

Big Cypress – Caloosahatchee Critical Linkage

The Big Cypress–Caloosahatchee Critical Linkage secures the first northward connection between the Everglades and the rest of the Florida Ecological Greenways Network (FEGN) and Florida Wildlife Corridor. It is central to Florida panther recovery, hydrological resilience, and maintaining inland habitats as sea level rise and development reshape South Florida. The linkage is defined by a mosaic of sloughs, cypress swamps, wet prairies, flatwoods, and associated uplands. These systems, covering roughly half of the unprotected land, are among the highest-priority landscapes for rare species, biodiversity, and floodplain protection. Seasonal hydrology sustains aquifer recharge, water storage, and ecosystem productivity that support both Big Cypress National Preserve and the Greater Everglades Ecosystem.

Ranchlands and improved pasturelands comprise over 30% of this linkage. Managed by tribal and local ranching families, these working lands remain ecologically valuable by maintaining open space, sustaining hydrology, and buffering natural systems. Together, ranchlands and wetlands form the connective matrix necessary for wide-ranging species such as the Florida panther and black bear.

For the Florida panther, this linkage is pivotal. Historically, the Caloosahatchee River was a meandering stream and chain of lakes and wetlands that probably posed little barrier to panther movement. Beginning in the late 19th century, a series of dredging and dike construction projects were implemented to connect Lake Okeechobee to the Gulf of Mexico and to create a deeper and wider channel for ships. These changes made the river much more of a barrier to panthers, especially females, so for several decades the river marked the northern edge of its breeding range. While females have recently been documented crossing the river, no established population exists north of it. The corridor represents the primary “dispersal zone” for expansion, making it essential for recovery. Black bears also use this landscape, moving between subpopulations in Big Cypress and central Florida. Other focal species include the endemic Big Cypress fox squirrel and a diversity of plants and animals tied to wetland and pine flatwood habitats.

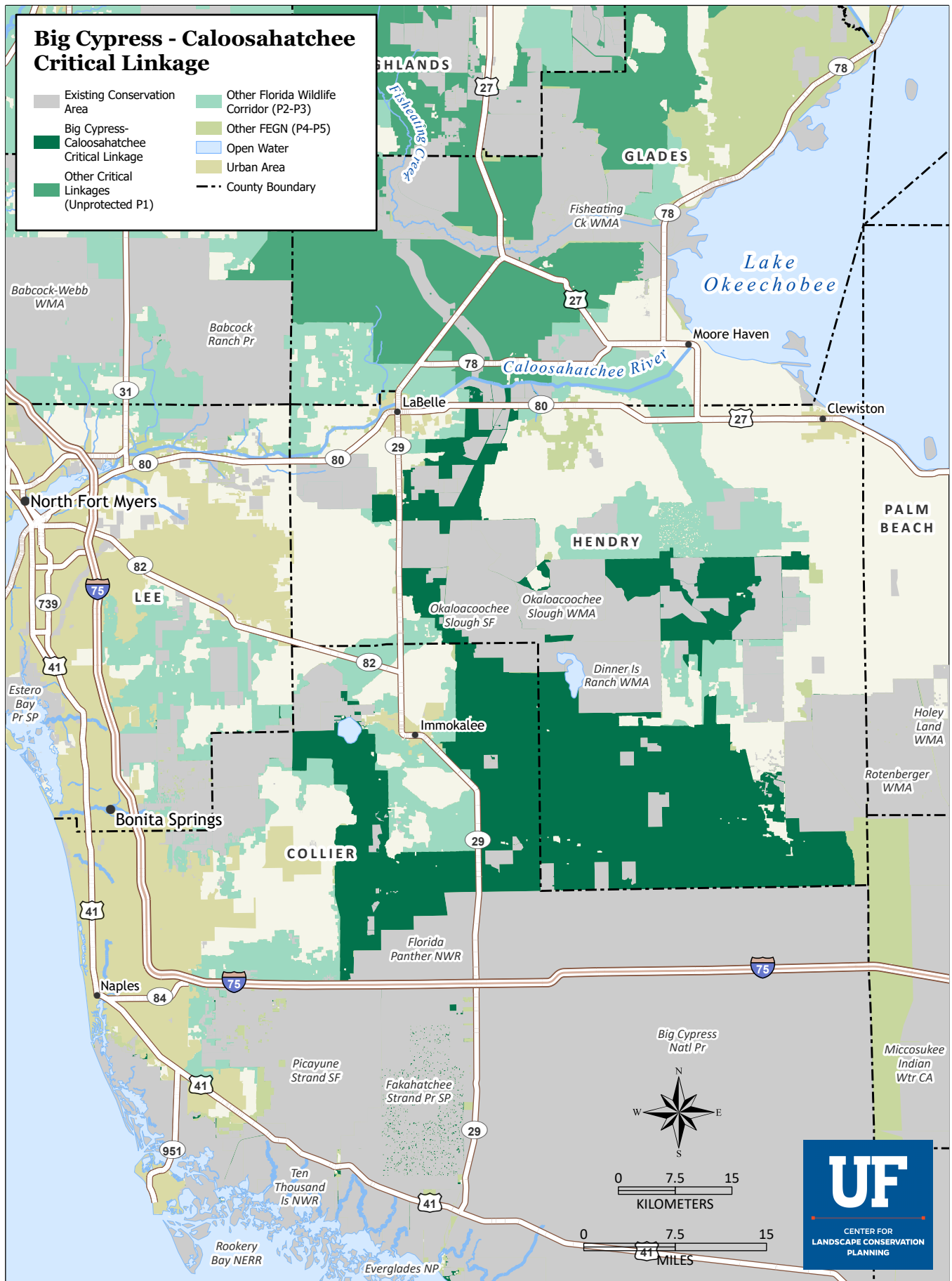
Development pressure in Collier and Lee counties, coupled with large-scale rural proposals, directly overlaps with panther habitat. Road mortality is a leading cause of panther deaths, particularly along State Road 80, I-75, and county roads lacking crossings. Sea level rise adds further vulnerability; three feet of rise by century’s end could inundate up to 30% of existing panther habitat. Saltwater intrusion and altered hydrology also threaten ecological integrity.

In 2024, the Everglades to Gulf Conservation Area was established to protect millions of acres north of Big Cypress through conservation easements and landowner partnerships. This initiative advances land protection, sustainable agriculture, and ecosystem services. Continued collaboration with conservation groups and local stakeholders will be critical to addressing development pressure, securing dispersal zones, and integrating wildlife crossings into transportation planning.

The Big Cypress–Caloosahatchee Critical Linkage remains one of the most vulnerable yet essential linkages in the Florida Wildlife Corridor. Its protection will determine whether panthers, bears, and other species can adapt to a changing climate while safeguarding the hydrological systems and rural landscapes that underpin South Florida’s resilience.

Big Cypress - Caloosahatchee Critical Linkage

- Existing Conservation Area
- Big Cypress-Calooosahatchee Critical Linkage
- Other Critical Linkages (Unprotected P1)
- Other Florida Wildlife Corridor (P2-P3)
- Other FEGN (P4-P5)
- Open Water
- Urban Area
- County Boundary



Big Cypress - Caloosahatchee Critical Linkage Generalized Land Cover (CLC 4.0)

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| Other Critical Linkages (Unprotected P1) | Marine Waters and Wetlands | Solar Farms |
| Existing Conservation Area | Mining | Timberlands |
| Developed | Open Freshwater | Upland Natural |
| Freshwater Wetland | Other Agriculture | Urban Area |
| | Ranchlands | Open Water |
| | Rural | County Boundary |

