



2018 REAMS ROAD WILDLIFE MORTALITY REPORT

**Orange County, Florida
January 28, 2019**

Noah's Notes is a 501(c)(3) nonprofit environmental organization with a mission to foster wildlife and habitat preservation by educating people to live sustainably and take action to save nature. For more information visit NoahsNotes.org or contact info@NoahsNotes.org.

OVERVIEW

In 2014 residents in Horizons West, in Southwestern Orange County, Florida, and Disney Cast Members driving to the Magic Kingdom, reported increasing numbers of wildlife being killed by vehicles in the vicinity of the existing pipe culvert on Reams Road between Peachtree Park Court and Greenbank Boulevard (Figure 1). At the same time water levels in the conservation areas north of Reams Road were also observed to regularly be above seasonal norms and long-term residents reported water encroaching their property where it had not in the past. These observations coincided with the advent of extensive development in the Lake Reams watershed which appears to have altered water flow in the basin.



Figure 1: Area of Highest Mortality at Existing Pipe Culvert

REGIONAL RIPARIAN WILDLIFE CORRIDOR

Reams Road and the existing pipe culvert bisect a very active regional riparian wildlife corridor that runs from northwest to south/southeast to Reedy Creek. The riparian wildlife corridor was significantly narrowed at the location of the pipe culvert by the development of Peachtree Park in 2015 (Figure 2).

Diverse resident and migrating wildlife species inhabit and traverse this corridor to access state wildlife corridors (Figure 3).

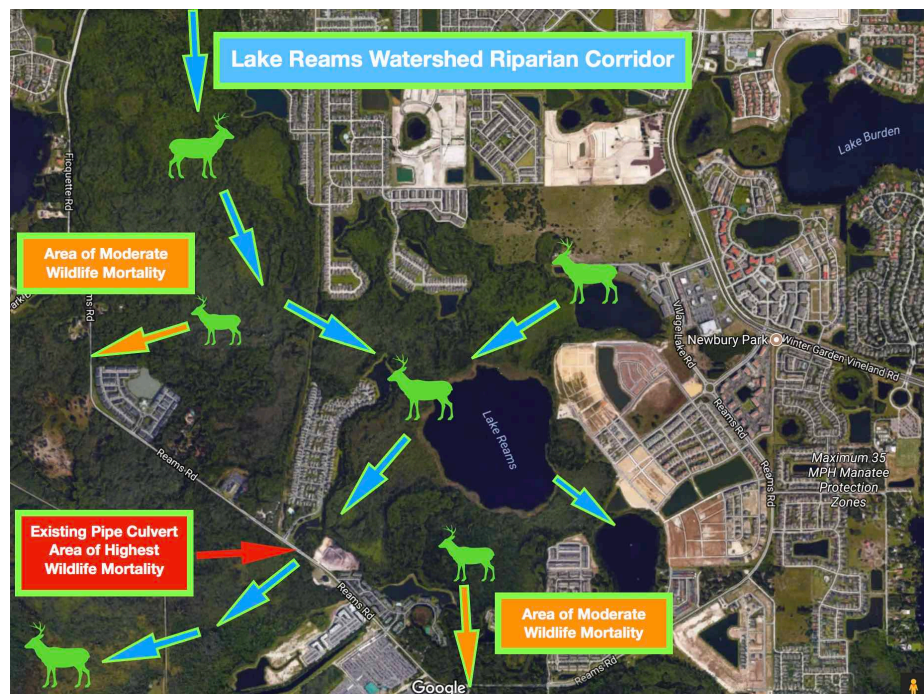


Figure 2: Lake Reams Watershed Riparian Corridor

Three threatened and three endangered species have been observed in the Lake Reams riparian wildlife corridor:

- Florida Black Bear
- Gopher Tortoise
- Sandhill Crane
- Indigo Snake
- Red-cockaded Woodpecker
- Florida Panther

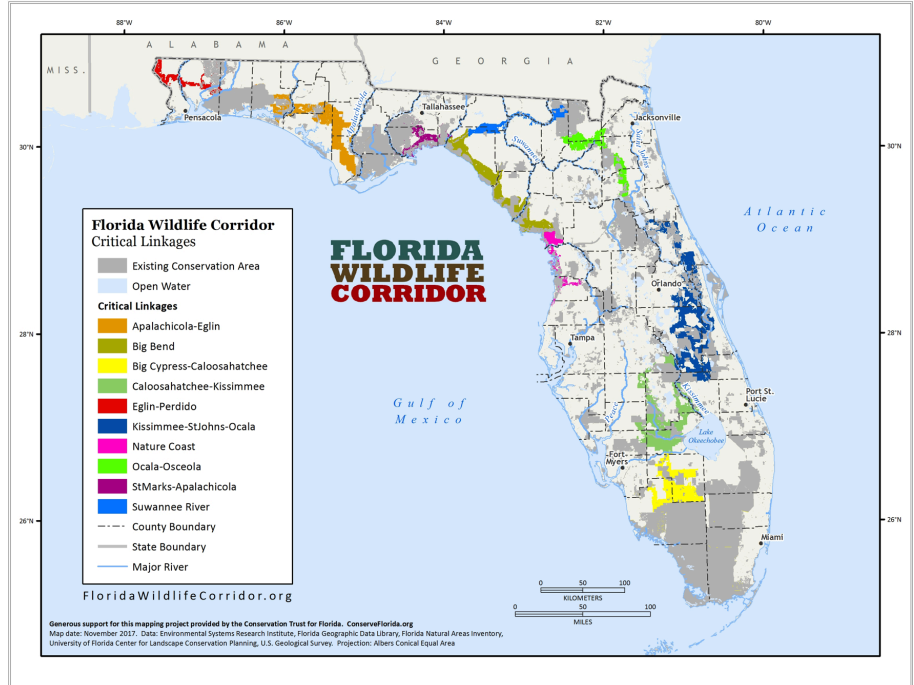


Figure 3: Florida Wildlife Corridor

MONITORING OBSERVATIONS

Noah’s Notes began monitoring and recording water levels and documenting wildlife killed in the vicinity of the pipe culvert in 2015 (Figure 4). Data indicates that the pipe culvert appears to be causing a damming effect with water levels significantly higher to the north and lower south. As a result, wetlands north of Reams Road have appeared to have expanded and the frequency and severity of flooding increased in communities around the Lake Reams watershed since 2015.



Figure 4: Existing Pipe Culvert (2017 drought)

In September 2017 over 16 inches of rain was recorded in the watershed and flood waters breached Reams Road in three areas with extensive flooding (Figure 5).



Figure 5: Hurricane Irma Flooding Reams Road Pipe Culvert

WILDLIFE MORTALITY

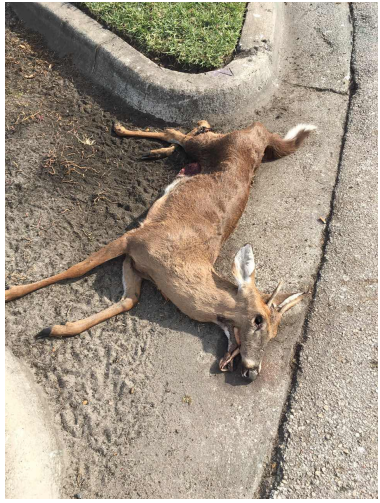
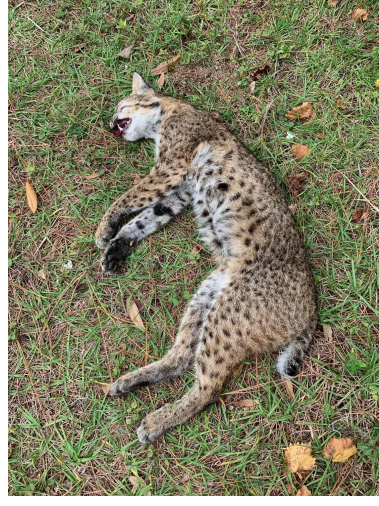
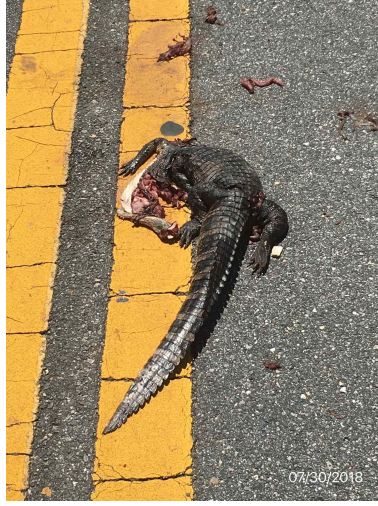
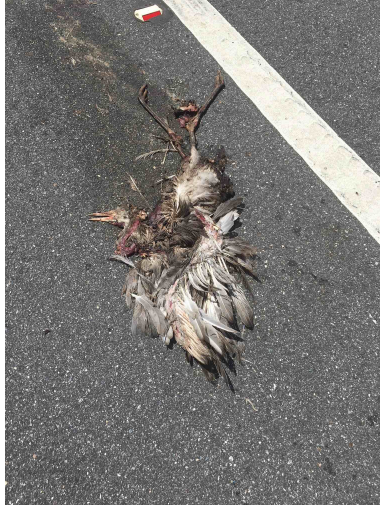
Three areas of wildlife mortality have been observed on Reams Road (Figure 6). The area of highest wildlife mortality is at the site of the existing pipe culvert in a zone between Greenbank Boulevard and Peachtree Park Court. Two areas of moderate mortality are approximately a half-mile east and one mile west of the pipe culvert. 198 animals have been killed from 2015 to 2018 just in the area of highest mortality at the pipe culvert (Figure 7). Wildlife Mortality in all three zones during the same time period is estimated to be in excess of 400 animals. On average one animal has been killed every 7.3 days over the last three years from 2015 to 2018.



Figure 6: Areas of Wildlife Mortality Reams Road

PHOTOS: 9 OF 198 ANIMALS KILLED 2015-2018

Clockwise: Sandhill Crane, American Alligator, Bobcat, White-tailed Deer, Otter, Opossum, Feral Hog, Barred Owl, Raccoon



PLANNED LONG-TERM ACTIONS

Reams Road is scheduled for improvement and widening with completion estimated in 2025. Improvement will include replacement of the existing pipe culvert with larger box culverts capable of accommodating increased storm water flow and allowing aquatic species to safely pass through. Road improvement will also include terrestrial wildlife crossings in three areas of moderate and high mortality.

SHORT-TERM ACTIONS TAKEN 2017 to 2018

Orange County has taken the following short-term actions from 2017 to 2018 to address the issue of increased wildlife mortality on Reams Road:

2017

- Speed limit reduced from 55 to 45 mph (summer)
- Two “Wildlife Crossing Next 1.5 Miles” signs installed (summer)
- Additional speed limit signs installed (summer)
- Temporary placement of two speed trailers placed (3-week duration/summer)
- Random speed enforcement by Orange County Sheriff
- Two solar flashing “Wildlife Crossing” signs installed in the area of highest wildlife mortality at the existing pipe culvert (fall)
- Temporary placement of two speed trailers (2-week duration/fall)

2018

- Random speed enforcement by Orange County Sheriff
- Temporary placement of two speed trailers (six weeks/fall)

IMPLEMENTATION OF ADDITIONAL ACTIONS 2019-2025

Additional actions must be taken immediately to reduce wildlife mortality in the time period before adequate wildlife crossing infrastructure is in place with the new roadway. Possible additional actions include:

1. Speed reduction to 35 mph from Church of Latter Day Saints to NewMarket Drive
2. Cut vegetation back 20 feet from road in areas of moderate and high wildlife mortality
3. Lane striping (reflective and/or rumble)
4. Solar digital warning sign – “Slow Down! Give them a Brake!”
5. Lighting installation
6. Fencing north of Reams Road at pipe culvert in area of highest mortality
7. Temporary or permanent wildlife crossing constructed beneath Reams Road at pipe culvert
8. Routine placement of speed trailers
9. Continued speed enforcement by Orange County Sheriff

TIMETABLE FOR CONSIDERTION & IMPLEMENTATION OF ADDITIONAL ACTIONS

The rate of wildlife mortality on Reams Road is unacceptable and is impacting the sustainability of wildlife populations. Noah's Notes and the community take this situation very seriously and have been extremely patient and cooperative in seeking solutions over the last three years. However, since there has been no significant decrease in wildlife mortality over this time, and no additional actions have been taken to reduce mortality, we seek the following timetable of action:

March 15:

- Orange County to provide list of additional actions to be taken and schedule of implementation

June 1:

- Additional actions in progress or completed

September 1:

- If no action has been taken, and there is no significant decrease in mortality by September 1st, 2019, we will engage with our national conservation partners in a coordinated media campaign to bring state and national attention to this issue. We will also commence our legal options.