

Apalachicola – Eglin Critical Linkage

The Apalachicola–Eglin Critical Linkage region located in the heart of Florida’s Panhandle, is one of the most biologically significant regions in the United States. Identified as one of six biodiversity hotspots nationwide, the region provides a corridor between two of Florida’s largest conservation areas: Apalachicola National Forest and Eglin Air Force Base. The critical linkage here would support a corridor for this exceptional region of biodiversity, aid in the protection of intact hydrologic and geologic systems, and anchor the ecological integrity of the Florida Wildlife Corridor in the central to western Panhandle.

The region’s biodiversity is driven by its unique position at the intersection of the Gulf Coastal Plain and the Atlantic Coastal Plain, as well as its humid climate and extensive river valleys. The Apalachicola River basin, which overlaps with the linkage and has its headwaters in the Appalachian Mountains, contains more species of reptiles, fish, mussels, and amphibians than any other river basin in North America. Rare natural communities such as pitcher plant bogs, steephead ravines, and longleaf pine savannas support a wide range of rare and endemic species, including the purple skimmer, Apalachicola dusky and reticulated flatwoods salamander, pinewoods aster, Gholson’s blazing star, the elfin butterfly and its host plant, the sundial lupine. This concentration of isolated habitats has created a center of endemism, making the corridor globally significant for both species richness and evolutionary diversity.

The majority of the upland natural land in this linkage is sandhill in the Ecofina River region. This high quality, xeric landscape features sandhill upland lakes, steephead ravines, pinelands and numerous rare species. Working timberlands dominate much of the unprotected land in the linkage, comprising more than half of the landscape outside existing conservation areas. These lands play a critical role in maintaining large, connected corridors of habitat, supporting species such as the red-cockaded woodpecker, eastern indigo snake, and Florida black bear, while also providing carbon sequestration, aquifer recharge, and flood regulation. Timberlands in this region retain some of the function of native pine flatwoods and offer long-term potential for ecological restoration to resilient longleaf pine systems. Ensuring their protection is essential both for ecological connectivity and for sustaining ecosystem services that benefit surrounding communities.

The coastal bays associated with this linkage - Apalachicola Bay, East Bay, St. Joseph Bay, and Choctawhatchee Bay - support a vibrant aquaculture industry dependent on clean, reliable freshwater from rivers such as the Apalachicola, Econfina, and Choctawhatchee. Loss of natural or working lands within the corridor would directly threaten the water quality and hydrologic balance that underpin these estuarine systems and the regional economies they sustain.

While the region has historically remained rural, development pressures are rising along the Emerald Coast, creating growing concern for the future of working lands and the narrowest connections within the corridor. Much of the unprotected timberland is held by large private landowners, and bottlenecks within the linkage are particularly vulnerable to fragmentation. Protection of the Apalachicola–Eglin Critical Linkage is therefore essential for sustaining biodiversity, water quality, rural economies, and the resilience of both natural and human communities in the central and western Panhandle.



