

Appendix A

Glossary

Action Area – the spatial extent of the physical environment affected by the proposed action that include the Plan Area and existing roads upon which traffic volume (≥ 100 trips/day leaving or entering Transportation Analysis Zones (TAZs) that coincide with the Plan Area) will be added by development proposed in the ECMSHCP.

Plan Area – The sum of the HCP area (159,488 acres) comprised of the Covered Activities Area (43,767 acres), Preserve/Plan-Wide Activities Area (90,576 acres), Very Low-Density Development Area (2,667 acres), Base Zoning Area (2,431 acres), and Lands Eligible for Inclusion (20,047 acres).

- **Covered Activities Area** – the 43,767-acre Open Lands within the Plan Area, including the 5,027 acre boundary of Ave Maria, designated for an additional 39,973 acres of commercial and residential development and Earth mining activities.
- **Preservation/Plan-Wide Activities Area** – the 90,576 acres of lands in the Plan Area where use will be limited to the types of agricultural, ranching, and other rural activities that have occurred historically and are expected to continue. Activities expected to occur in this area include Crop Cultivation; Ranching/Livestock Operations; Forestry and Silviculture; Recreation; Exotic and Nuisance Species Control; and Oil and Gas Exploration and Production.
- **Very Low-Density Use Area** – the 2,667-acre area designated for Very Low Density Use for such purposes as isolated residences, lodges, and hunting/fishing camps. Any construction in this area would be limited to no more than one dwelling unit per 50 acres, with no more than 10 percent of the total existing native vegetation subject to clearing.
- **Base Zoning Area** – the 2,431 acres of the Plan Area comprising the Half Circle L Ranch, east of Immokalee. These 2,431 acres represents an RLSP “Open” overlay area, where either development or preservation could occur under RLSP regulations, and where base zoning (1 dwelling unit per 5 acres) under the Collier County Land Development Code applies. As of this writing, the Half Circle L Ranch is for sale on the open market. Although the current property owner is a member of the FPPP and an applicant for an ITP, it is not currently known what land designation may ultimately be applied to these 2,431 acres in the event of a sale. State and county conservation acquisition programs (Florida Forever and Conservation Collier) have targeted the property for potential acquisition.
- **Eligible Lands** – 20,047 acres of Open Lands that aren’t currently participating in the HCP but which may join the HCP at a later date.

Transportation Analysis Zone (TAZ) - a unit of geography, based on U.S. Census blocks and data, used in transportation planning models.

Transportation Analysis Area- Action Area roadways with a history of panther-vehicle collisions within a 25 mile radius of the Plan Area.

D1RPM Model Area- District One Regional Planning Model (D1RPM, 2010-2040), is a regional traffic model comprised of the Plan Area and a 12 county area beyond it that includes of 5,628 traffic analysis zones (TAZ) covering 12,400 square miles. It represents the travel characteristics of a population of approximately 4.1 million residents.

Rural Lands Stewardship Area – a 185,935 acre area of eastern Collier County where a system of stewardship and restoration credits are used to entitle development at densities higher than those allowed under the Collier County Land Development Code in exchange for the preservation of high-value species’ habitat, flowways, water retention areas, and agricultural lands.

- **Stewardship Receiving Area (SRA)** - A designated area within the RLSA District that has been approved for development as a Hamlet, Village, Town or compact rural development (CRD) and that requires the consumption of Stewardship Credits.
- **Stewardship Sending Area (SSA)** - A designated area within the RLSA District that has been approved for the generation of Stewardship Credits in exchange for the elimination of one or more Land Use Layers.
- **Rural Lands Stewardship Overlay Map** – The spatial allocation of habitat stewardship areas, flowway stewardship areas, water retention areas, and open lands in the RLSA.
- **Habitat Stewardship Area (HSA)** – Approximately 40,000 acres of lands delineated on the RLSA Overlay Map, which include both areas with natural characteristics that make them suitable habitat for listed species and areas without these characteristics. These latter areas are included because they are located contiguous to habitat with natural characteristics, thus forming a continuum of landscape that can augment habitat values.
- **Flowway Stewardship Area (FSA)** - Lands delineated on the RLSA Overlay Map, which primarily include privately owned wetlands that are located within the Camp Keais Strand and Okaloacoochee Slough. FSAs form the primary wetland flow way systems in the RLSA District. The FSA comprises approximately 31,000 acres of the RLSA.
- **Water Retention Area (WRA)** - Privately owned lands delineated on the RLSA Overlay Map, that have been permitted by the SFWMD to function as agricultural water retention areas and that provide surface water quality and other natural resource value. WRAs and their buffers comprise approximately 20,000 acres of the RLSA.
- **Agricultural Stewardship Area** – A program proposed by Collier County to incentivize the retention of agriculture lands within the RLSA “Open” designation shown on the Proposed RLSA Overlay Map. The Open designation is generally in agriculture uses and where future development may occur. This Agriculture Credit offers an incentive for property owners to consider an alternative to developing Open lands, and if utilized, will force 45,000 acre cap on development in the RLSA and prevent development at Base Zoning densities elsewhere.
- **Area of Critical State Concern** - The Areas of Critical State Concern Program was created by the "Florida Environmental Land and Water Management Act of 1972." The program is intended to protect resources and public facilities of major statewide significance, within designated geographic areas, from uncontrolled development that would cause substantial deterioration of such resources. Lands identified as “Preserve” and “Covered Activities” in the HCP include portions of the Big Cypress Area of Critical State Concern; designated by the state to "conserve and protect the natural, environmental and economic resources and the scenic beauty of the Big Cypress Area, including the proposed Federal Big Cypress National Fresh Water Reserve, the Everglades National Park, and ecologically related wetlands, estuarine fisheries, and the fresh water aquifer, and ecologically related areas." (Rule 28-25.002, Florida Administrative Code).
- **Open Lands** – Approximately 95,000 acres of land within the RLSA not designated as HSAs, FSAs, WRAs and their buffers or a 500’ restoration zone.

Functional Zone – The only area known to support a viable population of panthers based on the results of recent habitat and PVA modeling. The Functional Zone encompasses 9,094 km² of occupied habitat in South Florida and supports a panther population that is demographically viable but will require periodic introduction of new genetic material to be viable in the long-term, perhaps as many as five female puma every 20–40 years. It is made up of Zones A and B as mapped by Service and FWC biologists. These zones comprise areas of suitable habitat identified by the South Florida Random Forest Model (Frakes et al. 2015) and

additional areas of habitat known to support panthers based on existing occurrence data. The Service is in the process of updating its current regulatory framework to incorporate information from the South Florida RFP Model, and it is for this reason the Biological Opinion relies on an analysis of impacts to the Functional Zone rather than Panther Habitat Zones defined by Kautz et al. (2006).

- **Zone A** – an area that covers 6,103 km² and is largely coincident with the areas of suitable habitat identified by the South Florida RFP model (Frakes et al. 2015) with a probability presence >0.338 and an average probability of presence value of 0.667. Approximately 4357 km² (71 percent) of Zone A is within existing conservation lands.
- **Zone B** – an area which covers 2,991 km², is comprised of generally lower quality habitat that nevertheless provides connectivity among habitats in Zone A, is used by dispersing panthers, and occasionally supports breeding females. Zone B consists of panther habitat with a probability of presence ranging from 0.1 to 0.29 and an average probability of presence value of 0.158. Approximately 1,339 km² (45 percent) of Zone B is within existing conservation lands.

Panther Habitat Zones - An earlier effort to map areas of South Florida important for panther habitat conservation resulted in three distinct regions of panther habitat (Kautz et al. 2006): Primary Zone (9,189km²), Secondary Zone (3,286km²), and Dispersal Zone. Kautz et al. (2006) developed their spatially explicit habitat model based on adult and subadult panther (>2 years old; $n = 79$) radio telemetry records collected from 1981–2001 and concluded that the habitat zones had the capacity to support approximately 80–94 adult and subadult panthers, a population size determined by the authors to have a high probability of persistence for 100 years. The habitat zones delineated by Kautz et al. (2006) and their assessment that these zones had the capacity to support a viable population of 80–94 panthers formed the basis for the current Service regulatory framework used to assess impacts to panther habitat. However, the best available information now suggests that Kautz et al. (2006) underestimated the capacity of these areas to support panthers, because the density estimate they used (0.91/100 km²; Maehr et al. 1991) is much lower than the range of densities reported today (1.37 to 4.03/100 km²; Sollmann et al. 2013, Dorazio and Onorato 2018, Onorato et al. 2020).

- **Primary Zone** – An area defined by Kautz et al. (2006) as lands essential to the long-term viability and survival of the Florida panther. Approximately 78 percent of the Primary Zone is in public ownership, 17 percent is in private ownership, and 5 percent is in tribal ownership.
- **Secondary Zone** – An area considered by Kautz et al. (2006) to be comprised of less suitable habitat only occasionally occupied by panthers, specifically defined as "natural and disturbed lands in south Florida that may be important to transient sub-adult male panthers and have the potential to support an expanding panther population, especially if habitat restoration were possible."

Dispersal Zone – an area that was defined as a small wildlife corridor east of LaBelle, Florida, intended for protection to facilitate long-term movements of panthers out of South Florida and into potentially suitable habitats in Central Florida north of the Caloosahatchee River.