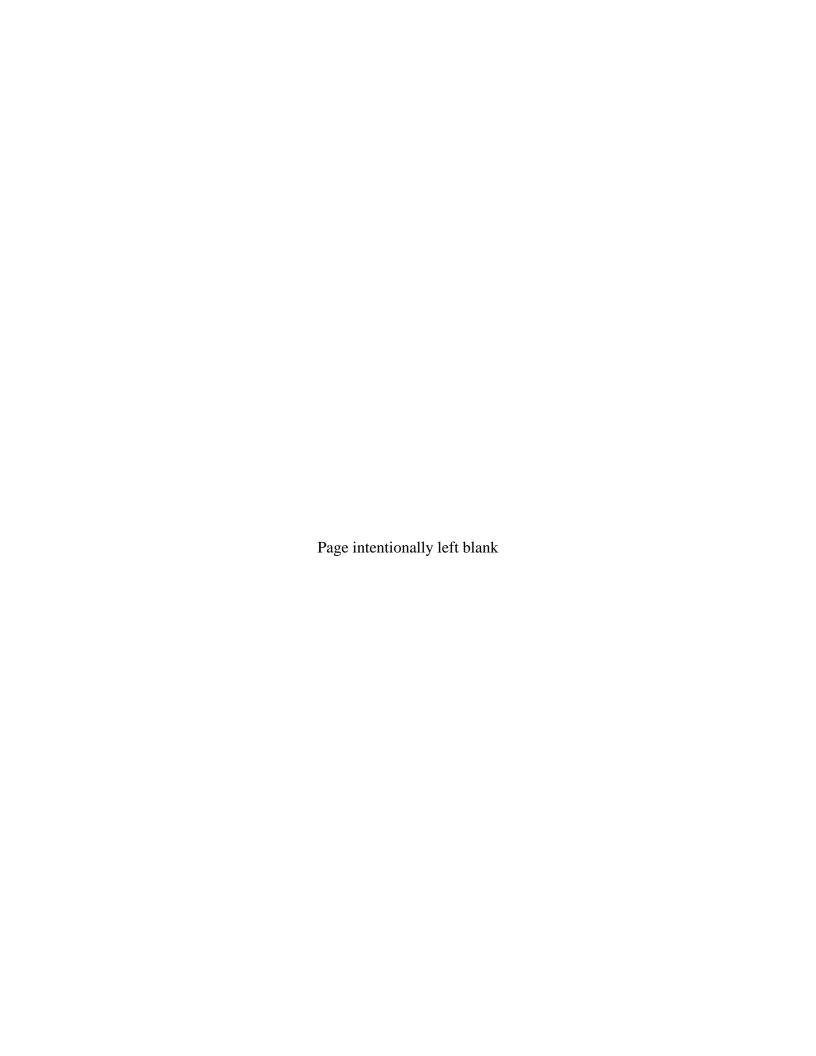
# APPENDIX I COMMENTS AND RESPONSES RECEIVED ON THE DSEIS





#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4 ATLANTA FEDERAL CENTER 61 FORSYTH STREET ATLANTA, GEORGIA 30303-8960

## AUG 18 2006

District Engineer Attn: Dr. Jon Moulding Army Corps of Engineers P.O. Box 4970 Jacksonville, FL 32232-0019

Subj: Draft Supplemental Environmental Impact Statement (DSEIS) on the Interim Operational Plan (IOP) for Protection of the Cape Sable Seaside Sparrow

Dear Dr. Moulding:

Pursuant to Section 102(2) (C) of the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, the U.S. Environmental Protection Agency (EPA) has reviewed the referenced U.S. Army Corps of Engineers (COE) Draft Supplemental Environmental Impact Statement (DSEIS) describing environmental impacts associated with water control/pumping/management strategies comprising preferred alternative "Alt. 7R". This alternative modifies a previously-implemented Interim Operational Plan designed to protect the Cape Sable Seaside Sparrow (CSSS), an endangered species living in and near Taylor Slough and in Big Cypress Swamp situated in southern Florida.

Background – In 1905 the Florida legislature passed the first comprehensive drainage law creating a board with authority to construct a system of canals designed to drain and reclaim swamp land (Tebeau, 1974). Following the genesis of the initial drainage law, a number of surface water drainage and diversion projects have been built which, although met the original design goals of the project, had unintended consequences adversely impacting wildlife species, a situation that became more evident in the 1960's and 1970's. In attempts to ameliorate the disruption of protected species and their habitats, more recent water management strategies attempted the restoration of more natural flows through the Everglades. These strategies included the Experimental Program, allowing the COE (in 1983) to deviate from minimum water deliveries to improve conditions within the ENP; the more recent Modified Water Deliveries plan, of which the final Tamiami Trail segment is scheduled for completion in 2008; and the C-111 Project which calls for five pump stations and levee-bounded retention structures to be built to control seepage out of the ENP, and at the same time, providing flood control protection to agricultural lands situated between Lake Okeechobee and the ENP.

In February 19, 1999, the U.S. Fish & Wildlife (FWS) released a Biological Opinion (BO) documenting the decline of the CSSS and identified the greatest threats to

its continued survival being vegetation changes, fire, development, and hydrologic alteration. The BO implicates controlling water levels within the Florida Everglades as having affected this species, which is dependent upon natural level fluctuation. The sparrow's breeding season typically extends over nearly half of the year (February – August), and depends on the characteristics of individual rainy seasons. Nesting activity decreases abruptly when the marsh they depend on becomes flooded. The BO determined that elements of the Experimental Program's hydrologic regimes caused jeopardy and adverse modification of sparrow critical habitat, and that incidental takes were anticipated. Similarly, operational modes of C-111 also were anticipated to cause sparrow incidental takes. In January, 2000, the Experimental Program was terminated and replaced with an Interim Structural and Operational Plan (ISOP) designed to meet FWS conditions defining the most reasonable alternative articulated in the B.O.

An FEIS, prepared by the COE in May, 2002, identified the environmental consequences of the on-going modifications in water management practices being implemented to benefit portions of the CSSS habitat in the ENP. These modifications, designed to prevent jeopardy to the continued existence of the endangered CSSS, also provided additional flood protection capability for development in lands east of the L-31N Canal. The COE proposed construction of an additional pump station (S-332C) and reservoirs designed to intercept seepage losses from ENP along the L-31N Canal. The pump station and seepage reservoirs are to supplement the capacity of the existing pump station (S-332B) to lower canal and groundwater levels in anticipation of significant storm events. In addition, a previously-authorized pump station, S-356, in the Tamiami Canal has been added as part of the water management plan. This will return seepage from the northern reach of the L-31N Canal to the Northeast Shark River Slough.

Comments on Subject Document - The subject DSEIS provides a final revised water management plan, known as Alt. 7R, to be implemented as the Interim Operational Plan for the protection of the CSSS. Alt. 7R is the end product of a mediation process between the U.S. Fish and Wildlife Service, National Park Service, Corps of Engineers, and South Florida Water Management District. The additional components associated with Alt. 7R, notably the inclusion of a second seepage reservoir and the addition of Pump Station S-332C and the removal of the southern four miles of Levee 67 Extension and canal, should address the water quality concerns expressed in EPA's previous comments, reiterated below, about discharges into ENP.

Water delivered to ENP must meet stringent water quality requirements. First, a U. S. District Court Settlement Agreement Consent Decree identified that an annual phosphorus long-term limit of 11 parts per billion must be met at inflows to the Taylor Slough/C-111 Basin. In addition, under the Consent Decree, if research were to determine the numeric value for the Class III narrative nutrient criteria results in a more stringent phosphorus limit for the ENP, then the more stringent limit shall apply. Florida has adopted and EPA approved a 10 ppb total phosphorus criterion for the Everglades Protection Area. Lastly, ENP is afforded a more stringent level of water quality protection as an Outstanding Florida Water.

We note that water quality concerns continue to echo in this document. Once the selected alternative has been constructed, future operations are critical in determining the quality of water that is delivered to the detention reservoirs, and subsequently, the ENP. Any water quality operational plan must also factor in Lake Okeechobee, with its enormous internal reservoir nutrient load accumulated during prior decades that will take a significant period, possibly on the order of 20 years according to the SDEIS, to be removed and/or stabilized. Most recently, the 2005 hurricanes have resuspended the nutrient rich sediments in the Lake such that average phosphorus levels in the lake are in the 200 – 300 ppb range. Although nutrients from Lake Okeechobee are not likely to be quickly reduced in the near term, some progress is evident. For example, the DSEIS (pg 57) stated that the flows entering the SRS under IOP since 2002 have been in compliance with interim limits of phosphorus, and the yearly interim concentration was 9.4 ppb, which is the same as calculated in the Settlement Agreement. From a water quality perspective, this is a positive development.

EPA supports implementation of this IOP as it appears to be the best practicable solution to the CSSS issue. Additional information, if available, would improve the DSEIS.

- The impact of Florida's anti-degradation policy (ADGP) (see F.A.C. 62-302.300, 62-302.700 or 62-4.242) for the two affected stream segments (Outstanding FL waters, Class III) on the proposed discharges should be considered. The water quality monitoring that has been initiated is a positive step and should be continued long-term to verify that project waters comply with state/federal standards. The water quality monitoring should include mercury and pesticides that are currently in use in the agricultural watershed. It is critical that data of known and documented quality be produced.
- Are there plans for post-construction WQ monitoring as requested by FWS and FFWCC? How would compliance with National and State criteria and standards be measured without any background data or any estimated loadings? If there are storm-water discharges with measurable concentrations of Hg, Cd, or BOD, are these likely to causing or contributing to the exceedance of a WQS? If so, would NPDES permit or CWA, Section 401 certification be needed?
- We could not find pre-EIS monitoring data for many of the FL WQS, including bacteria, nitrates/nitrites, ammonia, pesticides, turbidity, BOD, and DO, among others, nor for any sediment-related parameters. Except for some metals, compliance with all of the FL narrative and numeric water quality standards at F.A.C. 62-302.500, was not evident in the DSEIS.
- We could not find a commitment to mitigate specific wetlands losses attributable to the project, or to implement the mitigating measures discussed with FWS, FFWCC, EPD and Region 4 EPA. It would be beneficial to document any tradeoffs against the loss of 3.4 FU of wetlands and a 5 to 10% loss of aquatic connectivity. Furthermore, there is a reference to "additional flood protection capability for development of lands east of L31N canal" that needs documentation also.

We could not find compliance steps for the stormwater discharges associated with construction and operation of new equipment, or the removal of four miles of the levee at the south end of Levee 67 Extension and Canal. We assume that COE and their construction contractor will be required to file Notices of Intent to use an EPA or FL DEP general permit for stormwater discharges from both the construction and operations of the new facilities, along with preparation of a Stormwater Pollution Prevention Plan that implements the appropriate Best Management Practices (BMPs).

EPA reiterates that operational procedures should maximize the delivery of cleaner water to ENP and minimizes the influence of seepage water from urban/agricultural areas. Lessons have already been learned from operation of the S-9 structure, that is, use of appropriately sized pumps, for maintaining water quality which can be applied in the C-111 basin. If the subject system is initially designed to minimize the transport and influence of degraded water, this can greatly decrease the need for subsequent treatment prior to discharge into ENP. It should be noted that if Alt. 7R does not deliver the necessary quality of water, additional treatment costs may be incurred.

The water quality monitoring that has been initiated is a very positive step and must be continued long-term to verify that project waters comply with state/federal standards. The water quality monitoring should include mercury and pesticides that are currently in use in the agricultural watershed. With regard to all parameters, but EPA-8 especially total phosphorus, it is critical that data of known and documented quality be produced. This requires appropriate field sampling methods, and planning such that laboratory analytical methods, precision or accuracy are not in dispute. This would help to minimize future disputes about data quality.

Notwithstanding our concerns about the potential long-term impacts of poor water quality on the ENP, EPA supports implementation of this IOP as it appears to be the best practicable solution to the CSSS issue. This document was rated EC-2, Environmental Concerns, with suggestions for additional information on water quality. Thank you for the opportunity to comment on this action. If we can be of further assistance or if a meeting is desirable to discuss this and/or related water delivery projects, Richard Harvey (561-615-5292) and Dan Scheidt (706-355-8724) will serve as initial points of contact; for NEPA-related concerns please contact John Hamilton (404) 562-9617.

Sincerely,

Heinz J. Mueller, Chief

Office of Environmental Assessment

#### Literature Cited:

U.S. Fish and Wildlife Service, 1999. Final Biological Opinion for the U.S. Army Corps of Engineers, Modified Water Deliveries to Everglades National Park, Experimental Water Deliveries Program, and the C-111 Project. Vero Beach, Florida

Tebeau, Carlton W. 1974. South Florida Water Management, pg 362. In: Environments of South Florida, Memoir 2, Miami Geological Society, Patrick J. Gleason, Ed.



# United States Department of the Interior

OFFICE OF THE SECRETARY Washington, D.C. 20240

August 10, 2006

Colonel Paul Grosskruger Commander United States Army Corps of Engineers Jacksonville District P.O. Box 4970 Jacksonville, FL 32232-0018

Dear Colonel Grosskruger:

Thank you for the opportunity to review and provide comments on the Draft Supplemental Impact Statement (DSEIS) for the Interim Operating Plan (IOP) for Protection of the Cape Sable Seaside Sparrow, Everglades National Park, Miami Dade County, FL. We appreciate the efforts of your staff to resolve many difficult issues in producing this report and look forward to working with you as we seek to improve it.

In general, the Department's interest is to resolve the IOP issues quickly and move to implementation of the Combined Structural and Operating Plan (CSOP) as soon as possible. We DOI-1 have no specific comments on the DSEIS at this time, but the U.S Fish and Wildlife Service will provide additional input as part of its Section 7 consultation for the project.

Sincerely,

Perrence C. Salt.

Director of Everglades Restoration Initiatives

# LEHTINEN VARGAS & RIEDI

# ATTORNEYS AT LAW A PROFESSIONAL ASSOCIATION

August 14, 2006

Colonel Paul L. Grosskruger c/o Jon Moulding United States Army Corps of Engineers 701 San Marco Blvd. The Prudential Building Jacksonville, Florida 32207-8175 Via Fax and U.S. Mail; E-Mail; and Express Mail

Re: OBJECTIONS BY MICCOSUKEE TRIBE OF INDIANS TO THE JUNE 6 2006, DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT ("SEIS") ON THE INTERIM OPERATIONAL PLAN ("IOP") ALTERNATIVE 7R

Attention: Dr. John Moulding at iopcomments@sai02.usace.army.mil

Dear Colonel Grosskruger,

#### I. OVERVIEW

### The Draft SEIS Does Not Comply with NEPA or the Court's March 24, 2006 Order

The Miccosukee Tribe of Indians objects to the Army Corps of Engineers (Corps) Draft Supplemental Environmental Impact Statement (SEIS) on the Interim Operational Plan (IOP), Alternative 7R and contends that it does not comply with the National Environmental Policy Act ("NEPA") and other federal law, or the Court's March 24, 2006, Order. The Draft SEIS states that, "Pursuant to a March 14, 2006 order by the United States District Court for the Southern District of Florida, the Corps is now supplementing its 2002 IOP EIS," and that it has been ordered to prepare an SEIS and include modeling results for the recommended plan. Draft SEIS at p. 2 and 79. Nowhere does the Draft SEIS divulge that the Judge Moore's Order in Case No. 00-22778-Civ-Moore was the result of a case brought by the Miccouskee Tribe of Indians, and that the Court found

<sup>1</sup>The Tribe incorporates its comments on the Final Supplemental EIS and Draft
Supplemental EIS (SEIS) dated November 26, 2001, the Draft EIS dated April 9, 2001, along
with the comments attached to those filings on the Interim and Structural Operation Plan (ISOP),
and the public comments made at the January 11, 2000 public meeting, the May 21, 2002
meeting and all other public meetings concerning the IOP, including the May 21, 2002 meeting.

Court agrees with Intervenors and Plaintiff [Tribe] that the failure of the Corps to prepare a SEIS, with hydrologic modeling results and the interpretation of the modeling stemming from the introduction of Alternative 7R, was arbitrary and capricious. Accordingly, for the reason stated above, this Court finds that Defendants [Corps] violated NEPA." Order at page 13. The Corps should disclose to the public that it was the Court's finding of a NEPA violation that resulted in a mandate to the Corps to prepare an SEIS. The Court found, "It is clear to the Court that the Corps violated NEPA by failing to issue an SEIS after adopting Alternative 7R," and ordered the Corps to issue an SEIS on IOP." Order at pages 32-33. NEPA mandates that an EIS be a full disclosure document, and the Corps is required to divulge the details of the Court's March 14, 2006, Order in the SEIS.

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The Tribe contends that the Corps' failure to follow the requirements of NEPA, the ESA and other federal law for the last eight years has resulted in the dire situation that exists today on Tribal Everglades in Water Conservation Area 3A ("WCA 3A"), which is also the critical habitat for the endangered Snail Kite the population of which has declined an alarming 50% under these unanalyzed water management actions. A review of the Draft SEIS at page 68-69 is proof of the agency's ongoing failure to conduct the analysis required under NEPA and the ESA. The Draft SEIS confirms that WCA 3A, which the government promised the Tribe would be preserved in its natural state in perpetuity, has severely deteriorated under IOP operations. "The principal concern is that the habitat quality, and thus the carrying capacity of, WCA 3A is already seriously degraded." Draft SEIS at p. 69. "Habitat quality in WCA 3A is changing progressively and dramatically to less desirable habitat in this area, and this conversion is rapid, with changes even after a year." Id. at p. 69. There is also very bad news for the endangered Snail Kite. The Draft SEIS states that, "The snail kite population in Florida progressively and dramatically decreased between 1999 and 2002." Id. At 68. "Since 2002, kite production in WCA 3A has dramatically dropped, having produced no kites in 2005." Id. At 69.

The Tribe is perplexed how the Corps can admit all the devastation in WCA 3A wrought by its failure to follow NEPA and IOP, yet continue to recommend the same operating plan that is devastating Tribal Everglades and the endangered Snail Kite and its critical habitat. The Tribe is more perplexed that the Draft SEIS can detail such damage, while at the same time claiming that, "The Corps has not identified any adverse effects on the species or their critical habitats resulting from the water management operations during the period from August 2002 to the present." Compare Draft SEIS at pp. 68-69 with Draft SEIS at pp. 77-78. This contradictory information is a classic example of arbitrary and capricious behavior by the Corps. Indeed, the Draft SEIS at the same time admits that Dr. Wiley Kitchens believes that "this trend of lowered reproduction is a cause of concern regarding the sustainability of the [Snail Kite] population." Id. at p. 68. The Tribe has attached the 2005 Snail Kite Demography Annual Report on which many of the Corps statements are based as a warning to the Corps that the Tribe will continue to pursue violations of the Endangered Species Act ("ESA") against both the Corps and Fish and Wildlife Service ("FWS") should this irresponsible neglect of the decline of the Snail Kite, and its critical habitat in WCA 3A. continue. Attachment A. This 2005 Report prepared for FWS states that Snail Kite researchers are very concerned about the alarmingly high water levels that have existed in WCA 3A. Id. at p. 19.

A review of the cursory, and contradictory nature, of the Draft SEIS shows that the Corps is still failing to comply with the National Environmental Policy Act ("NEPA"), the Administrative Procedures Act ("APA"), the Endangered Species Act (ESA), and the Corps' trust responsibility to the Tribe (including their responsibility to protect the Tribe's reservation and leased lands in WCA-3A), and the U.S. Constitution, along with implementing regulations. A review of this perfunctory document shows that it was hastily put together, contradicts itself in many instances, and does not contain the modeling results for Alternative 7R for WCA 3A and other portions of the Everglades, which the Court ordered. Obviously, the Corps did not want the public to see that the Tribe has been absolutely correct about the high water impacts on WCA 3A and other parts of the ecosystem. There is NO hydrograph anywhere in the SEIS that shows the impacts that Alternative 7R, using 7R modeling, will have on WCA 3A or the high water criterion areas in indicator regions 14 and 19 specified in the Incidental Take Statement for the Snail Kite as compared to Test 7 and ISOP. Both NEPA and the Court's Order dictate that the modeling results for all areas of the Everglades impacted by IOP, including Lake Okeechobee and the estuaries, be included in the Draft SEIS for public comment. The Corps must include these modeling results under NEPA. Simply stating that there are figures that would be of interest on the Corps web site does not comply with the Court's Order or the NEPA requirement that an EIS be a full disclosure document. Draft SEIS at p. 43. Directing people, some who may not have a computer, to a complicated Corps web site is not sufficient under the statute or the Corps regulations.

While the Court mandated the Corps was to analyze the new structural components of IOP Alternative 7R as a result of the lawsuit the Tribe filed, that the Corps Draft SEIS still contains misleading, and in some cases untrue, statements about these temporary IOP components, which are not part of the C-111 and Modified Water Deliveries Projects. The Corps is well aware that the temporary S-356-like pump was NOT constructed in the exact location specified by the Mod Waters 1992 GDM. Draft SEIS at p. 13. Moreover, nowhere in the Draft SEIS does it show the modeling of Alternative 7R using these structures impacts on the Water Conservation Areas or other areas. In fact, many places in the Draft SEIS contain the exact same language that was in the FEIS even though the documents allegedly used different modeling. Nowhere in the document does it explain MIT-7 which model run was used. It has now been eight years since the Corps began closing the S-12 gates and backing up water on Tribal Everglades in WCA 3A. The Tribe warned that the Corps' actions would be devastating for the Everglades and the Snail Kite, but the Corps, in blissful disregard of NEPA, ignored these warnings. Sadly, pages 68-69 of the Draft SEIS contains evidence that Tribe's warnings have become reality. Yet, despite acknowledging that the alarming decline in WCA 3A and the Snail Kite population, the Corps continues to plan to operate IOP contrary to NEPA and the ESA. To support this bizarre conclusion, the Corps makes the same unsupported statement borrowed from the FEIS that Alternative 7R showed no significant increase over existing conditions in WCA 3A. Draft SEIS at p. 54. Even more incredibly, and in direct contradiction to page 69 of the Draft SEIS which discusses the downward spiral in WCA 3A, the document bizarrely claims that Alternative 7R, "would not have adverse effects on vegetation throughout WCA 3A." Id. at. p. 61.

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The record gathered over the last four years of IOP operations openly contradicts these unfounded statements in the Draft SEIS concerning Alternative 7R and shows that the Draft SEIS is an arbitrary and capricious document that fails to provide the Alternative 7R modeling results to

the public in a manner in which they can review the impacts that the sustained high water levels caused by IOP have caused to WCA 3A and other areas of the Everglades. There is no proof for the unfounded statement that Alternative 7R would not have adverse effects on WCA 3A or that impacts to tree islands there have been minimized. Draft SEIS at p.61. These arbitrary and capricious statements are contradicted by the facts in the record collected over the past four years of IOP operations, which are detailed at page 68-69 of the Draft SEIS itself. Additionally, the new information on WCA 3A and the Snail Kite contradicts the arbitrary and capricious finding in the faulty FWS 2002 Amended Biological Opinion that the degradation of 88,300 acres and/or 10.5% of Snail Kite in WCA-3A caused by Alternative 7R would not result in the destruction or adverse modification of its critical habitat.<sup>2</sup> Draft SEIS at 68-69; Attachment A. The data in the 2003, 2004, and 2005 Snail Kite Demography Annual Reports shows that IOP has done just that. Id.

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MIT-11

In short, the Draft SEIS contains errors, inaccurate statements, and misrepresentation of facts and data. A review of this perfunctory document, masquerading as an SEIS, shows that the Corps has treated the IOP SEIS ordered by the Court as yet another case of "first the verdict-then the trial." Both the IOP NEPA process, and the Draft SEIS, fail to meet the requirements of NEPA and other federal law. Alternative 7R, which was devised and adopted "behind closed doors" by an illegal advisory group that failed to comply with FACA, has once again been rubber stamped in the Draft SEIS. Draft SEIS at p. 5. The Corps says it welcomes public comment, but in reality the decision was long ago made outside of the public process. Id. The sole purpose of the Draft SEIS is to be a mere paperwork exercise to comply with the Court's Order while rubber stamping Alternative 7R which has caused the progressive degradation of Tribal Everglades in WCA 3A; has degraded the Snail Kite's critical habitat and caused an alarming 50% decline in its population which threatens its very sustainability; and which continues to cause irreparable damage to the Miccosukee Tribe's entire culture and way of life. Id. at 68-69.

#### II. SPECIFIC COMMENTS ON THE DRAFT SEIS DOCUMENT AND PROCESS

#### A. DRAFT SEIS IS IMPROPERLY BASED ON A FAULTY BIOLOGICAL OPINION

The Draft SEIS on IOP is faulty because it is based on the equally faulty February 1999 and 2002 Biological Opinions of the FWS. The Corps was required the Corps to reinitiate consultation with FWS under Section 7 of the ESA on the IOP Draft SEIS, because it knew that IOP Alternative 7R modeling showed more weeks of sustained high water in Snail Kite critical habitat. Yet, the Corps failed to reinitiate the required consultation until four months after the Court's Order and after the Draft SEIS went out for public comment. The alarming decline of the Snail Kite documented at page 68-69 of the Draft SEIS and in the 2005 Snail Kite Report, is proof that the FWS biological opinions are faulty. New information on the Snail Kite dictates a new biological opinion, which is not yet complete. The Tribe has long argued that neither the 1999 nor the 2002 biological opinions

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<sup>&</sup>lt;sup>2</sup> The Miccosukee Tribe has sued the FWS for violations of the ESA, including its faulty Biological Opinion and failure to reinitiate consultation on the decline in the Snail Kite in Case No. 05-23045-Civ-Moore.

are based on the best scientific information available and neither have been subject to NEPA review. Thus, they can not be the basis for the proposed IOP Alternative 7R action. Both the Corps and the MIT-14 FWS have violated the ESA by failing to use Alternative 7R modeling to predict IOP's impacts on the endangered Snail Kite and its critical habitat in the Draft SEIS; and by failing to reinitiate Section 7 consultation immediately when the 2003 Snail Kite Report showed an alarming 50% decline in the Snail Kite population. The fact contained in the 2005 Snail Kite report that no young fledged out of WCA 3A last year, required the Corps to reinitiate consultation with FWS in 2005, and also on the Draft SEIS. Thus, a new FWS draft biological opinion should have been included in the Draft SEIS, but was not. Attachment A at p. 10.

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The Corps should not rely on FWS's selective use of science and/or their "reasonable and prudent alternatives" (RPAs) that violate the ESA. The Draft SEIS contains evidence that the Corps water management actions taken in response to the FWS BO has caused, and will continue to cause, irreversible destruction of Tribal Everglades in WCA 3A, and has adversely affected the Snail Kite and its there. Draft SEIS at 68-69; Attachment A. The document admits: "The principal concern is that the habitat quality, and thus the carrying capacity of, WCA 3A is already seriously degraded." Draft SEIS at p. 69. Habitat quality in WCA 3A is changing progressively and dramatically to less desirable habitat in this area, and this conversion is rapid, with changes even after a year." Id. at p. 69. "The snail kite population in Florida progressively and dramatically decreased between 1999 and 2002." Id. At 68. "Since 2002, kite production in WCA 3A has dramatically dropped, having produced no kites in 2005."Id. at p. 69. It further admits that Dr. Wiley Kitchens believes that "this trend of lowered reproduction is a cause of concern regarding the sustainability of the population." Id. at p. 68. The Tribe warned that Alternative 7R modeling showed that Alternative 7R would exacerbate the flooding in WCA-3A but neither the Corps nor FWS cared. The Corps still refuses to put hydrographs that show the results of 7R modeling compared to ISOP and Test 7, and which

looks at indicators regions 14 and 19, which does not comply with NEPA or the Court's Order.

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The Corps also continues to refuse to take an independent hard look at the Sparrow science and refuses to analyze reasonable alternatives suggested by Sparrow experts such as captive rearing, predator control and other localized actions that would not result in massive changes to the water management system, threaten private and public property and cause irreversible destruction to other parts of the Everglades, including WCA-3A. See, Tribe's Comments on Draft EIS (April 9, 2001): Attachment 2, paper of Dr. Will Post and Dr. John Greenlaw). Now, despite its admissions about the devastation to WCA 3A, and the alarming decline of the Snail Kite under IOP, the Corps continues to recommend Alternative 7R that will continue to adversely impact the of the endangered Snail Kite and the Tribal culture by closing the S-12 gates. The data in the Draft SEIS shows that the both ISOP and IOP have not helped sub-population A of the sparrow. Draft SEIS at p. 66. Like the Snail Kite, the western sub-population A has declined since 1999. Id. This sparrow subpopulation fared better under Test 7 operations. Id. Also, the population figures disprove the Corps assertion that flows through the S-12 gates caused the decline of the sparrow. The population estimates show that sparrow sub-population fared quite well with the gates open in 1981 and in 1992 until Hurricane Andrew hit. Id. In fact, the sub-population A estimates show that the Corps' actions under ISOP and IOP have actually caused sub-population to decline, which would be in keeping with Dr. Post and Greenlaw's warnings that the actions being taken are "simplistic." Id. The Corps must

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analyze this data in its SEIS and reinitiate consultation with FWS on the drop in population. The Corps should also acknowledge the fact that water will be higher under Everglades Restoration in this area than FWS is insisting it be kept now.

The Corps has long known that the closing of the S-12s would cause the damage that is reported on page 68-69 of the Draft SEIS. On page 3 of appendix E, to the February 5, 1999 letter from the Corps to Sam Hamilton of FWS, it states that actions requested such as limiting flow through the S-12s "may cause adverse environmental impacts in the WCAs as well as adverse impacts upon tribal interests." (emphasis added). FWS also stated at page 82, item 9 of the 1999 BO that: "Excessive water storage in WCA-3A, above the current operating schedule, adversely impacts the endangered Wood Stork, the endangered Snail Kite, and designated Snail Kite." (emphasis added). In 2006, and only as a result of a Court Order, the Corps is finally reporting the devastating impact that closing these gates has had on WCA 3A and the endangered Snail Kite. Draft SEIS at pp. 68-69. NEPA and the ESA require an analysis prior to the action being taken. Unfortunately for the Tribe and the Snail Kite, the Corps and FWS's continuing failure to comply with the law, including the ongoing failure to analyze the cumulative impacts of the past, present, and future impacts on the Snail Kite and its, has had (and will continue to have) dire results.

#### B. USING THE SPARROW TO EVADE THE LAW AND CONTROL WATER

For over eight years now, four of them under IOP, the Corps has failed to follow NEPA and the Indian Trust Doctrine. The Corps has yet to analyze the cumulative adverse impacts of their actions on the environment and other endangered and threatened species, as required by NEPA and the ESA. Until their belated March 15, 2002, request for formal consultation with FWS, the Corps had never conducted formal consultation on the impact that their actions would have on the Snail Kite and its, even while fully aware that its actions created detrimental high water conditions in WCA 3A. And, even though it knew since March 15, 2002, that IOP would adversely impact the Snail Kite, the Corps did not reinitiate consultation with FWS on the Draft SEIS ordered by the Court until the Tribe sued FWS and FWS demanded that the Corps do so. Still the results of this consultation are not included in the Draft SEIS, as required under NEPA. In the Draft SEIS, the Corps attempts to create the illusion of NEPA and ESA compliance by releasing a hastily prepared and legally insufficient Draft SEIS that continues to fail to analyze the cumulative impacts that its past and present deviations, and IOP, will have on the human environment and endangered species. The Draft SEIS does not even attempt to conduct such analysis but instead simply states: " Cumulative impacts were previously described in the 2002 FEIS." Draft SEIS at p. 73, Section 4.19. It is impossible for the FEIS to contain a cumulative impact analysis of IOP Alternative 7R modeling, since it did not use 7R modeling. Moreover, the IOP Draft SEIS predicts an additional four years more of IOP operations that were not analyzed in the IOP FEIS. The Corps is required to conduct a cumulative impacts analysis in the SEIS, and the failure to do so violates NEPA.

For the past eight years, the Corps has used the sparrow to evade the law, and the FWS has used the sparrow to control the water to its liking without having to assess the damage inflicted on other endangered species and other parts of the Everglades. The Tribe has suffered much devastation

from the Corps' water management actions. On February 13, 1998, the Chairman of the Miccosukee Tribe, Billy Cypress, declared an Emergency in WCA-3A. That emergency still exists. In fact, the Draft SEIS shows that WCA 3A has become so degraded that it may have reached its carrying capacity and be in danger of crashing. Draft SEIS at p. 69. Sadly, this is proof that the Tribe was right all along about the damage that the Corps' actions were causing to WCA-3A, the Snail Kite and the Tribe's lands, religion and culture and way of life. It is time for the Corps to analyze other reasonable alternatives that will protect both the Sparrow and the Snail Kite and WCA 3A.

#### C.IOP DRAFT SEIS PROCESS VIOLATES NEPA

#### 1. The NEPA Ruse and Blatant Rubber Stamping of Alternative 7R:

The Tribe protested the fact that IOP (Alternative 7R) was developed in closed door meetings without complying with FACA, and constructed prior to the NEPA process being completed. As a result of a lawsuit filed by the Tribe, the Court found that the Corps had violated NEPA and ordered the agency to conduct an SEIS using the 7R modeling in its analysis. The Tribe hoped that the Corps would in conduct the in depth analysis ordered by the Court. A review of the perfunctory Draft SEIS shows that it has not. Not only do many of the unproven assumptions and conclusions remain from the previous FEIS, there is no detailed analysis of modeling results, including hydrographs and stage duration curves(i.e. number of weeks high/low water depth exceeded) that show the impacts caused by Alternative 7R on areas such as WCA 3A using the 7R modeling. Nowhere in the Draft SEIS does it contain hydrographs of WCA 3A, and other areas of the Everglades, that show Alternative 7R modeling compared to Test 7 and ISOP. While there are a few charts on the L-31 Canal and sparrow habitat, these are not adequate. There should be hydrographs and stage duration curves for all the WCA s, Lake Okeechobee and the estuaries. Even though the Corps was forced to report the damage that IOP has caused, it incredibly continues to recommend Alternative 7R rather than analyze other reasonable alternatives, as required by NEPA. Draft SEIS at pp. 68-69. The Corps' Draft SEIS does not even discuss mitigation except to say the S-12D gate, which is required to be kept open, will be kept open. In short, the Draft SEIS is nothing more than a rubber stamp of a preordained decision that was made in a process that violated NEPA and FACA. The Draft SEIS also continues to violate NEPA, and the Court's Order, by failing to provide the results for Alternative 7R modeling in a hydrograph form for WCA 3A and the other WCAs, so that the Tribe can compare the impacts of IOP with ISOP and Test 7, especially in terms of the number of extra weeks of sustained high water. While the Draft SEIS discusses the importance of this performance measure, it does not appear to include an analysis in hydrograph form for WCA 3A using Alternative 7R. Draft SEIS at p. 43. The Draft SEIS also fails to comply with NEPA because it does NOT contain any analysis at all of cumulative impacts. Id. at p.73, Section 4.19.

The Corps is violating its solemn Trust responsibility to the Tribe by continuing to recommend Alternative 7R while acknowledging the damage that has been done to WCA 3A. Draft SEIS at p. 69. It is tragic, indeed, that an agency directly under the President's Order to treat Indian MIT-21 Tribes on a government-to-government basis would ignore their duty to meaningfully consult with the Tribe on matters that would adversely impact their land and culture. It is even more tragic that the Corps has taken actions for the past eight years, four of them under IOP, that have caused, and

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will continue to cause, irreversible destruction to federal trust lands, and the Tribe's culture and way of life and have now predetermined the selection of an alternative that will escalate that damage for four additional years without conducting the adequate analysis required by law. Id.

#### 2. Tribe Proven Correct Right That Alternative 7R Required An SEIS:

In the Tribe's lawsuit against the Corps (Case No. 02-22778-Civ-Moore) it argued that the IOP Alternative 7R was a new alternative that contains new structural components, which were not analyzed in the prior DEIS or SEIS and, thus, the Corps was required to issue another SEIS. The Court agreed with the Tribe that the Corps violated NEPA and was required to issue an SEIS under NEPA. Court Order at p. 32-33. The Tribe continues to contend that these new temporary pumps and structures cannot be analyzed apart from the IOP project and that these structures are not MWD or C-111 Project components, as the Corps improperly suggests. Draft SEIS at pp. 14-17. The Corps should divulge that the features constructed for IOP are "temporary" in nature and are not the permanent C-111 and Mod Waters features.

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#### 3. S-356-like Pump Experiment in the Field Violated NEPA

The Draft SEIS discusses a proposed pump test with the S-356-like temporary pump station that was hurriedly constructed at great expense (including a million dollar bonus for the contractor) in 2002 but which never operated under IOP. The so-called test is neither "proposed" (it has already happened) nor is it an IOP test. In fact, while this Draft SEIS was out for public comment, on August 1, 2006, the Corps began conducting this experiment in the field to gather information for future Combined Structural and Operational Plan ("CSOP") operations. The Tribe filed a motion for preliminary injunction to stop this test claiming that it violated NEPA. The Corps suspended the test. The Tribe continues to contend that this IOP temporary pump, which virtually has no way of operating under IOP, has any authorization under CSOP, which has NO EIS. This experiment in the field is yet just another example of the Corps taking unanalyzed actions that impact the human environment before completing NEPA. Even if the operation of the S-356-like pump was MIT-23 properly analyzed, which it has not been, that analysis would show that the pump is pulling tremendous amounts of ground water and discharging it in violation of Florida's Water Quality Standards. A rapid lowering of ground water levels was observed in several ground water wells located many miles from the S-356 during the unlawful test conducted this month. Pumping ground water and reintroducing those waters to surface waters amounts to pumping in a circle. The results of the Corps unlawful pump test calls into question the very usefulness of the hastily constructed IOP temporary S-356-like pump station to control seepage in the L-31 canal since the test results indicate that huge volumes of groundwater are being pumped when it is in operation. Under the Mod Waters Project, the permanent S-356 pump is designed, and to be operated, to capture seepage out of Everglades National Park and WCA 3B and then return it to the Park, not to cause greater seepage and excessive ground water draw down,

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#### 4. IOP Alternative 7R, the Action, Is An Improper No Action Alternative:

According to the Draft SEIS the No Action alternative is the current IOP Alternative 7R action. Draft SEIS at p. 13. It is improper to use Alternative 7R, which is the current plan in effect, and was implemented without the analysis required under NEPA, as the No Action alternative. Alternative 7R can not be the Recommended Alternative and also the No Action Alternative against which impacts are measured. This is nonsensical and turns NEPA on its head. The No Action alternative should be the last lawful Water Control Plan and regulation schedule that has gone through the reviews required by law.

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#### 5. Draft SEIS Fails to Analyze Cumulative Impacts:

Neither the 1998, 1999, 2000, 2001 or 2002 "emergency" deviations taken by the Corps were ever subject to the requisite EIS, and both ISOP and the after-the-fact FEIS on IOP was found to be not in compliance with NEPA. Thus, the Corps has now taken unanalyzed actions that have unknown environmental impacts for eight years. More chilling, the Corps has NEVER conducted a cumulative impact analysis that analyzes the combined impact that the past eight years of water management operations have had on the human environment and listed species, along with the predicted four more years of future impacts from the IOP. NEPA requires that federal agencies consider "cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts" should be discussed in the same impact statement. 40 C.F.R. § 1508.25. In addition, 40 C.F.R. §1508.7 defines a "cumulative impact" as the "impact on the environment which results from the incremental impact of the action when added to other past, present and other reasonable foreseeable future action" and thus requires analysis. The Draft SEIS contains NO ANALYSIS of the combined impacts of the 1999, 1998, 1999, 2000, 2001 and 2002 deviations, the four years of IOP operations, and predicted four more years of IOP on the human environment. The Corps can not rely on the prior one paragraph faulty analysis in the IOP FEIS that is based on different modeling and less years of IOP operations, but instead must conduct a cumulative impacts analysis of Alternative 7R in the Draft SEIS, which it has failed to do. Draft SEIS at p. 74, Section 4.19. This is especially true in light of the devastating impacts to WCA 3A reported at page 69 of the Draft SEIS, which is proof that Corps' statement in its faulty FEIS that cumulative effects of these actions are "mostly positive" is incorrect.

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Additionally, the Draft SEIS continues to rely on the faulty FWS CAR that was not based on Alternative 7R modeling and does not contain an adequate environmental baseline, nor attempt to analyze the effects that the past, present, and future deviations will have on the Wood Stork, Snail Kite and Snail Kite as required under both NEPA and the ESA. Section 50 C.F.R. §402.02 states that the environmental baseline includes "the past and present impacts of all Federal, state or private actions and other human activities in the proposed action area." Since the FWS did not use IOP 7R modeling, neither the Draft SEIS nor the CAR contain an adequate analysis of the cumulative impacts on endangered species and their critical habitats. Moreover, the current population estimates for the Snail Kite that are detailed on page 68-69 of the Draft SEIS disprove the prior unsupported assertion that the Snail Kite would not be adversely impacted by Alternative 7R.

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The Corps' IOP is a major federal action that significantly affects the physical environment, including, but not limited to, destruction of natural resources, flooding and degradation of the central

Everglades in WCA-3A, decrease in Everglades biodiversity, destruction of Everglades tree islands, injury to wildlife and increased flood risk. The Corps has violated NEPA for over eight years by failing to adequately analyze the impact that its emergency actions, ISOP, and IOP have had on the human environment. The Draft SEIS continues to violate NEPA by failing to assess the cumulative impacts of their past and present operations, along with the impact of four more years of the IOP action on the human environment.

#### 6. Draft SEIS Fails to Contain A Health and Safety Analysis of High Water

The IOP Draft SEIS, like the FEIS before it, also continues to remain silent on the public health and safety aspects that were addressed in the Final EA on the 1998 so-called emergency. The Corps does so despite the fact that it knows that IOP backs up water in the system and that it has come under fire lately about concerns for the integrity of the dike surrounding Lake Okeechobee caused by high water conditions. Page C-7 of the 1998 Final EA states,

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[t]he continued deviation from established water regulation schedules in order to minimize discharges south would increasingly tax the operation and capability of the system, especially for the upcoming wet season. Target elevations for the beginning of the wet season would probably be exceeded, even further reducing the system's ability to respond to events. There is an issue of increased risk to human safety due to high water levels in both Lake Okeechobee and the WCAs. Higher water levels during the wet season reduce the flood control capacity of the system.

The 1998 Final EA also states, under section 4.07, the consequences of extending the emergency that,

Observations of the 1994-95 high water events have shown that if high water levels are maintained through the dry season, then water levels in WCA-3A remain excessively high during the following season, thereby reducing the overall storage capacity of the WCAs. Not only would this situation have exacerbated recent damage to the native upland communities in WCA-3A, but it could have also set the stage for reenactment of the current emergency next year.

The Draft SEIS fails to address the issue of whether the resulting reduction in storage in the WCAs caused by IOP exacerbates the impacts that hurricanes and storms have had, and will continue to have, on the environment and urban and agricultural interests. Nor does it conduct the required analysis using Alternative 7R modeling to show the high water impacts on the WCAs, Lake Okeechobee, and the St. Lucie and Caloosahatchee estuaries, as required by NEPA. The Miccosukee Tribe is especially concerned by the Corps' refusal to address the health and safety issue, as they have faced an imminent threat in the past when a hurricane threatened at a time when the Corps had closed the S-12A structure and water threatened to overflow the structure. The perfunctory language on pre-storm operations in the Draft SEIS does not address the health and safety concerns raised by the Tribe. Draft SEIS at p. 40. Nor does it address the integrity of the levee concerns that have been raised concerning Lake Okeechobee which result from high water.

# 7. The Draft SEIS Ignores the Devastating Damage in WCA 3A and Does Not Contain Alternative 7R Modeling Results for WCA 3A That Would Show It:

The 2002 Alternative 7R modeling, which the Corps failed to use in the IOP FEIS and was subsequently ordered to use by the Court, showed that 7 R would cause many more weeks of sustained high water in WCA 3A. Draft SEIS at 79. See, Attachment B. Now despite the Court's Order to conduct its analysis in the SEIS using such modeling, the document contains no actual modeling results for WCA 3A or other areas of the Everglades for public to review. For instance, the Draft SEIS states that "one of the performance measures of interest in the WCA is the number of weeks the water would be above 2.5 feet." Draft SEIS at p. 43. It goes on to say that under RPA02, for example, there were 566 weeks with depths greater than 2.5 feet as compared to 519 for the 95 Base Mod 2 condition and 475 weeks for Alternative 1 condition in southern WCA 3A. Id. The document appears to state that RPA02 was never implemented and does not even explain what Alternative 1 is (which appears to be ISOP 9dR) in section 4.3. More important, no hydrographs for WCA 3A are contained in the Draft SEIS that compares Alternative 7R with ISOP and Test 7 operations that were in effect prior to ISOP and IOP, as the Tribe previously uncovered in 2002. Attachment B. It is improper under NEPA to not divulge these modeling results to the public so that it can see the additional number of weeks of sustained high water being caused by IOP. The Draft SEIS should contain model comparisons between ISOP, IOP Alternative 7R and Test 7, so that the public can see the differences and comment on them. Failure to do so, violates both the Court's

The statement in the FEIS that "minor adverse effects due to raised water levels could occur in the vicinity of the tree islands in the southern portions of WCA 3A and 3B is not supported by the record which shows devastating impacts there. Compare Draft SEIS at p. v with p. 69. It is also contradicted by another statement on the next page that says "increased flood duration could lead to loss of some wetland vegetation in WCA2A and 3A as well as upland vegetation (including tree islands) in the southern part of the areas." Id at p. vi. The FEIS also attests to the fact that one of the "most significant causes of habitat degradation in WCA 3A are flood damage to tree islands in the northeastern and southwestern part of the WCA." Id. at p. 61. On page 69, the Draft SEIS states, "Habitat quality in WCA 3A is changing progressively and dramatically to less desirable habitat in this critical area, and this conversion is rapid, with changes even after a year." It further admits that, "The principal concern is that the habitat quality, and thus the carrying capacity of WCA 3A, is already seriously degraded." Id. at p. 69. Despite these statements, the Corps continues to make the unsupported assertion that Alternative 7R, which closes the S-12A, S-12B and S-12C structures that release water from WCA 3A, would not have adverse effect on vegetation throughout WCA 3A. Id. at p. 61

March 14, 2006 Order and NEPA.

The Corps has known since at least 1997 that closing the gates would cause high water in WCA 3A to the detriment of the Tribe, the Everglades, and endangered species. Some of these letters were attached as Exhibit G to the Tribe's comments on Draft EIS on IOP and include:

December 24, 1997 letter from FWS and ENP states, "Moreover, our agencies cannot concur with

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any water management actions that would increase the current risk of extinction to the Cape sable seaside sparrow or result in unacceptable environmental damage to the Water Conservation Areas, Everglades National Park, Big Cypress National Preserve or other regional natural resources. Also, the Department of the Interior cannot concur with actions that damage or inflict unacceptable harm to other areas in the South Florida ecosystem, particularly the Water Conservation Areas." (emphasis added).

January 14, 1998, letter from the Florida Freshwater Fish Commission details the damage that high water levels have had on the WCAs.

January 15, 1998 letter from FWS states, "Because of these immediate adverse impacts on endangered wood storks, snail kites, and other federal trust resources, we do not endorse any water management actions that artificially increase water levels in the WCAs ... We have never recommended actions that protect the endangered Cape Sable seaside sparrow at the expense of other portions of the historic Everglades ecosystem." (emphasis added).

January 23, 1998, letter from the FGFWFC states, "observations during the 1994-95 high water events have shown that if high water levels in WCA-3A are maintained through the dry season, then the water levels in WCA-3A remain excessively high during the following wet season, thereby reducing the overall storage capacity of the WCA." (emphasis added).

February 2, 1998, letter from FWS "the proposed action may result in adverse effects on the endangered Snail Kite and Wood Stork, we agreed to complete an after-the-fact consultation per 50 CFR 402.05." (emphasis added). (Note: The after-the-fact consultation was never done.)

February 9, 1998, letter from Florida Game and Fresh Water Fish Commission discusses the impact that high water from 1998 emergency will have on WCAs and states that the actions proposed in that Draft EA will cause significant impacts and requires an EIS. (Note: an EIS was not done.)

February 13, 1998, letter from FWS to Colonel Miller, "Portions of WCA-3A are designated as critical habitat for the endangered snail kite. Maintaining high water levels during the dry season in WCA-3A may adversely modify the snail kite's critical habitat ... Maintaining high water levels in WCA-3A may adversely affect wood stork by delaying or precluding the initiating of nesting ... High water levels during the dry season are associated with reduced nesting effort and reduced nesting success for wood storks." (emphasis added).

Additional letters and documents include:

June 5, 1998, letter from FWS to Dexter Lehtinen states, "...we indicated to the Corps that holding high water levels in Water Conservation Area 3A to the possible detriment of the snail kite and the wood stork was not an acceptable option."

January 27, 1999, letter to SERA from the Florida Game and Fresh Water Fish Commission concerning the FWS draft B.O. states, "we remain adamantly opposed to the management of the

Water Conservation Areas in such a way that artificially extends the six years of high water that have damaged tree islands and destroyed willow stands since 1993." (emphasis added)

The Tribe submitted an affidavit by Dr. Ron Jones to the SEIS comments that says that even a few days of sustained high water in an area that has been severely stressed by years of high water, will cause irreparable harm to the tree islands; along with an affidavit by Colonel Terry Rice that contains a letter by FWS and a document by the SFWMD that shows that high water has reduced the tree island acreage in WCA-3A by 60%. (See, Tribe's comments on SEIS).

The FWS March 28, 2002 Amended Biological Opinion states: "IOP Alternative 7R is not predicted to provide the same relief to the southern and eastern portions of WCA 3A as would the original RPA...The disturbance intensity, or amount of snail kite critical habitat that could potentially be disturbed in southern and eastern WCA-3A, would be approximately 88,300 acres out of a total 841, 600 acres of designated critical habitat, or approximately 10.5 percent of the available designated critical habitat."

Army Corps of Engineers Draft SEIS on IOP dated June 2006: "The principal concern is that the habitat quality, and thus the carrying capacity of, WCA 3A is already seriously degraded." Draft SEIS at p. 69. Habitat quality in WCA 3A is changing progressively and dramatically to less desirable habitat in this area, and this conversion is rapid, with changes even after a year." Id. . "Since 2002, kite production in WCA 3A has dramatically dropped, having produced no kites in 2005. "Id. at p. 69. "In 2005, nesting success was lower than during any year between 1992 and 2005. Historically nests in WCA 3A have fledged proportionally the large majority of young in the region." Id. at p. 68. Dr. Wiley Kitchens believes that "this trend of lowered reproduction is a cause of concern regarding the sustainability of the population." Id. at p. 68.

#### 8. FEIS Fails to Adequately Assess Impact on Snail Kite and Its Critical Habitat

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The Draft SEIS acknowledges that Alternative 7R does not provide the same relief in terms of hydrologic improvements to the southern and eastern portions of WCA 3A as would the original RPA, which was never implemented. Draft SEIS at p. 67. The Corps now contends without having completed the reinitiation of consultation required under the ESA, and based on a faulty BO that does not analyze the new information on the alarming decline of the Snail Kite, that IOP 7R is not likely to jeopardize the species or modify its critical habitat even while acknowledging that Dr. Wiley Kitchens has stated that the sustainability of the population is threatened. Draft SEIS at 68-69. Despite acknowledging the alarming decline in the Snail Kite population and its critical habitat in WCA 3A under IOP, the Draft SEIS fails to contain any analysis of the impacts of Alternative 7R on the Snail Kite and the Snail Kite in WCA-3A, as required under both NEPA and the ESA. Id.; See also Snail Kite 2005 Report at Attachment A. Nor does it contain a new amended biological MIT-32 opinion using 7R modeling, as required under the ESA. This is especially disturbing in light of the fact that the Draft SEIS admits that the Snail Kite population has progressively and dramatically decreased. Id. at 68. Second, the Draft SEIS contains no baseline study and cumulative impacts analysis of past water management actions coupled with the additional four years that IOP will have

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on the Snail Kite and its designated critical habitat. Third, the Draft SEIS does not address how the Corps is meeting the non-discretionary terms and conditions of the FWS Incidental Take Statement in light of the alarming information on the Snail Kite. There are no hydrological modeling results contained in the Draft SEIS for Indicator Regions 14 and 19 that are supposed to be monitored for the Incidental Take Statement for the Snail Kite and should be.

It is clear from the attached hydrological graph of WCA 3A for 2005, that water there was alarmingly high in the same year that no young fledged out of WCA 3A. Attachment C. Yet, the Corps Draft SEIS contains no analysis of these high water levels impact on the Snail Kite using the 7R modeling. The Corps also ignores that Snail Kite researchers are concerned about the alarmingly high water levels in WCA 3A. Attachment A at p. 19. It is the Corps' responsibility to see that their IOP meets the requirements of the ESA and a review of the perfunctory Draft SEIS clearly shows that they have not done that. Thus, the Corps has no basis for their assertion that none of their alternatives, including Alternative 7R, is expected to significantly alter the status of the Snail Kites or their habitat in WCA 3A. Id. at pp. 66-67. Indeed a review of the next few pages of the document shows that IOP clearly has done just that! Id. at pp. 68-69.

The Corps can no longer evade the fact that sustained high water in WCA 3A has caused, and will continue to cause, adverse impacts to the Snail Kite and its designated on Tribal Everglades in WCA 3A. The Corps own Draft SEIS admits, The principal concern is that the habitat quality, and thus the carrying capacity of, WCA 3A is already seriously degraded." Draft SEIS at p. 69. Habitat quality in WCA 3A is changing progressively and dramatically to less desirable habitat in this area, and this conversion is reapid, with changes even after a year." Id. at p. 69. "The snail kite population in Florida progressively and dramtically decreased between 1999 and 2002." Id. At 68. "Since 2002, kite production in WCA 3A has dramatically dropped, having produced no kites in 2005."Id. at p. 69. Indeed, the Draft SEIS admits that Dr. Wiley Kitchens believes that "this trend of lowered reproduction is a cause of concern regarding the sustainability of the population." Id. at p. 68. See also, 2005 Snail Kite Report at Attachment A.

The 2002 Amended BO, which was NOT based on Alternative 7R modeling, found that Alternative 7R would adversely impact 88,300 acres of Snail Kite critical habitat and take endangered Snail Kites but came to the arbitrary and capricious conclusion that this would not jeopardize the Snail Kite or result in adverse modification. The Snail Kite Report's results detailed at pages 68-69 is proof that it has caused an alarming decline in the Snail Kite population and has devastated its critical habitat in WCA 3A. In fact, there is every reason to believe that the additional weeks of sustained high water under IOP are resulting in jeopardy to the Snail Kite and adverse modification to its critical habitat. The Corps is required to include these hydrological modeling results in the SEIS under NEPA. The Corps is also required to look beyond the obviously faulty FWS BO which arbitrarily and capriciously concluded that this immense destruction of critical habitat would not jeopardize the Snail Kite or cause adverse modification to determine if it has. The Corps and FWS experiment in the field in WCA 3A has caused a dramatic decline in the Snail Kite as noted in the Draft SEIS and the 2005 Snail Kite Report. Draft SEIS at pp. 68-69, Attachment A. The Corps, which has the ultimate responsibility for its actions under the ESA, had the duty to reinitiate consultation with FWS on IOP Alternative 7R, and the Incidental Take Statement terms

and conditions, immediate after the Court's March 14, 2006 Order and prior to issuing its Draft SEIS but failed to do so. Thus, its Draft SEIS fails to comply with NEPA and its conclusion that "FWS concurs that Alternative 7R, the recommended alternative, is acceptable is unsupported and not based on the process the Corps is required to follow under the ESA. Draft SEIS at p. 82, Section 9.

The Corps can not rely on FWS to meet ESA requirements. The Corps has the duty to show that it will not violate the ESA, which it has failed to do in the legally and factually inadequate Draft SEIS. Corps must ask FWS to reopen the biological opinion to analyze the new Snail Kite information and the cumulative impacts that the previous deviations and the IOP will have on this and other endangered species in the action area. The Corps must also conduct a review of whether they are complying with the Incidental Take Statement on the Snail Kite in the SEIS, including through modeling results that analyze the indicator regions 14 and 19, in light of the alarming decline of this endangered species.

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#### 9. Draft SEIS Fails to Meaningfully Analyze Flooding Impacts:

The Draft SEIS fails to adequately analyze the adverse impacts that raising the canal levels in L-31, as required under Alternative 7R will have on urban and agricultural areas in Miami-Dade County. The Miami-Dade County Flooding Task Force has determined that the canal levels required by Alternative 7R caused increased flooding in Miami-Dade County in Hurricane Irene. A member of the public reviewing the Draft SEIS has no way of determining whether the Corps statements concerning the flood risk are accurate. The Draft SEIS should include stage hydrographs for cells in the urban and agricultural areas for the modeling period that shows ground elevations and stage duration curves. The hydrographs should compare Test 7, ISOP and IOP model results so that the public can determine whether IOP 7R increases the flood risk in WCA-3A and to urban and agricultural areas. Statements in the Draft SEIS, such as "the actual flood control capability within IOP is consistent with the modeling results" is meaningless without comparing it to previous operations. Additionally, simply pointing to high water conditions and labeling it a storm, does not give any indication of whether IOP has made the antecedent conditions worse as compared to prior plans. The Draft SEIS should conclusively state whether or not IOP has increased the risk of flooding.

#### 10. Draft SEIS Glances at Damage to WCA 3A and Ignores What It Sees:

There is also no evidence in the record to support the Corps' blanket statement in the FEIS that "potential impacts to tree islands have been minimized" and that "Alternative 7R would not have adverse impacts on vegetation throughout WCA 3A." Draft SEIS at vi and 61. Moreover, the statement that Alternative 7R showed no significant increase over existing conditions is totally misleading and can only be made because the Corps is improperly using IOP as both the No Action Alternative and the Recommended Plan. Id. at p. 54. Thus, it is arbitrarily and capriciously analyzing the impacts of IOP Alternative 7R against itself. There is absolutely no basis for these assertions. Indeed, the Draft SEIS contains information that shows they are incorrect. Id. at pp. 68-69. In fact, there is also evidence that the requisite "hard look" required by NEPA has not been taken. The Draft SEIS admits that, "The principal concern is that the habitat quality, and thus the

carrying capacity, of WCA 3A is already seriously degraded. Although still preliminary, the studies tend to confirm these concerns." Id at p. 69. Thus, it is clear that the Draft SEIS requires further information. The Corps should not be relying on incomplete information to predict no harm to the human environment. The Tribe has demonstrated that there is ample evidence in the record that such harm has occurred, and will continue to occur. Id. at 68-69 and Attachment A.

The Corps simply refuses to do the legally required analyses, and publish the modeling results, that would demonstrably prove that IOP is drowning WCA 3A and other areas of the Everglades. Under NEPA, the Corps is required to take a "hard look" at that damage their IOP action is causing. The same failure to look for harm applies to WCA-3B, WCA-2A, Lake Okeechobee, the St. Lucie and Caloosahatchee River estuaries and Florida Bay, which have, and will, continue to suffer adverse impacts because of IOP. It is erroneous for the Corps to state that these areas will not be adversely impacted by the IOP without having taken the "hard look" at the cumulative impacts of their actions required by NEPA.

#### 11. Draft SEIS Fails to Conduct an Analysis of Reasonable Alternatives:

The Draft SEIS fails to analyze reasonable alternatives that would protect the Cape Sable Seaside Sparrow with far less impact on the rest of the Everglades and the endangered Snail Kite. The only alternatives analyzed in the Draft SEIS are variations of IOP. This alternatives analysis is totally inadequate under NEPA. The Tribe has provide affidavits and articles by Dr. Will Post and Dr. Jon Greenlaw, renowned sparrow scientists, that contend that localized strategies such as translocation, captive breeding and building dikes around nests that would be a more effective means of population recovery for the sparrow and would not cause damage to the other parts of the Everglades and the human environment. These alternatives were described in a paper published by Dr. Will Post and Dr. John Greenlaw in the Florida Naturalist, which has been provided to the Corps. In light of the information on the alarming decline in the Snail Kite discussed at page 68-69 of the Draft SEIS, and the decline of sub-population A of the Sparrow under ISOP and IOP, the Corps has a duty to analyze all reasonably foreseeable alternatives, including those that are not within the jurisdiction of the lead agency. 40 CFR §1502.14 (c). The Draft SEIS, while making an obscure comment that the Corps is considering "whether to implement another alternative," fails to analyze all reasonable alternatives and must do so. Draft SEIS at p. 5. As the discussion about the precipitous decline of WCA 3A at page 69 shows, the Corps' continuing failure to conduct the requisite alternatives analysis is damaging both to the Everglades and the future of Everglades restoration.

A memo from Richard Punnett of the Corps that was attached to the previous SEIS concerning the CAR states: "The draft report fails to mention that both the "natural" and "restored" conditions will be less conducive to the western sparrow nesting (i.e. more nesting failures) than the 1995 base, ISOP or IOP conditions." The Corps continues to ignore its expert hydrologist's advice and continues to support IOP Alternative 7R which has devastated WCA 3A and continues to keep the western area unnaturally dry, which has not even helped the sparrow.

#### 12. Draft SEIS Fails to Disclose Costs of Destructive IOP and Other Alternatives:

The cost of implementing the Corps' prior ISOP was a staggering 9-10 million dollars, which was divulged in the so-called EA. Yet, the Draft SEIS fails to disclose the approximately \$30 million dollars that IOP cost, as required under NEPA. Nor does the IOP Draft SEIS discuss the million dollar bonus given to the contractor to expedite the building of the S-356 like pump in 2002, which has never operated under IOP since it was constructed. The Draft SEIS not only neglects to divulge the multi-million dollar expenditure for the structural components of Alternative 7R, it does not divulge the source of the money. Nor does the Draft SEIS discuss whether using this money for "temporary" IOP project features will cause the Corps to exceed their project budgets and delay the completion of the permanent Modified Water Deliveries and C-111 projects. The IOP cost information for each alternative must be provided under the full disclosure and cost benefit analysis requirements of NEPA. Moreover, if the Corps is using MWD and C-111 funds for IOP 7R, it has exceeded its statutory authority and is violating NEPA by using funds contrary to the projects' purpose.

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#### 13. DRAFT SEIS Can Not Mitigate for Adverse Impacts to WCA 3A and Snail Kite:

The Corps' statement in the Draft SEIS that keeping-12D open as part of Alternative 7R will provide hydrologic relief to WCA 3A is absurd. Opening one S-12 structure when all four are supposed to be open in high water conditions does not qualify as mitigation. Additionally, in light of the fact that the closing of the gates under ISOP and IOP has caused an alarming decline in the Snail Kite population proves that this is not mitigation.

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## 14. DRAFT SEIS Fails to Disclose Unavoidable Adverse Impacts As Avoidable:

The Corps incorrectly claims that "the detention of excess water in the WCAs could also occur with the alternatives, and would likely continue in the future without the full implementation of the Modified Water Deliveries Project." Draft SEIS at 74. The Corps can stop this detention of excess water now. The Tribe agrees that the implementation of the MWD project is the ultimate solution, but contends that it is misleading for the Corps to state that the detention of excess water would occur without the completion of MWD, when they know that it can be relieved by the opening of the S-12 structures, which could be accomplished by assessing another reasonable alternative in the IOP Draft SEIS. The irreversible destruction of tree islands and the critical habitat in WCA 3A and the devastating impacts on the culture and way of life of the Miccosukee Tribe could be avoided by either the expeditious completion of the MWD project, or the adoption of a reasonable alternative that did not close the S-12 and other structures. The Corps should analyze another reasonable alternative in its FEIS.

MIT-41

#### 15. SEIS Fails to Address Substantive Tribal Comments and Concerns:

The body of the Corps' SEIS failed to acknowledge comments provided by the Tribe on the IOP throughout the IOP NEPA process. Nor does it even address the fact that the Everglades in MIT-42 WCA 3A are Tribal lands. Instead, it erroneously concludes that IOP has caused no impacts to

cultural resources or environmental justice impacts. Draft SEIS at pp.73 and 80. It fails to acknowledge that the Tribe, an Indian Tribe, is bearing the disproportionate adverse consequences of the Corps' IOP operations which are adversely impacting WCA 3A and the Tribe's culture and way of life.

#### 16. Animal Farm Equality for the Everglades and Its Endangered Species:

The Draft SEIS makes it clear that in the eyes of the Corps and FWS, some parts of the Everglades, and certain species, are more equal than others. The Corps and FWS are willing to see 88, 300 acres of designated Snail Kite be destroyed, and Snail Kites injured and killed, in return for the "alleged" protection of the western non-designated habitat of the Cape Sable seaside sparrow, which has declined under these operations. This is not only Animal Fair Equality for the Everglades, this single species management and selective protection is detrimental to Everglades restoration and must be stopped. The Everglades is an ecosystem and must be treated as such under both NEPA and the ESA.

#### 17. Irreversible and Irretrievable Commitment of Resources:

Section 4.23 of the Draft SEIS erroneously states that the commitment of resources would be "temporary in nature, and the irreversible and irretrievable commitment of resources would be minimal." Draft SEIS at p. 74. A review of pages 68-69 of the Draft SEIS, which details the alarming decline of the Tribal Everglades in WCA 3A and the endangered Snail Kite shows that this statement is ludicrous. IOP Alternative 7R has caused irreversible and irreparable harm to Tribal Everglades and Snail Kite, in WCA-3A; caused the endangered Snail Kites population to decline by 50%; cause permanent damage to tree islands and incalculable harm to the culture and way of life to the Miccosukee Tribe of Indians who call the Everglades home. Id. at 68-69 and Attachment A.

#### 18. Draft SEIS Fails to Adequately Analyze IOP Impacts on Water Quality

The Draft SEIS fails to adequately analyze the impact that IOP is having on water quality both in WCA 3A and Everglades National Park, including whether it is interfering with the Settlement Agreement requirements in the Everglades case before Judge Moreno.

#### D. DRAFT SEIS DOES NOT COMPLY WITH THE APA

The operation of IOP Alternative 7R is contrary to current rules and regulations for the operation of the Central and Southern Florida Project (C&SF) and constitutes an amendment to the rules and regulations for operating the project. This amendment of rules and regulations violates the APA because the Corps has never complied with the required rulemaking procedures, including notice and the opportunity to be heard, pursuant to APA. The Draft SEIS does not state that the Corps plans to comply with the rulemaking requirements of the APA.

MIT-44

MIT-45

#### E. DRAFT SEIS FAILS TO CONSULT UNDER FWCA

The Corps has failed to follow the Fish and Wildlife Coordination Act (FWCA) of 1973, that requires an agency whose actions are likely to have adverse impacts on the environment and endangered species to enter into consultation with the Florida Fish and Wildlife Conservation Commission ("FFWCC") as part of the IOP Draft SEIS process. The FFWCC has raised concerns in the past about the high water levels in the WCAs being caused by the Corps' operations. The Draft SEIS contains no letters to or from the FFWCC seeking such consultation. The FFWCC had raised concerns in the past that no attempt had been made to model the actual water management operations that will be employed in Alternative 7R and remain concerned about the deeper water conditions in WCA-3A and WCA-3B. The Corps is required to seek the FFWCC's input on the Draft SEIS and the IOP 7R modeling results.

#### F. DRAFT SEIS DOES NOT COMPLY WITH THE ESA

#### 1. Draft SEIS Fails to Analyze Cumulative Impacts on Endangered Species:

The IOP Draft SEIS fails to comply with the Endangered Species Act ("ESA") by failing to adequately analyze the cumulative impacts of past, present, and future operational plans on the Snail Kite and other endangered species. Neither the Corps, nor FWS, adequately analyzed the cumulative impacts that past deviations (including ISOP), coupled with the estimated eight years of IOP will have on the Wood Stork, Snail Kite and Snail Kite's and other endangered species in a biological opinion that should be included in the Draft SEIS but is not. Thus, there is absolutely no support for the statement in the SEIS that the "Corps has not identified any adverse effects on the species or their critical habitats resulting from water management operations during the period from August 2, 2002, to the present, Draft SEIS at p. 77-78. Indeed, the Draft SEIS contains evidence to the contrary that shows that IOP has caused alarmingly high water levels in WCA 3A that has resulted in a 50% decline in the Endangered Snail Kite population and degraded and modified its there. SEIS at 69 and Attachment A at p. 19. The fact that neither FWS, nor the Corps, has shown that the terms and conditions of the Incidental Take Statement for the Snail Kite can be met under the IOP, using alternative 7R modeling, jeopardizes its very existence.

The Corps' refusal to even mention how they plan to meet the non-discretionary requirements of the FWS Incidental Take Statement for the Snail Kite in the Draft SEIS is a continuation of the violation of the ESA that has been well documented in Tribal correspondence with the Corps. The Tribe sent a 60 day Notice of Intent to Sue on March 16, 1998, informing the relevant agencies, including the Corps, about violations of the ESA that were occurring on Tribal lands as a result of their deviations from the regulation schedule - deviations that have occurred every year since 1998. (See Tribe's Comments on Draft EIS: composite exhibit F). The Corps' MIT-49 failure to analyze past, present and future cumulative impacts of their previous deviations, coupled with the IOP, is a continuing violation of the ESA that has been ongoing since 1998. Indeed, the Corps never conducted the after-the-fact biological assessment on the Wood Stork, the Snail Kite and the Snail Kite's critical habitat that they promised to conduct in 1998.

MIT-48

MIT-49 cont.

The Biological Opinion and numerous other letters from the FWS, ENP, and the Florida Game and Fresh Water Fish Commission, expressed grave concern about the adverse impacts to WCA-3A, and the endangered Wood Stork and Snail Kite that inhabit it, caused by maintaining high water levels in this area of the Everglades. Despite these warnings, the Corps continues to support Alternative 7R that will close structures along Tamiami Trail and further endanger and threaten the Snail Kite and destroy the Snail Kite critical habitat on Tribal Everglades in WCA 3A. The Corps is required to construct an environmental baseline and conduct the analysis on cumulative impacts of the proposed actions required under both NEPA and the ESA.

#### 4. Draft SEIS Does Not Contained the Required FWS BO or ITS Analysis:

The ESA requires that biological opinions be prepared as part of the interagency consultation process to analyze whether proposed actions are likely to jeopardize the continued existence of endangered species. The Corps should have reinitiated consultation with FWS on the Draft SEIS immediately upon receiving the Court's March 14, 2006, Order mandating that an SEIS be conducted. Instead, the Corps waited until July 27, 2006, after the Tribe had sued the FWS and FWS required them to consult, to send a letter requesting consultation on the IOP SEIS. The Corps knew at least since March 15, 2002 that the IOP would adversely impact the endangered Snail Kite. The FWS has repeatedly stated that high water in WCA 3A could adversely impact the Snail Kite and Wood Stork, but conveniently closed their eyes to the fact that this is exactly what IOP has done for the past four years. The Draft SEIS can not rely on the faulty 2002 Amended Biological Opinion that was not based on Alternative 7R modeling or the new information on the decline of WCA 3A and the Snail Kite. The faulty FWS BO also fails to assess the cumulative impacts that the past eight years of sparrow operations, coupled with four more years of IOP, will have on the endangered species in WCA 3A, including the Snail Kite. The Draft SEIS fails to discuss whether the Corps can meet the terms and conditions for the Snail Kite contained in the Incidental Take Statement ("ITS") in the Amended BO and does not show modeling results for indicator regions 14 and 19.

The Corps Draft SEIS should have contained a biological opinion that analyzed the impacts that Alternative 7R would have on the Snail Kite, Wood Stork , and even the Sparrow based on current information and 7R modeling. The Corps failure to do so violates both NEPA and the ESA.

#### G. DRAFT SEIS DOES NOT COMPLY WITH THE 5TH AMENDMENT

The predetermined selection of IOP Alternative 7R in the Draft SEIS, which increases water levels in WCA-3A, deprives the Tribe, whose members will be adversely affected, of life, liberty or property without due process of law.

# H. THE CORPS HAS NOT COMPLIED WITH THE INDIAN TRUST DOCTRINE AS REFLECTED IN THE INDIAN LAND CLAIMS SETTLEMENT ACT

The Corps owes the Miccosukee Tribe of Indians a Trust obligation and fiduciary duty to protect tribal lands, resources, and assets pursuant to the federal Indian Trust Doctrine. This Trust obligation and fiduciary responsibility under the Indian Trust Doctrine extends protection to tribal lands, resources and assets recognized in the Florida Indian Land Claims Settlement Act, P.L. 97339.

This law established a federal Miccosukee Indian Reservation and a perpetual lease in the area of the Everglades adversely impacted by the IOP. As shown in the Draft SEIS, Tribal lands within WCA-3A are being degraded and destroyed by the Corps' IOP Alternative 7R, which will once again begin closing the S-12 structures on November 1, 2006, and cause further irreversible destruction. The Corps has failed to conduct meaningful consultation with the Tribe on Alternative 7R. Moreover, the Corps' predetermined selection and construction of Alternative 7R, and the Draft SEIS's rubber stamping of it, the failure to include the Alternative 7R modeling results for WCA 3A in the document, has harmed the Tribe and will continue and escalate the destruction of these lands that are vital to the culture and way of life of the Tribe, and which the Corps has a solemn responsibility to protect.

#### **CONCLUSION**

The Corps' Draft SEIS fails to comply with NEPA, the ESA, the APA, the Indian Trust MIT-50 Doctrine, and the 5th Amendment to the U.S. Constitution. The Corps' legally insufficient and fundamentally flawed Draft SEIS is nothing more than a rubber stamp for a preordained decision and does not cure the Corps' past NEPA or other violations. Moreover, it does not comply with the Court's Order to include IOP Alternative 7R modeling results so that the public can review the impacts and provide meaningful comments. The Corps has a duty under NEPA to fully divulge all of these modeling results to the public in a manner that can be understood. Nor does the Draft SEIS contain the required analysis of IOP Alternative 7R's's impact on the endangered Snail Kite using 7R modeling, or an analysis of the decline of this highly endangered species.

For more than eight years, the Corps draconian water management actions, which have never been the subject of a legally adequate NEPA document, has caused and will continue to cause, irreversible damage to Tribal lands in WCA-3A. These actions, not only endanger the Snail Kite and its critical habitat in WCA 3A, but the Tribe's entire culture and way of life, as well. There is now evidence that the FWS's and the Corps' playing God with the Everglades has caused both WCA 3A and the endangered Snail Kite to progressively and dramatically decline. Not just Tribal lands, but Lake Okeechobee and the estuaries have all suffered as a result of these draconian water management actions. The Corps and FWS has decided which endangered species and habitat will be protected and which will be sacrificed. Today, the Corps continues to do so in blissful disregard of the requirements of NEPA and other federal law, despite a federal Court Order to comply.

The Corps has a Trust responsibility to the Miccosukee Tribe to protect its lands from further destruction. It also has a duty under the ESA to stop the downward spiral of the endangered Snail Kite. The Corps must take immediate steps to analyze other reasonable alternatives; issue an EIS that complies with NEPA and the ESA; and implement a new alternative as soon as possible. The Corps should also expedite the Mod Waters Project and CSOP. Completion of both the MWD and C-111 projects will protect numerous threatened and endangered species, along with urban and agricultural areas. The Corps' failure to complete Mod Waters has resulted in environmentally harmful plans, such as IOP, through which people's rights are violated and laws to protect the environment are ignored.

The Corps' fundamentally flawed perfunctory Draft SEIS fails to comply with NEPA and other federal law, that will result in continuing an IOP that violates people's rights, endangers the public health and safety, and I ensure the continued destruction of large portions of the Everglades (including Miccosukee Tribal Everglades) and threaten the future of Everglades Restoration. This madness must be stopped before there is no Everglades left to restore.

Sincerely,

Dexter W. Lehtinen, Esquire

Claudio Réecti, eg. for

## SNAIL KITE DEMOGRAPHY ANNUAL REPORT 2005

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2005 Report

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#### PREFACE

This document is not intended as a definitive stand alone and completed piece of work. We strongly recommend the 1997 report (entitled: Movement and demography of the Snail Kite in Florida) and the publication from Dreitz et al. (2002), for more complete explanations about the protocol employed. We also included two articles relevant to the conservation and habitat management of snail kites. These two articles should not be distributed, until printed copies are made available from the peer reviewed journals.

This report is intended as an annual progress report informing funding and interested agencies regarding the status of our snail kite monitoring study.

This monitoring effort is long term. It should be noted that our field personnel are monitoring the snail kite throughout its range on a year-round basis.

This progress report allows investigators to highlight significant progress in the form of both analytical and personal observations.

#### **ABSTRACT**

This report presents demographic data on snail kites in Florida. It concentrates on data collected in 2005, but also synthesizes data collected since 1992.

Recent demographic results show alarming trends concerning the snail kite population in Florida. First we found that kite abundance drastically declined between 1999 and 2003. This decline coincides with a multiregional drought that affected survival of juveniles and adults. Survival of both juveniles and adults rebounded shortly after the drought. On the other hand, the number of young produced has not recovered from a sharp decrease that preceded the drought. The estimate of population size for 2005 does not indicate any significant recovery. In fact, reproduction was exceptionally low in 2005. No kites were observed fledging out of the Water Conservations Areas (WCA's). For the period 1992-2005, statewide reproductive success was at its lowest in 2005. In this report we also make specific recommendations that may help managers plan management actions aimed at increasing snail kite population growth.

#### **INTRODUCTION**

The snail kite (*Rostrhamus sociabilis plumbeus*) is an endangered raptor that inhabits flooded freshwater areas and shallow lakes in peninsular Florida and Cuba (Sykes 1984, Sykes et al. 1995). The historical range of the snail kite once covered over 3.6 million ha in Florida (Davis and Ogden, 1994), but is now restricted mainly to the watersheds of the Everglades, Lake Okeechobee, Loxahatchee Slough, the Kissimmee River, and the Upper St. Johns River.

The snail kite is unique in that it is the only avian species whose population in the U.S. is restricted to freshwater wetlands in central and south Florida. The snail kite in addition to being endangered is considered by many to be an excellent barometer of the success of the restoration efforts currently underway.

Snail kite habitats in south and central Florida exhibit considerable variation in their physiographic and vegetative characteristics, which include graminoid marshes (wet prairies, sloughs), cypress swamps, lake littoral shorelines, and even some highly disturbed areas such as agricultural ditches and retention ponds (Bennetts and Kitchens 1997a). Three features that remain constant within the selected habitats are the presence of apple snails, sparsely distributed emergent vegetation (Sykes 1983b, 1987a), and suitable nesting substrates.

Snail kites are dietary specialists, feeding almost exclusively on the freshwater apple snail, *Pomacea paludosa* (Sykes 1987a, Sykes et al. 1995). They use two visual foraging methods, either flying above the water surface or hunting from a perch (Sykes 1987a), and both require open water and sparse vegetation. In the Water Conservations Areas, kites typically nest in woody vegetation over water, such as willows, bald cypress, pond apple, wax myrtle, etc. (Beissinger 1988, Bennetts et al. 1988, see also Appendix 1). On the other hand,

kites use predominantly herbaceous nesting substrate when nesting in the Kissimmee Chain of Lakes (see Appendix 1). The snail kite's survival depends on maintaining hydrologic conditions that support these specific vegetative communities and subsequent apple snail availability in at least a subset of critical size wetlands across the region each year (Bennetts et al. 2002).

Wetland habitats throughout central and southern Florida are constantly fluctuating in response to climatic or management influences, resulting in a mosaic of hydrologic regimes. Snail kites respond to these fluctuations through movements between wetlands. (Bennetts and Kitchens, 1997a, 1997b). Developing a thorough understanding of kites' ability to move between wetlands, their resistance and resilience to disturbance events (e.g. droughts and high water events) or changes in habitat is essential to optimizing the management of the systems inhabited by the snail kite in Florida.

This report presents information on the current demography of snail kites throughout central and southern Florida. It concentrates on demographic data collected in 2005, but will also synthesize data collected since 1992.

#### **METHODS**

## Study Area

The Florida population of snail kites is best viewed as a single spatially structured population, distributed among a network of heterogeneous wetland units in central and southern Florida (Bennetts and Kitchens 1997a, 1997b). Kites utilize the entire spatial extent of their range, exhibiting interchange among wetland units (Bennetts and Kitchens 1997a, 1997b, Martin et al. 2006). The study area includes a large portion of these different wetland units used by snail kites throughout peninsular Florida (Figure 1).

## Monitoring protocol

Survey method

Multiple consecutive surveys were conducted throughout the designated wetland units (Figure 1) from March to June at 2-3 week intervals of each year since 1992. This time period coincides with the occurrence of peak nesting (Bennetts and Kitchens 1997a). The surveys followed a format similar to the quasi-systematic transects conducted by airboat for the annual count (Sykes 1979, 1982; Bennetts et al. 1994). During each survey we inspected every sighted kite using both binoculars and spotting scopes. We categorized each observed individual as follows: (1) "marked" if the kite carried a band that could be uniquely identified; (2) "unmarked" if the sighted kite did not carry an identifiable band; or (3) "unknown" whenever the banding status of the kite could not be determined (see Martin et al. in review).

#### Nest monitoring

Nests were checked with a telescoping mirror pole to determine their status. Water depths at certain nests were determined by placing a meter stick vertically into the water column until it rested on the sediment. GPS (Global Positioning System) locations of the nest, nesting substrate and height were also recorded. We also assigned the status of each nest failure to one of four categories:

- 1-Predation or post scavenging event with no nest collapse: any nest that included scattered remains of young or adults kites (e.g., wing; conglomerate of feathers etc.), broken egg shells, or no eggs where a full clutch was present before.
- 2-Predation or post scavenging event associated with nest collapse: any nest built on robust substrate (e.g. shrubs), whose collapse was likely to have been caused by a land predator (e.g., raccoons). This category only included nests with a reasonable access to land predator (i.e., water depth < 50 cm and/or relatively close to land < 50m)
- 3-Nest collapse: any nest failure associated to the falling of the nest out of its original location.
- 4-Unable to determine reason of nest failure: any nest that contained an incomplete egg clutch on subsequent monitoring visits (possibly due to abandonment or adult mortality) or any nest that that could not be relocated.

#### Mark-resighting

Snail kites were banded during fledging time (approximately 25 days old) with alphanumeric bands. During each of the surveys we reported the number of unmarked and marked kites. Individually marked birds were identified using a spotting scope.

#### Radiotelemetry

In March 2003 we initiated a radio telemetry study, with a sampling design similar to the 1992-1995 study (Bennetts and Kitchens, 1997). Birds were located by aircraft and airboat monthly. This protocol was designed to estimate movement among wetlands (Martin et al. 2006); and survival (see also "Data analysis").

#### Data reported and statistical analysis

Nest Success

We calculated nest success for the period of record using the following estimator:

$$\widehat{NS} = x/n$$

Where  $\widehat{NS}$  is the maximum likelihood estimate of the probability of nest survival (or nest success), x is the number of nests which produced at least one fledgling, and n is the number of nests initially observed with at least one egg (Williams et al. 2002).

#### Survival

The Cormack-Jolly-Seber model (CJS, Cormack 1964, Jolly 1965), implemented in program MARK (White and Burnham 1999), was used to estimate survival probability (denoted  $\hat{\phi}$ ). The Aikaike Information Criterion (AIC) was used to select the best model describing survival (Burnham and Anderson 1998). The protocol and previous survival estimates (up to 1999) have been published elsewhere (Bennetts and Kitchens 1997a, Bennetts et al. 2002). CJS models were also used to estimate detection probability (i.e., the probability of detecting a snail kite given that it is present in the study area during the period of sampling). We also reported this calculated detection probability (denoted  $\hat{p}$ ).

#### Total population size

We used the superpopulation approach described in detail by Dreitz et al. (2002) to estimate population size of snail kites between 1997 and 2005.

#### Number of young produced

Starting in 2004, we recorded the number of banded and unbanded young- snail kites.

Using the superpopulation approach, we were then able to estimate the number of young produced (Martin et al. in review). However, because of the small sample size of young marked, we could not estimate detection probabilities that were specific to young kites.

Instead we used detection probability estimated for adults.

#### Bird movement

Using a multistate modeling framework, we conducted a movement analysis at two temporal scales (month and year) and two spatial scales (wetlands and regions) (see Martin et al. 2006).

#### Juvenile survival using radio-telemetry

Preliminary survival estimates based on radiotelemetry information were obtained using the following estimator:

$$\hat{S} = y/u$$

Where  $\hat{S}$  is the maximum likelihood estimate of the probability of surviving, y is the number of snail kites alive that were located, and u is the number of individuals that were marked initially (Williams et al. 2002).

## RESULTS

## Reproduction

Number of nests counted.

Ten percent of the total number of nests were found in the WCAs. No nests were observed in WCA2B, 1A, 2A, 3B, Everglades National Park and Big Cypress (Table 1). Thirty-eight percent of the nests were found in Lake Tohopekaliga in 2005 (Table 1). Thirty-five percent of the total number of nests were found throughout the remainder of the range in Lake Okeechobee, West Palm Beach Water Catchment Area, Lake Istopoga and St Johns River Marsh.

#### Number of juveniles banded.

Out of 117 nests that were monitored in 2005, 39 young were fledged (but only 30 kites were banded). Nineteen kites were banded during the typical study period (March 1 to June 30). An additional 11 kites were fledged between August 22 and October 17.

The total number of young fledged throughout the entire state dropped substantially after 1998, but was particularly low in 2005 (Figure 5). Prior to 1998, the number of young fledged annually for the entire state varied between 117 and 306. From 1999 to 2003, the annual number varied between 26 and 97. Proportionally, the large majority of birds fledged over time have been generated from the Water Conservation Areas, principally WCA3A, however in 2005 no young were fledged out of WCA3A. This trend of lowered reproduction raises concerns regarding the population sustainability. Using the superpopulation approach we estimated that 55 young were produced in 2005 (Martin et al. in review).

#### Nest success

In 2005, the estimate of nest success for the entire population was  $0.17 \, (\widehat{SE}(\widehat{NS}) = 0.04)$ . Average nest success statewide between 1992 and 2005 was  $0.31 \, (\widehat{SE}(\widehat{S}) = 0.04)$ . Estimates of nest success between 1992 and 2005 are presented in Fig. 2. Nest success in 2005 was lower than during any other years between the interval 1992 and 2005. Using direct and indirect evidence, we note that 36% of the nests in Lake Tohopekaliga (particularly those iniated early in the nesting season) showed signs of predation or post-scavenging events Table 1 summarizes the number of nests that were predated (or alternatively, that were scavenged after nest failure) for the entire study area.

Table 1. Snail kite nests by study area in 2005 and their production/fate

	Active	Successful	Young	Intact	Non-	Collapsed	Other
Study Area	Nests <sup>a</sup>	Nests <sup>b</sup>	Fledged <sup>c</sup>	Depredated	Intact	Nestsf	Failed
				Nests d	Nests <sup>e</sup>		Nests <sup>g</sup>
West Palm Beach (WPB)	14	1	1	9	1	1	3
Lake Kissimmee (KISS)	9	1	2	4	1	2	1
Lake E. Toho. (ETOHO)	1	0	0	0	0	. 1	0
Lake Okeechobee	23	3	3	14	0	1	5
St Johns Marsh	9	2	3	4	1	1	0
Lake Tohopekaliga	47	12	21	20	5	5	5
Lake Istopoga	4	4	9	0	0	0	0
WCA 2B	0	-	-	-	-	-	-
WCA 2A	0	-	-	-	-	-	-
WCA 3A	12	0	0	10	0	0	2
WCA 1A (Loxahatchee)	0	-	-	-	-	-	-
Big Cypress Nat. Pres.	0	-	-	-	ba .	-	-
Everglades National Park	0	<u>.</u>	-	-	-	-	-
WCA 3B	0	-	. <b>-</b>	-	-	-	-

a: number of nests found containing at least one egg or young

b: number of nests fledging at least one young

c: number of young successfully fledged

d: potential nest depredations as evidenced by missing eggs/broken egg shells and/or snail kite feathers/parts (predation cannot be separated from post scavenging events)

e: potential nest depredations as evidenced by collapsed/overturned nests that were sturdy and unlikely to have collapsed without predator disturbance (predation cannot be separated from post scavenging events)

f: collapsed nests due to substrate failure/inclement weather

g. other failed nests (unable to determine cause; however, possibilities include abandonment, adult mortality, etc.)

#### Survival

During non-drought years adult survival has remained constant over time (Fig. 3a). However, survival dropped substantially between 2000 and 2001, and to its minimum value between 2001 and 2002, in response to the regional drought of 2000-2001. This drop represented a decrease of 16% in adult survival (see Martin et al. 2006). Juvenile survival has varied widely over time, but also reached a record low between 2000 and 2001 (Fig. 3, from Martin et al. 2006). Juvenile survival decreased by 86% in 2000 through 2002, when compared to its average over the non-drought years (1992 - 1999 and 2003 - 2004).

### **Population Size**

The snail kite population in Florida progressively and dramatically decreased between 1999 and 2002 (Figure 4) from approximately 3400 to 1700 birds. Population size estimates of abundance between 2002 and 2003 suggest a possible stabilization at approximately 1500-1600 birds. Although the population size estimates (approximately 1700) for 2004 and 2005 are slightly higher than both 2002 and 2003, the confidence intervals of these estimates are overlapping indicating that the population has not shown clear signs of recovery. Appendix 2 summarizes capture data used in the estimation procedure.

# Radio telemetry

Out of 68 young kites equipped with radios in 2004, only 5 survived until the period January-March 2005. This corresponds to a survival rate of 0.073. This estimate is less than the survival estimate of  $\hat{S} = 0.55$  for juveniles radiotracked in 2003. In fact, values this low

have only been recorded previously during the recent drought event of 2000-2001. These estimates do not consider detection probabilities, therefore theoretically they could underestimate true survival. However, given the high detection probability obtained with our radiotracking protocol we believe detection probabilities to be approaching 1.0 for both of these estimates (Martin et al. 2006).

## **DISCUSSION**

Our recent demographic studies point toward alarming trends in the snail kite population in Florida. First, we have found that kite numbers have drastically declined since 1999 (Fig. 4). Concurrent with the population decline there is a corresponding decline in nesting attempts, nest success and the number of young fledged (Fig. 5). A number of factors have likely contributed to these observed declines. Lake Okeechobee, which from 1985 to 1995 was a productive breeding site, has become only a minor contributing unit (in terms of reproduction) since 1996. In 2000 and 2001 South Florida experienced a major drought that affected nearly the entire habitat network of the kite (although the Kissimmee Chain of Lakes (KCL) appeared to be less affected) (Martin et al. 2006). Survival of both adults and juveniles was strongly affected by this natural disturbance, especially in the Water Conservation Areas and Lake Okeechobee (Martin et al. 2006). The KCL appeared to serve as refugia to this drought perhaps because these more northern lacustrine wetlands were less affected by the drought than the palustrine wetlands located in the south. As a consequence survival of kites that occupied KCL in 2001 did not decrease substantially (Martin et al. 2006). Following this drought there was also an intensive draw down of the Upper Kissimmee Chain of Lakes (2004) along with extensive aquatic weed control activities in the littoral zone (managed draw down with mechanical scraping and herbiciding) of the littoral reach of Lake Tohopekaliga. This drawdown had the equivalent impact of a sub regional drought in terms of lake stages and no doubt influenced the production of kites from the KCL for that year (Figure 5).

While adult survival declined temporarily during the 2000-2001 drought (Fig.3.a), we are particularly concerned about an apparent continuing lack of recruitment of juveniles which appears to be currently limiting population growth. A preliminary population viability

analysis (PVA, see 2003 annual report), predicts high probability of extinction in the next 50 years if survival and reproduction as well as drought frequency maintain the same rates as per the last 10 years (Martin et al. in preparation).

Given the perennial contribution of the WCA's to the annual production of kites (Fig. 5) there is little doubt at this point in time that the persistence of kites in Florida depends principally on the habitat quality within these wetlands. Current water regulation schedules in the WCA's have the potential to drastically shorten the window during which kites can breed successfully (Mooij et al. in review) (see "Recommendations"). In addition, rapid water level recession rates from the elevated stage schedule between February and July can present enormous foraging difficulties to both juvenile and even adult kites (Mooij et al. in review). During low precipitation regimes the current regulation schedule increases the likelihood of localized drought, which may reduce kite survival if other habitats are not available in close proximity (Martin et al 2006). In 2004 for instance, we estimated that 430 juveniles were produced (the water levels in the WCA's were fairly high during the initial part of the breeding season, see 2004 annual report). Out of 68 birds that we radioed, only 7% were reobserved between January and March 2005 (indicating that the recruitment was minimal). We attribute this mass mortality to the prolonged drying of the WCA's (Fig. 6 and Fig. 7). In addition, this drying event occurred at the same time as the managed draw down of the entire Kissimmee Chain of Lakes, which reduced the potential for this area to serve both as a refuge and as an alternate source of recruitment. In 2005, only 30 fledglings were observed and marked which is a record low since 2001. No fledglings were observed in the WCA's which typically is the most productive area. This absence of reproduction is particularly disturbing given that the WCA's did not dry down in 2005. It is possible that part of the problem is due

to the prolonged drying of the WCA's that occurred in 2004 (which may have substantially affected the apple snail population). However we note that over 80 kites were fledged and marked in 2002 (which followed the 2001 drought). Therefore other factors may be involved (see recommendations).

Interestingly, Figure 7 shows that during the period of study (1992-2005), whenever water stages in WCA3A remained above 9 feet at station 3AS3W1, juvenile survival remained high (> 37%; we note that in 1992 water stages fell below 9 feet, however few birds were marked in WCA3A during that year, and therefore the high survival in Fig. 3.a did not accurately reflect juvenile survival that prevailed in WCA3A in 1992; on the other hand after 1992 most birds marked statewide were marked in WCA3A). Conversely, whenever water stages fell below 9 feet, juvenile survival was substantially reduced (< 36%). Prolonged drying events appeared to be particularly harmful to juveniles. Indeed, any drying event (water stage below 9 feet at station 3AS3W1) that lasted more than 3.5 months, caused a dramatic decrease in juvenile survival (<10%), and even severely reduced adult survival.

Concerning the effect of hurricanes on snail kites, hurricanes certainly have the potential to affect nesting and foraging habitat of kites, by altering the vegetation through wind effects but also through the effect of flooding. Hurricanes could also directly affect kite survival, but we currently do not have any quantitative measures of the direct or indirect effect of hurricanes on kites because too few radio-tagged individuals were present in areas recently impacted by hurricanes.

## RECOMMENDATIONS

A recent radio telemetry study showed that although kites move extensively among contiguous wetlands (i.e. KCL or WCA's) most kites do not move as freely as previously thought among wetlands which are isolated by extensive areas of unsuitable habitats (Martin et al. 2006). This may actually impede a significant proportion of birds from moving successfully to refuge habitats during drying events.

"This observation is of particular importance to management of the Everglades Ecosystem, given the paradigm that the persistence of good natural habitats requires occasional drying events" (Bennetts *et al.*, 1998; Kitchens *et al.*, 2002). Restoration projects that involve wholesale dry downs of an entire region (e.g., restoration of Lake Tohopekaliga) (Welch, 2004) may want to consider the option of conserving water in at least some local patches within the region to be affected, to serve as refuge for snail kites. The draw downs of local patches should occur sequentially, allowing a sufficient recovery period for previously dried areas to return to a productive level. Moreover, the pattern of drying and inundation should optimally attempt to mimic as closely as possible the hydrology of the Everglades under a more natural landscape (Fennema *et al.*, 1994)" (Martin and Kitchens in prep).

Because WCA3A is currently so critical to kites persistence, we propose a management plan for that wetland unit using a modification to the existing regulation schedules. Whenever dry conditions (drier than the 10 year average) are predicted (e.g. La Nina events etc.) for the period April to July, managers may want to follow "Zone E regulation" for the period January to September of the same year (in any case water stages at 3AS3W1 should not fall below 9 feet for any prolonged period of time (< 3 weeks)), in order to mitigate negative effects of dry conditions on snail availability to kites. Doing so would

probably prevent the catastrophic mortality that was observed in 2004 and 2001. By contrast, when conditions are "normal" or "wetter" than average "Zone E1 ISOP regulation" could be adopted for that same period of time. This would possibly allow for better apple snail productivity (Darby et al. 2005). In fact, Darby et al. (2005) suggest that for the period February to April water depth should remain below 40 cm (or equivalently 9.41 feet at station 3AS3W1, see Fig. 7) to allow for better snail production, but they warn that any prolonged drying event (especially if it occurs at a critical time during the snail's reproductive cycle) could be highly detrimental to snails. Therefore, our recommendations are compatible with Darby et al. (2005). We note that wet years and dry years could be predicted by examining climatological data. El Nino years for instance are good indicators of wet conditions while La Nina years are good indicators of dry conditions in the wetlands used by kites (Martin et al. in prep.). Several researchers (e.g., Mooij et al. in review; Kitchens et al 2002; Darby et al. 2005) have raised their concerns about potentially adverse effects of flooding in WCA3A. In recent years water levels in WCA3A have been maintained at alarmingly high levels (in part due to recent hurricanes) for the period September to January. We suggest that water levels in WCA3A should be maintained around Zone E regulation for the period September to January (more specifically, water stages at 3AS3W1 should not go above 10.5 feet for any prolonged period of time (<3 months)) in order to mitigate negative effects of prolonged hydroperiod (or/and greater water depth) on vegetation communities and apple snail production (Kitchens et al. in prep and Darby et al. 2005).

We also would like to reiterate the importance maintaining a monitoring program to document snail kite population changes, apple snail densities, habitat shifts and quality relative to kite usage.

## **ACKNOWLEDGEMENTS**

We thank Rob Bennetts, Vicky Dreitz and James Nichols for helping design this study. We also thank James Nichols and James Hines for their invaluable help with statistical modeling.

We wish to thank Madan Oli and Hardin Waddle for help with PVA analyses. We are very grateful to the many people who helped us with fieldwork during this study: Zach Welch, Janell Brush, Jamie Duberstein, Samantha Musgrave, Derek Piotrowicz, Jeff Kingscott, Michaela Speirs, Phil and Patty Darby, Katie Golden, Steve McGehee, Scott Severs, Hilary Maier, David Boyd, James Conner, and Lyn Bjork. We thank John Steinberg for contributing to the aircraft radio tracking protocol.

We also thank Phil Darby and Jim Rodgers for sharing their insights concerning the impact of exotic plant control on kite habitats. We give a special thanks to Steve Miller and Tylan Dean for their technical advice. Janell Brush helped with the editing of this report. The authors take full and sole responsibility for the analyses, conclusions, and recommendations reported.

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#### LITERATURE CITED

- Beissinger, S.R. 1988. The Snail Kite. Pages 148-165 in Handbook of North American Birds. (R.S. Palmer, ed.). Volume IV. Yale University Press, New Haven, CT. 433pp.
- Bennetts, R.E., M.W. Collopy, and S.R. Beissinger. 1988. Nesting ecology of snail kites in Water Conservation Area 3A. Dept. Wildl. and Range Sci., University of Florida, Gainesville. Florida Cooperative Fish and Wildlife Research Unit. Tech. Rep. No. 31. 174pp.
- Bennetts, R.E., M..W. Collopy, and J.A. Rodgers, Jr. 1994. The Snail Kite in the Florida Everglades: a food specialist in a changing environment. Pages 507-532 *in* Everglades: the ecosystem and its restoration (S.M. Davis and J.C. Ogden, eds.). St. Lucie Press, Delray Beach, FL. 848pp.
- Bennetts, R.E. and W.M. Kitchens. 1997a. The demography and movements of Snail kites in Florida. U.S.G.S. Biologica Resources Division, Florida Cooperative Fish and Wildlife Research Unit. Tech. Rep. No. 56. 169pp.
- Bennetts, R.E. and W.M. Kitchens. 1997b. Population dynamics and conservation of Snail kites in Florida: the importance of spatial and temporal scale. Col. Waterbirds 20:324-329.
- Bennetts, R.E. and W.M. Kitchens. 2000. Factors influencing movement probabilities of a nomadic food specialist: proximate foraging benefits or ultimate gains from exploration? Oikos 92:1-9.
- Bennetts, R. E., W. M. Kitchens V. J. Dreitz 2002. Influence of an extreme high-water event on survival, reproduction, and distribution of Snail kites in Florida. Wetlands. 22(2): 366-373.
- Burnham, K. P., and D. R. Anderson. 1998. Model Selection and Inference: A practical Information-theoretic Approach. Springer-Verlag, New York.
- Cormack, R. M. 1964. Estimates of survival from the sighting of marked animals. Biometrika 51:429-438.
- Darby, P. C., L. B. Karunaratne, and R. E. Bennetts. 2005. The influence of hydrology and associated habitat structure on spatial and temporal patterns of apple snail abundance and recruitment. University of West Florida/ US Geological Survey, Pensacola, FL, USA. Technical report.
- Davis, S. & Ogden, J., eds. 1994 Everglades, The Ecosystem and its restoration, pp 826. St Lucie Press, Boca Raton.
- Dreitz, V. J., R. E. Bennetts, and W. M. Kitchens. 2001. Spatial and temporal variability in nest success of Snail Kites in Florida: A meta-analysis. Condor 103:502-509.
- Dreitz, V.J., J.D. Nichols, J.E Hines, R.E. Bennetts, W.M. Kitchens and D.L. DeAngelis 2002. The use of resighting data to estimate the rate of population growth of the snail kite in Florida. Journal of Applied Statistics 29(1-):609-623.
- Fennema, R. J., C. J. Neidraueuer, R. A. Johnson, T. K. MacVicar, and W. A. Perkins. 1994. A computer model to simulate natural Everglades hydrology. Pages 249-89 *in* S. Davis and J. Ogden, editors. Everglades: The Ecosystem and its restoration. St. Lucie Press, Delray Beach.
- Jolly, G. M. 1965. Explicit estimates from capture-recapture data with both death and immigration-stochastic model. Biometrika. 52: 225-247.

- Kitchens, W.M., R.E. Bennetts, and D.L. DeAngelis. 2002. Linkages between the snail kite population and wetland dynamics in a highly fragmented South Florida hydroscape. Pages 183 203 *in* Porter, J.W. and K.G. Porter, editors. Linkages between ecosystems: the south Florida hydroscape. CRC/St. Lucie Press, Delray Beach, Florida, USA.
- Martin, J., J. D. Nichols, J. E. Hines, and W. M. Kitchens. 2006. Multiscale patterns of movement in fragmented landscapes and consequences on demography of the snail kite in Florida. Journal of Animal Ecology (in press)
- Mooij, W. M., R. E. Bennets, W. M. Kitchens and D. L. DeAngelis 2002. Exploring the effect of drought extent and interval on the Florida snail kite: interplay between spatial and temporal scales. Ecological Modelling 149: 25-39.
- Sykes, P.W., Jr. 1979. Status of the Everglade Kite in Florid, 1968-1978. Wilson Bull. 91:495-511.
- Sykes, P.W., Jr. 1982. Everglade Kite. *In CRC* Handbook of census methods for terrestrial vertebrates (D.E. Davis, ed.). CRC Press, Boca Raton, Florida.
- Sykes, P.W., Jr. 1983a. Recent population trends of the Snail Kite in Florida and its relationship to water levels. J. Field Ornith. 54:237-246.
- Sykes, P.W., Jr. 1983b. Snail Kite use of the freshwater marshes of South Florida. Florida Field Nat. 11:73-88.
- Sykes, P.W., Jr. 1984. The range of the snail kite and its history in Florida. Bulletin of the Florida State Museum of Biological Science. 29: 211-264.
- Sykes, P.W., Jr. 1987a. The feeding habits of the Snail Kite in Florida, USA. Col. Waterbirds 10:84-92.
- Sykes, P.W. 1987b. Some aspects of the breeding biology of the Snail kite. J. Field. Ornithol. 58:171-189.
- Sykes, P.W., J.A. Rodgers Jr, and R.E. Bennetts. 1995. Snail kite (*Rostrhamus sociabilis*). *In* The Birds of North America (A. Poole and F. Gill, eds.). The Academy of Natural Sciences, Philadelphia, and The American Ornithologists' Union, Washington D.C. No. 171. 32pp.
- Schlaepfer, M. A., M. C. Runge, and P. W. Sherman. 2002. Ecological and evolutionary traps. Trends in Ecology and Evolution 17:474-480.
- Toland, B.T. 1991. Snail kite ecology in the upper St. Johns marshes. 1991 Annual Report. Florida Game and Fresh Water Fish Commission, Vero Beach, Florida. 13pp.
- Toland, B.T. 1992. Snail kite ecology in the upper St. Johns marshes. 1992 Annual Report. Florida Game and Fresh Water Fish Commission, Vero Beach, Florida. 11pp.
- Toland, B.T. 1994. Snail kite ecology and status reports of other species of regional concern in the upper St. Johns marshes. Final Report. Florida Game and Fresh Water Fish Commission, Vero Beach, Florida. 27pp.
- Welch, Z. C. 2004. Littoral vegetation of Lake Tohopekaliga: Community description prior to a large-scale fisheries habitat-enhancement project. MS thesis. University of Florida, Gainesville.
- White, G. C. and K. P. Burnham. 1999. "Program MARK: Survival rate estimation from both live and dead encounters." Bird Study 46 (Suppl.): S120-S139.
- Williams, B. K., J. D. Nichols, and M. J. Conroy. 2002. Analysis and Management of Animal Populations, Academic Press edition, San Diego.

Figure 1. Study area, with the number indicating the area sampled during the surveys.

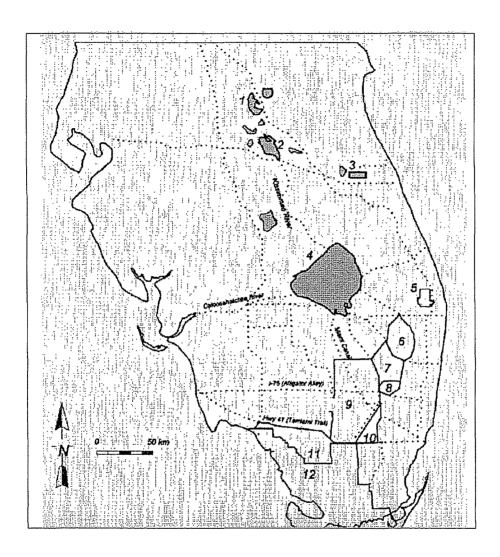


Figure 2. Nest success between 1992 and 2005 (estimates from 1992 and 1997 were taken from Dreitz et al 2001). Error bars correspond to 95% confidence intervals.

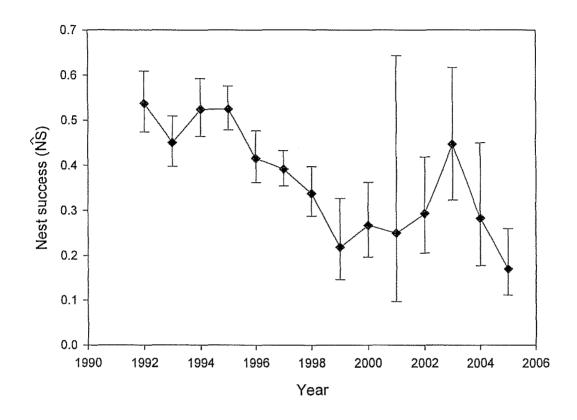


Figure 3. (a) Model averaged Estimates of adult (black squares) and juvenile (white dots) survival ( $\hat{\phi}$ ) between 1992 and 2005; (b) estimates of detection probability ( $\hat{p}$ ). Error bars correspond to 95% confidence intervals. Red star correspond to juvenile survival estimated using radiotelemetry data.

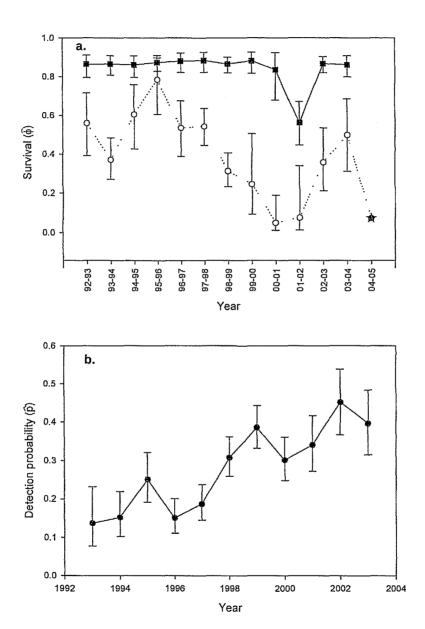


Figure 4. Population size of snail kites estimated using the superpopulation approach (Dreitz et al. 2002; Martin et al. in review).

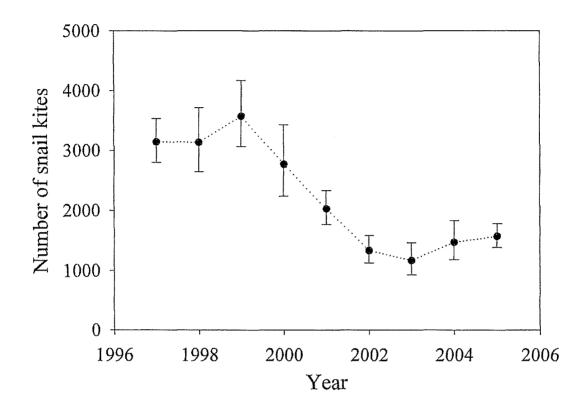


Figure 5. Number of young detected and banded: in the BCMC, Water Conservation Areas (WCA), Kissimmee Chain of Lakes (KCL), Lake Okeechobee, and all areas combined (total), between 1992 and 2005 (Martin et al. in review).

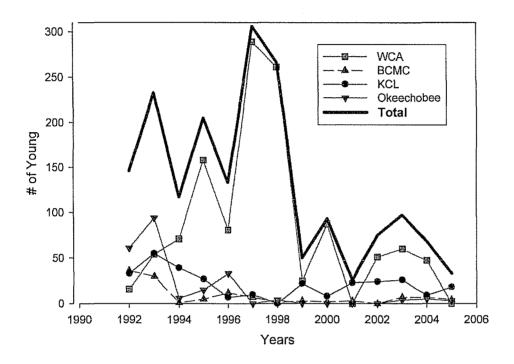
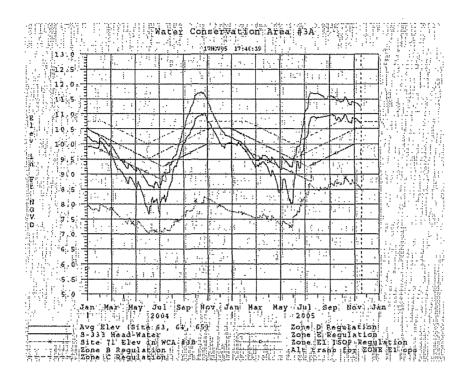


Figure 6. Water regulation schedule for WCA3A.



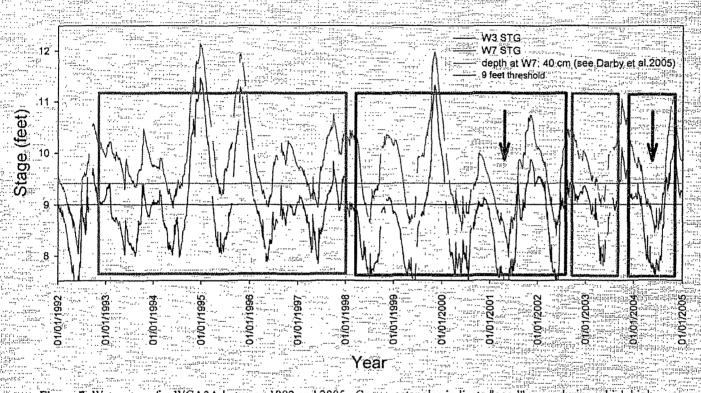


Figure 7. Water stage for WCA3A between 1992 and 2005. Green rectangles indicate "good" years during which high juvenile survival rates were observed; red rectangles indicate "bad years" during which juvenile survival and even adult survival rates were severely reduced. Arrows indicate prolonged drying events.

Station W7 is a South Florida Water Management well, also referred to as 3AS3W1 (UTM NAD83/17R/ 522415E/2859895N).

Station W3 is located at UTM NAD83/17R/ 521235E/2851974N (see Appendix 4).

BOOK OF THE BOOK OF THE					
Substrate type					
Region	"Woody" (%)	"Herbaceous" (%)	Region		
E	97	3	E		
KCL	30	70	KCL		
SJM	77	23	SJM		
OKEE	83	17	OKEE		
WPB	88	12	WPB		

Appendix 1. Proportion of nest substrate type (categorized either as "woody" or "herbaceous") used by the snail kite in the five major wetland complexes occupied by the kite in Florida between 1995 and 2004. Data prior to 1995 was not included because only a subset of the nest data was available (therefore including data from 1994 to 2005 would have biased estimates presented in Appendix 1). Regions E includes the Water Conservation Areas, Big Cypress National Preserve, and Everglades National Park; region KCL includes Lake Tohopekaliga, Lake East Tohopekaliga and Lake Kissimmee; region Okee corresponds to Lake Okeechobee; region SJM corresponds to St Johns Marsh; region WPB corresponds to West Palm Beach Water Catchments Area.

dates	Total banded	Total unband	Total Unknown	Total
25/02 - 20/03	44	357	62	463
21/03 - 10/04	45	363	57	465
10/04 - 27/04	41	283	48	372
01/05 - 14/05	35	237	49	321
18/05 - 06/08	51	247	22	320
11/06 - 27/06	30	175	17	222

Appendix 2. Number of banded birds identified (total banded id); number of banded birds (total band, include birds whose bands have been both identified and not identified); number of unbanded birds (total unband); number of birds whose bands have not been identified (total band unid); number of birds whose legs could not be examined and therefore could not be classified as either banded or unbanded (total unknown). This table includes both adults and juveniles (from Martin et al. in review)

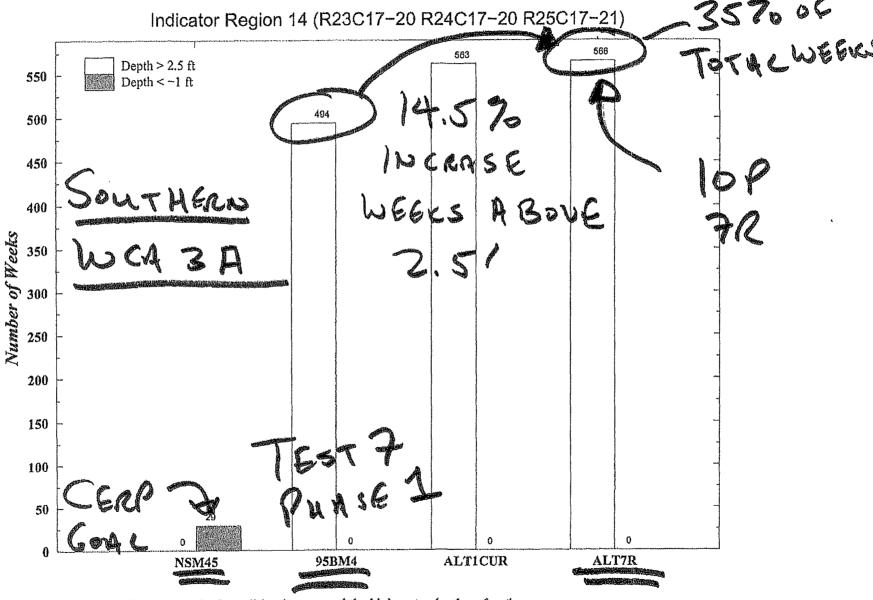
	Total	Total	
dates	banded id	unband	Total
01/03 - 21/03	0	0	0
24/03 - 11/04	0	0	0
16/04 - 06/05	0	0	0
06/05 - 28/05	0	4	4
03/06 - 18/06	6	5	11
20/06 - 30/06	6	8	14

Appendix 3. Number of banded birds identified (total banded id); number of unbanded birds (total unband); number of birds whose bands have not been identified (total band unid); number of birds whose legs could not be examined and therefore could not be classified as either banded or unbanded (total unknown). This table includes only juveniles (from Martin et al. in review).

Appendix 4. Map of gauging stations W7 and W3 (green numbers) described in Figure 7.

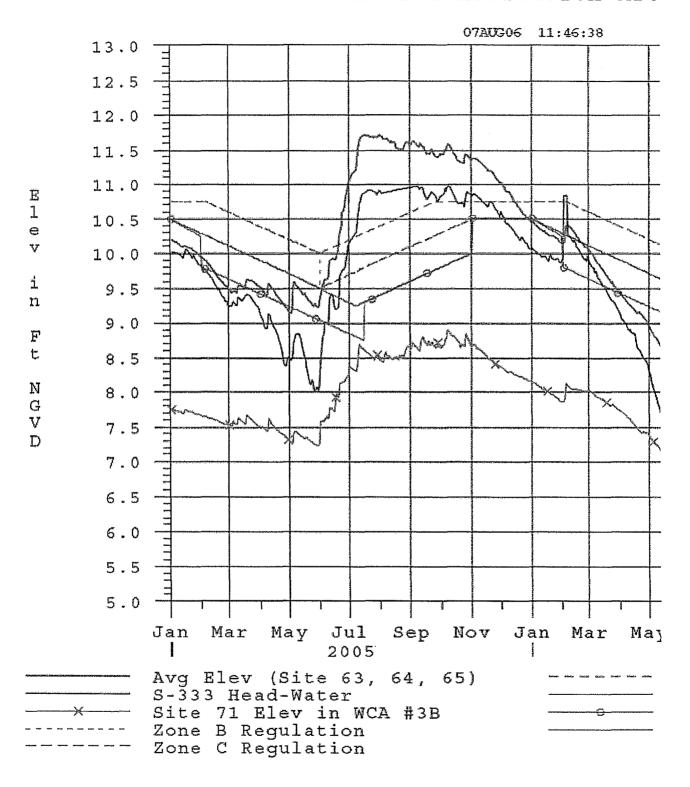


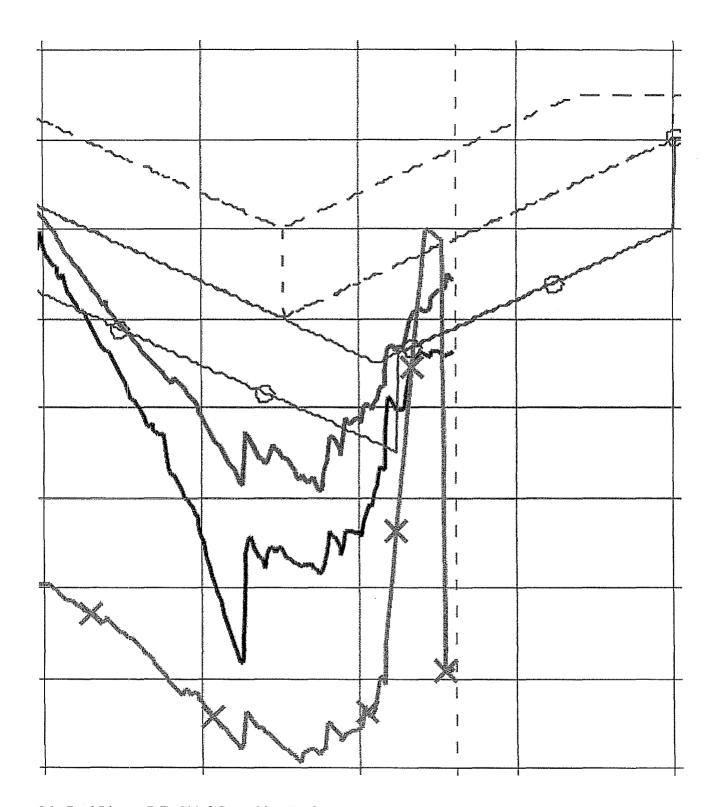
# Number of Weeks High/Low Water Depth Criteria Exceeded



Note: The desired condition is to exceed the high water depth as few times as possible and go below the low water depth as few times as possible.

Run date: Fri Oct 25 16:09:54 EDT 2002 For Planning Purposes Only SFWMM V3.4





Mr. Paul Linton, P.E. Chief Consulting Engineer South Florida Water Management District 3301 Gun Club Road West Palm Beach, Florida, 33408 Office 561-682-2871 Mobile 561-718-2830 Facsimile 561-682-0100

## Memorandum



TO:

Florida State Clearinghouse

THROUGH: Greg Knecht, Administrator

Water Quality Standards & Special Projects Program

FROM:

Inger Hansen and John Outland

DATE:

August 4, 2006

SUBJECT:

Draft Supplemental EIS, Interim Operational Plan for Protection of the Cape

Sable Seaside Sparrow, Everglades National Park

SAI#:

FL06-2302

The Department has reviewed the referenced document and offers the following comments:

## Background

The Draft Supplemental Environmental Impact Statement (EIS) provides a final recommended plan, Alternative 7R to be implemented as the Interim Operational Plan (IOP) for the Protection of the Cape Sable Seaside Sparrow. A final EIS on the IOP was issued on June 3, 2002, Alternative 7R was selected, and the Record of Decision on IOP was signed in July 2002. Alternative 7R was implemented. However, a subsequent Order issued by the U.S. District County in Miami required the Corps to prepare a Supplemental EIS.

The EIS includes an analysis of previously authorized features described in the 1992 Modified Water Deliveries to Everglades National Park report and the 1994 C-111 reports that, if incorporated into Alternative 7R, will provide for increased flood control and water management capability. These include adding S-332C and seepage reservoirs along the L-31N Canal. The S-356 structure is also included to capture water from the northern reaches of the L-31N Canal and return it to Northeast Shark River Slough. A second seepage reservoir associated with S-332B and the removal of the southern four miles of L-67 Extension and canal is also proposed for incorporation into Alternative 7R.

#### **Comments**

The following suggestions are offered for consideration in project planning:

The SEIS appears to have some inconsistencies in the evaluation of impacts to the Everglades Protection Area (EPA). The Executive Summary (page v) states that impacts to vegetation under the recommended alternative are similar to those of ISOP where "minor effects due to raised water levels may have occurred in the vicinity of tree islands in the southern portion of WCA

DEP-1

Florida State Clearinghouse August 4, 2006 Page 2 of 3

and 3B." However, Page 58, Section 4.6, Wetlands, states that "Wetlands in NESRS, the Rocky Glades, and the western marl prairies are expected to benefit from the restoration of more natural hydroperiods with Alternative 7R, whereas increased flooding in southern WCA 3B and WCA 2A may contribute to negative wetlands impacts." Nevertheless, Page 61, under Section 4.7, Vegetation concludes that Alternatives 7 and 7R will not have adverse effects on vegetation through out WCA 3A and 3B. Impacts to WCA 2A are expected to be similar to Alternative 1, with less ponding than with the other alternative but vegetation could be adversely affected.

Section 4.21 says that the detention of excess water in the WCAs could also occur with Alternative 7R, and would likely continue in the future without full implementation on the Modified Water Deliveries project. The impacts of the detention could include loss of tree island vegetation and associated wildlife, adverse impacts to snail kite nesting and critical habitat and adverse impacts to wood stork. As part of the impact analysis, the Alt7R alternative should not only be compared to the 1995 base condition, but also to the ISOP 2001 conditions, as this was the condition that existed prior to IOP being implemented. The updated EIS does not attempt to quantify these impacts. Prior to the Department authorizing operations outside of those allowed under the existing emergency order, an evaluation of the alternatives to the pre-project conditions (i.e., ISOP 2001 & 1995 base) using the most recent version of the SFWMM should be performed.

DEP-3

DFP-2

The SEIS does not include any new hydrologic modeling results but does provide a reference to the existing webpage that was set up by the Corps of Engineers to disseminate information regarding IOP. This site provides a link to the South Florida Water Management District 2 by 2 modeling results that were posted a few years ago. What is referred to as the "new" modeling results on the ISOP webpage were implemented using the version 4.4 of the SFWMM. Since these results were posed, there have been numerous updates to the SFWMM that will likely affect the performance of the modeled scenarios and the Department therefore recommends using the latest updates when providing a supplemental post implementation report to analyze the performance of IOP.

DFP-4

The Department has issued a number of emergency orders to allow portions of the C-111 project and IOP to move forward. Some of the project features which include the S-356 pump station and the S-355 have been constructed, but do not have permits to operate. The supplemental EIS addresses the water quality issues associated with the S-356 pump station, but does not provide any information regarding potential water quality issues associated with discharging Miami Canal water into WCA 3B by allowing flow through using the proposed S-355 structures. Please note that the Department is concerned about water quality issues associated with the proposed flow through WCA 3B using the Northern Gaps and the S-355 A and B structure as the water quality in the Miami Canal does not currently meet the current water quality standards for discharges into the Everglades Protection Area. The proposed S-355 A and B operation may not be allowable until water quality in the regional system has improved so that the proposed flow through will not adversely impact WCA 3B. A modification of the CERP permit for the

Florida State Clearinghouse August 4, 2006 Page 3 of 3

Modified Water Deliveries Project is required prior to operation of the existing S-355 structures) and the S-356 pump station.

Upon completion of detailed design, this project will require a Comprehensive Everglades Restoration Plan Regulation Act (CERPRA) permit pursuant to Section 373.1502, Floridal Statutes. The project may require a NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities in accordance with Rule 62-621.300(4), Floridal Administrative Code. Other department permits may be required during the construction phase of this project, as applicable. We recommend that the U.S. Army Corps of Engineers and the South Floridal Water Management District coordinate closely with the Department in order to facilitate permit issuance.

DEP-5

If you have any questions regarding these comments, please feel free to contact Inger Hansen at (561) 681-6709.

cc: John Outland (cc)
Inger Hansen (cc)
Frank Nearhoof (cc)
Shelley Yaun (cc)
Tim Gray (cc)





3301 Gun Club Road, West Palm Beach, Florida 33406 • (561) 686-8800 • FL WATS 1-800-432-2045 • TDD (561) 697-2574 Mailing Address: P.O. Box 24680, West Palm Beach, FL 33416-4680 • www.sfwmd.gov

August 1, 2006

Ms. Lauren Milligan, Coordinator Florida State Clearinghouse 3900 Commonwealth Boulevard, MS-47 Tallahassee, FL 32399-3000

Dear Ms. Milligan:

Subject:

South Florida Water Management District Comments on the Draft Supplemental Environmental Impact Statement for the Interim Operational Plan for Protection of the Cape Sable Seaside Sparrow (June 2006)

Clearinghouse Number No. FL200605152302C

Below are the South Florida Water Management District's (SFWMD's) comments on the Draft Supplemental Environmental Impact Statement (DSEIS) for the Interim Operational Plan (IOP) for Protection of the Cape Sable Seaside Sparrow (CSSS) dated June 2006. Please note that the lack of comments on the level of flood protection provided by the IOP for Protection of the CSSS in no way reduces the concerns expressed previously by the SFWMD. Since this SEIS does not propose operational changes the SFWMD is not restating those comments as it is hoped that they will be resolved through CSOP. Specifically, the SFWMD Governing Board has given direction that for the C-111 canal basin the minimum level of flood protection acceptable shall egual or exceed ISOP 2001 and that the 8.5 Square Mile Area (SMA) shall be provide drainage equal to or superior than the performance identified in the 8.5 SMA 2000 GRR.

#### Comments

Description of the S-356 operations needs to acknowledge that water pumped by 1. the S-356 pump is seepage collected by the L-31N canal and seepage collected WMD-1 by the L-30 canal discharged via the S-335 structure into the L-31N canal. The seepage into the L-30 canal arises primarily from WCA-3B and the Pennsuco Wetlands. Seepage into the L-31N canal arises predominately from the West (WCA-3B and Northeast Shark Slough) and secondarily from the East.

2. Description of the modeling should make it clear the ALT7R run assumes that the land swap of approximately 1,000 acres between SFWMD and Everglades National Park (ENP) occurred and that a continuous detention area was constructed from S-332B North to the Frog Pond. The land swap increases the

WMD-2

GOVERNING BOARD

EXECUTIVE OFFICE

Ms. Lauren Milligan August 1, 2006 Page 2

detention area from the approximately 700 acres provided by S-332B North, S-332B West, and S-332C to approximately 1,700 acres.

3. The text (section 4.4, page 55) describing the surface water discharge (overflows) should make it clear that the construction required to facilitate this requirement has not been completed. Even though the partial connector is not complete and the western levee has not been raised, the SFWMD has, to the extent feasible, eliminated surface water discharges into ENP via S-332B West. The factors limiting the SFWMD ability to effectively eliminate surface water discharge from S-332B West into ENP are listed below:

WMD-3

- The additional capacity provided by S-332B North has been limited due to the private ownership of adjacent land. Currently pumping operations are generally limited to about half of the available capacity (125 cfs of the 250 cfs capacity).
- The small elevation difference between the overflow crest height of approximately 2.4 feet above ground surface and the normal maximum depth of 2 feet.
- Initially, the lack of tail water (detention area) telemetry and subsequent problem with telemetry thereafter.
- Until this year land ownership prevented the use of the North Partial Connector and South Partial Connector which together provide an additional 160 acres of detention area and reduces the North South gap between S-332B West and S-332C from two miles to a little over a half a mile.
- The unconstructed central section of the partial connect would primarily close the approximately half mile long remaining gap and secondarily provide an additional 70 acres of detention area. The central section of the partial connector is scheduled to be constructed by the U. S. Corps of Engineers (USACE) by June 2007.
- Construction of the continuous final detention area covering approximately 1,700 acres including the land received from ENP in the land swap would more than double the detention area. The continuous detention area from S-332B North to the Frog Pond will be constructed by the USACE by June 2007 now that the land swap between ENP and the SFWMD has been completed.

From Table ES-1 (S-332B, S-332B West Seepage Reservoir)

There will be no overflow into the Park when the project (i.e., the S-332B north seepage reservoir and the partial S-332B/S-332C connector) is complete and when it is practical to do the construction necessary to raise the western levee. There may be overflow during emergency events until the project is complete and the western levee is raised.

4. The text describing the overflow should provide a more complete description of how the actual overflow volumes were calculated. The current numbers are overly precise given the uncertainties in the seepage rates and the rating curve for the 1,700 long flat broad crested weir. Precision on the order 40 acre-feet rather than the 36.46 acre-feet used are more justifiable. I recommend assuming a conservatively low seepage loss of about 125 cfs during these overflow periods rather than trying to calculate a discharge rate from the weir. The 125 cfs seepage rate is conservative and supported by considerable operational data showing that 125 cfs of seepage occurs at stages below the overflow level. The average pumping rate during the overflow period should be estimated (e.g. 200 cfs) then the assumed seepage rate of 125 cfs would be subtracted to calculate the average overflow rate. If the hourly data is available the assumed seepage rate of 125 cfs could be subtracted on an hourly basis. The 125 cfs number could be refined by looking at the pumping rate and water levels immediately before or after the overflow events. Specifically, the head difference for a pump rate which did not cause overflow could be used to determine a seepage relationship. For example, a detention area stage of 8.0 feet NGVD and a canal stage of 5.0 feet NGVD for a pumping rate of 125 cfs results in a seepage relationship of 125 cfs per 3 feet of head. If the water level is 8.5 feet during over flow then the seepage rate would be about 145 cfs ([{8.5-5.0}/{8.0-5.0}]\*125 cfs).

5. The text describing the proposed S-356 wet season test has been updated. WMD-5

A AIAID-O

6. The project description should include a history of when each facility became operational.

Please use the current version.

WMD-6

- S-332D August 1999 (575 cfs) with a detention area of 2,089 acres
- S-332B West April 2002 (575 cfs) with a detention area of 160 acres
- S-332C August 2002 (574 cfs) with a detention area of 240 acres
- S-332B North (250 cfs) and S-332B West (325 cfs) April 30, 2003 providing a 240 and 160 acre of detention area respectively and total detention area of 400 acres

WMD-4

7. The description of marsh operation needs to clarify that marsh operations developed in the Combined Structural and Operation Plan (CSOP) for the Modified Water Deliveries to Everglades National Park (MWD ENP) project and the C-111 Canal project, was developed after implementation of the Interim Operational Plan for Protection of the Cape Sable Seaside Sparrow (IOP for Protection of the CSSS).

WMD-7

8. The SEIS should discuss that during the development of the IOP for Protection of the CSSS that provisional water quality data which was later found to be non representative was the primary justification for the design of the IOP for Protection of the CSSS as seepage area without direct surface water overflows.

WMD-8

9. The IOP should clearly state that the incomplete condition of the detention systems is due to the delays in the land swap between Everglades National Park WMD-9 and the SFWMD. The incomplete detention area due to this delay severely limits the ability of IOP for Protection of the CSSS to precisely and evenly affect water level along the eastern boundary of ENP. We expected that once the construction is complete that the detention system will provide beneficial water levels to ENP's eastern boundary. The land swap has been executed and the construction of the continuous detention area is scheduled for completion before the 2007 wet season.

Thank you for the opportunity to comment on the DSEIS IOP. Again, we request that these comments be included in the Corps' formal administrative record.

Sincerely.

Paul Ferguson Linton

Chief Consulting Engineer

Watershed Management Department South Florida Water Management District

PL/bg

c: Dr. Jon Moulding, U.S. Army Corps of Engineers

Ms. Lauren Milligan August 1, 2006 Page 5

bc: Luna Phillips Paul Linton

# Florida Department of Transportation

JEB BUSH GOVERNOR 1000 Northwest 111th Avenue Miami, Florida 33172-5800 \*\* DENVER J. STUTLER, JR. SECRETARY

August 16, 2006

Ms. Barbara Cintron
Department of the Army
Jacksonville District Corps of Engineers
P.O. Box 4970
Jacksonville, Fl 32232-0019

Re: ICAR # FL 2006 05152302C; U.S. Army Corps of Engineers Draft Environmental Impact Statement, Interim Operational Plan (IOP) for Protection of the Cape Sable Seaside Sparrow June 2006.

Dear Ms. Cintron:

We are in receipt of the above referenced Draft Environmental Impact Statement (DEIS), IOP for Protection of the Cape Sable Seaside Sparrow, June 2006.

The Modified Water Deliveries Project (MODWATERS) is an integral part of IOP and will require that the portion of Tamiami Trail (US 41) between Krome Avenue and Levee 67A/Extended to be reconstructed. The DEIS notes that under the preferred alternative 7R, water elevation constraints for the L-29 Canal will be 9.0 feet.

As the FDOT has previously stated, a water elevation of 7.5 feet in the L-29 Canal barely provides adequate protection for some of the existing section of the adjacent Tamiami Trail/US 41. Therefore, water elevations in the L-29 Canal should not be allowed to exceed 7.5 feet until after the currently planned reconstruction of Tamiami Trail is complete.

FDOT-1

Should you have any questions in this regard, please contact me at (305) 470-5201.

Sincerel

Alice@rayo, P.E.

District Planning and Environmental Management Engineer

Cc: Bob Crim, FDOT

Barbara Culhane, FDOT Marjorie Bixby, FDOT Janet Seitlin, FDOT

Lauren Milligan, FDEP State Clearinghouse



# Florida Department of Agriculture & Consumer Services CHARLES H. BRONSON, Commissioner

Please Respond to:
Office of Agricultural Water Policy
P.O. 24680
3301 Gun Club Road
West Palm Beach, FL 33416

**RECEIVED** 

August 3, 2006

AUG 0 7 2006

Ms. Lauren Milligan, Coordinator Florida State Clearinghouse 3900 Commonwealth Boulevard, MS-47 Tallahassee, Florida 32399-3000

OIP / OLGA SAI# FL200605152302C

Dear Ms. Milligen:

The Florida Department of Agriculture and Consumer Services (FDACS) appreciates the opportunity to provide comments on the Corps' June 2006 Draft Supplemental EIS for the Interim Operational Plan (IOP) for Protection of the Cape Sable Seaside Sparrow.

FDACS has previously submitted comments through the Florida State Clearinghouse on the February 2001 Draft IOP EIS, the October 2001 Supplemental IOP EIS and the May 2002 Final EIS that have not been adequately addressed in this document. As stated in previous letters, the Department remains concerned about the type of flood protection analyses that has been done in for this project.

The May 2006 SEIS states that: "Flooding impacts to residential and agricultural lands above current levels would not likely occur with the recommended alternative" (p-vi). The pre-storm operations proposed may prevent additional surface flooding from occurring in the study area. However, the modeling indicates that the proposed operations will elevate the ground water table by 0.25 to 0.50 ft. in the southern Dade agricultural area. The Corps' analyses of the L-31N canal during IOP operations confirm the model output (p 58). A high groundwater table will harm tree roots and cause disease and/or death of the trees. The tropical fruit tree crops are put in jeopardy by the IOP operations.

The additional flood storage capacity and structures that have been added could address the concerns with changes to the L-31N canal level operations. In order to reduce flooding impacts, and meet the ecological objectives, we support the implementation of Alternative 1. We are strongly opposed to the adoption of Alternative 7R.

FDA-1

If you have any questions or I can assist in any way, please feel free to call me at 561-682-2845. We would be happy to participate in any future collaborative efforts to develop operational plans in this region.

Sincerely,

CHARLES H. BRONSON COMMISSIONER of AGRICULTURE

Linda J. McCarthy
Water Policy Liaison

cc: Chuck Aller, FDACS Tom MacVicar

## FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION



RODNEY BARRETO Miami SANDRA T. KAUPE Palm Beach H.A. "HERKY" HUFFMAN Enterprise DAVID K. MEEHAN St. Petersburg

KATHY BARCO Jacksonville RICHARD A. CORBETT Tampa BRIAN S. YABLONSKI Tallahassee

ENNETH D. HADDAD, Executive Director ICTOR J. HELLER, Assistant Executive Director MARY ANN POOLE, DIRECTOR
OFFICE OF POLICY AND STAKEHOLDER COORDINATION
(850)488-6661 TDD (850)488-9542
FAX (850)922-5679

July 27, 2006

RECEIVED

JUL 2 8 2006

OIP / OLGA

Ms. Lauren Milligan Florida State Clearinghouse Department of Environmental Protection 3900 Commonwealth Boulevard, MS-47 Tallahassee, Florida 32399-3000

Re:

SAI #FL200605152302C, Miami-Dade County, Draft Supplemental Environmental Impact Statement on the Interim Operational Plan for the Protection of the Cape Sable Seaside

Sparrow

Dear Ms. Milligan:

The Florida Fish and Wildlife Conservation Commission (FWC) has reviewed the referenced document and provide the following comments in accordance with the Coastal Zone Management Act/Florida Coastal Management Program, National Environmental Policy Act, and the Fish and Wildlife Coordination Act.

The U.S. Army Corps of Engineers has issued the draft Supplemental Environmental Impact Statement (DSEIS) on the Interim Operational Plan (IOP) for the Protection of the Cape Sable Seaside Sparrow in response to an order by the U.S. District Court for the Southeastern District of Florida, Miami Division, to include hydrologic modeling results that were not available at the time that the Environmental Impact Statement (EIS) for IOP was originally produced in 2002. The 2002 EIS was developed to document the potential impacts of operating the Central and Southern Florida Project in such a way as to avoid jeopardizing the Cape Sable seaside sparrow, which is both federally and state listed as endangered. Those operations, which were documented as Alternative 7R, have been in place since the summer of 2002, and we understand that they are expected to continue until the implementation of the Combined Structural and Operational Plan (CSOP) next year.

Ms. Lauren Milligan Page 2 July 27, 2006

The FWC continues to support IOP as an interim operation, recognizing that structural and legal limitations currently do not allow for a longer-term solution that moves more towards restoration of the south Florida ecosystem. At this point we have the following recommendations and questions that we would like to see addressed in the final SEIS.

- 1. We note that the SDEIS includes updated information on water quality and flood control performance of IOP in the 2002 2006 period (pp. 55 through 58). It would seem reasonable to include information has been collected on changes to the habitat of the snail kite in Water Conservation Area 3A and other pertinent biological data in the final SEIS, and recommend that it include, at a minimum, the information that was required under the Terms and Conditions of the U.S. Fish and Wildlife Service's 2002 Amended Biological Opinion to monitor vegetative shifts in snail kite habitat.
- 2. The DSEIS mentions the anticipated start of CSOP as 2007, with completion in 2010. Would IOP be the operational plan until 2010, or will the EIS for CSOP cover operations during that interim?

FFWCC-2

FFWCC-1

We understand that this is also an opportunity to call to the attention of the U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service any new biological information that has been discovered since IOP was implemented. In this regard, we note a final report by Darby, Karunaratne, and Bennets (2005) submitted to the U.S. Geological Survey in which they indicate that water temperature appears to play a key role in determining when apple snails, the primary food item of the snail kite, lay their eggs. They state, "We have concerns that relatively high water levels and associated cooler temperatures delays [sic] peak production in egg clusters. This would be problematic in that shifts in peak production into the rainy season may result in an increased frequency of eggs being flooded." They also note that work by others has showed that submerged eggs do not hatch, thereby negatively affecting recruitment and abundance of snail. At the time that IOP was originally reviewed, much of the concern about effects on the snail kite in Water Conservation Area 3A revolved around potential changes in vegetation structure in snail kite habitat due to deeper water levels; however, it appears that deeper water levels also can affect the availability and abundance of their primary prey item, as well.

Based on the information that we have at this time, we do not find this project inconsistent with Chapters 370 or 372, Florida Statutes, as included under the Florida Coastal Management Program. If you or your staff would like to coordinate further on the recommendations contained

Ms. Lauren Milligan Page 3 July 27, 2006

in this report, please feel free to contact me at 850-488-6661 or e-mail me at <a href="maryann.poole@MyFWC.com">maryann.poole@MyFWC.com</a>, and I will be glad to help make the necessary arrangements.

Sincerely,

Mary Ann Poole, Director Office of Policy and Stakeholder Coord.

Mary Ann Poole

map ENV 1-3-2 Seaside Sparrow 316

CC: Stu Appelbaum, U.S. Army Corps of Engineers, Jacksonville Jon Moulding, U.S. Army Corps of Engineers, Jacksonville Paul Souza, U.S. Fish and Wildlife Service, Vero Beach Dan Nehler, U.S. Fish and Wildlife Service, Vero Beach Chuck Collins, FWC, West Palm Beach

#### Literature Cited

Darby, P.C., L.B. Karunaratne, and R.E. Bennets. 2005. The influence of hydrology and associated habitat structure on spatial and temporal patterns of apple snail abundance and recruitment. Final Report submitted to the U.S. Geological Survey for Grant Agreement Number 02ERAG0039, April 25, 2005.

**COUNTY: MIAMI-DADE** 

SCH-CORPS 2006-04243 DATE:

5/15/2006

RECEIVED COMMENTS DUE DATE:

6/15/2006

HISTORIC PRESERVATION ARANCE DUE DATE:

6/30/2006

2006 MAY 17 P 1: 20

**REFER TO:** FL200204281893C

SAI#: FL200605152302C

#### MESSAGE:

STATE AGENCIES
AGRICULTURE
COMMUNITY AFFAIRS
ENVIRONMENTAL PROTECTION
FISH and WILDLIFE COMMISSION
X STATE
TRANSPORTATION

#### WATER MNGMNT. DISTRICTS

SOUTH FLORIDA WMD

**OPB POLICY** UNIT

RPCS & LOC **GOVS** 

The attached document requires a Coastal Zone Management Act/Florida Coastal Management Program consistency evaluation and is categorized as one of the following:

- \_ Federal Assistance to State or Local Government (15 CFR 930, Subpart F). Agencies are required to evaluate the consistency of the activity.
- X Direct Federal Activity (15 CFR 930, Subpart C). Federal Agencies are required to furnish a consistency determination for the State's concurrence or objection.
- Outer Continental Shelf Exploration, Development or Production Activities (15 CFR 930, Subpart E). Operators are required to provide a consistency certification for state concurrence/objection.
- Federal Licensing or Permitting Activity (15 CFR 930, Subpart D). Such projects will only be evaluated for consistency when there is not an analogous state license or permit.

#### **Project Description:**

DEPARTMENT OF THE ARMY, JACKSONVILLE DISTRICT CORPS OF ENGINEERS - NOTICE OF INTENT TO PREPARE A SUPPLEMENT TO THE 2002 FINAL ENVIRONMENTAL IMPACT STATEMENT (SEIS) ON THE INTERIM OPERATIONAL PLAN (IOP) FOR PROTECTION OF THE CAPE SABLE SEASIDE SPARROW, EVERGLADES NATIONAL PARK - MIAMI-DADE COUNTY, FLORIDA.

To: Florida State Clearinghouse	EO. 12372/NEPA	Federal Consistency
AGENCY CONTACT AND COORDINATOR (SCH) 3900 COMMONWEALTH BOULEVARD MS-47 TALLAHASSEE, FLORIDA 32399-3000 TELEPHONE: (850) 245-2161 FAX: (850) 245-2190	No Comment Comment Attached Not Applicable	No Comment/Consistent SHPO-1 Consistent/Comments Attached Inconsistent/Comments Attached Not Applicable
From: Division of Historical Resources Division/Bureau: Bureau of Historic Preservation	Sama	a. Kammuce Deputa SHPC
Reviewer: Janue Maddo	A Comment of the Comm	2006 RECEIVED
Date.	o Webshipman and American and American and American Ameri	Annual Control of Cont

JUN 2 8 2006

OIP / OLGA



36th Floor 100 Renaissance Center Detroit, MI 48243-1157 313.259.7110 Fax 313.259.7926

Todd C. Fracassi 313.393.7404 fracassit@pepperlaw.com

August 14, 2006

Ms. Barbara Cintron U.S. Army Corps of Engineers Jacksonville District P.O. Box 4970 Jacksonville, FL 32232-0019

Re:

Draft Supplemental Environmental Impact Statement:

Interim Operational Plan (IOP) for Protection of the Cape Sable Seaside Sparrow

("Supplemental EIS")

Dear Ms. Cintron:

Radio One, Inc. is in receipt of the Draft Supplemental Environmental Impact Statement: Interim Operational Plan ("IOP") for Protection of the Cape Sable Seaside Sparrow dated June 2006. It is our understanding that the Corps will be evaluating Alternative 7R with hydrologic modeling. Radio One owns an approximately 80 acre parcel within the Northeast Shark River Slough ("NESRS") area upon which it operates 8 radio towers and one transmitter building. The towers broadcast to the Miami area on 1080 kHz (WVCG) pursuant to a FCC license and serve diverse segments of the community with programming that is not otherwise available in the area.<sup>1</sup>

I have attached for your convenience Radio One's prior comments that it submitted on June 16, 2006 and April 9, 2001. Radio One appreciates the opportunity to comment, and trusts that its comments and concerns will be considered and accommodated in the Supplemental EIS and the final IOP, with appropriate mitigating actions being included within the scope and costs of the IOP.

Radio One requests that it be kept on the mailing list for any further materials that are generated for the IOP and associated EIS. Finally, please keep us advised as to any public meetings scheduled for this project.

The property previously was owned by AMFM Operating, Inc.

Philadelphia	Washington, D.C.	Detroit	New York	Pittsburgh
Berwyn	Harrisburg	Orange County	Princeton	Wilmington

Barbara Cintron August 14, 2006 Page 2

Please send all such mailings to my attention at the above address. You also should feel free to contact me if you have any questions regarding this correspondence.

Best Regards,

Todd C. Fracassi

TCF:erw

John Moulding (via telecopier) John Mathews (Radio One) cc:

36th Floor 100 Renaissance Center Detroit, MI 48243-1157 313.259.7110 Fax 313.259.7926 313.393.7398 wilczakt@pepperlaw.com

June 16, 2006

Ms. Barbara Cintron U.S. Army Corps of Engineers Jacksonville District P.O. Box 4970 Jacksonville, FL 32232-0019

Re: Supplement to the 2002 Final Environmental Impact Statement:

Interim Operational Plan (IOP) for Protection of the Cape Sable Seaside Sparrow

("Supplemental EIS")

Dear Ms. Cintron:

Radio One, Inc. is in receipt of the U.S. Army Corps of Engineers ("Corps") letter dated May 10, 2006, regarding the above-referenced matter. It is our understanding that the Corps is updating its analysis of Alternative 7R with hydrologic modeling. Radio One continues to be concerned with the potential impact to the approximately 80 acre parcel that it owns within the Northeast Shark River Slough ("NESRS") area upon which it operates 7 radio towers and one transmitter building. The towers broadcast to the Miami area on 1080 kHz (WVCG) pursuant to a FCC license and serve diverse segments of the community with programming that is not otherwise available in the area.

I have attached for your convenience Radio One's prior comments that it submitted on April 9, 2001. Radio One appreciates the opportunity to comment, and trusts that its comments and concerns will be considered and accommodated in the Supplemental EIS and the final IOP, with appropriate mitigating actions being included within the scope and costs of the IOP.

Radio One requests that it be kept on the mailing list for any further materials that are generated for the IOP and associated EIS. Finally, please keep us advised as to any public meetings scheduled for this project.

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Berwyn	Harrisburg	Orange County	Princeton	Wilmington

Barbara Cintron June 16, 2006 Page 2

Please send all such mailings to my attention at the above address. You also should feel free to contact me if you have any questions regarding this correspondence.

Best Regards,

Thomas P. Wilczak

TPW:lmf

John Moulding (via telecopier) cc: John Mathews (Radio One)



36th Floor 100 Renaissance Center Detroit, MI 48243-1157 313.259.7110 Fax 313.259.7926

313.393.7398 wilczakt@pepperlaw.com

April 9, 2001

#### VIA EMAIL AND FEDERAL EXPRESS

Elmar Kurzbach U.S. Army Corps of Engineers Jacksonville District P.O. Box 4970 Jacksonville, FL 32232-0019

Re: Draft Environmental Impact Statement: Interim Operational Plan (IOP)

for Protection of the Cape Sable Seaside Sparrow ("Draft EIS")

Dear Mr. Kurzbach:

This letter contains the public comments of Radio One, Inc. to the above-referenced Draft EIS. Pursuant to a telephone conversation on April 4, 2001 with my legal assistant, Ellen Zapalski, you indicated that comments would be accepted if submitted via email by the April 9, 2001 due date as long as a copy was mailed on the same day.

Radio One understands that the U.S. Army Corps of Engineers ("Corps") proposes to implement the IOP that is the subject of the EIS to attempt to provide protection of the Cape Sable Seaside Sparrow ("CSSS"), while also continuing to provide flood protection through the project.

Radio One, however, is concerned that the EIS failed to adequately consider the impacts of the project, particularly of the Phase II operations, on property in the study area, particularly properties within the Northeast Shark River Slough ("NESRS"). Radio One owns a parcel of approximately 80 acres within that area upon which it operates 7 radio towers and one transmitter building. The towers broadcast to the Miami area on 1080 kHz (WVCG) pursuant to a FCC license and serve diverse segments of the community with programming that is not otherwise available in the area.

Specifically, the Radio One property is located adjacent to and immediately south of Tamiami Trail (U.S. Hwy 41) in Section 8, T54S, R38E (N. Latitude: 25° 44' 53"; and W.

<sup>1</sup> The property previously was owned by AMFM Operating, Inc.

 Philadelphia
 Wzshington, D.C.
 Detroit
 New York
 Pittsburgh

 Berwyn
 Cherry Hill
 Hatrisburg
 Princeton
 Tysons Corner
 Wilmington

Elmar Kurzbach April 9, 2001 Page 2

Longitude: 80° 32' 47"), approximately four miles west of the L-31N Canal, and about five miles west of Krome Avenue (SR997). The towers and structures, which were constructed in 1980 are situated on fill pads and access from Tamiami Trail is provided along a filled road bed.

The pads and road bed were intentionally constructed above the 100 year flood level to assure access. As a result, Radio One has not had any problem with flooding or access, seasonal or otherwise. Radio One, however, is concerned that the IOP will create problems for Radio One's operations that were not considered or addressed in the draft EIS.

Based upon a review of the anticipated increased water levels in the area of the Radio One property, as determined by Corps IOP project modeling (which modeling appears to have failed to fully and adequately address all hydrologic parameters and effects in the area), it appears that the IOP project likely may result in:

- A loss of access to Radio One's property via its existing access road, at least on a seasonal basis
- Flooding of the pads upon which its towers and structures are situated, at least on a seasonal basis
- Difficulty in servicing its towers and structures during such resulting high water conditions, and possible total loss of such service during those time periods
- Disruption, distortion or elimination of a public service to diverse segments of the Miami area community, which service is not otherwise available to such communities.

Additionally, the increased water levels likely may result in erosion damage to the road beds and tower pads, which could threaten the tower's structural integrity, and result in increased maintenance and upkeep costs, and cause an environmental sedimentation impact upon the local ecosystem if the pads and road beds are eroded. Moreover, it may become necessary to access the towers via a motor boat, which in turn may result in environmental impacts that were not addressed in the EIS. The increased water levels also could result in signal disruption or distortion interfering with Radio One's broadcast capabilities.

As a result of such effects, Radio One likely may incur significant costs to mitigate the impacts, such as, re-building or raising the grade of the access road and the tower pads, amending its FCC license or loss of value of such license, and possibly needing to reconfigure the signal from its tower or, in the worst case, relocate its towers altogether (assuming a suitable alternative location is even available). Radio One believes that the draft

Elmar Kurzbach April 9, 2001 Page 3

EIS is flawed, and that these socio-economic, economic and environmental impacts and costs must be considered in the final EIS for the IOP project.

If such adverse impacts are not planned for and mitigated with the IOP for the project, Radio One's property interest likely may be significantly reduced, or completely taken in the worst case, as a result of the government's actions. In such case, Radio One will look to the government for appropriate compensation.

Radio One has been further informed that a related project entailing physical modifications to Tamiami Trail in the area of its property is being planned. Radio One is concerned about the potential impacts, and associated costs, that might result to its continuing access to its property via its access road off of Tamiami Trail.

Radio One appreciates the opportunity to comment, and trusts that its comments and concerns will be considered and accommodated in the final draft EIS and the final IOP, with appropriate mitigating actions being included within the scope and costs of the IOP.

Radio One requests that it be kept on the mailing list for any further materials that are generated for the IOP and associated EIS, including the response to these comments, the draft final EIS and the anticipated future Combined Structural and Operations Plan ("CSOP), along with the draft EIS for the CSOP. Radio One further requests being placed on the mailing list for all plans, including the draft EIS, for the Tamiami Trail modification project. Finally, please keep us advised as to any public meetings scheduled for these projects.

Please send all such mailings to my attention at the above address. You also should feel free to contact me if you have any questions regarding this correspondence.

Very truly yours,

Thomas D Wilson

lmf c:

John Moulding (via telecopier) Linda Eckard Vilardo, Esq. (Radio One) John Mathews (Radio One) Brian Considine



36th Floor 100 Renaissance Center Detroit, MI 48243-1157 313.259.7110 Fax 313.259.7926

313.393.7398 wilczakt@pepperlaw.com

April 9, 2001

#### VIA EMAIL AND FEDERAL EXPRESS

Elmar Kurzbach U.S. Army Corps of Engineers Jacksonville District P.O. Box 4970 Jacksonville, FL 32232-0019

Re:

Draft Environmental Impact Statement: Interim Operational Plan (IOP)

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Philadelphia Washington, D.C. Detroit New York Pittsburgh

Berwyn Cherry Hill Harrisburg Princeton Tysons Corner Wilmington

Elmar Kurzbach April 9, 2001 Page 2

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Elmar Kurzbach April 9, 2001 Page 3

EIS is flawed, and that these socio-economic, economic and environmental impacts and costs must be considered in the final EIS for the IOP project.

If such adverse impacts are not planned for and mitigated with the IOP for the project, Radio One's property interest likely may be significantly reduced, or completely taken in the worst case, as a result of the government's actions. In such case, Radio One will look to the government for appropriate compensation.

Radio One has been further informed that a related project entailing physical modifications to Tamiami Trail in the area of its property is being planned. Radio One is concerned about the potential impacts, and associated costs, that might result to its continuing access to its property via its access road off of Tamiami Trail.

Radio One appreciates the opportunity to comment, and trusts that its comments and concerns will be considered and accommodated in the final draft EIS and the final IOP, with appropriate mitigating actions being included within the scope and costs of the IOP.

Radio One requests that it be kept on the mailing list for any further materials that are generated for the IOP and associated EIS, including the response to these comments, the draft final EIS and the anticipated future Combined Structural and Operations Plan ("CSOP), along with the draft EIS for the CSOP. Radio One further requests being placed on the mailing list for all plans, including the draft EIS, for the Tamiami Trail modification project. Finally, please keep us advised as to any public meetings scheduled for these projects.

Please send all such mailings to my attention at the above address. You also should feel free to contact me if you have any questions regarding this correspondence.

Very truly yours.

Thomas P. Wilcza

lmf c:

John Moulding (via telecopier)

Linda Eckard Vilardo, Esq. (Radio One)

John Mathews (Radio One)

Brian Considine

Comment Number	Organization/ Agency	Comment	Response
EPA -1	US Environmental Protection Agency	The water quality monitoring should include mercury and pesticides that are currently in use in the agricultural watershed. It is critical that data of known and documented quality be produced.	Mercury and pesticides are included in all monitoring programs the Corps is involved within this project area. The SFWMD has an extensive monitoring network and has developed special low detection methods ("ultratrace") for pesticides with the cooperation of the FDEP. FDEP is in the process of getting these methods approved by the EPA. The SFWMD monitors the entire basin for pesticides and has an expert staff that is familiar with the pesticides used in this water management district. Any detections of an unexpected substance or atypical concentration are traced upstream to determine the origin and determine if remedial actions or BMP's need adjustment. The Corps works closely with the FDEP and the SFWMD to determine the appropriate monitoring regime for mercury and pesticides for any project in this area. Currently there is an agreed upon protocol (mercury CGM) that is the basis for mercury monitoring. All data collected has all the appropriate and agreed upon quality controls in place for any monitoring regime to ensure the data is of acceptable quality
EPA-2		Are there plans for post-construction WQ monitoring as requested by FWS and FFWCC?	Yes. Water quality monitoring is planned and is a normal condition of the FDEP operations permit for any operable features. FDEP coordinates any permit with the other state agencies, to include the FFWCC, to solicit their comments. Any concerns of the FWS for WQ will be addressed but ENP is the entity more directly involved in discussion related to WQ monitoring. ENP is directly involved in any monitoring regime for operations that involve structures that are adjacent to the ENP. Loxahatchee DOI staff is directly involved in the development or alteration of any monitoring plan for inflows into WCA 1. Any features that are presently built and being operated are being monitoring in compliance with a water quality monitoring plan that has been coordinated with and approved by FDEP. In addition for ENP and WCA inflows the TOC is involved in adjustments or modifications of those monitoring regimes. Any operable features that are not presently being operated or are not yet built will also have water quality monitoring that is coordinated with and approved by FDEP.
EPA-3		How would compliance with National and State Criteria and standards be measured without any background data or estimated loadings?	The canal system in this project area adjacent to the ENP is an extensively monitored area with a very large amount of background data. Any new discharges areas into the ENP will be appropriately monitored. All monitoring plans are fully coordinated and open to comment from the public. Compliance with the settlement agreement into the NESRS and the Taylor Slough/Coastal Basin is clearly defined and the associated monitoring to determine compliance is ongoing and is expected to continue.

Comment Number	Organization/ Agency	Comment	Response
EPA-4		If there are storm water discharges with measurable concentrations of Hg, Cd or BOD, are these likely to causing or contributing to the exceedance of a WQS?	Presently, Cd and BOD are not the primary focus for WQ concerns in this project area. Storm water discharges associated with this project area are not expected to cause Hg, Cd or BOD problems. Hg is of concern and is monitored extensively. The exact mechanism of mecury methlyation is not completely understood but sulfur soil amendments may be a contributing factor to the methylation rate. Sulfur compounds are therefore included in WQ monitoring regimes. Changes in upstream land use patterns and acid rain are other factors to be considered that are outside of the control of the Corps in this project area. The SFWMD and the FDEP are involved in evaluating and implementing any necessary BMPs to address the sulfur amendments and upstream land use patterns that could be part of the mercury methylyation problem. As new information becomes available in the mercury methylyation area, operations may have to be adjusted to address this issue but it is very likely that any mercury problems are outside of the control of anything that can be implemented at the operational level of this project.
EPA-5		If so would a NPDES permit or CWA, Section 401 Certification be needed?	The Corps will apply for the 401 certification(s) from the FDEP for any new operable features that the Corps constructs. If the Corps does not apply for 401 certification for a particular feature, the SFWMD will. Presently the operation of the C111 project features is authorized by Emergency Order No. 9, issued by FDEP. Either way there will be a FDEP 401 certification to either the Corps or the SFWMD for all operable features associated with this project. Some of the features will be turned over to the local sponsor and the 401 certification (in the form of the FDEP permit) will be transferred to the SFWMD. The remainder of the features will remain under the control of the Corps and the permit will not be transferred for those features.
EPA-6		We could not find pre-EIS monitoring data for many of the FI WQScompliance with all of the FI narrative and numeric water quality standards at F.A.C. 62-302.500, was not evident in the DEIS.	The inflows into the EPA, the NESRS and the Taylor Slough/Coastal Basins are some of the most intensely monitored (water quality) areas in the US. If the comment is intended to ensure that a baseline is established for the inflows to those areas, that is indeed the case. New inflow points in the EPA and ENP will be monitored as necessary if additional baseline is determined necessary. All appropriate resource agencies will be coordinated with if additional baseline is determined necessary for these areas. The preliminary discussions on these areas has taken place with the FDEP, SFWMD and ENP and monitoring transects for new inflow points for WCA 3B and the ENP NESRS are part of the monitoring strawman for CSOP. This monitoring regime has not been finalized.

Comment Number	Organization/ Agency	Comment	Response
EPA-7		We could not find compliance steps for the Stormwater discharges associated with construction and operation of new equipment, or the removal of four miles of the levee at the south end of the L67 Extension and Canal. We assume that COE	The Corps received 401 certification from the FDEP for the removal of the lower section (4miles) of the L67 extension levee. The Corps had turbidity control measures (BMPs) and a compliance turbidity monitoring program that was coordinated with and approved by the FDEP. The BMPs were incorporated into the contract specs and had to be adjusted during construction to control turbidity. All construction activity associated with the removal of this levee section was closely coordinated with the FDEP during the field work phase. Progress reports were provided at least weekly to the FDEP staff during the construction phase of this job. All concerns of the FDEP were fully addressed during this job.
EPA-8		With regards to all parameters, but especially total phosphorus, it is critical that data of known and documented quality be produced.	Corps only uses labs that successfully meet the phosphorus quality standard recommended by the University staff performing the statistical analysis for the State Phosphorus Round Robin results. Whenever possible, splits of key analytes are provided to the SFWMD and or FDEP lab. It should be noted that if data is produced from a Corps monitoring project that is detrimental to the State interests, conflicts can arise that are expressed through data quality being questioned. Corps staff is aware of this potential and make all reasonable efforts to reduce the potential for discussion about data quality to ensure the discussion focuses on data results, by using standard collection methods and approved labs.
DOI-1	US DOI Office of the Secretary	In, general, the Department's interest is to resolve the IOP issues quickly and move to implementation of the Combined Structural and Operating Plan (CSOP) as soon as possible. We have no specific comments on the DSEIS at this time, but the U.S. Fish and Wildlife Service will provide additional input as part of its Section 7 consultation for the project.	Comment noted.
MIT-1	Lehtinen, Vargas & Reiner	The Tribe incorporates its comments on the Final Supplemental EIS and Draft Supplemental EIS (SEIS) dated November 26, 2001, the Draft EIS dated April 9, 2001, along with the comments attached to those filings on the Interim and Structural Operation Plan (ISOP), and the public comments made at the January 11, 2000 public meeting, the May 21, 2002 meeting and all other public meetings concerning the IOP, including the May 21, 2002 meeting.	ISOP EA comments/responses were incorporated into the IOP with assistance of the IECR process in early 2001. The ISOP evaluation concluded that an EIS would be required. The IOP Final EIS was responsive to all previous comments, including comments from the Tribe on the Draft and Supplemental Draft IOP EIS.
MIT-2		The Corps should disclose to the public that it was the Court's finding of a NEPA violation that resulted in a mandate to the Corps to prepare an SEIS. The Court found, "It is clear to the Court that the Corps violated NEPA by failing to issue an SEIS after adopting Alternative 7R." and ordered the Corps to issue an SEIS on IOP."	Language has been added to the introduction to show why the Court required supplementation of the FEIS: namely, that modeling results of Alt 7R were not published in the FEIS, and that in the Court's view the description of the "R" components of Alt 7R (pump stations and impoundments) was insufficient.  The Court found a flaw in that a second draft EIS introducing Alternative 7R should have been coordinated prior to finalizing the IOP EIS. The Corps also included additional description and discussion of the IOP structural features authorized under the 1992 MWD GDM and the C-111 GRR.

Comment Number	Organization/ Agency	Comment	Response
MIT-3		The Tribe contends that the Corps' failure to follow the requirements of NEPA, the ESA and other federal law for the last eight years has resulted in the dire situation that exists today on Tribal Everglades in Water Conservation Area 3A ("WCA 3A), which is also the critical habitat for the endangered Snail Kite the population of which has declined an alarming 50% under these unanalyzed water management actions. A review of the Draft SEIS at page 68-69 is proof of the agency's ongoing failure to conduct the analysis required under NEPA and the ESA. The Draft SEIS confirms that WCA 3A, which the government promised the Tribe would be preserved in its natural state in perpetuity, has severely deteriorated under IOP operations.	Pages 68-69 contain <a href="new">new</a> information and analysis on snail kite reproduction in the years 2003-2005. These years were characterized by heavy rainfall in the late wet season and by direct impact of multiple hurricanes. A low point in snail kite reproduction in 3-A was reached prior to IOP implementation; then reproduction appeared to rebound until the 2004-2005 hurricane years. For the record, the Corps has followed all determinations and requirements of FWS regarding the sparrow, snail kite and other listed species subject to this consultation. On June 30, 2006 the Corps re-initiated consultation, and the FWS issued a BO on IOP on November 17, 2006 in which the FWS determined that continued operation of IOP would not jeopardize the snail kite.
MIT-4		There is NO hydrograph anywhere in the SEIS that shows the impacts that Alternative 7R, using 7R modeling, will have on WCA 3A or the high water criterion areas in indicator regions 14 and 19 specified in the Incidental Take Statement for the Snail Kite as compared to Test 7 and ISOP.	The hydrographs and discussion are included in Appendix D in the Final SEIS. The results are discussed in the section on hydrology.
MIT-5		The Corps is well aware that the temporary S-356-like pump was NOT constructed in the exact location specified by the Mod Waters 1992 GDM. Draft SEIS at p. 13.	Pump station S-356 was installed in approximately the location described in the 1992 GDM. The pump station was was adjusted to reduce impacts to wetlands and avoid a fiber optics cable.
MIT-6		Moreover, nowhere in the Draft SEIS does it show the modeling of Alternative 7R using these structures impacts on the Water Conservation Areas or other areas.	The S-356 structure was modeled in Alternative 7R. The public website shows a special sensitivity run with and without the S-356 structure. There is virtually no difference in WCA stages as a result of S-356 operations which are primarily limited by high stages at G-3273 and in L-29.
MIT-7		Nowhere in the document does it explain which model run was used.	The hydrologic model used in the analyses was SFWMM ver3.4 and it is now identified in the document text.
MIT-8		the Corps makes the same unsupported statement borrowed from the FEIS that Alternative 7R showed no significant increase over existing conditions in WCA 3A. Draft SEIS at p. 54. Even more incredibly, and in direct contradiction to page 69 of the Draft SEIS which discusses the downward spiral in WCA 3A, the document bizarrely claims that Alternative 7R, "would not have adverse effects on vegetation throughout WCA 3A." Id. at. p. 61.	The Corps believes the data support our statement. The opinion expresses on page 69 of the draft SEIS was provided by Dr. Kitchens. Dr. Kitchen's study will be continued to, among other things, enable meteorological effects, such as hurricanes, to be sorted out from IOP effects.
MIT-9		The record gathered over the last four years of IOP operations openly contradicts these unfounded statements in the Draft SEIS concerning Alternative 7R and shows that the Draft SEIS is an arbitrary and capricious document that fails to provide the Alternative 7R modeling results to the public in a manner in which they can review the impacts that the sustained high water levels caused by IOP have caused to WCA 3A and other areas of the Everglades.	The modeling results have been posted on the Corps' website for public review since they were developed. The Alt 7R model runs for indicator regions 14 and 19, which are pertinent to WCA 3A are now included in the Final SEIS. More important than model runs, however, are the actual stage data for the sparrow habitat and WCA-3A. They show that operations are flexible enough under the WCA 3A operational schedule to allow releases into L-29 and around the "eastern loop" to offset closure of the s-12 structures, except during extraordinary rainfall periods. Such periods occurred in 2004 and 2005, as is well known.
MIT-10		There is no proof for the unfounded statement that Alternative 7R would not have adverse effects on WCA 3A or that impacts to tree islands there have been minimized.	The Corps believes that Alt 7R has minimized impacts to WCA 3A and tree islands to the best of our ability and still meet the RPA requirements.

Comment Number	Organization/ Agency	Comment	Response
MIT-11		Additionally, the new information on WCA 3A and the Snail Kite contradicts the arbitrary and capricious finding in the faulty FWS 2002 Amended Biological Opinion that the degradation of 88,300 acres and/or 10.5% of Snail Kite in WCA-3A caused by Alternative 7R would not result in the destruction or adverse modification of its critical habitat	The Corps disagrees. The heavy rainfall events within WCA 3A and south Florida in general during IOP years 2004 and 2005 as well as the hurricane events of the recent years have been responsible for higher water levels in WCA 3A. We cannot address comments on the FWS BO. We followed FWS requirements requirements for endangered species survival monitoring as required under Federal law.
MIT-12		The Draft SEIS on SOP is faulty because it is based on the equally faulty February 1999 and 2002 Biological Opinions of the FWS.	The Corps legally is required to meet requirements in the 1999 and 2002 Biological Opinions of FWS.
MIT-13		The Corps was required to reinitiate consultation with FWS under Section 7 of the ESA on the SOP Draft SEIS, because it knew that IOP Alternative 7R modeling showed more weeks of sustained high water in Snail Kite critical habitat. Yet, the Corps failed to reinitiate the required consultation until four months after the Court's Order and after the Draft SEIS went out for public comment.	On issuance of the Court's order, the Corps initiated informal coordination with the FWS. Initially the agencies contemplated informal consultation. When the FWS decided that formal consultation was appropriate and sent the Corps a list of information needs, the Corps began assembling the information and submitted it to the FWS by email on June 30 th, followed by a formal letter submittal on July 7th.
MIT-14		Both the Corps and the FWS have violated the ESA by failing to use Alternative 7R modeling to predict IOP's impacts on the endangered Snail Kite and its critical habitat in the Draft SEIS	Disagree. The Corps and FWS used the best available information in the selection process. The Alt 7R modeling has been available since autumn of 2002 to FWS. Modeling cannot show adaptive management actions to offset unseasonable high water, nor would it necessarily indicate effects of extraordinarily high wind and rainfall in WCA-3.
MIT-15		and by failing to reinitiate Section 7 consultation immediately when the 2003 Snail Kite Report showed an alarming 50% decline in the Snail Kite population.	Disagree. The data show that nesting in the WCA has increased between 2001 and 2004, although the isolated heavy rainfall and hurricane events of 2004 and 2005 may have led to a drop in nesting in 2005. Preliminary results indicate that nesting has been successful in 2006.
MIT-16		The Corps should not rely on FWS's selective use of science and/or their "reasonable and prudent alternatives" (RPAs) that violate the ESA.	By law the Corps must consult with FWS and abide by any RPAs determined by FWS.
MIT-17		The Corps also continues to refuse to take an independent hard look at the Sparrow science and refuses to analyze reasonable alternatives suggested by Sparrow expers such as captive rearing, predator control and other localized actions that would not rresult in massive changes to the water management system, threaten private and public property and cause irreversible destruction to other parts of the Everglades, including WCA-3A.	The Tribe has urged wildlife stewardship agencies to investigate these options previously. The Corps is not authorized to violate the ESA by ignoring FWS RPAs. We note that captive breeding was unable to save the dusky seaside sparrow, a close relative of the CSSS, and that most experts did not agree with Dr. Post's comments.
MIT-18		The data in the Draft SEIS shows that the both ISOP and IOP have not helped sub-population A of the sparrow.	Although the survey numbers for CSSS sub- population A have not increased, the Corps' water management met the RPA requirements specified in the FWS BO to the best practical level.
MIT-19		Nowhere in the Draft SEIS does it contain hydrographs of WCA 3A, and other areas of the Everglades, that show Alternative 7R modeling compared to Test 7 and ISOP. While there are a few charts on the L-3 1 Canal and sparrow habitat, these are not adequate. There should be hydrographs and stage duration curves for all the WCA s, Lake Okeechobee and the estuaries. Even though the Corps was forced to report the damage that IOP has caused, it incredibly continues to recommend Alternative 7R rather than analyze other reasonable alternatives, as required by NEPA. Draft SEIS at pp. 68-69.	Hydrographs of Indicator Regions (IR) 14 and 19 have been added for the IOP years 2002-2006. Lake Okeechobee levels are not driven by IOP. The WCA-3A Water Regulation Schedule, which has not changed, limits times when Lake Okeechobee water can be routed to WCA 3. Water quality concerns also play a part since adoption of the 10ppb total Phosphorus standard for the Everglades Protection Area. Neither water deliveries to the estuaries nor deliveries from Lake Okeechobee are expected to change until more of the system is decompartmentalized, with construction of the Tamiami Trail bridge and conveyance of water from WCA-3A into WCA-3B and across the Trail into ENP.

Comment Number	Organization/ Agency	Comment	Response
MIT-20		The Corps' Draft SEIS does not even discuss mitigation except to say the S-12D gate, which is required to be kept open, will be kept open.	IOP, along with the various Restudy components, will restore wetlands and natural habitat to the greatest practical extext. Therefore, no mitigation is warrented. With regard to the S-12D structure, IOP was designed to compensate for potential higher canal stages by initiating storm operations, when appropriate.
MIT-21		[The Corps] directly under the President's Order to treat Indian Tribes on a government-to-government basis would ignore their duty to meaningfully consult with the Tribe on matters that would adversely impact their land and culture.	The Corps has coordinated with the Tribe with regards to this and other projects that may affect the Miccosukee Tribe and their tribal lands. The Corps initiated formal government-to-government cooperation with the Tribe on September 6, 2006 (letter and response are included in Appendix G). The draft SEIS is replete with references to coordination with the Tribe. Coordination with the Tribe is specifically mentioned in the notes to the Operations Table for Alternative 7R: Operations for other than named events. SFWMD will monitor antecedent conditions, groundwater levels, canal levels and rainfall. If these conditions indicate a strong likelihood of flooding, SFWMD will make a recommendation to the Corps to initiate pre-storm operations. The Corps will review the data, advise ENP, FWS of the conditions, consult with the Miccosukee Tribe and make a decision whether to implement pre-storm drawdown or otherwise alter systemwide operations from those contained in the table.
MIT-22		The Tribe continues to contend that these new temporary pumps and structures cannot be analyzed apart from the IOP project and that these structures are not MWD or C-111 Project components, as the Corps improperly suggests.	The new structures were analyzed in both the 2002 IOP FEIS and the 2006 DSEIS. These structures are functionally equivalent to those previously described in the 1992 MWD GDM and the 1994 C-111 GRR. Additional segments of the C-111 "hydraulic ridge" will be built now that a land swap has occurred with ENP. While direct culvert flow from these impoundments into the Park is no longer a part of the plan, they will be operated to maximize restoration of the seasonal wetlands along the eastern Park boundary. Monitoring wells with telemetry have been installed inside ENP as planned. The S-356 pump is located directly N of S-334, as shown in the 1992 GDM. While it is less massive than the 1992 GDM drawing it is functionally equivalent. It may be enlarged as suggested by ongoing CSOP modeling.
MIT-23		Even if the operation of the S-356-like pump- was properly analyzed, which it has not been, that analysis would show that the pump is pulling tremendous amounts of ground water and discharging it in violation of Florida's Water Quality Standards. Under the Mod Waters Project, the permanent S-356 pump is designed, and to be operated, to capture seepage out of Everglades National Park and WCA 3B and then return it to the Park, not to cause greater seepage and excessive ground water draw down.	The operation of S-356 was properly analyzed. The pump operations limit pumping to stages of 5.5 to 5.8 ft in L-31N. Also, the pumping was limited to the amount of seepage from the ENP. These two operations prevent overpumping of groundwater. The return of seepage would not result in violations of Florida's Water Quality Standards. The primary concerns that have been discussed involve the risk of pulling undesirable water from the area East (potential WQ problems as that is urban/agricultural area) of the pump station or from the North (Lake Okeechobee source water with high phosphorus levels) during water supply deliveries to the lower East Coast. The proposed operational plan was amended to address those concerns. The plan was amended to reflect that no pumping can occur when water supply deliveries to the LEC or any discharges from Lake O are being routed to the pump station via the L30N canal. The other change was that all coastal structures downstream of the S356 Pump Station

Comment Number	Organization/ Agency	Comment	Response
MIT-23 cont.			intake will be closed during pump operations. This will restrict surface water flows from the East. One specific concern/scenario associated with this pump station was the potential for overpumping during the wet season and pulling water of an undesirable nature via the ground water path from the east. More information is needed on that scenario to ensure the operational plan does not allow that to happen. A series of limited duration pump tests to include operations during the wet season needs to be conducted to address the known concerns and determine if there are any other undesirable potential consequences that need to controlled in the operations plan. The Corps will coordinate these pump tests with all stakeholders and obtain authorization from the FDEP prior to conducting these tests. These tests will include water quality monitoring for all events. Stream gaging, tracking the response of nearby GW monitoring stage wells and other methods will be used during these pump tests to gain more information on the impacts of operating the pump under different condition.
MIT-24		It is improper to use Alternative 7R, which is the current plan in effect, and was implemented without the analysis required under NEPA, as the No Action alternative. Alternative 7R cannot be the Recommended Alternative and also the No Action Alternative against which impacts are measured. This is nonsensical and turns NEPA on its head. The No Action alternative should be the last lawful Water Control Plan and regulation schedule that has gone through the reviews required by law.	While the Court agreed with the Miccosukee Tribe that the Corps violated NEPA, it did not impose injunctive relief but instead allowed the Corps to continue operations under IOP while preparing a SEIS. The Tribe proposes that the Corps use last "lawful Water Control Plan" as the no action alternative, but, excluding IOP, the last otherwise lawful Water Control Plan was contrary to the Endangered Species Act. The Court explicitly recognized that enjoining IOP would risk returning the sparrow to its jeopardy status. Because the Corps continues to operate under IOP, it identified IOP as the No Action Alternative in its alternatives analysis in the draft SEIS. The draft SEIS includes the full array of alternatives previously considered.
MIT-25		The Draft SEIS contains NO ANALYSIS of the combined impacts of the 1999, 1998, 1999, 2000, 2001 and 2002 deviations, the four years of IOP operations, and predicted four more years of IOP on the human environment.	Disagree. The DSEIS as well as the previous FEIS relied on the available data during this time frame to determine impacts to the affected resources. Among impacts discussed are: flood mitigation to residents and agriculture east of L-31; impacts to tree islands based on best judgment of scientist of the WMD, FWS and Corps; flooding of residential areas. The discussion of cumulative impacts of operations since the first ISOP operations has been added to the FEIS. Again, it is important to distinguish between model predictions assuming average climate and the effects of actual meteorological events.
MIT-26		the Draft SEIS continues to rely on the faulty FWS CAR that was not based on Alternative 7R modeling and does not contain an adequate environmental baseline, nor attempt to analyze the effects that the past, present, and future deviations will have on the Wood Stork, Snail Kite and Snail Kite as required under both NEPA and the ESA.	See MIT-14 and MIT-16 responses. The FWS Coordination Act Report (CAR) is a document that provides Service recommendations(pursuant to the Fish and Wildlife Coordination Act, not the Endangered Species Act) to the Corps regarding all fish and wildlife resources in the area that would be affected by the recommended plan. It is in the BO (a separate document prepared under the Endangered Species Act) that FWS provides determinations regarding listed species, unless other arrangements are made. There are both a final CAR and an Amended BO in the 2002 IOP Final EIS.

Comment Number	Organization/ Agency	Comment	Response
MIT-27		The Corps' IOP is a major federal action that significantly affects the physical environment, including, but not limited to, destruction of natural resources, flooding and degradation of the central Everglades in WCA-3A, decrease in Everglades biodiversity, destruction of Everglades tree islands, injury to wildlife and increased flood risk.	The Corps agrees that IOP is a major federal action, but disagrees with the Miccosukee Tribe's assessment of the effects. This sweeping statement mixes operational effects with weather phenomena and historic problems regarding operations of WCA-3A. The IOP primarily addresses changes to operations of the South Dade Conveyance System, and counts on flexibility in the WCP for WCA-3A to adjust and offset the effects of S-12 closures for the sparrow's nesting season. It is difficul to move large amounts of water out of WCA-3A when heavy rains occur late in the year, because it is a large impounded area that stores a large volume of water, and the outlet capacity is relatively small. These difficulties are not new. The 1992 "Mod Waters" report also recognized the need for additional conveyance of water into WCA-3B from WCA 3-A, as well as additional outlets south to L-29 and into the Park. They were recognized in the C&SF <i>Restudy</i> in 1997-99, and led to creation of the "Decompartmentalization" element of the CERP plan.  The years 1999, 2000, 2004 and 2005 were years of heavy late-season rain. This rain led to very high stages in WCA-3A. The years 2004 and 2005 were so abnormal in terms of hurricane impacts that they probably should not be used to draw conclusions about management measures. There were many direct damages caused by high winds that must surely have affected water management (inlouding loss of telemetry), tree islands and recently fledged birds (probably some direct mortality).
MIT-28		The IOP Draft SEIS, like the FEIS before it, also continues to remain silent on the public health and safety aspects that were addressed in the Final EA on the 1998 so-called emergency. The Corps does so despite the fact that it knows that IOP backs up water in the system and that it bas come under fire lately about concerns for the integrity of the dike surrounding Lake Okeechobee caused by high water conditions.	IOP does not affect water levels in Lake Okeechobee. It would be more correct to say that management of stages in Lake Okeechobee would affect the water available for delivery to the WCAs. When Lake Okeechobee is too high water is discharged primarily to tide. The Corps has just published a new proposed regulation schedule study for Lake Okeechobee that would lower average and peak Lake levels for public safety
MIT-29		The 2002 Alternative 7R modeling, which the Corps failed to use in the IOP FEIS and was subsequently ordered to use by the Court, showed that 7 R would cause many more weeks of sustained high water in WCA 3A. Draft SEIS at 79. See, Attachment B. Now despite the Court's Order to conduct its analysis in the SEIS using such modeling, the document contains no actual modeling results for WCA 3A or other areas of the Everglades for public to review.	Disagree. The Tribe compared Alt 7R to 95Base, which is not valid due to the jeopardy opinion on the CSSS. When compared to Alt 1, IOP would result in less than a 1% increase in water levels >2.5 feet at indicator region 14.

Comment Number	Organization/ Agency	Comment	Response
MIT-30		some wetland vegetation in WCA2A and 3A as well as upland vegetation (including tree islands) in the southern Part of the areas." Id at p. vi. The FEIS also attests to the fact that one of the "most significant causes of habitat degradation in WCA 3A are flood damage to tree islands in the northeastern and southwestern Part of the WCA." Id. at p. 61. On page 69, the Draft SEIS states, "Habitat quality in WCA 3A is changing progressively and dramatically to less desirable habitat in this critical area, and this conversion is rapid, with changes even after a year." It further admits that, "The principal concern is that the habitat quality, and thus the carrying capacity of WCA 3A, is already seriously degraded."  Id. at p. 69. Despite these statements, the Corps continues to make the unsupported assertion that Alternative 7R, which closes the S-12A, S-12B and S-	The Corps does not agree that operations under IOP are the likely cause of habitat deterioration in WCA 3A. It would be more accurate to say that until additional conveyance capacity is built into the system (out of WCA-3A and into 3B, across Tamiami Trail, with additional seepage control to the east of 3B), the problem of sustaining tree islands and avoiding prolonged high stages will not be resolved. "Fixing" WCA-3A and WCA-3B was a major focus of the <i>Restudy</i> . It is known that WCA-3A has suffered a gradual loss of tree islands, and it appears that there is a scientific consensus that prolonged high water stages are at least in part to blame. However, this deterioration was underway before ISOP or IOP were implemented. An examination of the hydrograph for IRs 14 and 19, comparing several different operational schemes, including Phase I of the Experimental Program, shows very little difference among alternatives when the stages they generate are compared to the "natural systems model."  Only after the CERP decompartmentalization elements, currently under study, are authorized and completed does the Corps expect the problem to be resolved.
MIT-31		3A. Id. at p. 61.  FEIS Fails to Adequately Assess Impact on Snail Kite and Its Critical Habitat	Disagree. The Final SEIS includes the evaluation conducted by the FWS and includes the FWS opinion that although the continued operation of IOP may have an adverse effect on the snail kite, it will not jeopardize the species' continued existence.
MIT-32		Nor does it contain a new amended biological opinion using 7R modeling, as required under the ESA.	The Corps has remained in close coordination with the FWS on the species subject to consultation since 2002. Monitoring is underway as required under the Amended Biological Opinion of April 2002. The Corps has not identified any adverse effects on species or their critical habitats resulting from water management operations during the period between August 2, 2002, when operations under IOP began, and the present. In conjunction with this supplemental NEPA documentation, the Corps has re-initiated consultation under Section 7 of the ESA with the FWS for species including the snail kite and CSSS and the BO is included in this document
MIT-33		Third, the Draft SEIS does not address how the Corps is meeting the non-discretionary terms and conditions of the FWS Incidental Take Statement in light of the alarming information on the Snail Kite.	The Corps has funded Dr. Kitchens and Dr. Frederick's studys every year since the initial "jeopardy" opinion was issued by the Service in 1999. We have attempted to manage water under the WCA-3A schedule to avoid adverse foraging and nesting conditions for the snail kites in WCA-3A. A major new paper on Snail kite reproduction was published last year; it is cited in the FEIS text. In addition, the Corps has been coordinating with the SFWMD regarding removal of nuisance vegetation south of S-12D.
MIT-34		The Corps, which has the ultimate responsibility for its actions under the ESA, had the duty to reinitiate consultation with FWS on IOP Alternative 7R, and the Incidental Take Statement terms and conditions, immediate after the Court's March 14, 2006 Order and prior to issuing its Draft SEIS but failed to do so.	The Tribe did not prevail on its ESA claim.  Nevertheless, as part of the supplemental NEPA process, the Corps reinitiated formal consultation with the FWS (see Appendix F for ESA consultation documents including the 2006 BO).

Comment Number	Organization/ Agency	Comment	Response
MIT-35		Corps must ask FWS to reopen the biological opinion to analyze the new Snail Kite information and the cumulative impacts that the previous deviations and the IOP will have on this and other endangered species in the action area. The Corps must also conduct a review of whether they are complying with the Incidental Take Statement on the Snail Kite in the SEIS, including through modeling results that analyze the indicator regions 14 and 19, in light of the alarming decline of this endangered species.	The Corps reinitiated formal consultation with the FWS (see Appendix F for ESA consultation documents including the 2006 BO).
MIT-36		The Draft SEIS fails to adequately analyze the adverse impacts that raising the canal levels in L-31 as required under Alternative 7R will have on urban and agricultural areas in Miami-Dade County.	Disagree. These impacts were analyzed in section 4.5 of the DSEIS (see Figures 10 and 11 of that document).
MIT-37		There is also no evidence in the record to support the Corps' blanket statement in the FEIS that "potential impacts to tree islands have been minimized" and that "Alternative 7R would not have adverse impacts on vegetation throughout WCA 3A.	Disagree. The efforts to minimize adverse impacts to resources including tree islands in WCA 3A include keeping S-12D open and routing additional water to minimize ponding. It should be noted that heavy localized railfall has been primarily responsible for flooding in WCA 3A which has led to adverse impacts to vegetation. Alternative 7R modeling has demonstrated that less than 1 % water level exceedences over the desired 2.5 feet would occur over the previous water management plan.
MIT-38		The Draft SEIS fails to analyze reasonable alternatives that would protect the Cape Sable Seaside Sparrow with far less impact on the rest of the Everglades and the endangered Snail Kite.	The FWS BO specifically directs the Corps to meet certain RPAs by managing water deliveries to maintain habitat conditions in breeding CSSS populations. The FWS may determine to implement other measures suggested by the Tribe, not within the Corps' jurisdiction.
MIT-39		The Draft SEIS not only neglects to divulge the multi-million dollar expenditure for the structural components of Alternative 7R, it does not divulge the source of the money. Nor does the Draft SEIS discuss whether using this money for "temporary" IOP project features will cause the Corps to exceed their project budgets and delay the completion of the permanent Modified Water Deliveries and C-111 projects. The IOP cost information for each alternative must be provided under the full disclosure and cost benefit analysis requirements of NEPA.	The MWD and C-111 components are authorized federal projects whose budgets and costs are public record. The Corps fully expects to continue constructing the C-111 project until the entire hydraulic ridge of impoundments is complete. This in turn will conect, to the north, to the STA for the 8.5 SMA, part of Mod Waters which is also authorized. (See Figure 2 FSEIS). The 8.5 SMA is currently under construction. Construction on the next phase of the C-111 Project is expected to begin in 2007.
MIT-40		The Corps' statement in the Draft SEIS that keeping-12D open as part of Alternative 7R will provide hydrologic relief to WCA 3A is absurd. Opening one S-12 structure when all four are supposed to be open in high water conditions does not qualify as mitigation. Additionally, in light of the fact that the closing of the gates under ISOP and IOP has caused an alarming decline in the Snail Kite population proves that this is not mitigation.	See MIT-18 response.
MIT-41		The Corps incorrectly claims that "the detention of excess water in the WCAs could also occur with the alternatives, and would likely continue in the future without the full implementation of the Modified Water Deliveries Project." Draft SEIS at 74. The Corps can stop this detention of excess water now. The Tribe agrees that the implementation of the MWD project is the ultimate solution, but contends that it is misleading for the Corps to state that the detention of excess water would occur without the completion of MWD, when they know that it can be relieved by the opening of the S-12 structures, which could be accomplished by assessing another reasonable alternative in the IOP Draft SEIS.	The western population of the Cape Sable Seaside Sparrow can be impacted by releases from WCA 3A. Therefore, the S-12s have been limited in agreement with USFWL. Furthermore, the S-12s have reduced capacity due to growth of downsteam vegetation. MWD can be a solution to the problem by removing the constraint in NESRS and allowing more water into that area.

Comment Number	Organization/ Agency	Comment	Response
MIT-42		Nor does it even address the fact that the Everglades in WCA 3A are Tribal lands. Instead, it erroneously concludes that IOP has caused no impacts to cultural resources or environmental justice impacts. Draft SEIS at pp.73 and 80. It fails to acknowledge that the Tribe, an Indian Tribe, is bearing the disproportionate adverse consequences of the Corps' IOP operations which are adversely impacting WCA 3A and the Tribe's culture and way of life.	The Tribe implies that its interests in WCA have been largely ignored, which is not the case. The draft SEIS is replete with references to coordination with the Tribe. Coordination with the Tribe is specifically mentioned in the notes to the Operations Table for Alternative 7R:  Operations for other than named events. SFWMD will monitor antecedent conditions, groundwater levels, canal levels and rainfall. If these conditions indicate a strong likelihood of flooding, SFWMD will make a recommendation to the Corps to initiate pre-storm operations. The Corps will review the data, advise ENP, FWS of the conditions, consult with the Miccosukee Tribe and make a decision whether to implement pre-storm drawdown or otherwise alter systemwide operations from those contained in the table.
MIT-42 cont.			Note: The Chairman of the Miccosukee Tribe of Indians of South Florida or his designated representatives, will monitor the conditions in WCA3A and other tribal lands and predicted rainfall. If the Tribe determines these conditions indicate jeopardy to the health or safety of the Tribe, the Chairman will make a recommendation to the Corps to change the operations of the S12 structures or other parts of the system. The Corps will review the data, advise appropriate agencies of the conditions, and the District Commander will personally consult with the Chairman prior to making a decision whether to implement changes to the S12 operations.
MIT-43		·	The Corps is required to follow directions specified in the FWS BO. IOP was developed first to meet the RPA in the 1999 BO, and secondly to minimize the effects to other resources including flood control, agricultural lands, tribal lands, and other protected species.
MIT-44		Section 4.23 of the Draft SEIS erroneously states that the commitment of resources would be "temporary in nature, and the irreversible and irretrievable commitment of resources would be minimal." Draft SEIS at p. 74. A review of pages 68-69 of the Draft SEIS, which details the alarming decline of the Tribal Everglades in WCA 3A and the endangered Snail Kite shows that this statement is ludicrous.	Once MWD is complete, snail kite habitat will improve. The snail kite is a wide-ranging species and extensive pouplations exist elsewhere in Florida and the Americas, and population numbers are expected to increase with improved habitat conditions.
MIT-45		The Draft SEIS fails to adequately analyze the impact that IOP is having on water quality both in WCA 3A and Everglades National Park, including whether it is interfering with the Settlement Agreement requirements in the Everglades case before Judge Moreno.	There is no evidence that IOP is having an adverse effect on water quality.

Comment Number	Organization/ Agency	Comment	Response
MIT-46		The operation of IOP Alternative 7R is contrary to current rules and regulations for the operation of the Central and Southern Florida Project (C&SF) and constitutes an amendment to the rules and regulations for operating the project. This amendment of rules and regulations violates the APA because the Corps has never complied with the required rulemaking procedures, including notice and the opportunity to he heard, pursuant to APA. The Draft SEIS does not state that the Corps plans to comply with the rulemaking requirements of the APA.	This argument was previously dismissed by Judge Moore. The Court found that the Water Control Plan for WCA-3A provides sufficient flexibility to adjust operations to account for meteorological anomalies and temporary needs.
MIT-47		The Corps has failed to follow the Fish and Wildlife Coordination Act (FWCA) of 1973, that requires an agency whose actions are likely to have adverse impacts on the environment and endangered species to enter into consultation with the Florida Fish and Wildlife Conservation Commission ("FFWCC") as part of the IOP Draft SEIS process.	Disagree. The Corps coordinated with the FFWCC during the previous and current NEPA process. For the record we coordinate all eligible actions with FWC. FWC comments have been received and are incorporated into this comment-response matrix.
MIT-48		The IOP Draft SEIS fails to comply with the Endangered Species Act ("ESP) by failing to adequately analyze the cumulative impacts of past, present, and future operational plans on the Snail Kite and other endangered species.	The Corps reinitiated formal consultation with the FWS (see Appendix F for ESA consultation documents including the 2006 BO).
MIT-49		The Corps' failure to analyze past, present and future cumulative impacts of their previous deviations, coupled with the IOP, is a continuing violation of the ESA that has been ongoing since 1998. Indeed, the Corps never conducted the after-the-fact biological assessment on the Wood Stork, the Snail Kite and the Snail Kite's critical habitat that they promised to conduct in 1998. The Biological Opinion and numerous other letters from the FWS, ENP, and the Florida Game and Fresh Water Fish Commission, expressed grave concern about the adverse impacts to WCA-3A, and the endangered Wood Stork and Snail Kite that inhabit it, caused by maintaining high water levels in this area of the Everglades. Despite these warnings, the Corps continues to support Alternative 7R that will close structures along Tamiami Trail and further endanger and threaten the Snail Kite and destroy the Snail Kite critical habitat on Tribal Everglades in WCA 3A.  The Corps is required to construct an environmental baseline and conduct the analysis on cumulative impacts of the proposed actions required under both NEPA and the ESA.	The Corps has not knowingly violated the ESA by failing to incorporate all RPAs and other actions required by FWS. As part of this 2006 SEIS procedure, the Corps re-initiated consultation with FWS, providing all information on habitat and nesting currently available from researchers contracted by the Corps. The FWS has since issued a new BO on November 17, 2006, and concluded that continued operations of IOP will not jeopardize any threatened or endangered species. Therefore, IOP is in compliance with the ESA.
MIT-50		The Corps' Draft SEIS fails to comply with NEPA, the ESA, the APA, the Indian Trust Doctrine, and the 5th Amendment to the U.S. Constitution.	This SEIS has been prepared in compliance with NEPA and the Judge's order and remains in compliance with all state and federal laws. The requirement called for a re-assessment after five years. These studies are ongoing and final reports from Corps contractors have not yet been received.

Comment Number	Organization/ Agency	Comment	Response
DEP-1	Florida Dept. of Environmental Protection	The SEIS appears to have some inconsistencies in the evaluation of impacts to the Everglades Protection Area (EPA). The Executive Summary (page v) states that impacts to vegetation under the recommended alternative are similar to those of ISOP where "minor effects due to raised water levels may have occurred in the vicinity of tree islands in the southern portion of WCA and 3B." However, Page 58, Section 4.6, Wetlands, states that "Wetlands in NESRS, the Rocky Glades, and the western marl prairies are expected to benefit from the restoration of more natural hydroperiods with Alternative 7R, whereas increased flooding in southern WCA 3B and WCA 2A may contribute to negative wetlands impacts."  Nevertheless, Page 61, under Section 4.7, Vegetation concludes that Alternatives 7 and 7R will not have adverse effects on vegetation through out WCA 3A and 3B. Impacts to WCA 2A are expected to be similar to Alternative 1, with less ponding than with the other alternative but vegetation could be adversely affected.	Comment noted. Text has been amended to correct inconsistencies.
DEP-2		Section 4.21 says that the detention of excess water in the WCAs could also occur with Alternative 7R, and would likely continue in the future without full implementation on the Modified Water Deliveries project. The impacts of the detention could include loss of tree island vegetation and associated wildlife, adverse impacts to snail kite nesting and critical habitat and adverse impacts to wood stork. As part of the impact analysis, the Alt7R alternative should not only be compared to the 1995 base condition, but also to the ISOP 2001 conditions, as this was the condition that existed prior to IOP being implemented. The updated EIS does not attempt to quantify these impacts. Prior to the Department authorizing operations outside of those allowed under the existing emergency order, an evaluation of the alternatives to the pre-project conditions (i.e., ISOP 2001 & 1995 base) using the most recent version of the SFWMM should be performed.	Alternative 7R was compared to the 1995 Base and to the ISOP operations (as Alt1Cur). Alt1Cur included other operations that were not in the 1995 Base such as WSE and operations for new STAs. The increase of highwater stages in WCA-3A, due to IOP, was not significant (566 weeks compared to 563 weeks for the 31-year period). Current conditions, which includes IOP, are shown as part of the CSOP modeling effort. The updated modeling, with new version and updated 36-yr period of record, shows only 462 weeks of highwater in WCA-3A.
DEP-3		The SEIS does not include any new hydrologic modeling results but does provide a reference to the existing webpage that was set up by the Corps of Engineers to desseminate information regarding IOP. This site provides a link to the South Florida Water Management District 2 by 2 modeling results that were posted a few years ago. What is referred to as the "new" modeling results on the ISOP webpage were implemented using the version 4.4 of the SFWMM. Since these results were posed, there have been numersous updates to the SFWMM that will likely affect the performance of the modeled scenarios and the Department therefore recommends using the latest updates when providing a supplemental post implementation report to analyze the performance of IOP.	Noted. New hydrologic modeling results for Alt 7R have been included. However, the SFWMM ver.3.4 was used to allow comparison to previous model runs. Future projects will use the District's 2 by 2 model.

Comment Number	Organization/ Agencv	Comment	Response
DEP-4		move forward. Some of the project features which include the S-356 pump station and the S-355 have been constructed, but do not have permits to operate. The supplemental EIS addresses the water quality issues associated with the S-356 pump station, but does not provide any information regarding potential water quality issues associated with discharging Miami Canal waqter into WCA 3B by allowing flow through using the proposed S-355 structures. Please note that the Department is concerned about water quality issues associated with the proposed flow through WCA 3B using the Northern Gaps and the S-355 A and B structure as the water quality in the Miami Canal does not currently meet the current water quality standards for discharges into the Everglades Protection Area.	Noted. Modifications to the existing MWD permit must be obtained to routinely operate the S355 A/B and the S356 Pump Station. Operational tests of limited duration for these features will continue to require FDEP authorization following the guidelines in the current MWD permit.  Response specific to the S355 A/B: The Corps will either 1) demonstrate that the Miami Canal Gaps flow into WCA 3B, during IOP, will not increase above present conditions when the S355 A/B structures are operated or will demonstrate to the FDEP that operations will be adjusted (during the IOP period) to ensure no flow increase occurs from the Miami Canal Gaps into WCA 3B, above present conditions, during the IOP period. The Corps understands that this will be necessary for FDEP to issue operational authorization to operate these structures (S355A/B) during the IOP period.
DEP-4 cont.		The proposed S-355 A and B operation may not be allowable until water quality in the regional system has improved so that the proposed flow through will not adversely impact WCA 3B. A modification of the CERP permit for the Modified Water Deliveries Project is required prior to operation of the existing S-355 structures and the S-356 pump station.	Response specific to the S356 Pump station: The Corps current approach to resolve the concerns associated with the operations of the S356 pump station, is to run a series of pump tests, particularly during the wet season. The Corps will acquire authorization for these limited duration pump tests per the guidance in the existing MWD permit. The Corps went through this process for the most recent pump test and received FDEP authorization for that limited duration (2 week) test. The information gained from these tests will provide the necessary practical knowledge to develop a suitable operating plan for the S356 pump station. This operating plan must be demonstrated to provide reasonable assurance that the WQ will not be degraded as a result of operating this pump station.
DEP-5		Upon completion of detailed design, this project will require a Comprehensive Everglades Restoration Plan Regulation Act (CERPRA) permit pursuant to Section 373.1502, Florida Statutes. The project may require a NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities in accordance with Rule 62-621.300(4), Florida Administrative Code. Other department permits may be required during the construction phase of this project, as applicable. We recommend that the U.S. Army Corps of Engineers and the South Florida Water Management District coordinate closely with the Department in order to facilitate permit issuance.	Noted. The Corps will apply for the necessary permits at the appropriate time.
WMD-1	South Florida Water Management District	Description of the C-356 operations needs to acknowledge that water pumped by the S-356 pump is seepage collected by the L-31N canal and seepage collected by the L-30 canal discharged via the S-335 structure into the L-31N canal. The seepage into the L-30 canal arises primarily from WCA-3B and the Pennsuco Wetlands. Seepage into the L-31N canal arises predominately from the West (WCA-3B and Northeast Shark Slough) and secondarily from the East.	Noted. The information has been included in the text.
WMD-2		Description of the modeling should make it clear the ALT7R run assumes that the land swap of approximately 1,000 acres between SFWMD and Everglades National Park (ENP) occurred and that a continuous detention area was constructed from S-332B North to the Frog Pond. The land swap increases the detention area from the approximately 700 acres provided by S-332B North, S-332B West, and S-332C to approximately 1,700 acres.	Noted. The information has been included in the text.

Comment Number	Organization/ Agency	Comment	Response
WMD-3		The text (section 4.4, page 55) describing the surface water discharge (overflows) should make it clear that the construction required to facilitate this requirement has not been completed. Even though the partial connector is not complete and the western levee has not been raised, the SFWMD has, to the extent feasible, eliminated surface water discharges into ENP via S-332B West. The factors limiting the SFWMD ability to effectively eliminate surface water discharge from S-332B West into ENP are provided.	Noted. The information has been included in the text.
WMD-4		The text describing the overflow should provide a more complete description of how the actual overflow volumes were calculated. The current numbers are overly precise given the uncertainties in the seepage rates and the rating curve for the 1,700 long flat broad crested weir. Precision on the order 40 acre-feet rather than the 36.46 acre-feet used are more justifiable. I recommend assuming a conservatively low seepage loss of about 125 cfs during these overflow periods rather than trying to caluclate a discharge rate from the weir. The 125 cfs seepage rate is conservative and supported by considerable operational data showing that 125 cfs of seepage occurs at stages below the overflow level. The average pumping rate during the overflow period should be estimated (e.g. 200 cfs) then the assumed sepage rate of 125 cfs would be subtracted on an hourly basis. The 125 cfs number could be refined by looking at the pumping rate and water levels immediately before or after the overflow events. Specifically, the head difference for a pump rate which not cause overflow could be used to determine a seepage relationship. Tor example, a dtention area stage of 8.0 feet NGVD and a canal stage of 5.0 feet NGVD for a pumping rate of 125 cfs results in a seepage relationship of 125 cfs per 3 feet of head. If the water level is 8.5 feet during over flow then the seepage rate would be aobut 145 cfs ([{8.5-5.}}/{8.0-5.0}]*125 cfs).	Overflows volumes were calculated by using the broad crested weir equation. Agree that there are other factors affecting the accuracy of the numbers. Therefore, estimates will be rounded.  Agree. However, the difference in flow is not significant due to a maximum head differential of approximately 5 feet between the canal and the detention area.
WMD-5		The text describing the proposed S-356 wet season test has been updated. Please use the current version.	Agree. Text will be updated to include the latest version.
WMD-6		The project descirption should include a history of when each facility became operation.	Noted. The information has been included in the text.
WMD-7		The description of marsh operation needs to clarify that marsh operations developed in the Combined Structural and Operation Plan (CSOP) for the Modified Water Deliveries to Everglades National Park (WMD ENP) project and the C-111 Canal project, was developed after impementation of the Interim Operational Plan for Protection of the Cape Sable Seaside Sparrow (IOP for Protection of the CSSS).	Noted. The information has been included in the text.

Comment Number	Organization/ Agency	Comment	Response
WMD-8		The SEIS should discuss that during the development of the IOP for Protection of the CSSS that provisional water quality data which was later found to be non representative was the primary justification for the design of the IOP for Protection of the CSSS as seepage area withou direct surface water overflows.	Disagree that the Corps collected data was non representative for the C111 project area. The Corps data was in general agreement with the SFWMD in that for the majority of the recent time period, there is no generally no problem with phosphorus levels in the Taylor Slough/Coastal Basin monitoring area. The short term phosphorus spiking event that occured in the Oct 2000 timeframe was confirmed by splits of samples, obtained by the Corps contractor, analysed by the FDEP and SFWMD labs. SFWMD sampling and analysis also confirmed there were high levels in the L31N canal system during that time period. However that was a unusual event that has never been repeated since then and may never occur again. The Corps position is that the potential for settlement agreement violations in the Taylor Slough/Coastal Basins is presently low and does not presently justify the expenditure of additional funding for water quality treatment to those areas. The reality of the matter is that the ENP is not willing to take even limited risks in regards to additional phosphorus loading into this area If the water quality situation continues to be maintained as it presently exists (meeting settlement agreement long term targets) for the inflows to the Taylor Slough/Coastal Basins and the potential for mobilization of nutrients from the former agricultural lands that are being incorporated into the C111 detention can be proved to the FDEP/ENP as not happening, we can practically discuss whether surface water from the S332B and S33C detention areas can be discharged into the ENP. Until that time, direct surface water discharges from the S-332Band C detention areas onto ENP lands will be highly disputed. Current modeling indicates (CSOP Alt 5R) that with the proposed levee system features, surface water discharges into the ENP will not occur from the S332B and C detention areas even during the wet season with a very significant storm.
WMD-9		The IOP should clearly state that the incomplete condition of the detention systems is due to the delays in the land swap between Everglades National Park and the SFWMD. The incomplete detention area due to this delay severely limits the ability of IOP for Protection of the CSSS to precisely and evely affect water level along the eastern boundary of ENP. We expected that once the construction is complete that the detention system will provide beneficial water levels to ENP's eastern boundary. The land swap has been executed and the construction of the continuous detention area is scheduled for completion before the	Noted. The information has been included in the text.
FDOT-1	Florida Dept. of Transportation	As the FDOT has previously stated, a water elevation of 7.5 feet in the L-29 Canal barely provides adequate protection for some of the existing section of the adjacent Tamiami Trail/US41. Therefore, water elevations in the L-29 Canal should not be allowed to exceed 7.5 feet until after the currently planned reconstruction of Tamiami Trail is complete.	Although IOP establishes a constraint of 9.0 feet-NGVD in L-29, the 6.8 foot level at G-3273 tends to override the L-29 constraint. The highest level reached in the canal was 7.92 feet NGVD on June 20, 2005 and was mainly associated with heavy rainfall in the area.

Comment Number	Organization/ Agency	Comment	Response
FDA-1	Florida Dept. of Agriculture & Consumer Services	The May 2006 SEIS states that: "Flooding impacts to residential and agricultural lands above current levels would not likely occur with the recommended alternative" (p-vi). The pre-storm operations proposed may prevent additional surface flooding from occurring in the study area. However, the modeling indicates that the proposed operations will elevate the ground water table by 0.25 to 0.50 ft. in the southern Dade agricultural area. The Corps' analyses of the L-31N canal during IOP operations confirm the model output (p58). A high groundwater table will harm tree roots and cause disease and/or death of the trees. The tropical fruit tree crops are put in jeopardy by the IOP	One SFWMM cell, R13C25, shows a predicted increase (about 0.3 ft) in stage with a predicted increase in root zone percentage. An evaluation of real-time data has shown no evidence of stage increases in that area as a result of IOP operations with the current structures and seepage reservoir configuration. It should be noted that this area will be monitored as newer and larger seepage reservoirs are built and operated. Additionally, newer marsh operations are yet to be determined.
FFWCC-1	Florida Fish and Wildlife Conservation Commission	We note that the SDEIS includes updated information on water quality and flood control performance of IOP in the 2002 - 2006 period (pp. 55 through 58). It would seem reasonable to include information has been collected on changes to the habitat of the snail kite in Water Conservation Area 3A and other pertinent biological data in the final SEIS, and recommend that it include, at a minimum, the information that was required under the Terms and Conditions of the U.S. Fish and Wildlife Service's 2002 Amended Biological Opinion to monitor vegetative shifts in snail kite habitat.	In accordance with the 2002 BO, the Corps has contracted with Dr. Wiley kitchens of USGS to monitor vegetative shifts in prime snail kite foraging habitat in WCA 3A. The final report is due later this year. Preliminary conclusions from the study are that the habitat quality in WCA3A is changing progressively and dramatically to less desirable habitat in this critical area, and that this conversion from emergent prairies/sloughs to deep water sloughs is rapid, with changes evident even after a year. This description is included in the DSEIS and FSEIS Section 4.9, Protected Species, Snail Kite, Monitoring Efforts.
FFWCC-2		The DSEIS mentions the anticipated start of CSOP as 21007, with completion in 2010. Would IOP be the operational plan until 2010, or will the EIS for CSOP cover operations during that interim?	CSOP will provide certain guidelines for interim operations while IOP will continue to be adjusted until CSOP is fully implemented
SHPO-1	Florida State Clearinghouse	No Comment No Comment/Consistent	Noted.
PH-1	Pepper Hamilton LLP.	I have attached for your convenience Radio One's prior comments that it submitted on June 16, 2006 and April 9, 2001. Radio One appreciates the opportunity to comment, and trusts that its comments and concerns will be considered and accomodated in the Supplemental EIS and the final IOP, with appropriate mitigating actions being included within the scope and costs of the IOP.	Comment noted. The project has not changed and our previous responses to the comments are incorporated by reference.