



South Florida Wildlands Association  
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David Shindle  
Florida Panther Coordinator  
U.S. Fish and Wildlife Service  
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Dear Mr. Shindle:

South Florida Wildlands Association (SFWA) appreciates the opportunity to submit these comments for the five-year review that the U.S. Fish and Wildlife Service ("the Service") is currently conducting for the Florida panther (*Puma concolor coryi*).

In their own post on the topic, the Service has requested information from the public on the following categories. We will therefore arrange our comments according to those categories.

***The five-year reviews seek information on: (1) species biology, including population trends, distribution, abundance, demographics, and genetics; (2) habitat conditions, including amount, distribution, and suitability; (3) conservation measures that have been implemented; (4) threat status and trends; and, (5) other new information, data, or corrections, including taxonomic or nomenclatural changes; identification of erroneous information contained in the ESA list; and improved analytical methods. Comments and materials received will be available for public inspection by appointment.***

### **1. Species biology, population trends, distribution, abundance, demographics, and genetics**

The panther is currently classified as a sub-species by the Service. With the Service's decision to officially declare the Eastern Cougar "extinct" in June of 2015, the Florida panther is now the last remaining population of cougar (*Puma concolor*) in the eastern United States.

In its historic range (pre-European contact), cougars would have been found throughout the Continental United States – and from northern British Columbia in North America to Patagonia in South America. It is thought to have the widest range of any mammal species in the Western Hemisphere and has a variety of names corresponding to that enormous geographical expanse. Those include Panther, Painter, Puma, Cougar, Catamount, Deer Tiger, Mountain Lion, and Red Tiger in English and León Americano, León Bayo, León Colorado, León De Montaña, Mitzli, Onza Bermeja in Spanish. Portuguese translations include Puma, Onca, and Sucuarana.

As a subspecies, panthers once roamed throughout southeast United States – from east Texas to the Carolinas and south throughout the entire Florida peninsula. The current range is largely concentrated in southwest Florida, with a few male and female panthers recently showing up north of the Caloosahatchee River. Whether the presence of females in central Florida is the beginning of a long-term trend or an anomaly has yet to be determined.

Panthers have large home ranges (up to 80 square miles for a female and up to 200 for a male) and, with 20 million residents in Florida, those ranges invariably cross roads. Minimum convex polygons for collared panthers show that even panthers whose home range includes some of the large public lands in south Florida – e.g. the Big Cypress National Preserve, Fakahatchee Strand Preserve State Park, Picayune Strand State Forest, Florida Panther National Wildlife Refuge – invariably will have ranges which cross major roadways. Panthers whose home ranges are based on private lands to the north of the Big Cypress have the same problem.

See any of the Florida Panther Annual Reports on this page for the home ranges of collared panthers:

<http://myfwc.com/wildlifehabitats/managed/panther/reports/>

It is therefore not surprising that by far the largest cause of death for panthers is now roadkill. That can be seen consistently – year after year - on the “Panther Pulse” website ran by the Florida Fish and Wildlife Conservation Commission (FWC).

<http://myfwc.com/wildlifehabitats/managed/panther/pulse/>

Of the 22 panthers known to have died this year (2017), the vast majority were killed in Collier and Hendry Counties as a result of vehicle collision. Only two – both males – were killed in central Florida. Of the record 42 panthers which died in 2016, 32 died of roadkill. In 2015, 30 of the 42 panthers known to have died, were killed by vehicles. This geographic concentration of panther roadkill in southwest Florida counties is further confirmation of the limited geographic range of most of the population.

According to the FWC, the current estimate for the number of panthers is 120 to 230 adult and sub-adult panthers. Although larger than the estimated 20 to 30 panthers in the mid-nineties when the panther was hovering on the brink of extinction, this is still a very small number. And given the close proximity of most of this population to each other – this is a population which could be easily and quickly wiped out by disease. Should that occur, the miniscule population which now exists in central Florida could not survive on its own – and the panther would be extinct.

With regard to genetics, the Florida panther has long been recognized as a sub-species of the cougar. It was designated in that way when the panther was placed in the “freshman class” of the Endangered Species Preservation Act of 1966 – and again when it was listed as endangered under the Endangered Species Act of 1973. According to reports, the panther exhibits certain morphological and behavioral differences from western cougars (e.g. cranial shape, no verified attacks on humans from Florida panthers). As a result of rampant habitat loss, road construction, and indiscriminate hunting of the panther as a “nuisance species,” the panther has also been genetically and geographically isolated from other cougar species with virtually no contact for approximately 100 years (email from Darrell Land, FWC).

This PowerPoint presentation by Dave Onorato of the FWC and published on the Service's Vero Beach website demonstrates much evidence for the continued classification of the Florida panther as a sub-species of the panther.

<https://www.fws.gov/verobeach/FloridaPantherRIT/20150519%20Florida%20Panther%20Taxonomy.pdf>

However, even if the determination were to be made that the panther exhibited no differences from the North American cougar and did not merit sub-species classification, it would still easily qualify for its endangered status as a Distinct Population Segment (DPS) of the cougar.

The Service describes endangered listing criteria below. Any one is enough for listing. The panther is clearly facing the first (the present or threatened destruction, modification, or curtailment of its habitat or range) and fourth (the inadequacy of existing regulatory mechanisms). Disease has impacted this population (e.g. feline leukemia) and future outbreaks of potentially fatal and infectious disease always remains a possibility. Due to the real possibility of extinction for this species from any one or a combination of the above – we would also add that whether classified as sub-species or Distinct Population Segment, the correct conservation status for the panther is “endangered.” Delisting at this point is out of the question – and “threatened” is reserved only for species which may become endangered in the future. The panther is endangered now and should maintain that status.

<https://www.fws.gov/endangered/what-we-do/listing-overview.html>

***A species is added to the list when it is determined to be endangered or threatened because of any of the following factors:***

- ***the present or threatened destruction, modification, or curtailment of its habitat or range;***
- ***overutilization for commercial, recreational, scientific, or educational purposes;***
- ***disease or predation;***
- ***the inadequacy of existing regulatory mechanisms; or***
- ***other natural or manmade factors affecting its survival.***

## ***2. Habitat conditions, including amount, distribution, and suitability***

As noted above, the panther has lost most of its suitable habitat in its original range in the southeast U.S. It has eked out survival in a small fraction of that original habitat in southwest Florida because – until recently – this was the only roadless and contiguous habitat available to it once extirpated from the remainder of its range. However, as we have communicated with your office in the past, vast amounts of that habitat have recently been paved over – and much more paving is on the way. Relatively recent projects which have destroyed, degraded, and fragmented prime panther habitat have included Florida Gulf Coast University, Ave Maria, and the Southwest Florida International Airport.

The list of current projects (that SFWA is aware of) which will obliterate more of the Florida panther's primary, secondary and surrounding core habitat in southwest Florida include the following:

1. Florida Power and Light Hendry Clean Energy Project (3,750 MW gas-fired power plant – largest fossil fuel plant in the U.S.), Hendry County, 3,000 acres. This project was recently expanded to a total of 7,000 acres with the inclusion of a massive solar farm on the 3,000 acres which border of the Big Cypress Seminole Reservation. FPL chose to move the gas-fired power plant moved further north to an additional 4,000 acres of primary panther habitat purchased by the company. This is now a 7,000-acre project.
2. Town of Big Cypress – recently changed to “Rural Lands West” – Collier County, 6,000+ acres. This is part of the approximately 200,000-acre Rural Lands Stewardship Area (RLSA) of eastern Collier County. Other developments within the RLSA are likely (up to a total of approximately 45,000 acres of dense urban development). The Rural Lands West project is just west and north of the Florida Panther National Wildlife Refuge – important as both habitat and a connection corridor between the refuge and the Corkscrew Regional Ecosystem Watershed and Audubon’s Corkscrew Swamp.
3. Wild Blue residential development, Lee County, 2,960 acres (east of FGCU between Corkscrew and Alice Roads).
4. Corkscrew Farms, Lee County, 1,300 acres. Further east on Corkscrew Road. This project is now under construction.
5. Widening of SR 82 – 23 miles of road widening in Lee and Collier Counties.
6. Widening of SR 29 – 18 miles from Collier County to Hendry County. From the project description (good example to use – the road is adjacent to or near important public lands – e.g. Spirit of the Wild WMA, Kalaloches Slough State Forest): “Traffic volumes on S.R. 29 are projected to increase from a current volume of 6,200 vehicles per day to 23,800 vehicles per day by the year 2035 as documented in the project traffic report.”  
<http://www.sr29.com/>
7. Widening of Snake Road, Hendry County, approximately 8 miles inside the Big Cypress Seminole and Big Cypress Miccosukee Indian Reservations.
8. Town of Babcock Ranch, 18,000 acres just north of the Caloosahatchee River. When complete, the project and nearby development likely to be spurred by the construction of 20,000 homes will severely restrict potential expansion of Florida panthers north of the Caloosahatchee River. In 2006, the Service identified this area north of the Caloosahatchee as the best possible expansion area for the panther – which would connect the main population south of the river to the combined areas of the Babcock Webb Wildlife Management Area, the Babcock Ranch Preserve, and the Fisheating Creek Wildlife Management Area. However, as a result of the Service’s biological opinion okaying this project, the very best area for panther expansion – according to the Service itself – will now have a massive subdivision on its central southern border. And – just as Florida Gulf Coast University threw open the floodgates to new development in its vicinity – there is no reason to expect that other private rural lands in the vicinity of the Town of Babcock Ranch will not follow suit. This particular development in the heart of an area already identified by the Service as the best possible “expansion zone” for the panther is also an excellent example of the “inadequacy of existing regulatory mechanisms.” Almost routine approval of projects of this magnitude in the panther’s habitat should guarantee the panther’s continued listing as “endangered.”

See report on potential expansion of the panther into central Florida here:

<https://academic.oup.com/jmammal/article-lookup/doi/10.1644/08-MAMM-A-219.1>

9. Burnett Oil Seismic Survey (utilizing vibroseis trucks), 235,000-acre lease wholly inside the Big Cypress National Preserve (the largest and most important habitat for panthers in the state). Phase 1 is approximately 70,000 acres. Oil field development will potentially follow once oil bearing rock is located.

10. Tocala LLC Seismic Survey, 103,000 acres in Hendry and Collier County utilizing over 8,000 shot holes. North of the Big Cypress National Preserve and the Florida Panther National Wildlife Refuge. Includes over 2,000 acres of the Dinner Island Wildlife Management Area. Again, oil field development is expected to follow once the location of likely oil deposits is successful as a result of the geophysical survey which will take place.

It should be noted that both Tocala's and Burnett's geophysical surveys will take place inside the Sunniland Trend – a known producing trend for oil – and are likely to find deposits and lead to the development of new oil fields. That means oil roads, pads, chemicals and a new industrial landscape for some of the most pristine and protected panther habitat which currently exists.

We also just found out about two new projects which should be added to this list:

11. Verdana – see: <http://www.news-press.com/story/news/2017/06/25/another-1-400-homes-dr-gr-aired-monday/424147001/>

12. Pepperland Ranch – see: <http://www.news-press.com/story/news/local/2017/03/08/pepperland-begins-journey-to-approval/98911068/>

Our recommendation on this point centers on the Service taking its role as a regulatory government agency seriously. The Endangered Species Act requires much more than simply deciding if a given project will cause “jeopardy” for a listed species. Cumulative impacts must be considered – as well as how each project reviewed impacts the recovery of the species. We strongly believe the panther will not survive this level of new development in its habitat – and the science (see below) backs that up. Contrary to the Service's frequent public statements that it has no power over new development, the Service is actually the only agency that has the power to apply the brakes. Hopefully that responsibility will not be avoided by the Service – by determining in its recommendation in this current five-year review that the panther should be delisted.

### ***(3) Conservation measures that have been implemented***

Unfortunately, real conservation measures have been extremely limited. As we have said previously, the Service approves virtually every new project in the habitat that comes before it. It routinely ignores habitat loss and fragmentation – and even traffic reports which show that a given project will greatly increase traffic on a given roadway where roadkill of panthers has been prevalent. That was recently the case in the Service's analysis of the Corkscrew Farms development – now under construction along heavily traveled Corkscrew Road – and surrounded by important conservation lands for the panther.

We believe the Service's outreach to ranchers and their concerns – and the Service's willingness to incentivize ranching practices which maximize quality of habitat for panthers has been helpful. However, the larger problem of loss of quality upland habitat for panthers must be addressed.

Continuously approving development after development is simply a death walk for the panther as well as other wildlife – many also classified as threatened or endangered - which share its range.

As stated in the abstract for the well-known Kautz et al paper (How much is enough? Landscape-scale conservation of the Florida panther):

***The Florida panther (*Puma concolor coryi*) is an endangered, wide-ranging predator whose habitat needs conflict with a rapidly growing human population.***

However, both the Kautz paper (2006) and the more recent Frakes et al paper (2015 - Landscape Analysis of Adult Florida Panther Habitat) reach the same conclusion about remaining panther habitat. From the Frakes et al paper:

***Because there is less panther habitat remaining than previously thought, we recommend that all remaining breeding habitat in south Florida should be maintained, and the current panther range should be expanded into south-central Florida.***

Both papers can be found below:

[https://www.researchgate.net/publication/222149393\\_How\\_much\\_is\\_enough\\_Landscape-scale\\_conservation\\_of\\_the\\_Florida\\_panther](https://www.researchgate.net/publication/222149393_How_much_is_enough_Landscape-scale_conservation_of_the_Florida_panther)

<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0133044>

Best available science therefore calls for maintaining quality and quantity of current panther habitat – and even expanding that protection into suitable habitat in central Florida. That goal is incompatible with the Service’s permitting of new developments currently on the table.

#### ***(4) Threat status and trends***

This category requires little addition to what we stated above. However, we could add here that the current willingness of Collier Resources to lease out vast quantities of the 800,000+ acres of mineral rights that they own in southwest Florida is a trend which could lead to massive development of new oil fields in the most protected lands of the Florida panther’s core habitat. As mentioned above - a lease of 235,000 acres to Burnett Oil is already being exploited for seismic testing inside the Big Cypress National Preserve. Another lease to Tocala LLC for over 100,000 + acres of primary panther habitat north of the preserve will likely be exploited soon. Those combined with the previously mentioned projects point to a miserable outlook for the Florida panther for the future.

We should also add here under “trends”- that the system of mitigation that has been put in place is little more than a shell game. Programs like the Rural Lands Stewardship Program of Collier County allow massive urbanization of important parts of the panther’s habitat (called “receiving areas” in that program) – with only a guarantee that other areas (“sending areas”) will be protected). However, science research on panther’s use of the southwest Florida landscape has shown that the entirety of the panther’s remaining habitat – natural land, wetlands, forested areas, ranchlands, farmlands, semi-rural areas, etc. – form an essential mosaic and that the panther is able to utilize all of these lands for different purposes. Guarantees of non-development of some lands do absolutely nothing for the habitat that is being lost, degraded, and fragmented by new development.

In conclusion – SFWA strongly suggests the Service recommend that the Florida panther maintain its status of endangered in its current five-year review. We also add that the Service must take its role as a regulatory government agency more seriously - and insure that goals and mission of the Endangered Species Act are fulfilled. The survival of the Florida panther, Florida’s beloved state animal, and all federally listed species which share its range must be better protected.

As stated in the “Findings” section of the Act:

***The Congress finds and declares that—***

***(1) various species of fish, wildlife, and plants in the United States have been rendered extinct as a consequence of economic growth and development untempered by adequate concern and conservation***

That “adequate concern” is precisely what the law requires – and which we are urging the Service to follow through on.

Sincerely,

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