	Department of Commerce—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; National Coastal Resilience Fund
	Department of Homeland Security—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.	Building Resilient Infrastructure and Communities; Hazard Mitigation Grant Program (HMGP); Flood Mitigation Assistance Program; HMGP Post-Fire Grant
	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





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