United States Department of the Interior

FISH AND WILDLIFE SERVICE
South Florida Ecological Services Office
1339 20th Street
Vero Beach, Florida 32960

March 25, 2020

Memorandum

To: Mr. Pedro Ramos, Superintendent, Everglades National Park, Homestead, Florida

From: Donald Progulske, Everglades Program Supervisor, South Florida Ecological Services Office, Vero Beach, Florida DONALD PROGULSKE Digitally signed by DONALD PROGULSKE Date: 2020.03.25 15:29:22 -04'00'

Subject: Service concurrence for Phase 2 of the Tamiami Trail: Next Steps Project

The U.S. Fish and Wildlife Service (Service) has reviewed your draft report entitled Confirmation of Previous Analyses of the Tamiami Trail Next Steps Final EIS, Addressing Modifications to the Authorized Plan, Based on Recommendations from a 2019 Phase 2 Value Analysis Workshop, received via electronic mail on March 19, 2020. The subject draft report reaffirms previous species affects determinations, adds new species not considered previously and requests the Service's concurrence on these determinations as it relates to minor design modifications of the final phase (Phase 2) of the Tamiami Trail Next Steps Project. This document transmits the Service's concurrence on the National Park Service (NPS) affect determinations as they relate to the proposed design modifications of the final phase of the Tamiami Trail Next Steps Project and its effects on threatened and endangered species and their designated critical habitat within the project area, in accordance with section 7 of the Endangered Species Act of 1973, as amended (Act) (87 Stat. 884; 16 U.S.C. 1531 *et seq*.). The project site is located on the south side of Tamiami Trail (US 41) in the 10-mile stretch between the S-333 spillway on the west and S-356 pumping station to the east in Section 10, Township 54 South, Range 37 East, Miami-Dade County, Florida (Figure 1).

The Service and NPS have been consulting on the Tamiami Trail Modification suite of projects since 2009 and the Service provided a Final Biological Opinion (2010; Service Federal Activity Code 41420-2009-FA-0648 and Service Consultation Code 41420-2010-F-0370), an amended Biological Opinion (2014) and has exchanged correspondence several times regarding small project design modifications, on January 2017 and most recently on December 4, 2018. As stated in previous correspondence, this project has benefitted from a continual review process due to its frequent but minor design changes, funding sources and permit requirements on its way to completion. The Service thanks the NPS for its continued coordination throughout the planning and completion of this critical restoration project.

Project Description and Background

The purpose of the Tamiami Trail Next Steps (TTNS) Project, begun in 2015, is to construct bridges and reconstruct/raise the remaining portion of the roadway that remains unbridged. This critical project is a precursor to the Comprehensive Everglades Restoration Project (CERP) and when completed, will greatly improve water conveyance, marsh connectivity, and sheet flow between Water Conservation Area 3A/3B and the Northeast Shark River Slough (NESRS) of Everglades National Park (ENP). To date, Phase 1 of the project has been competed (April 2019) and includes 2.3 miles of western bridging, in addition to the previously constructed 1-mile eastern bridge completed during the Modified Water Deliveries Project. The currently proposed action is a modification of Phase 2 which was previously modified in 2018 (NPS 2018). The Phase 2 plan will not include any additional long-span bridges but will focus on reconstructing/raising the remaining 6.7-miles of roadway, which currently constrains water levels in the L-29 canal. The current constraints on L-29 canal levels limit the restoration benefits in both the upstream Water Conservation Areas and ENP.

Specific features of Phase 2 include the addition of six 72-foot wide pre-cast concrete culverts, reconstructing/raising the roadway, and adding swales for water quality treatment. As a result of the prior design modification of Phase 2 in 2018, the NPS reevaluated the wetland impacts along the trail and found them to be very similar to the original analysis. The prior modifications of Phase 2 resulted in approximately 24 acres (ac) of permanent impacts to wetlands which the Service concluded was consistent with its previous biological opinion, amendments and modifications. The Service reiterated its concurrence with the NPS species affects determinations of 'may affect not likely to adversely affect' the wood stork, Florida panther, Cape Sable seaside sparrow, Everglade snail kite, Eastern black rail, Florida bonneted bat, West Indian manatee, Everglades bully and Eastern indigo snake. The Service also concurred with the NPS' determination of 'no effect' for several species listed in their draft evaluation as well as the recently listed Florida bristle fern.

The currently proposed action represents another design change resulting from the NPS' 2019 Value Analysis workshop. Additional modifications to the Phase 2 plan were added including: replacing the six proposed 72-foot wide culverts with 60-foot wide slab bridges, enlarging the swale system treatment capacity by 50% to meet the Outstanding Florida Water (OFW) designation for ENP, adding four turning lanes to improve traffic safety at the Coopertown and Gator Park commercial sites, the Airboat Association, and the Miccosukee Osceola Camp, and adding a new access lane, diagonal parking, retaining walls, and wider shoulders at the Miccosukee Camp for improved safety at the Miccosukee Tigertail Camp (NPS 2020).

Total wetland impacts for the Tamami Trail are now estimated to be 53.83 ac. This includes the 18.83 ac impacted in Phase 1 and a maximum of 35 ac of wetlands estimated to be impacted by the final design refinement for the currently proposed design modifications for Phase 2. This permanent wetland impact is approximately 4.63 ac larger than the 49.2 ac of permanent impacts predicted for the Original Plan (Alt.6e) in the 2010 Final EIS. The amount is also larger than that considered under the December 2018 Confirmation Assessment. The proposed modified Phase 2 plan has no temporary wetland impacts, compared to 22.4 ac for the Original Plan as a result of keeping all construction activities within the new roadway and swale footprint.

For more detail on the estimated permanent and temporary wetland impacts of the Original Plan as compared to wetland impacts from the Phase 2 with proposed design refinements, please refer to table 3 in the NPS' Draft Confirmation of Pervious Analyses (NPS 2020).

Threatened and Endangered Species

The NPS has re-evaluated impacts that the proposed action (Phase 2 with design refinements) may have on threatened and endangered species located in the project area. The NPS retains all of its original determinations from the 2010 consultation and adds new species not originally addressed as follows: the project is likely to adversely affect the Florida panther (*Puma concolor coryi*) and the wood stork (*Mycteria americana*); and the project may affect, but is not likely to adversely affect the Cape Sable seaside sparrow (*Ammodramus mairitimus mirabilis*), Everglade snail kite (*Rostrhamus sociabilis plumbeus*), Eastern black rail (*Laterallus jamaicensis ssp. jamaicensis*), Florida bonneted bat (*Eumops floridanus*), West Indian manatee (*Trichecus manatus*), Everglades bully (*Sideroxylon reclinatum ssp. austrofloridense*), and the Eastern indigo snake (*Drymarchon corais cooperi*). Additionally, the NPS has determined that several species will see no effects from the project (NPS 2020). The Service previously concurred with the NPS' 'no effect' and 'may affect, not likely to adversely affect' determinations in the original Biological Opinion (Service 2010) and in subsequent assessments of design refinements since then. Phase 2 is not likely to increase effects on these species and based on the updated analysis in the NPS' Draft Confirmation of Previous Analyses report modifications to Phase 2 the Service continues to concur with these assessments.

The NPS also reiterated their determination from 2010 that the project is likely to adversely affect the Florida panther and wood stork. However, the proposed action, for which the NPS is presently requesting concurrence from the Service, is a design refinement for Phase 2 which is only part of the whole Tamiami Trail Next Steps Project. In order to determine whether the impacts from changes to Phase 2 remain consistent with previous consultations the NPS reevaluated the wetland impacts and direct footprint impacts and their effects on the wood stork and Florida panther. More detail regarding this evaluation is addressed in sections below. The NPS found that design refinements to Phase 2 of the TTNS project are consistent and within the bounds of previous consultations, Biological Opinion, subsequent amendments (Service 2010, 2014), and reevaluations of design refinements. Therefore, the Service concurs with the NPS' determinations regarding the Florida panther and wood stork. The Incidental Take Statement (ITS) in the 2010 BO and any guidance in subsequent amendments and correspondence is still valid.

Wood Stork

The proposed impacts of Phase 2, to the threatened wood stork, when considered in conjunction with the effects that have already occurred during construction of Phase 1, are still less than those assessed in the Service's Biological Opinion (2010). The incidental take in the 2010 biological opinion was assessed in terms of the area of lost foraging habitat and the prey biomass. The total wetland impacts associated with Phase 2, including the design refinement, are less than the 100.5 ac anticipated under the original Biological Opinion. The NPS updated

the average annual discontinuous hydroperiod from approximately 252 days used in 2010 to 315 days and applied the same methodology as in 2010. The results indicate that the 35 ac of wetland impacts estimated in Phase 2 will result in a loss of 154.67 kg of fish biomass. When combined with the estimated loss of prey biomass from Phase 1, the overall loss of biomass for the TTNS project, including the Phase 2 design refinement, is 237.69 kg, still less than the 387.29 kg identified in the ITS of the 2010 BO.

Direct impacts to wood stork colonies along the trail are also reduced by the design refinements of Phase 2. The reduction in impacts are mostly due to modifications to the bridge configurations in the vicinity of the Tamiami West colony and one of the colonies becoming unoccupied for the last decade. The NPS concludes in their draft report that Phase 2 with design refinements falls completely within the analysis of effects and resulting incidental take in the previous 2010 Biological Opinion and 2014 amendment. The Service concurs with this determination.

Wetland impacts are proposed to be offset through mitigation at the nearby Hole-in-the-Donut mitigation site, or through the removal of the Old Tamiami Trail roadbed within Everglades National Park. Both of these potential mitigation sites will increase wood stork foraging habitat and prey productivity and replace the reductions in foraging suitability within the core foraging habitat of the three stork colonies that occur near the Tamiami Trail (Tamiami East 1 & 2 and Tamiami West Colonies). The mitigation sites provide additional benefits to wood stork foraging which were not considered in the 2010 Final Environmental Impact Statement (FEIS) (NPS 2010) and Biological Opinion, and further reduce overall project impacts to stork foraging.

Florida panther

There has been no additional information about Florida panther occurrence in or near the project area in recent years that would change previous consideration of this species. The proposed modifications to the Phase 2 project, when considered in conjunction with the construction of the Phase 1 project, is expected to have fewer potential impacts to Florida panthers than what was considered in the 2010 FEIS and associated Biological Opinion. The NPS analyzed the impacts of Phase 2 in the same manner as was conducted in 2010, and calculated the number of Panther Habitat Units (PHUs) impacted. In addition to the 35 ac of wetlands impacted, with a panther habitat value of 0.5, the NPS identified impacts to approximately 0.65 ac of uplands composed of mixed hardwoods, much of which is exotic vegetation, and some of which is adjacent to the developed sites such as the airboat concession operations. The panther habitat value of 0.9 was applied to these wooded uplands. Developed areas received a score of 0. Using these values and applying the 2.5 multiplier that was determined for habitat value within the panther primary zone, Phase 2 with design refinements will impact 452 PHUs. When this total is combined with the Phase 1 impacts of 194 PHUs, the total impacts remain less than the 1,278.48 PHUs that were allocated for the Tamiami Trail Next Steps Project as a result of restoration in Picayune Strand as identified in the 2010 Biological Opinion.

In the December 2018 confirmation assessment, NPS identified that the swales added in Phase 2 may also provide additional benefit for panthers. The construction of a stormwater treatment swale immediately south of the existing roadway may provide a high-likelihood movement corridor that will not subject panthers to increased risk from roadway mortality.

The elevated berm on the south side of the swale will be well-separated from traffic flow. This potential benefit remains or may be slightly greater in Phase 2 with the design refinement because the additional swale width and resulting added (but small) increase in separation from traffic may further improve the likelihood of panther use as a travel corridor. There was no such feature proposed in the FEIS. The NPS concludes in their draft report that the proposed change in design for Phase 2 falls completely within the analysis of effects and resulting incidental take in the previous Biological Opinion. The Service agrees with this assessment and reiterates its concurrence with the determination as previously stated in the Biological Opinion.

Thank you for your cooperation in the effort to protect fish and wildlife resources. If you have any questions regarding this Project, please contact Kevin Palmer via email at Kevin_Palmer@fws.gov or by phone at 772-469-4280.

cc: electronic only
ENP, Homestead, Florida (Tylan Dean)

LITERATURE CITED

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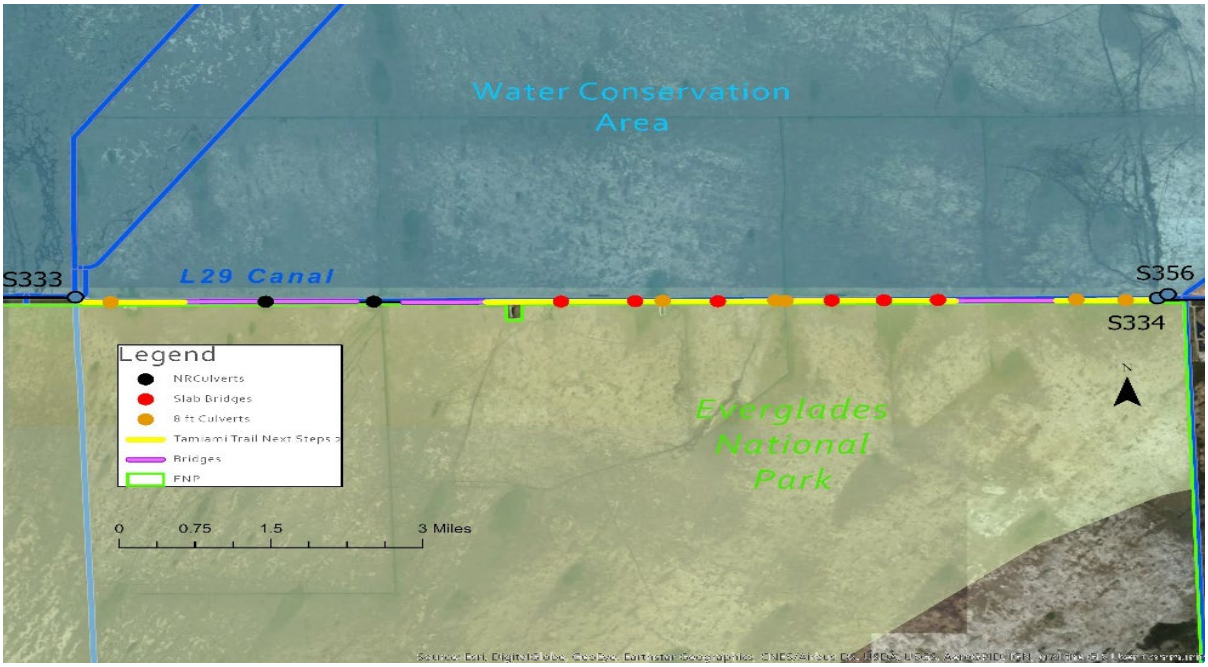

Figure 1. General project location along Tamiami Trail (US 31) between S-333 and S-356. Purple lines indicate existing bridges and dots represent proposed culvert locations.