## **SOUTHERN INDIANA**SENTINEL LANDSCAPE

Indiana | est. 2022



Beginning about 20 miles south of Indianapolis, the Southern Indiana Sentinel Landscape comprises a unique patchwork of land uses. The Landscape is anchored by four critical Department of Defense installations and ranges: Naval Support Activity Crane, the Lake Glendora Test Facility, Atterbury-Muscatatuck Training Center, and the Indiana Air Range Complex. These facilities provide a variety of testing and training opportunities for the Army, Navy, Air Force, Marine Corps, and National Guard, as well as federal and state partners. The Landscape also contains six state parks, seven state forests, nine state fish and wildlife areas, 39 state-dedicated nature preserves, one National Forest, and three National Wildlife Refuges—areas where federal, state, and local stakeholders are engaged and actively working to protect natural resources, sustain the military mission, enhance public recreation, and preserve threatened and endangered species habitats.

Despite these protected areas, the Landscape is faced with a number of encroachment challenges including incompatible development, declines in water quality, risks of drought and flooding, challenges to soil health and loss of prime soils, invasive species, and threatened and endangered species habitat loss. To address these challenges, stakeholders came together in 2022 to form the Southern Indiana Sentinel Landscape to collaborate on projects to achieve mutually beneficial goals while protecting the military mission and enhancing conservation efforts.

## SUSTAINABLE WORKING LANDS FOR HABITAT, RESILIENCE, AND RECREATION

Much of the land surrounding the Southern Indiana Sentinel Landscape installations is forested or agricultural. These natural and working lands provides an opportunity for partners and stakeholders to sustainably manage forests, build soil health

Figure 1: Southern Indiana Sentinel Landscape Map

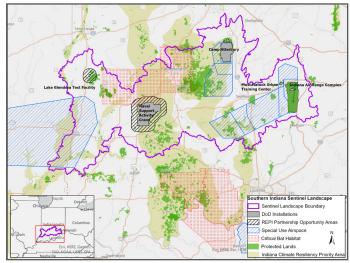


Table 1: Southern Indiana Sentinel Landscape Footprint Details (from year established through fiscal year 2021)

Total Protected Acres <sup>1</sup>	0
Total Enrolled Acres <sup>2</sup>	0
Active Base Area	132,493
Total Sentinel Landscape Area	3,546,232

and resiliency on agricultural lands, improve ecosystem health, and maintain areas compatible with the military mission.

Within the first five years as a sentinel landscape, the Southern Indiana Sentinel Landscape aims to enhance forestland management including oak and hickory regeneration, reforestation projects, and invasive species removal; protect sensitive floodplains and wetland corridors; promote agricultural best management practices; and connect natural lands for habitat and recreation opportunities.

<sup>&</sup>lt;sup>1</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>&</sup>lt;sup>2</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.



Both listed under the Endangered Species Act, the Indiana and northern longeared bats have declined in numbers partly due to the loss of mature forests, which they use for foraging and roosting. Both species are also greatly affected by a fungal disease called White-Nose Syndrome, which affects bats during their hibernation. (U.S. Fish and Wildlife Service photo).

Sustainable forestry and invasive plant removal projects decrease the likelihood of wildfires during drought conditions, while reforestation projects increase floodwater storage and reduce nutrient loads and sedimentation during heavy storms. In addition to improving landscape resilience by maintaining and connecting healthy forests, the project also addresses habitat needs of the federally endangered Indiana bat, federally threatened northern long-eared bat, hellbender salamander, and neotropical migratory songbirds among others. Combined, these efforts have the potential to mitigate the effects of existing encroachment threats or avoid them altogether.

## PARTNERSHIPS FOR HEALTHY RIVERS AND WATERSHEDS

Southern Indiana Sentinel Landscape partners are building on years of successful collaborations focused on river and watershed protection. Protecting and enhancing rivers and their watersheds further improves landscape resilience. The ongoing Healthy Rivers Initiative, managed by the Indiana Department of Natural Resources, is one of the largest land conservation initiatives ever undertaken in Indiana. Through this initiative, natural resource agencies and organizations work with willing landowners to permanently protect land located within the Muscatatuck River and Wabash River floodplains.

Implementation of regional watershed management plans, state and federal wetland and waterway programs, and perpetual easement programs will allow for improved resiliency and encroachment protections. These projects involve the protection, restoration, and enhancement of riparian and aquatic habitats with a focus on the species of greatest conservation need, including threatened and endangered, and declining migratory birds and waterfowl. These initiatives also

benefit the public and surrounding communities by providing flood protection to riparian landowners and increasing tourism and public access to recreational opportunities such as hunting, fishing, hiking, and bird watching. In addition, best management practices on agricultural lands reduces nutrient runoff and increase resilience to droughts and flooding.

Working with existing partnership projects and other riparian and watershed initiatives, the Southern Indiana Sentinel Landscape aims to promote water conservation within wetlands and floodplains by providing watershed and riparian corridor protections and waterway and wetland restoration.

## **Key Partners**

- Department of Defense
- ★ U.S. Department of Agriculture Natural Resources Conservation Service
- ★ U.S. Department of Agriculture Forest Service
- ★ U.S. Fish and Wildlife Service
- Naval Support Activity Crane and Lake Glendora Test Facility
- Atterbury-Muscatatuck Training Center
- ★ Indiana Air National Guard Indiana Air Range Complex
- ★ Indiana Department of Natural Resources
- ★ Indiana Economic Development Corporation
- ★ Indiana Defense Task Force
- ★ Conservation Law Center Indiana University Maurer School of Law
- ★ Indiana University Center for Rural Engagement
- ★ Indiana University Environmental Resilience Institute
- ★ Purdue University Dept. of Agriculture / County Extension Program
- ★ The Nature Conservancy
- ★ White River Military Coordination Alliance
- ★ The American Farmland Trust
- ★ Ouabache Land Conservancy
- George Rogers Clark Land Trust
- Sycamore Land Trust
- ★ Oak Heritage Conservancy
- \* Radius Indiana
- \* Regional Opportunities Initiative



Historically, the Wabash River served as a significant transportation corridor. Today, the Wabash River and its tributaries are no longer utilized for commercial navigation, but are still a vital source of water supply and recreation in the region (U.S. Army Corps of Engineers photo).