

# Northwest Florida Sentinel Landscape

The Northwest Florida Sentinel Landscape (NWFSL) creates a regional approach to land stewardship and coastal resilience that emphasizes collaborations to achieve compatible land uses to minimizing encroachment threats, alleviate constraints to military missions in ways that create locally relevant sustainability and conservation outcomes appreciated by local stakeholders. This [Sentinel Landscape designation](#) provides its partners with greater access to funding and assistance from federal, state and local government and private sector programs to better address the complex demands of population growth, economic development, rural vitality, military readiness, climate change and natural resource protection in Northwest Florida.



*Photo by Department of Defense*

The NWFSL stretches east from Escambia County (Pensacola) to Jefferson County (Monticello). This boundary encompasses the focus/priority areas of NWFSL partners and is reflective of the goals and objectives of the NWFSL. As depicted in the NWFSL

[story map](#) and [interactive online map](#), nearly the entirety of this area furthers installation missions as it is under a Restricted Airspace; a Military Operations Area; within a military installation; and/or is used to access the Eglin Gulf Testing and Training Range (EGTTR). The NWFSL also contains remote sites and outlying airfields essential for EAFB, TAFB, NASP and NASWF aviator training. Military operations originating from Ft. Rucker (AL), Ft. Benning (GA), Robins AFB (GA), Moody AFB (GA) and NAS Jacksonville (FL) also take place within the proposed NWFSL, its overlying MOAs, and EGTTR.

The opportunity exists in Northwest Florida to create a network of priority lands that will conserve watersheds, wildlife habitat, agricultural lands, community recreation opportunities, and will support the missions of Northwest Florida's military installations. The purpose of the NWFSL proposal is to create a regional approach to land stewardship and coastal and natural systems resilience that emphasizes collaborations to achieve partnership goals. The most significant challenges facing the partners of the NWFSL are:

Population Growth. Between 2010 and 2018, the populations of the five counties home to the five principle installations increased between 6% and 30%. This growth creates numerous natural resource management challenges, impacts the water quantity, and water quality of rivers and the ecologically and economically important estuaries on the Gulf of Mexico, and can reduce recreational opportunities and quality of life of airmen and soldiers.

Climate Crisis. The 2019 Report on Effects of a Changing Climate to the Department of Defense acknowledged the increasing risk that climate change poses to U.S. military installations and their missions globally. The NWFSL will further the Secretary of Defense's call for "integrating climate considerations into the Department's policies, strategies, and partner engagements." For example, TAFB was heavily impacted by wind and storm surge from Hurricane Michael providing a prime example of this risk and is being rebuilt to be climate resilient. Hurricane Michael left catastrophic and severe impacts to 12,000 acres of merchantable timber at TAFB and affected 2.8 million acres of Florida timberlands through the heart of the proposed NWFSL. With 80% of those lands owned by more than 16,000 private landowners there is much uncertainty as to how much of the damaged forest land will be converted to a land use not compatible with the military mission of nearby installations. Studies relevant to the NWFSL area indicate increasing storm intensity and frequency will in turn increase the urgency of regional collaboration to mitigate the effects of extreme weather, storm surge, sea level rise and coastal erosion on

mission capabilities. This will be done in ways that bolster mission resilience, create important locally relevant social, environmental, and economic benefits to local stakeholders.

To achieve regional resiliency and sustainability, the partners of the NWFSL are enhancing their coordination pursuing the following goals and objectives to be employed in 2022 through 2024:

1. Create a regional partnership platform for the NWFSL, increase recognition of sentinel landscapes within Florida, and enhance coordination and problem-solving ability among stakeholders and partners (including landowners, military, state natural resource and agricultural agencies, funding agencies and entities, and NGOs) to address resiliency and sustainability challenges to military installations, working lands and wildlife.
2. Retain working agriculture and forestry lands as compatible resilient and sustainable land uses that support the evolving military missions of NWFSL installations and that enhance wildlife habitat.
3. Increase the resiliency and sustainability of natural systems by conserving and restoring habitat and water resources with an emphasis on listed species recovery, water quality, and water quantity.
4. Identify, implement and accelerate projects that mitigate coastal risks and increase the climate resiliency of military installations and the landscapes that overlap mission footprints.

Guided by our goals and objectives, our Partnership has formed three work groups to be our sentinel landscape’s conservation delivery network for project development and coordination.

## SUPPORTING MILITARY READINESS

The 16-county NWFSL has hosted military bases since Spanish colonization and now is home to nine of the nation’s most important installations and ranges. Supporting the 2018 National Defense Strategy, the coastal locations of installations in Northwest Florida are ideally situated for training as they have direct access to training airspace for live-fire training over the Gulf of Mexico using autonomous target aircraft. Eglin AFB, Tyndall AFB, Naval Support

Activity Panama City (NSAPC) and the Eglin Gulf Test and Training Range (EGTTR) are all critical assets for testing the new, more lethal, technologies and weapons called for in the 2018 NDS.

Eglin Air Force Base is the designated anchor military installation for the NWFSL. Nearly all air-to-ground and air-to-air weapons systems begin on Eglin AFB, and it is the largest land-based testing range east of the Rocky Mountains. Various organizations on Eglin are responsible for research, development, and acquisition of weapon systems including explosive component development, arena and



*Photo by Department of Defense*

sled test facilities, aircraft stores compatibility and safe separation testing, guidance systems testing, conducting air-to-ground weapons’ ballistic characteristics and terminal effects on both base ground ranges and over water in the EGTTR. Tyndall AFB hosts quarterly Combat Archer exercises for live fire air-to-air weapons training over the EGTTR and provides the full scale and sub-scale drones used as targets as well as range safety aircraft to keep the area clear of ships, boats and aircraft that could intrude into the live fire area. NSAPC tests and evaluates subsurface, surface, and air unmanned and autonomous systems in the EGTTR.



These weapons would be useless without highly trained personnel to employ them. Naval Air Stations Pensacola and Whiting Field, Saufley Field, and Tyndall AFB train the aircrew members who will be the future users of these weapons. Hurlburt Field accommodates the 1st Special Operations Wing (1 SOW), Headquarters Air Force Special Operations Command (AFSOC), an Air Force major command, and several associate units. The wing's core missions include close air support, precision aerospace firepower, specialized aerospace mobility, intelligence, surveillance and reconnaissance (ISR) operations, and agile combat support. NASPC trains the divers, amphibious warfare specialists and Mine Warfare Experts who will keep the seas clear for navigation in the future. The EGTR, covering the eastern Gulf of Mexico to the south of the NWFLS, is a unique national resource, larger than all other training ranges inside the continental US combined, the only test range in the U.S large enough for a full-range test flight of hypersonic missiles. It supports live-fire air, surface and sub-surface weapons testing and training for the bases within the proposed SL area plus many more bases from around the world.

The military sector provides the second largest economic impact in Florida trailing only tourism generating nearly \$49.3 billion in direct defense spending with \$96.6 billion total impact, supports nearly 860,200 jobs in 2020 and 8.5% of Florida's 2020 Gross State Product. As a result, a diverse set of partners at the federal, state, and local levels are joining to form the Northwest Florida Sentinel Landscape Partnership. In 2020 the economic contribution of the military represented 28.6% of the total economy of Northwest Florida. 63.3% of Okaloosa County's gross domestic product (GDP) is attributable to National Defense, as is 34.8% of Escambia County's GDP, 30.4% of Santa Rosa County's GDP, 34.6% of Bay County's GDP and 14.5% of Walton County's GDP (Source: [The Florida Defense Support Task Force's "Florida Defense Industry Economic Impact Analysis Report 2022 Update"](#), Page 62 Table 12. Northwest Region: Defense Impacts by County, 2020.

## **BENEFITING WORKING LANDS**

The vast majority of the 11,306 square-mile NWFLS is dedicated to agricultural and forested working lands. This collaborative effort seeks to sustain working farms and forests and conserve habitat through providing incentives to landowners to voluntarily promote land uses that help ensure DoD installations and ranges in Northwest Florida can continue to host a diverse and growing set of military missions compatible with the region's military missions. To



*Photo by Carlton Ward*

keep these private lands working, the Air Force and Navy, U.S. Fish and Wildlife Service, and U.S. Department of Agriculture's Natural Resources Conservation Service are working with local, state, and private conservation partners to better coordinate and to test and demonstrate strategies that result in increased landowner participation in stewardship programs. We will create a network of priority lands that will conserve watersheds, wildlife habitat, agricultural lands, community recreation opportunities, and the missions of Northwest Florida's military installations.

Timber and agricultural lands are essential connectors between public and private conservation lands, military installations and ranges and our communities in Northwest Florida. Key to maintaining these landscape connections is promoting the stewardship of renewable pine forests and enhancing the vitality of agriculture which support rural jobs and the local economies throughout the region. Rapid population growth and tourist-oriented development along the Gulf of Mexico coast have led to unprecedented landscape conversion that threatens the missions of our region's military installations and the long-term sustainability of nearby forestry and agricultural operations.

To help ensure forests and agriculture continue to remain vibrant and support rural economies, the partnership for the Northwest Florida Sentinel Landscape is bringing together conservation groups, agencies, and willing landowners to leverage the conservation funding programs of federal and state agencies and private organizations. Through voluntary programs and incentives, eligible landowners and communities who want to continue to be stewards of their working lands may receive financial assistance to do so while also protecting the mission of our military installations. These programs include Forest Legacy Program, Healthy Forest Reserve Program, Agricultural Conservation Easement Program, Regional Conservation Partnership Program, the Readiness and Environmental Protection Integration (REPI) Program and Florida's Rural and Family Lands Program. In turn, these partnerships will help buffer our Air Force and Navy bases from development and land use changes, protect flight paths and maintain the viability of agricultural and forestry production in the region.

The REPI Program [reported to Congress](#) from FY 2012 through FY 2020 sentinel landscapes partnerships across the nation enabled DoD to leverage \$178 million in funds with \$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, a 4:1 match. This crucial investment has permanently protected over 515,000 acres of land around high-value military testing and training areas and implemented sustainable management practices on an additional 2.7 million acres. In Florida through FY2020, DoD and partners with other federal agencies and the State of Florida have invested \$199.5 million to protect and conserve compatible land uses on 78,008 acres near military installations throughout the state, including \$60 million to conserve 35,241 acres within the NWFSL. The NWFSL will build on these past accomplishments to create a regional approach to land stewardship and coastal and natural systems resilience that emphasizes collaborations to achieve partnership goals.

## CONSERVATION OPPORTUNITIES

The region's exceptional biodiversity supports many threatened, endangered, and at-risk species which can benefit from innovative stewardship practices on the private lands surrounding and connecting our military installations. Thriving and recovering populations of listed species on non-military lands provides potential to reduce the regulatory burden associated with on-installation training and testing. For example, successful stewardship of Eglin AFB, Apalachicola National Forest and the Red Hills ensures three of the largest remaining populations of the endangered-cockaded woodpecker thrive. Nokuse Plantation and Eglin AFB are working to restore gopher tortoise populations which could help preclude the listing of gopher tortoises and other species.



*Photo by George Willson*

Partners cooperatively implement landscape protection programs for lands and habitat throughout the NWFSL which are essential for listed species and working lands to persist despite the threats of climate change and land use conversion. The USAF has also partnered with the US Fish and Wildlife Service to restore habitat for the endangered Okaloosa darter whose 95% of its entire range is found on Eglin AFB. This partnership may allow the Okaloosa darter to be removed from the Endangered Species list.

There are 4,062 square miles of conserved lands in more than 75 tracts of critical public and private conservation lands managed by our partners that protect habitat longleaf pine forests, the riverine ecosystems, and coastal areas. The managed



areas provide important habitat for many sensitive species including the Red cockaded woodpecker, Gopher tortoise, Eastern indigo snake, marine turtles, shorebirds, and numerous other federally listed species.

The region's 2.6 million acres of public and private conservation lands provide important habitat for these protected species and many others. These areas include Eglin AFB and NAS Whiting Field, Blackwater, Pine Log and Tate's Hell state forests, Nokuse Plantation, Econfina Water Management Area, Apalachicola National Forest, and the protected corridors of the Perdido, Escambia, Blackwater, Yellow, Choctawhatchee, Econfina Creek and Chipola and Apalachicola Rivers. Northwest Florida is home to some of the nation's largest remaining stands of longleaf pine with Eglin AFB having the largest contiguous old growth longleaf pine forest in existence plus the largest intact sandhill ecosystem in the Southeast. The region has extensive industrial pine forests many of which are being restored to longleaf pine as part of America's Longleaf Restoration Initiative.

The NWSFL is also one of the five richest biodiversity hotspots in the continental United States providing habitat for 29 Federally Endangered, 20 Threatened, and two Candidate species, and the region. The Apalachicola River with its floodplain and adjacent ravines has the highest species diversity of reptiles (over 80 species) and amphibians (over 40 species) found north of Mexico. It also provides habitat for more than 280 species of birds, over 130 species of fish, over 52 species of mammals, and more than 1,300 plant species including over 70 different species of trees.

## LOOKING FORWARD

This partnership has been established around a shared vision for the Northwest Florida Sentinel Landscape to be a "win-win-win" for national security, working lands, and conservation. The partners for the Northwest Florida Sentinel Landscape are using this federal designation to access the many financial incentive and other programs of federal and state governments and those of private organizations to promote forestry and agricultural production, natural resource conservation, coastal resiliency and sustainability to avoid encroachment of incompatible land uses to maintain the essential mission-oriented military training and testing of Northwest Florida's military installations. The partners for the Avon Park Sentinel Landscape and the NWFSL and the proposed Northeast Florida Sentinel Landscapes have executed a Sentinel Landscapes in Florida Memorandum of Understanding to establish a framework for coordinating efforts in support of Florida's sentinel landscapes. Our partners may also pursue legislation that formally recognizes existing and proposed Sentinel Landscapes in Florida.



*Photo by Justin Grubb, Running Wild Media*

## KEY CONTACTS FOR NORTHWEST FLORIDA SENTINEL LANDSCAPE

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Please visit the NWFLS [story map](#) that provides a narrative description and maps highlighting the features of the Northwest Florida Sentinel Landscape. Please visit the NWFLS [interactive online map](#) that details our partners' priorities and data related to military missions and land conservation projects.

