

# **Southwest Florida Road Hot Spots**

**Based on Documented Florida Panther Vehicle  
Mortalities and Injuries as of August 14, 2016**

**Transportation SubTeam Report**  
to  
**Florida Panther Recovery Implementation Core Team**  
**September 1, 2016**

# METHODOLOGY

- Buffered all roads by 200 meters
- Created a 1 km buffer around each panther-vehicle collision (deaths and injuries)
- Clipped the portion of the road buffers that fell within the 1 km buffer around each collision site
- Combined overlapping segments into a single segment
- Joined collision data to combined road segments
- Created “count” field

Final shapefile is a collection of road segments containing separate panther-vehicle collision sites within 1 km of each other.

Segments vary in length and have an associated count field reporting how many collisions occurred in a particular segment.

Categories of severity based solely on Florida panther-vehicle collisions.

Four count or Hot Spot categories: **Red 9+ deaths**      **Orange 6-8 deaths**      **Green 3-5 deaths**      **Blue 1-2 deaths**

Exempted segments where collisions occurred prior to installation of crossings/fencing (e.g. I-75 Alligator Alley).

Did not exempt roads with existing crossings/fencing that do not adequately alleviate hot spots (e.g. CR846 and segments of SR29).



**HOT SPOTS:**    **Red 9+ deaths**                    **Orange 6-8 deaths**                    **Green 3-5 deaths**                    **Blue 1-2 deaths**

<b>Map Location</b>	<b>Road Segment</b>	<b>Deaths</b>	<b>Comments</b>
A	SR29 north of CR858 Collier County	<b>Red</b>	Cooperating landowners at Owl Hammock Curve south of town of Immokalee, Collier Enterprises & King Ranch, within proposed Eastern Collier HCP area FDOT PD&E 2006 Eastern Collier Wildlife Movement Study 2009 Florida Panther Protection Program Technical Review Team Report
B	SR29 south of CR858 to to Florida Panther NWR Collier County	<b>Red</b>	May have cooperating landowners, within proposed Eastern Collier HCP area FDOT PD&E 2006 Eastern Collier Wildlife Movement Study 2009 Florida Panther Protection Program Technical Review Team Report
C	CR846 east of Immokalee Collier County	<b>Red</b>	Cooperating landowner, Barron Collier, within proposed Eastern Collier HCP area Collier County bridge replacements Existing City Gate crossing needs retrofit – bridge across north side swale, gate on south side 2006 Eastern Collier Wildlife Movement Study 2009 Florida Panther Protection Program Technical Review Team Report
D	US41, Turner River Collier County	<b>Red</b>	RADS study completed and FDOT funding proposal for improvements under consideration 2016 Assessing the Effectiveness and Reliability of the Roadside Animal Detection System on US Highway 41 near the Turner River in Collier County
E	I-75, Belle Meade Collier County	<b>Red</b>	Bridge ledges at Miller and FakaUnion canals nearly completed Adding 18 miles (9 miles each side of the road) of panther fencing to I-75 to be completed by summer 2017 FDOT evaluating underpasses/culverts May have cooperating eastern North Belle Meade landowners within County NRPA/TDR area
F	CR832, Keri Road Hendry County	<b>Orange/Blue</b>	Western section crosses OK Slough conservation lands network

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<b>Map Location</b>	<b>Road Segment</b>	<b>Deaths</b>	<b>Comments</b>
G	CR858 Collier/Hendry line	<b>Green</b>	May have cooperating landowners, within proposed Eastern Collier HCP area Collier County bridge replacements 2009 Florida Panther Program Technical Review Team Report
H	CR846, 846 Land Trust Collier County	<b>Green</b>	Collier County may reroute road eliminating curve Conservation land on north side
I	CR846, Camp Keais Strand Collier County	<b>Green</b>	May have cooperating landowners, within proposed Eastern Collier HCP area 2006 Eastern Collier Wildlife Movement Study 2009 Florida Panther Protection Program Technical Review Team Report Experimental crossing in place and study is ongoing
J	CR833, McDaniel Ranch/FPL Hendry County	<b>Green</b>	May have cooperating landowner, FPL Energy
K	CR846 Hendry County	<b>Green</b>	May have cooperating landowner, within King Ranch Sector Plan area
L	SR29 south of I-75 Collier County	<b>Green/Blue</b>	Conservation lands
M	US41, Collier-Seminole Park Collier County	<b>Green/Blue</b>	Picayune Restoration US41 culverts Conservation lands
N	US41, Big Cypress NP	<b>Green</b>	Conservation lands

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Road Segment	Deaths	Comments
CR858 east of SR29 Collier County	Blue	Collier County bridge replacements May have cooperating landowners, within proposed Eastern Collier HCP area 2006 Eastern Collier Wildlife Movement Study 2009 Florida Panther Protection Program Technical Review Committee
CR858 west of SR29 Summerland Swamp Collier County	Blue	May have cooperating landowners, within proposed Eastern Collier HCP area 2006 Eastern Collier Wildlife Movement Study 2008 Florida Panther Protection Program Technical Review Team Report
CR850, Corkscrew Road Lee/Collier line	Blue	Collier County maintains road Private lands on west side in Lee County
SR82 Collier County	Blue	FDOT planning wildlife crossing features at Under Canal (west of Corkscrew Road) and Panther Creek (east of Corkscrew Road) bridge replacements Cooperating landowners, Alico and King Ranch 2009 Florida Panther Protection Program Technical Review Team Report

**ADDITIONAL HOTSPOT SEGMENTS:**

While there may be additional segments with 3-5 and 1-2 recorded deaths, they are not noted in detail. Where there may be crossing opportunities at the time of writing, those segments were included in this report. These roads should be monitored because they may intersect with known or intended regional habitat linkages. The status may be elevated due to mortalities and/or further evaluation of telemetry, land cover, and other factors.

**NOTES:**

The Transportation Subteam is working to identify potential funding sources at the local, state, and federal level. This is a living document. When amended with additional vehicular deaths and injuries, the severity of road segments may elevate. Severity may not dictate order in which crossings/fencing or other features are installed. Additional information, such as telemetry, land cover, and land ownership, may be needed regarding placement of crossing features. The four hot spots on I-75/Alligator Alley will be removed from the map when the fencing and bridge ledges are completed on the nine mile Belle Meade stretch because the measures in place should greatly reduce road kills in that area, although efforts to improve connectivity will continue to be considered.