



**United States Department of the Interior
NATIONAL PARK SERVICE**



**Everglades and Dry Tortugas National Parks
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In Reply Refer to:

L54

Memorandum

To: Files

From: Superintendent, Everglades and Dry Tortugas National Parks

Through: Park Interdisciplinary Team and Denver Service Center

Subject: Tamiami Trail Modifications: Next Steps Project - Adequacy of National Environmental Policy Act Documentation

Project Information

Park Name: Everglades National Park

Project Title: Confirmation of Previous Analysis Documented in the Tamiami Trail Next Steps EIS for Addressing Modifications to the Authorized Plan Based on Regulatory Requirements of the Florida Department of Environmental Protection

Project Location: Miami-Dade County, Florida

Project Leaders: Lydia Creager (DSC), Charles Borders (DSC), and David Sikkema (ENP)

Project Description

The 2014 Modified Plan design of the deck runoff stormwater treatment as described in the May 8, 2014 Memorandum to File (MTF) was revised and modified in response to a request from the Florida Department of Environmental Protection (FDEP) to include wetland treatment areas to further enhance the quality of bridge runoff prior to discharge into Everglades National Park (ENP), an Outstanding Florida Water (OFW) body. The FDEP request is based on state guidelines stipulated in the "Environmental Resource Permit Applicant's Handbook Volume II," which is incorporated by reference in Rule 40E-4.091(1)(a) and Rule 62-330.010, F.A.C. In addition, the National Park Service (NPS) has completed the required consultation with the U.S. Fish and Wildlife Service (USFWS) for the endangered species listed subsequent to the release of the 2010 EIS and documented in the May 8, 2014 MTF. Complementing the information on these listed species, the NPS provided the effects determination and the results of the USFWS consultation.

Description of Previous Compliance Documentation

The NPS completed the Tamiami Trail Modifications: Next Steps Project (Next Steps Project) and Environmental Impact Statement (EIS) in 2010 and published the Record of Decision in 2011. The Next Steps Project would modify the Tamiami Trail roadway to allow for future water levels in the adjacent

marshes associated with the broader restoration objectives of the Comprehensive Everglades Restoration Plan (CERP). The Next Steps Project EIS evaluated six Alternatives including a No-action Alternative. The Draft EIS was published for public review and a Notice of Availability (NOA) was published in the Federal Register on May 25, 2010. The Final EIS was made available to the public and a NOA was published in the Federal Register in December 14, 2010. The Record of Decision (ROD) was signed on Feb 11, 2011. On December 23, 2011, Congress passed the Consolidated Appropriations Act of 2012 (Public Law 112-74) which authorized construction of Alternative 6e of the Next Steps Project. In October 2012, NPS Director Jonathan Jarvis directed the staff of the Denver Service Center (DSC) and ENP to focus on the western 2.6 mile bridge as the first increment toward implementation of the Authorized Plan (Fig. 1).

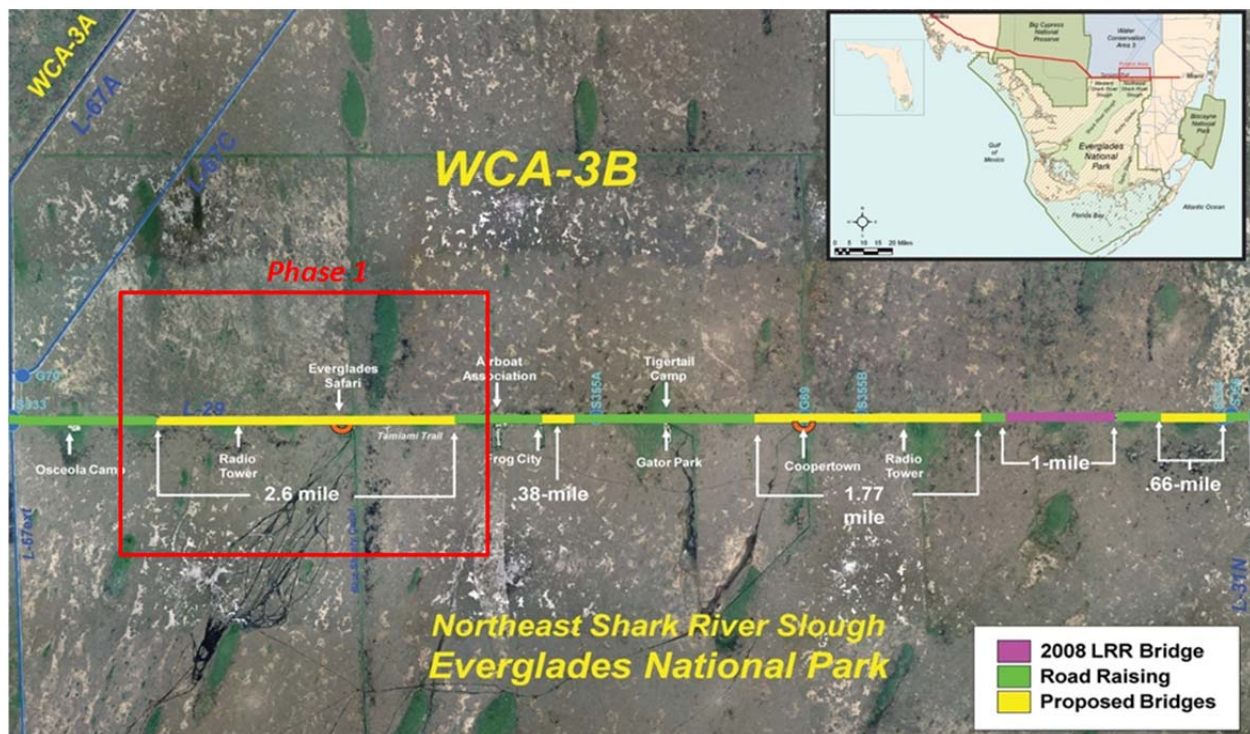


Figure 1: The 2010 Tamiami Trail Modifications: Next Steps authorized plan (Alternative 6e) and the project area for Phase 1 implementation, which originally consisted of a single 2.6 Mile Bridge and a downramp to the Everglades Safari Park commercial airboat facility.

The EIS stated that an assessment of the Lincoln Financial and Salem Radio Communications tower facilities would be completed, and the compatibility assessment was documented in a MTF signed and published on the NPS Planning, Environment and Public Comment (PEPC) website on July 7, 2011. A change in the preferred alternative design based upon elements of other alternatives which had been analyzed in the EIS was documented in a MTF published on PEPC and signed on May 8, 2014. For purposes of this document, the revised plan is referred to as the 2014 Modified Plan (Fig. 2).

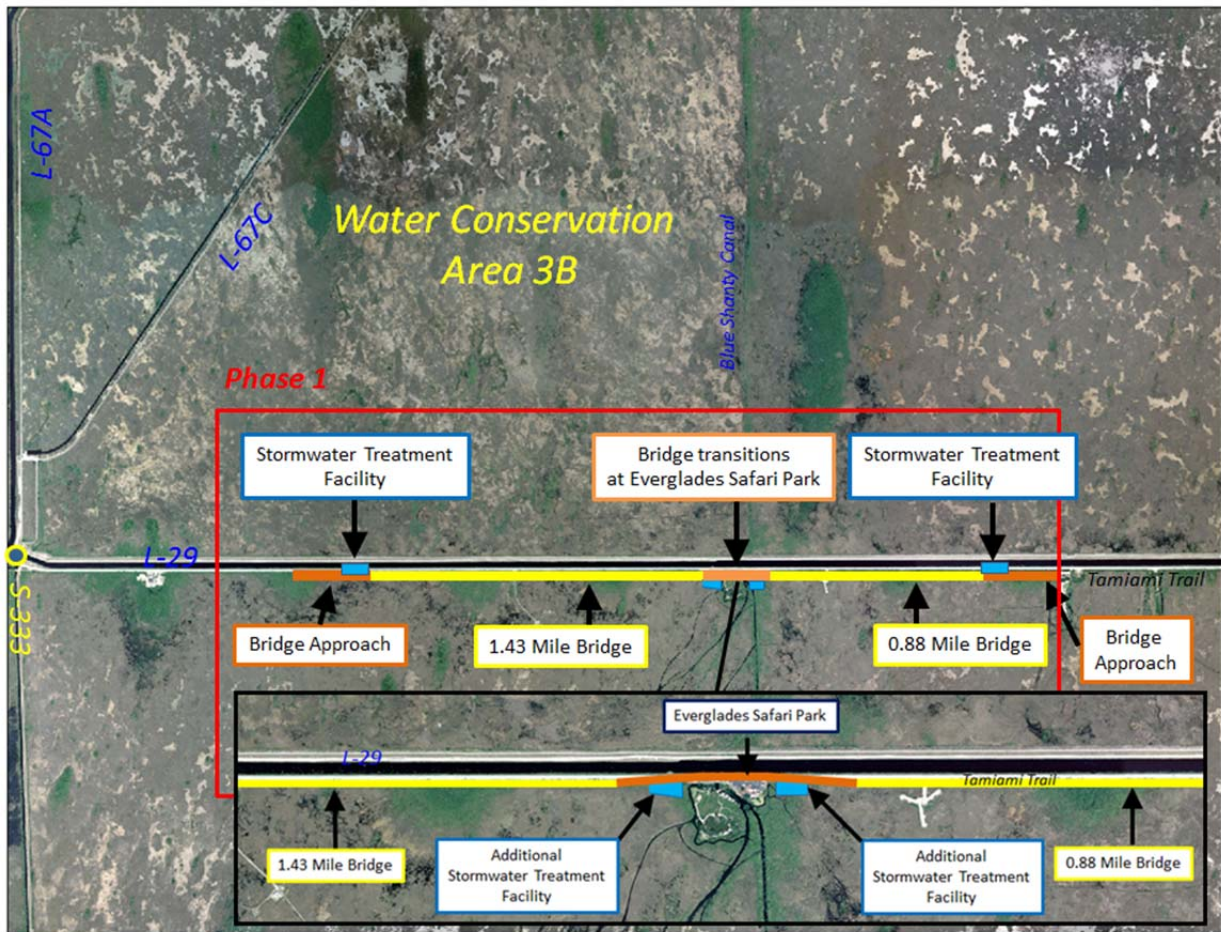


Figure 2: 2014 Modified Plan depicting the location of the two bridges instead of the original authorized 2.6 mile bridge. The inset shows the location of the two additional wetland treatment facilities on the east and west sides of the Everglades Safari Park that were required by Florida Department of Environmental Protection when the plan was modified from a single span to two bridge spans.

Benefits and Impacts of Additional Stormwater Treatment Facilities

Two additional wetland treatment areas were added to the 2014 Modified Plan as a result of discussions between the FDEP, Florida Department of Transportation (FDOT), and NPS following the submittal of the Comprehensive Everglades Restoration Plan Regulatory Act (CERPRA) permit application seeking approval for construction of the 2014 Modified Plan. Specifically, in order to meet the regulatory requirements of FDEP, the NPS was required to add two constructed wetland treatment areas on the east and west sides of the Everglades Safari Park commercial airboat facility (see inset in Fig. 2 depicting the general location of the new treatment facilities). The addition of these constructed wetlands will provide the required treatment of runoff from the east side of the western bridge and the west side of the eastern bridge approved for implementation of the 2014 Modified Plan described in the NPS May 8, 2014 MTF. The added treatment capacity provides the required additional treatment but also impacts approximately 1.45 additional acres of wetlands. These modifications bring the total wetland impact of the project to 17.17 acres but are still within the amounts and types of impacts described in the EIS. The updated stormwater treatment system, including the features recommended in this MTF, includes dry basins, wetland treatment areas, and a battery of runoff treatment units. See Figure 2 (insert) for the general

location of the two additional treatment areas and refer to Attachment A for more specific details on the location and configuration of the wetland treatment areas between the two bridge approaches and adjacent to the Everglades Safari Park commercial airboat facility.

Water Quality Treatment Improvements

The wetland treatment facilities design requires a runoff treatment volume of 6.93 ac-ft and provides a total treatment capacity of 11.28 ac-ft. By comparison with the 2014 Modified Plan design summarized in the May 8, 2014 MTF, these additional treatment facilities increase the required treatment capacity by 10% (6.93/6.32 ac-ft) but provide 63% (11.28/6.94 ac-ft) more treatment capacity. The total treatment capacity is now provided by the original 0.62 ac-ft in dry basins, 1.17 ac-ft in wetland treatment areas, and 10.28 ac-ft in runoff treatment units. The wetland treatment is a new addition to the treatment system, and the increased capacity from the runoff treatment units reflects changes in estimating the acreage of impervious areas.

A comparative analysis of this improved design shows that water-quality benefits would improve by providing significant extra treatment capacity, 63% above the required volume, and by adding wetland treatment areas to the treatment system that would retain nutrient-related pollutants not removed by runoff treatment units. Adverse water-quality effects from construction and maintenance of the 2.6 mile bridge are assessed to be local, minor, and of short-term duration, and are the same as the assessed effects for the Modified Alternative approved for implementation in the May 8, 2014 MTF and consistent with the EIS and associated ROD.

Wetland Impacts

A Uniform Mitigation Assessment Method (UMAM) was conducted on May 16, 2014 to assess the impact of the project construction on wetlands and surface waters. The additional treatment facilities added to the Modified Alternative for Phase 1 of the Next Steps Project is expected to result in 17.17 acres of permanent impacts to wetlands and surface waters within the construction limits. No temporary impacts to wetlands or surface waters are anticipated. Based on the earlier UMAM analysis, the project will also restore a total of 17.23 acres of existing roadway to freshwater marsh by removing the existing Tamiami Trail roadway and fill and scraping down to the bedrock at two sites within the project footprint. The two sites for roadway removal include 12.27 acres of roadway east of the Lincoln Financial Media site and 4.96 acres adjacent to and west of the Lincoln Financial Media site. The project benefits analysis demonstrated that the total functional gain from the roadway removal is greater than the total functional loss.

The Tamiami Trail Next Steps EIS and associated Statement of Findings (SOF) included an assessment of known impacts to wetland as well as anticipated impacts that would require additional mitigation. The total amount of wetland impacts requiring mitigation for the Next Steps Phase I Project is now 17.17 acres and 4.68 UMAM functional units, while a total of 17.23 acres of wetlands will be restored from Tamiami trail roadway removal (4.75 UMAM functional units). This indicates that the Next Steps Phase I Project is a self-mitigating project based on the roadway removal mitigation provided by the Next Steps Phase I Project. This is in conformance with the analysis of the EIS and the associated Statement of Findings and satisfies the language of the SOF and Decision Document that there is no net loss of wetlands.

Additional Listed Endangered Species Following Release of the EIS

This section describes the threatened and endangered species impact assessment and section 7 effect determinations of the 2014 Modified Plan in comparison with the determinations in the EIS, and

incorporates newly listed species and associated information. Soil and wetland impacts are reduced with the 2014 Modified Plan as compared to the impacts described in the EIS, leading to fewer impacts to wood stork (*Mycteria americana*), Everglade snail kite (*Rostrhamus sociabilis plumbeus*), and Florida panther (*Puma concolor coryi*) habitat, but the reduction in impacts does not alter effect determinations. All section 7 effect determinations for threatened and endangered species described in the Final Environmental Impact Statement (FEIS) remain unchanged from the EIS.

Since the release of the FEIS, the USFWS listed four species that occur in ENP. The Florida bonneted bat (*Eumops floridanus*), the Bartram's scrub-hairstreak butterfly (*Strymon acis bartrami*), the Florida leafwing butterfly (*Anaea troglodyta floridalis*), and the Cape Sable thoroughwort (*Chromolaena frustrata*) have all been listed as endangered. NPS is therefore providing effect determinations for these species (Table 1) as a part of ongoing informal consultation. Since the release of the FEIS, the USFWS also designated critical habitat for the Cape Sable thoroughwort, the Bartram's scrub-hairstreak butterfly, and the Florida leafwing butterfly. This document addresses impacts only within the 2014 Modified Plan project area (2.6 mile bridge).

Florida bonneted bat

The Florida bonneted bat is the largest bat occurring in Florida and is named for its large ears that extend beyond its eyes to form the appearance of a bonnet (USFWS 2013 (a)). This bat species feeds on insects and is known to inhabit forests, wetlands, other types of natural habitats, suburban, and urban areas (USFWS 2013 (a)). Roosting sites within south Florida generally occur within manmade structures and trees. The range of the Florida bonneted bat is largely restricted to south and southwest Florida and has been detected within Charlotte, Lee, Collier, Monroe, Miami-Dade Counties, Polk, and Okeechobee counties (USFWS 2013(a)).

The NPS performed acoustic monitoring along the L-31 North Levee, east of the 2014 Modified Plan project area, in 2012 and detected the Florida bonneted bat (email communication between Skip Snow and Paula Halupa, USFWS 2012). Based on the NPS survey data, the Florida bonneted bat has the potential to occur within the project area of the 2014 Modified Plan due to the project site proximity to the NPS monitoring site on the L-31N but it has not been documented in the project area. It is uncertain if the Florida bonneted bat roosts within trees or tree cavities within Northeast Shark River Slough of ENP or artificial structures bordering Northeast Shark River Slough, as no roosting surveys have been conducted in these areas. However, due to the limited mature woody vegetation and lack of other suitable roost substrates, it is unlikely that Florida bonneted bats roost in the project area. It is possible that the Florida bonneted bats forage for insects within the Northeast Shark River Slough of ENP because they are known to forage over wetlands and range widely across the landscape. For the purpose of our analysis, we assumed the bat is foraging but not roosting in the project area. We do not anticipate that implementation of the 2014 Modified Plan will significantly impact potential foraging because the loss of wetlands is small compared to the availability of similar habitats adjacent to the project, and bonneted bats are not known to preferentially forage in wetlands. The expansive habitat south of the project area in ENP would provide suitable foraging during the limited time during project construction and foraging bats (if present) would likely move away from the bridge and construction as a result of any disturbance.

The distance between bridge support beams in the 2014 Modified Plan will likely be too wide to provide Florida bonneted bat day roosting sites (Kelly and Tuttle 1999) should the bats occur in this area. It is uncertain if the height and design of the bridging structure would provide suitable conditions for night roosting for the Florida bonneted bat. To date, there are no documented reports of Florida bonneted bats using bridging structures as roosting sites. However, other bat species are known to night roost in similar bridging designs between beam structures (Kelly and Tuttle 1999). Open locations on the underside of the bridges between the bridge beam structures may provide night roosting sites if the bat occurs in this area. Therefore, there may be increased night roosting sites available for the Florida bonneted bat resulting

from implementation of the 2014 Modified Plan if this species occurs in the project area. However, sustainability of potential night-time roosting benefits will be contingent on implementation of bridge maintenance and repair activities that will be minimally disturbing to any roosting bats.

General mitigation measures for threatened and endangered species will be followed under the 2014 Modified Plan as described in the EIS and include the following:

- During the environmental training, construction contractors would receive training on federal- and state-listed species and how to recognize and avoid impacts to these species.
- Pre-construction surveys would be conducted to identify any federal- and state-listed species occurring in the project area. Should any individuals or active breeding sites be identified, additional protective measures would be taken to avoid impacts (e.g., providing additional information to contractors about the species) and Florida Fish and Wildlife Conservation Commission (FFWCC) and the USFWS would be notified of the presence of these species in the project area.

Overall, it is uncertain whether the Florida bonneted bat occurs in the project area, although this is possible due to the detection of this species at the nearby L-31N monitoring site and the suitable foraging wetlands that occur in the project area. Presence of roosting bats would be evaluated during the threatened and endangered species survey. Should the Florida bonneted bat or evidence of recent roosting activity be detected during the survey and show potential for bats to be affected by the project, consultation with the USFWS would need to be completed before initiating construction. Any effects are expected to be limited to temporary disturbance during construction, and potentially reduced foraging habitat in the immediate vicinity of the bridge. In response, if bats are present in the project area, they are expected to move to adjacent high quality foraging areas. These effects are anticipated to be insignificant and discountable. Due to the small but permanent impacts to potential Florida bonneted bat foraging habitat, long-term, minor, localized impacts to the Florida bonneted bat would be anticipated with implementation of the 2014 Modified Plan. The 2014 Modified Plan may affect, but is not likely to adversely affect, the Florida bonneted bat (Table 1).

Bartram's scrub-hairstreak butterfly

The Bartram's scrub-hairstreak butterfly was listed as endangered in August 2014 (USFWS (d) 2014). Survey data indicate the range of the Bartram's scrub-hairstreak butterfly is restricted to the pine rockland habitat of Miami-Dade and Monroe counties in Florida (USFWS (a) 2014). The distribution of the Bartram's scrub-hairstreak is thought to be restricted to pine rockland habitat that contains its only known larval host plant, the pineland croton (USFWS (a) 2014). Designated critical habitat for the Bartram's scrub-hairstreak occurs within the Long Pine Key region of Everglades National Park and also outside of Everglades National Park at the Navy Wells Pineland Preserve, Camp Owaissa Bauer, Big Pine Key, No Name Key, and Little Pine Key (79 USFWS (d) 2014).).

Pine rockland habitat and pineland croton does not occur within 2014 Modified Plan project area, and the project does not occur in proposed critical habitat of the Bartram's scrub-hairstreak butterfly. Therefore, the 2014 Modified Plan will have no effect to the Bartram's scrub-hairstreak butterfly or its proposed critical habitat (Table 1).

Florida leafwing butterfly

The Florida leafwing butterfly was also listed as endangered in August 2014 USFWS (d) 2014). . Survey data indicate the range of the Florida leafwing butterfly is currently restricted to Everglades National Park, and its historic range was limited to Miami-Dade and Monroe counties in Florida (USFWS (c) 2014). The distribution of the Florida leafwing is thought to be restricted to pine rockland habitat that

contains its only known larval host plant, the pineland croton (USFWS (c) 2014). Designated critical habitat for the Florida leafwing butterfly occurs within the Long Pine Key region of Everglades National Park and also outside of Everglades National Park at the Navy Wells Pineland Preserve, the Richmond Pine Rocklands, and Big Pine Key USFWS (d) 2014).

There are no records of Florida leafwing in the project area, and pine rockland habitat and pineland croton does not occur within the 2014 Modified Plan project area. No proposed critical habitat for the Florida leafwing butterfly occurs within the project area. Because this butterfly is not expected to occur in the project area and its preferred habitat and larval host plant does not occur within the project area, the 2014 Modified Plan will have no effect on the Florida leafwing butterfly or its proposed critical habitat (Table 1).

Cape Sable thoroughwort

The endangered Cape Sable thoroughwort is restricted to southern Florida and occurs within coastal berm, coastal rock barrens, coastal hardwood hammocks, rockland hammock, and buttonwood forest habitats located from the southern tip of Cape Sable in ENP east to Madeira Bay, and in the Florida Keys (USFWS (b) 2014). This species has been extirpated from approximately half of its historical distribution in the Florida Keys but still occupies its historical habitat range in Everglades National Park. Critical habitat for this species has been designated within Everglades National Park along the southern coast of Florida from Cape Sable to Trout Cove, and within the Florida Keys (USFWS (b) 2014). This species and its critical habitat do not occur within 2014 Modified Plan project area. Therefore, the 2014 Modified Plan will have no effect on this species and its designated critical habitat (Table 1).

Table 1. Endangered Species Act Section 7 effect determinations for species that have been listed or proposed for listing since the release of the EIS.

Species	Status	Effect Determination	Reasoning
Florida bonneted bat	Endangered	May affect, but not likely to adversely affect	This species has the potential to occur and forage in the project area but project implementation is not likely to adversely affect this species. The existing habitat is not likely to provide suitable roosting conditions. General mitigation measures that include a species survey and contractor training on threatened and endangered species will be implemented as described in the EIS.
Bartram's scrub-hairstreak	Endangered	No effect	This species and its larval host plant, the pineland croton, are not located in the project area. The project area is not located in the designated critical habitat for this species.
Florida leafwing butterfly	Proposed Endangered	No effect	This species and its larval host plant, the pineland croton, are not located in the project area. The project area is not located in the designated critical habitat for this species.
Cape Sable thoroughwort	Endangered	No effect	This species and its associated critical habitat do not occur in the project area.

Conclusion

The general conclusion from this Confirmation of Previous Analysis is that the additional ponds required by FDEP to be added to the 2014 Modified Plan for Phase 1 implementation of the Tamiami Trail Modifications: Next Steps project will result in improvements to the natural resources of Everglades National Park. The interdisciplinary team (IDT) determined the following specific benefits and impacts associated with the additional treatment areas were consistent with the original EIS:

- A. The additional wetland treatment areas still result in the project remaining self-mitigating. UMAM analysis of wetland impacts resulted in the determination that the amount of roadway removed still more than compensates for the wetland losses associated with the additional treatment ponds added to the 2014 Modified Plan.
- B. Slightly more permanent wetlands impacted (17.17 acres as compared to 15.72 acres impacted by the 2014 Modified Plan but still less than the amount of wetlands created by the project, 17.23 acres).
- C. Improved water quality treatment (Increased numbers of Runoff Treatment Units and added two wetland treatment areas as compared to the 2014 Modified Plan).

After careful review of the 2010 EIS, the IDT concurs that the previous document adequately describes and analyzes the impacts for this action. There is no change to project scope, the description of impacts (context, intensity, and duration) remain as described in that EIS, and site conditions have not changed since preparation of the EIS. No additional public involvement is required. Because neither the original EIS, nor this evaluation, resulted in any significant adverse effects to NPS resources and values, there would be no impairment to National Park System resources and values from implementation of this project.

Finally, the IDT also updated the effects determination (Section 7 of the Endangered Species Act compliance requirement) of the EIS to include several recently listed species. It is the opinion of the IDT that there would be no effect on the Bartram's scrub-hairstreak, the Florida leafwing butterfly, and the Cape Sable thoroughwort. The plan may affect, but is not likely to adversely affect, the Florida bonneted bat. This information and opinion was communicated to the USFWS through informal consultation and it was subsequently agreed to that adherence to the mitigation measures described in the EIS coupled with ongoing consultation throughout construction was appropriate (see Appendix for NPS/USFWS communication).



Superintendent

March 10, 2015

Date

Attachments

Literature Cited

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