

Panther Recovery Implementation Team (PRIT)

Transportation Sub-team

Meeting Notes

October 6, 2015

Florida Department of Transportation (FDOT) District 1 Office, Bartow, FL

Attendees:

Amber Crooks, Conservancy of Southwest Florida
Elizabeth Fleming, Defenders of Wildlife
Terry Gilbert, FWC
Darrell Land, FWC
Nancy Payton, Florida Wildlife Federation
Gwen Pipkin, FDOT
Brent Setchell, FDOT
Laurie Macdonald, Defenders of Wildlife, PRIT liaison
David Shindle, USFWS (phone)

Members of the public – Kristin Caruso of Scheda Ecological Associates, Mark Easley of Kisinger Campo, Nicole Monies of FDOT

- Minutes approved.
- Communications
 - Staff Liaison David Shindle
 - No update.
 - PRIT Liaison Laurie Macdonald
 - Laurie updated the subteam on the 08/19 PRIT meeting.
 - Inventory & Monitoring subteam is beginning to meet and Recovery Criteria subteam has been selected (formal appointment letters pending) and have had an introductory conference call.
 - Livestock depredations and Payment for Ecosystem Services program were discussed.
 - Larry Williams of FWS provided briefing on potential Safe Harbor Agreements and experimental population designations north of the Caloosahatchee River.
 - Elizabeth Fleming was selected to replace Laurie Macdonald on the PRIT.
 - Members of the transportation subteam encouraged the other subteams to open their meetings to the public.
- Transportation Subteam Presentation to PRIT
 - Xavier sent out an email that stated the revised FDOT Crossing Guidelines had been reviewed by FDOT Districts and Central Office; comments and response are being compiled.

- Nancy will give presentation of subteam background and work to-date and Amber will provide presentation of subteam's work on revising FDOT Crossing Guidelines.
- Hotspots Recommendations and Report
 - The group reflected on draft's format. Additional shapefile data for the maps will be collected.
 - There was a discussion about timing and prioritization of our review of roadways.
 - Darrell suggested prioritizing completing the entire stretch of SR29.
 - Dan suggested reviewing SR 70 soon.
 - Amber suggested Collier County proposed roadways Wilson-Benfield Road and 951 Ext.
- Crossing Types Compendium
 - The group reflected on the draft's format. There was discussion about including costs of crossing structures on the compendium.
 - FDOT jobs are either shown in "lump sum" or "pay item." If "lump sum", it is not possible to extract just the cost of the crossing.
 - Darrell will also add bridges/shelves that are being used by panthers.
 - Dan has some data on logistic regression on function parameters (opening and pathway dimensions). He also suggests adding distance through the crossing (from one end to the other) to the compendium. Dan also suggested adding aquatic species and RADS target species to compendium. Darrell suggested focus on Florida panthers.
 - Amber suggested including information in the compendium about features such as jump-outs, escape ramps, and other such features that Mark Easley discussed at a prior meeting.
- Cost Surface Mapping
 - The group reviewed Dan's draft model and maps.
 - Land cover values were multiplied by 10 because the model cannot accept fractions and values reversed so less selected habitat becomes most costly.
 - There were least cost pathways through western urban lands (e.g. western Lee County, Lehigh Acres, and onto Babcock Ranch area). The model looks at cost as well as distance.
 - The group discussed how to handle barriers and roads, as well as the Caloosahatchee River. Dan stated that these should be scored as more prohibitive, so made another test model that increased the magnitude of difference between the land covers by multiplying by 50 or 100.
 - Dan said that making urban areas more costly would help identify areas where crossing more likely to be built or are being planned. Amber said that least cost pathways may exist in the urban areas, which is supported by recent road mortalities. There have been and may be additional opportunities in urban areas to facilitate panther movement and building crossings.

- Darrell suggested that urban modeling did have some importance and the subteam would need to caveat model changes in the report.
- Darrell suggested basing magnitude of difference on population density and width of Caloosahatchee River where cats are more likely to cross (narrower than 150 yards).
- Dan plans to incorporate into the next test run the group's discussion about
 - human population densities
 - roadway weighting, including presence of crossings, traffic volume, and lanes of traffic
 - splitting the difference in land covers to add a moderate increase the cost of urban and other less selected habitats
 - increase the cost for the Caloosahatchee River where it is greater than 150 yards to reflect the unlikeliness of panthers to cross this distance.
- Pending Projects
 - Roadside Animal Detection System (RADS) Update
 - Dan provided update on RADS on US41 in Collier County near Turner River Road. He noted that three land bridges in this area are frequently used by panthers and are hotspots for roadkill.
 - RADS has a chronic false positive issue. Success rate should be no less than 87%, but all of the studied detectors were below that and some far below that literature-based standard.
 - Signs that stated to slow down at night and picture-based sign were found to be most effective in altering driver behavior based on tests in a driving simulator.
 - Sensors
 - Improve placement of sensors as they are currently skewed diagonally capturing some animals on land bridge, but doesn't capture animals crossing the road.
 - Place sensors back, further away from the road to allow more time for vehicle driver response.
 - Extreme weather (temperature, sun, wind, etc), access by recreationalists and visitors, and distance of beam are also considerations.
 - Signage
 - There is a gap in the signage, particularly at the ends.
 - There are existing signs that clutter this stretch of road and make it more difficult to focus on RADS signs.
 - RADS has resulted in reduction in vehicle speed by 2.37 mph which contributes to reducing crash rates.
- Public Comment
 - Kristin Caruso suggested that we incorporate existing studies about landscape corridor mapping into our work.
- Miscellaneous
 - Dan is continuing his study of the crossing on Immokalee Road at Camp Keais Strand. He plans to capture data through December and draft report.

- Next meeting is 11/17 via GoToMeeting. FWS can post in advance for any members of the public that want to attend.