TABLE D-2. COMMENTS RECEIVED DURING STATE AND AGENCY REVIEW OF ENVIRONMENTAL ASSESSMENT AND PROPOSED FINDING OF NO SIGNIFICANT IMPACT AND RESPONSES

Comment #	Commenter	Comment	Response
1	USFWS	The U.S. Fish and Wildlife Service (Service) has reviewed the Complete Initiation Package (CIP) for the G-3273 Constraint Relaxation/S-356 Field Test and S-357N Operational Strategy by the U.S. Army Corps of Engineers (Corps) dated January 6, 2015, and the updated CIP received via email January 22, 2015. The Service supports the project and has the following comment and recommendation: The Service understands it is a general expectation and assumption the project will decrease flows through the S-12s with more water being delivered towards the east in the L-29 Canal. It is also understood the Corps has not conducted any modeling to verify this assumption and an adequate model has not been developed. The Service also understands there are many uncertainties being addressed with water management operations. The Service recommends that during the test, flows through each S-12 structure (A, B, C, and D) be analyzed as part of the monitoring and assessment of project data. A comparison of flows through these structures with the project compared to the flows that would have occurred if the project were not operating is recommended. This analysis should provide ecological benefit conclusions from the project for the Cape Sable Seaside Sparrow subpopulation A and its habitat. Once a reply is received concerning this recommendation, the Service will complete its review of the CIP determinations made by the Corps in their letter dated January 6, 2015 and the updated CIP dated January 22, 2015.	As requested in your letter, the Corps will provide as part of the monitoring and assessment of project data a comparison of flows through the S-12 structures. This assessment will be limited to the duration of the project and will be provided to the Service on an annual basis at the end of each water year (*i.e.* October 1 through September 30).
2	USFWS	The Service has reviewed the CIP for the G-3273 Constraint Relaxation/S-356 Field Test and S-357N Operational Strategy by the Corps dated January 6, 2015, and the updated CIP received via email January 22, 2015.	Thank you. The Corps will continue to maintain ongoing communications with the USFWS throughout the duration of the field test.

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		The Service supports the project and concurs with your determinations pursuant to the Endangered Species Act for effects on federally listed species and critical habitat as illustrated in Table 1. The project does not appear to adversely affect threatened or endangered species or otherwise inhibit the regular system operations as defined by the Everglades Restoration Transition Plan.	
3	FDEP	The Department has provided input and guidance throughout the planning process and is supportive of initiating the G-3273 and S-356 pump station operational field test. The Department authorized a 21-day operational test of S-356 (Increment 0) on October 24, 2014, and a conditional authorization to conduct a multi-year operational test of the S-356 pump station (Increment 1 on March 13, 2015, as part of implementing the proposed operational strategy described in Appendix A of the Draft EA and the proposed monitoring plan in Appendix C of the Draft EA. Most of the MWD to ENP Project components have been constructed, but a COP has not been developed. The Department believes that the field test is necessary to not only move forward on implementing Increment 1, but to establish a path forward for Increment 2, and the completion of the COP.	Thank you for your comment. Development of the COP will be informed by the Increment 1 and Increment 2 field tests. The Corps appreciates the active involvement of the FDEP during the planning stages of the field test.
4	FDEP	The conditional authorization provided to the Corps on March 13, 2015, relied upon the recognition that all parties, including the Corps, DOI, the SFWMD, and the FDEP, are committed to implementing joint restoration projects and associated operational plans in a manner that is consistent with the objectives of the underlying C&SF Project. It is important to recognize in this Draft EA that there is a commitment that the Corps, DOI, and the State would use all available relevant data and supporting information to inform operational planning and decision making, document decisions made, and evaluate the resulting information from those decisions to avoid adverse impacts to water quality where practicable and consistent with the purposes of this conditional authorization.	The EA recognizes that the Corps Water Management Section's assessment of hydrometeorological conditions and stakeholder or agency input may suspend or discontinue the field test due to impacts greater than expected/discussed within this EA. A robust monitoring plan has been developed for the field test. Data outlined within Appendix C will be used during the evaluation of the field test, along with other pertinent information that may be relevant at the time.
5	FDEP	The conditional authorization provided to the Corps on March 13, 2015, does not authorize the operation of the S-357N water	The Corps understanding is that the SFWMD will be the applicant for the S-357N structure.

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		control structure nor does the current MWD to ENP Project permit (FDEP File No. 0246512-010). A permit modification is required in order to operate the S-357N water control structure.	
6	FDEP	The conditional authorization provided to the Corps on March 13, 2015, relied upon adherence to Section 8.3 of the Recommendations Chapter in the CEPP, PIR, where Section 8.3 provides the expectations and guiding principles associated with water quality for ENP and the Southern Estuaries. The Department requests that the CEPP water quality language is included into this Draft EA and that an explanation is provided as to how the Corps plans to follow these guiding principles to resolve only potential water quality issues associated with the proposed field test.	CEPP PIR Section 8.3 wording regarding water quality will be added to the EA in Section 4.27. These words provide the guidance to resolve water quality issues. Wording was also added to Section 4.27 stating that the Corps plans to follow this guidance if any water quality issues arise during the testing.
7	FDEP	The Draft EA should include recognition that the Technical Oversight Committee will consider and decide if future Consent Decree Appendix A calculations for Long Term Limits will include the S-356 Pump Station.	This language is included in Section 4.11 and Appendix C.
8	FDEP	Page 1-2 and Bullet F of FONSI – Permits, Licenses, and Entitlements: Please reference the Everglades Forever Act Permit by permit ID number. Please add all permits and their FDEP file numbers that would be affected to this statement. This information should also be referenced on Page 1-12 of the Draft EA, Section 1.10 Permits, Licenses, and Entitlements whereas currently only permit (File No. 0246512-010) is referenced.	Permit file number for S-356 operational testing has been added to FONSI bullet (f). Permit references provided by FDEP has also been added to Section 1.10.
9	FDEP	Page 1-4 - Project Background: Page 1-4 states, "An operational test conducted in 2009 indicated that the S-357 pump station and other 8.5 SMA features may not adequately mitigate the southwest corner of the 8.5 SMA. To ensure utilization of the S-357 Pump Station at maximum design capacity following completion of the NDA, new hydrologic modeling identified an additional east-west seepage collection canal (C-358) was needed to properly mitigate groundwater stages in the southwest corner (east of L-357W). A gated control structure (S-357N), currently planned for construction in fiscal year 2015, will connect the C-358 seepage collection canal to the existing C-357 Canal, upstream of S-357." This	Concur that operational authorization will be needed for S-357N structure once it is constructed. It is the Corps understanding that the SFWMD will be the applicant for that action. Details regarding the use of S-357N and S-331 are contained within Operational Strategy for 8.5 Square Mile pages A-9 to A-12. Brief text has been added to the FONSI to address S-357N and S-331 operations.

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		indicates the need to install and obtain a permit for the operations of the S-357N water control structure as the permit currently does not authorize pumping from the C-358 Canal or the operation of the S-357N water control structure. Given that the S-357N water control structure installation is currently scheduled for completion in February 2016, please modify the FONSI bullet (b) that states, "The field test may be implemented as early as May 2015" to specify how the field test will be implemented without construction of the S-357N water control structure. Additionally, per the Department's comment below on Appendix A-4, please modify the FONSI bullet (b) to specify how the field test will be implemented without construction of the North Detention Area or Contract 8.	
10	FDEP	Appendix A-2 – Introduction: Please acknowledge "This Operational Strategy also defines a testing protocol for S-357N operating criteria that will be incorporated into the first field test following completion of the C-358 seepage collection canal and associated S-357N." The MWD to ENP Project permit (FDEP File No. 0246512) will need to be modified to allow for operations of the S-357N water control structure.	The field test testing protocol for S-357N is intended to assist in defining specific water management operating criteria for S-357N that will be incorporated into the Water Control Plan revision to be completed prior to implementation of the Increment 2 field test. The test operations of the S-357N for Increment 1are described in the Operational Strategy. The existing 8.5 SMA features have already been turned over to the SFWMD. Once the S-358 canal and S-357N are completed they will be turned over to the SFWMD. Because these features have been turned over to the SFWMD, it is the Corps understanding that the SFWMD will be the applicant for any operational authorization required for the S-357N testing or operations.
11	FDEP	Appendix A-2 – Introduction: Regarding "Increment 1 includes additional water management operating criteria for features of the SDCS including S-197 (in addition to the S-197 operating criteria defined in the 2012 WCP)," please acknowledge that the operations plan for the S-197 Control Structure Project permit (FDEP File No. 0306639) may need to be modified in order for operations to vary from the current	The determination as to whether the FDEP requires a modification to the S-197 operations permit (issued to the SFWMD) to cover the proposed testing is an internal FDEP decision. The Corps will confirm that the SFWMD has received the requisite FDEP authorization prior to initiating Increment 1. Section 1.10 has added language that addresses what permit

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		Operation Plan on file with the Department.	actions may be required to support this testing.
12	FDEP	Appendix A-2 – Introduction: In order to completely reference all permits associated with affected structures, please specify, that the current Operational Protocol on file with the Department for the S-357 Pump Station (FDEP File No. 0317442) does not vary from the operational criteria outlined within the 2012 Water Control Plan for WCAs, ENP, and ENP-South Dade Conveyance System, and operations for this structure will not be changed and that a modification to this permit is not necessary for the operational field test(s).	Appendix A-2 will be modified to state "The current operational protocol for the S-357 Pump Station (FDEP File No. 0317442) does not vary from the operational criteria outlined within the 2012 Water Control Plan for WCAs, ENP, and ENP-South Dade Conveyance System, and operations for this structure will not be changed and that a modification to this permit is not necessary for the operational field test(s)."
13	FDEP	Appendix A-4 – Operational Strategy for G-3273 Constraint Relaxation/S-356 Field Test: Please specify how the field test will be implemented without construction of the North Detention Area or Contract 8 based on the following statement, "This increase is not expected to be manageable until the construction and operation of the C-111 South Dade Project Northern Detention Area (NDA)."	Refer to Section 2 within the EA: Increased flood control releases from S-18C and S-197 were included within Alternatives E and G to mitigate for potential risks to flood protection for areas within South Dade which may be affected by a combination of the following water management factors during the field test: increased seepage to the L-31N Canal south of S-331 prior to completion of C-111 South Dade NDA; increased discharges from S-331 for 8.5 SMA flood mitigation (potentially offset by reduced S-331 discharges with limited WCA 3A regulatory releases to the SDCS); and operation of the downstream S-332 D pump station and/or the C-111 South Dade SDA to manage L-31N Canal stages during periods of increased inflows. Since not all flood mitigation and seepage management features envisioned in the MWD and C-111 South Dade Projects are constructed (included the NDA), Increment 1 includes additional water management operating criteria for features of the SDCS including S-197 (in addition to the S-197 operating criteria defined in the 2012 WCP). Operating criteria for S-197 will be reassessed once construction of the C-111 South Dade Project NDA is constructed and operable, and/or upon completion of the Increment 1 Field Test. Consistent with prior operations under the 2012 WCP, S-331 will continue to operate to provide flood mitigation for 8.5 SMA during periods when S-357 may

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			be operationally constrained prior to completion of the C-111 NDA. Please refer to page A-10 of Appendix A (Operational Strategy for 8.5 Square Mile Area): "As stated in the 2011 Proposed Interim Operating Criteria for the 8.5 Square Mile Area Environmental Assessment and the 2012 WCP, S-331 will be operated using four pumping ranges: "high", "middle", "low" and "low adjustment", based on LPG2 and S-357 operational ability. S-331/S-173 operations will be triggered based on the S-331 HW elevation. The intent is to have S-357 provide the drainage authorized by the 8.5 SMA 2000 GRR while maintaining or improving the hydroperiods of the wetlands along the west side of the 8.5 SMA protection levee. Prior to completion of the C-111 South Dade Project NDA, only a portion of the S-357 capacity can be used due to the limited infiltration rate provided by the 8.5 SMA's small detention area and the inability to overflow this detention area. Due to the limited pumping capacity at S-357 it is expected that, at times, this capacity will be insufficient to maintain the C-357 Canal at target stages. During these time periods the S-331 operational range will be lowered to assist S-357 in providing flood mitigation for the 8.5 SMA." Additional text has been added to Page A-4 of the Operational Strategy)Appendix A): "Because of this, Increment 1 will include additional water management operating criteria for S-197 (in addition to the S-197 operating criteria defined in the 2012 WCP) to mitigate for potential risks to flood protection for areas within South Miami-Dade County."
14	SFWMD	Criteria should be included to describe how S-356 will be operated to maximize direction of excess water from L-30 and L-31N to ENP through S-356 in an efficient and flexible manner. Criteria will be developed to the extent practicable within the L-29 stage limit, and support the operation of S-356 in a manner which reduces the need to send water south through G-211.	Based upon the concerns identified through interagency development of Appendix A Operational Strategy (WCA-3A level, S-333 discharge, L-29 stage limit, L-31N level, pump cycling) the following was developed: **"1) Year-round when stage at G-3273 is below 6.8 and when WCA-3A stage is below the Increment**

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			1 Action Line (Figure 1) (S-333 has priority; S-356 use is secondary to S-333 but S-356 can and should be used subject to L-29 stage limitations). C) Excess flow from L-30 through S-335 may be diverted into NESRS using S-356 if desired by the agencies (ENP, SFWMD, USACE). When S-335 HW is above 6.0 feet, the SFWMD has full latitude to make the S-335 discharge required to maintain the stage in L-30 and also provide S-335 discharge to reduce pump unit cycling at S-356 and S-331, if appropriate (by releasing the flow required to maintain steady pumping at S-331 through G-211)." "2)**Year-round when stage at G-3273 is above 6.8 and the WCA-3A stage is below the Increment 1 Action Line (Figure 1) (S-356 has limited priority over S-333)** B) S-356 will be used to control the stage in L-31N between 5.5 and 5.8 feet with an assured minimum available capacity of 250 cfs through S-356 (S-356 limited priority over S-333), subject only to the L-29 constraint. Compliance with the range limits is based on the daily average stage at S-356/S-336. The USACE may turn pump units on and off within this range. Using S-356 to maintain the L-31N Canal between 5.5 and 5.8 feet allows the flexibility to keep G-211 and S-338 closed or reduce G-211 and S-338 discharge if conditions make this desirable."
15	SFWMD	There are places in the Draft EA where the potential inclusion in compliance calculations of S-356 as a new inflow point from the WCAs is suggested or inferred. While there should be general acknowledgement in the EA of the language of the Consent Decree on treatment of new inflows, there should also be recognition that the inclusion of S-356 in future Appendix A calculations for Long Term Limits will be considered and	Wording that the Technical Oversight Committee will evaluate whether the S-356 flows need to be considered in the settlement agreement calculations is included in Appendix C and Section 4.11.

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		decided by the Technical Oversight Committee.	
16	SFWMD	The monitoring plan detailed in Appendix C suggests a level of responsibility for implementing the monitoring plan that is outside the scope of current agreements between the Corps and SFWMD. The SFWMD is currently evaluating the level of effort that would be required to support field data collection and lab analyses that are proposed. The ability of the SFWMD to commit the necessary resources and staffing is dependent on further negotiations with the Corps and DOI regarding opportunities for federal funding or cost sharing of these tasks.	Noted. Appropriate modifications to the monitoring plan (Appendix C) have been made based on recent discussions with DOI and SFWMD. Staff has reached an agreement which requires SFWMD governing board for final approval. In addition to the cost share agreement between DOI and SFWMD, water managers, engineers, and hydrologists at the Corps, SFWMD, and ENP have jointly developed preliminary evaluation methodologies which are now listed in Appendix C, Section C.1.8.2.1, to evaluate the implementation of Increment 1 water management operations relative to its goals, objective and constraints consistent with the framework described in the Operational Strategy (page A-12 of Appendix A) and the field test monitoring plan (Appendix C). Water managers, engineers, and hydrologists at the Corps, SFWMD, and ENP have jointly developed a process for evaluating Increment 1 that has been incorporated into in Appendix A and Appendix C, Section C.1.8.2.1 and includes the following: Increment 1 operations updates and action items will be discussed on a weekly basis between water managers from USACE and SFWMD, as well as ENP when needed, to provide collective interpretation of results and evaluate implementation of Increment 1 operations relative to the Increment 1 goals, objectives, and constraints. USACE, SFWMD, and ENP water managers will meet monthly to discuss the collected data and the results of preliminary analyses, as well as system conditions and Increment 1 operations; additional technical staff from these agencies who are involved in the Increment 1 monitoring and data assessment efforts will also participate in the monthly coordination meetings, as needed. Results from these weekly and monthly coordination meetings, including

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			preliminary recommendations from water managers to incrementally modify the operational strategy (within the covered NEPA EA scope), will be further discussed with the PDT during regularly-scheduled interagency meetings to occur four times per year. PDT meetings will also include updates from the water quality and ecological monitoring sub-teams.
17	FDACS	Recent operational decisions have had significant, adverse impacts on growers in South Miami-Dade such that their crop productivity, livelihoods, and property values are jeopardized. It is essential that we begin to operate important project features, such as S-356, as they were intended so both the Everglades and the agricultural community can see some of the benefits the MWD Project was supposed to provide.	S-356 was authorized to return additional seepage to the L-31N Canal from WCA 3B and NESRS, resulting from implementation of the MWD Project. The Corps, Jacksonville District, is initiating the G-3273 and S-356 operations field test to raise the current operational stage constraint for inflows to NESRS at G-3273, and operate the S-356 pump station for control of seepage into the L-31N Canal. The Corps concurs on the importance of operating previously constructed features, such as S-356. The Corps and the SFWMD will continue to look at flooding concerns within the C&SF project area. In addition it is the Corps understanding that the SFWMD is actively assessing recent flooding concerns identified by agencies and stakeholders within the South Dade area, for further coordination with the Corps and other interested stakeholders.
18	FDACS	The FDACS supports selection of Alternative G as the Preferred Alternative, as it allows for a meaningful first use of facilities associated with the MWD Project while recognizing the significant uncertainty regarding flood protection for developed lands east of ENP and in the C-111 Basin. It also includes a mechanism to begin releases through S-197 slightly sooner while reducing the maximum discharge rate for Level 1 discharges. The Draft EA, with the proposed monitoring, provides the necessary justification for the recommendation of a one to two year field test for this important start to the MWD Project operations.	Thank you for your comment.
19	FDACS	FDACS is concerned regarding the EA statements regarding the use of Column 2 to alleviate high water conditions in	The Corps will operate in accordance with the approved Water Control Plan and NEPA.

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		WCA 3. Numerous times the EA states in one form or another that, "Under historical IOP and ERTP operations, the Column 2 mode of operations has also been used as an additional water management tool for WCA 3A high water conditions." While that may be true, it was not analyzed in either IOP or ERTP and should be discontinued outside the S-12 closure period. Continuing to divert WCA 3A regulatory releases and seepage flows from the Everglades into South Miami-Dade was not part of the authorized design of the MWD or C-111 Projects and FDACS vies Increment 1 as the first step in eliminating that practice.	
20	FDACS	We do not oppose ERTP's operational flexibility for WCA 3A and the S-12s but it should not be used to send more water into South-Miami Dade canals. Our experience has been that this contributes to a sustained high water table in the agricultural areas that has caused significant harm to crops and business losses for the landowners.	The field test represents a temporary deviation to ERTP. No significant effects are expected to flood control within South-Dade County as a result of implementation of the field test. This is a result of a significant reduction in WCA 3A regulatory release volume to the SDCS and inclusion of increased flood control releases from S-18C and S-197 to mitigate for increased risk to flood protection for South Dade areas which may be conditionally affected by the field test.
21	FDACS	1) Statements regarding the use of Column 2 to alleviate high water conditions in WCA 3 FDACS is concerned about the EA and Draft FONSI statements regarding the use of Column 2 to alleviate high water conditions in WCA 3. Numerous times the EA and Draft FONSI states in one form or another that" Under historical IOP and ERTP operations, the Column 2 mode of operations has also been used as an additional water management tool for WCA 3A high water conditions." (Additional examples are provided below.) While that may be true, it is not something that was analyzed in either the IOP or the ERTP and, as a result, is not authorized and should be discontinued outside the S-12 closure period. Continuing to divert WCA 3A regulatory releases and seepage flow from the Everglades into South Dade was not part of the authorized design of the MWD Projects or C-111 projects and not adequately analyzed for IOP or ERTP.	Please see response to comment 19 above.

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		Repeating this description throughout the document doesn't provide de facto authorization of operations that are not explicitly authorized. Page 2-2 First Paragraph last sentence: "Under historical IOP and ERTP operations, the Column 2 mode of operations has also been used as an additional water management tool for WCA 3A high water conditions." Page 2-3 Table 2-1 Alternative Descriptions Alternative A: "Column 2 Operations to manage WCA 3A during S-12 Seasonal Closure Period and high water as conducted under IOP/ERTP" Page 2-3 Section 2.1.1: "Column 2 operations would continue to be used to manage WCA 3A during the S-12 seasonal closure period (01 November through 14 July) and high water as conducted under IOP/ERTP." Page 2-3 to 2-4 Section 2.1.2 "Column 2 operations would continue to be used to manage WCA 3A during the S-12 seasonal closure period and high water as conducted under IOP/ERTP." Page 2-5 Section 2.1.5 mid second paragraph: "would not be used to manage high water between August 16th and October 31st, as may be periodically conducted under IOP/ERTP." Page 3-12 First Paragraph second to last sentence: "Under historical IOP and ERTP operations, the Column 2 mode of operations has also been used as an additional water management tool for WCA 3A high water conditions."	
22	FDACS	Uncertainty regarding maintaining the authorized purposes of the C&SF project and subsequent modifications: There is no conflict with authorized project purposes or uncertainty regarding maintaining the authorized purposes of the C&SF project and subsequent modifications. This is a one or two	Uncertainty arises concerning the compatibility of Alternatives E and G with the plan described in the C-111 South Dade GRR and EIS published in 1994 which would reduce damaging freshwater discharges to Manatee Bay and Barnes Sound, extend hydroperiods

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		year field test in an area where all restoration projects are incomplete and operated without long term permits under interim or transitional operational plans. There is no adverse impact to any authorized purpose of the project components anticipated to be operated under the terms of the Increment 1 Field Test. Page 2-15, paragraph 3 and Page 2-17 Table 2-7 : While appreciating the rationales applied on Page 2-15, paragraph 3, for carrying Alternatives E and G forward, there is no reason to assert uncertainty for maintaining authorized project purposes because there is no conflict with authorized project purposes. The inclusion of this uncertainty column on the Page 2-17 Table 2-7 indicates a difference in the Alternatives that does not really exist. Recommend removing the uncertainty for "Maintain the authorized purposes of the C & SF Project and subsequent modifications ..." designation from all alternatives and Table 2-7.	within the ENP eastern panhandle, and promote additional overland flows across the panhandle towards northeast Florida Bay. Uncertainty also arises concerning the compatibility of Alternatives E and G with the C-111 Spreader Canal Final Western Project PIR and EIS, published in 2011 which proposed to incrementally increase the operational stages maintained at S-18C with concurrent monitoring. Despite these uncertainties, Alternatives E and G were carried forward for detailed evaluation based on the following rationale: (1) potential minor adverse effects to Manatee Bay and Barnes Sound associated with salinity fluctuations from increased S-197 discharges would be temporary and spatially limited to nearshore areas within the southern estuaries; (2) detailed assessment the C-111 South Dade/CERP proposed eastern C-111 spreader canal feature has been deferred to the planned CERP C-111 Spreader Canal Eastern Project PIR); (3) incremental increases at S-18C are not expected to be implemented by the SFWMD during the planned duration of the Increment 1 field test; and (4) operating criteria for S-197 will be reassessed once construction of the C-111 South Dade NDA is constructed and operable, and/or upon completion of the Increment 1 field test. The NEPA requires federal agencies to consider environmental impacts of a proposed action, including reasonable alternatives to those actions. Potential uncertainties surrounding a proposed action should be openly communicated to the public in the interest of full disclosure. The above referenced uncertainties were identified during planning and evaluation of the field test and hence included within the NEPA documentation.
23	FDACS	Page 1-5, second paragraph, which provides background information regarding project authorizations, should be corrected as follows: The C-111 South Dade Project was	Current text within Section 1.3 regarding authorization and construction of the C-111 South Dade Project was modified as follows: The C-111 South Dade Project is

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		authorized by the Flood Control Act (FCA) of 1962 (PL 87-874). This Act authorized modifications to the existing C&SF Project as previously authorized by the FCAs of 1948 (PL 80-858) and 1954 (PL 83-566), The ENP-South Dade Conveyance System (SDCS) Project, authorized by the Flood Control Act of 1968, included the enlargement of existing canals and construction of new structures and pump stations.	part of the C&SF Project authorized by Section 203 of the Flood Control Act of 1948, Public Law 80-858, as modified by Section 203 of the Flood Control Act of 1968, Public Law 90-483The C-111 South Dade Integrated GRR and EIS was published in May 1994 (USACE 1994). This report described a plan to construct five pump stations and a levee-bounded retention/detention area.
24	FDACS	On Page 1-91.6, OPERATIONAL CONSTRAINTS, we recommend the following change: "C. No reduction in current flood protection". Delete "current" because current operations do not provide adequate flood protection.	Objectives and operational constraints for the field test were thoroughly vetted with the project delivery team during planning and evaluation of the field test. Based on current available information. it is the position of the Corps that current water management operations are consistent with and maintain the authorized purposes of the C&SF Project to provide flood control, water supply for municipal, industrial, and agricultural uses, prevention of saltwater intrusion, water supply for ENP, and protection of fish and wildlife. It is the Corps understanding that the SFWMD is actively assessing recent flooding concerns identified by agencies and stakeholders within the South Dade area, for further coordination with the Corps and other interested stakeholders.
25	FDACS	On Page 2-2, we recommend changing the last paragraph as follows: "Modified operational protocols for S-197 were included within Alternatives E and G to assess possible changes to flood protection for areas within South Miami-Dade County which may be affected during the field test by changes to the basin inflows from the S-331 pump station and increased seepage to the L-31N Canal south of the S-331 pump station, prior to the construction and operation of the C-111 South Dade Project NDA." These changes are needed because the plan begins S-197 releases sooner while reducing the maximum discharge rate for Level 1 discharges, but does not necessarily increase the volume of flood control discharges.	A letter dated June 30, 2014 was mailed to stakeholders, soliciting comments for the proposed action. The Corps received a letter from FDACS dated July 14, 2014 which requested the inclusion of operational changes to the C-111 Canal Structures (S-18C and S-197). The letter stated that the agricultural community in Miami-Dade has been repeatedly harmed by elevated water levels that adversely impact growers due to the lack of operational integration between the WCA, ENP, and SDCS, including the C-111 structures. Operational modifications at S-18C and S-197 were initially included in response to comments received during scoping. Further clarification is provided throughout the document.

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		On Page 2-15, second sentence of the last paragraph, the "Increased flood control releases" language also needs to modified.	The Corps does not anticipate adverse changes to the level of service for flood protection within South Dade due to the Increment 1 field test. Increased flood control releases from S-18C and S-197 were included within Alternatives E and G to mitigate for potential risks to flood protection for areas within South Dade which may be affected by a combination of the following water management factors during the field test: increased seepage to the L-31N Canal south of S-331 prior to completion of C-111 South Dade NDA; increased discharges from S-331 for 8.5 SMA flood mitigation (potentially offset by reduced S-331 discharges with limited WCA 3A regulatory releases to the SDCS); and operation of the downstream S-332 D pump station and/or the C-111 South Dade SDA to manage L-31N Canal stages during periods of increased inflows. Based on the hydrologic effects analysis described in Section 4.5.4.2 of the EA, Alternative G is expected to result in an increase to the total volume of S-197 discharges from 18 kAF to a range between 20-30 kAF (increase of 11-67%) over the historical hydrologic assessment period from July 2012 to June 2014 (during SFWMD operations of the CERP C-111 Spreader Canal project). Since increased utilization of S-18C and S-197 were included with Increment 1 as a flood protection measure, it is appropriate to reference these releases as "increased flood control releases" within the Increment 1 EA.
26	FDACS	6) Page 2-20 Section 2.4 PREFERRED ALTERNATIVE(S) The (S) after "Alternative" is not needed and should be deleted.	Thank you for the correction. The edit has been made.
27	FDACS	7) Page 2-23 Table 2-8 HYDROLOGY Alternative E NESRS:-"removal of G-3273 constraint" Recommend changing "removal" to "relaxation".	"Removal" of G-3273 will be changed to "relaxation" within Table 2-8. Based on the hydrologic effects evaluation described in Section 4.5.4.2 of the EA, the characterization of effects

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		Alternative G ENP Eastern Panhandle and Manatee Bay/Barnes Sound: "Minor to moderate impact with increased frequency and duration of low volume S-197 discharges; frequency and duration of S-197 discharges from 200-800 cfs (Level 1 S-197 gate opening range) will be reduced; and frequency and duration of flows greater than 800 cfs similar to effects discussed for No Action Alternative (refer to Section 4.5)." Recommend modifying above paragraph to remove "moderate" to be consistent with the rest of the document and change to "Negligible to minor impact from increased days with flow below 200 cfs being offset by a reduction in flow days above 200 cfs including a reduction of maximum flows from 800 cfs to 500 cfs during Level 1 S-197 discharges. Frequency and duration of flows greater than 800 cfs similar to No Action Alternative (refer to Section 4.5)."	to the ENP Eastern Panhandle and Manatee Bay/Barnes Sound has been changed to "minor" to better distinguish Alternative G from Alternative E. Alternative G is noted to reduce the frequency and duration of S-197 discharges from 200-800 cfs (Level 1 S-197 gate opening range).
28	FDACS	8) Page 2-24 Table 2-8 FLOOD CONTROL- Alternative A: South-Dade County: No significant effect, as less water is passed to the SDCS as compared with lOP. Recommend deleting "less water is passed to the SDCS as compared with IOP" since the data under ERTP operations shows otherwise. ERTP has led to significant damage to agricultural crops because of the large diversions of flow to the SDCS.	No changes are recommended to the "Flood Control" assessment in Table 2-8. Please reference the note at the beginning of Table 2-8: For the environmental effects evaluation of Alternative A (No Action), "Potential environmental effects of operations are discussed within the 2011 ERTP Final EIS (USACE 2011b) and are hereby incorporated by reference." Based on the hydrologic modeling analysis conducted for the ERTP EIS, the ERTP Recommended Plan was expected to pass less water to the SDCS than the predecessor IOP. Although a large volume of water was passed to the SDCS from WCA 3A during 2013 operations, the ERTP EIS Recommended Plan did not modify the previous IOP criteria for utilization of Column 2 operations, and a comparable release volume would have been anticipated if operations had remained under IOP for the 2013 hydro-meteorologic conditions.
29	FDACS	We recommend modifying Alternative E language as follows (consistent with the item 5 recommendation): Alternative E: "South-Dade County: no significant effect, due	No changes are recommended to the "Flood Control" assessment in Table 2-8. The Corps does not anticipate adverse changes to the level of service for flood protection within South Dade due to the Increment 1

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		to significant reduction in WCA 3A regulatory release volume to the SDCS and inclusion of modified operational protocols for S-197 to assess possible changes to flood protection for South Dade areas which may be conditionally affected by the field test."	field test. Increased flood control releases from S-18C and S-197 were included within Alternatives E and G to mitigate for potential risks to flood protection for areas within South Dade which may be affected by a combination of the following water management factors during the field test: increased seepage to the L-31N Canal south of S-331 prior to completion of C-111 South Dade NDA; increased discharges from S-331 for 8.5 SMA flood mitigation (potentially offset by reduced S-331 discharges with limited WCA 3A regulatory releases to the SDCS); and operation of the downstream S-332 D pump station and/or the C-111 South Dade SDA to manage L-31N Canal stages during periods of increased inflows. Since increased utilization of S-18C and S-197 were included with Increment 1 as a flood protection measure, it is appropriate to reference these releases as "increased flood control releases" within the Increment 1 EA.
30	FDACS	We recommend modifying Alternative F language as follows: Alternative F: "South-Dade County: Potential negligible to minor adverse effect due to net effect of reduced WCA 3A regulatory discharges to SDCS combined with increased flood control releases from S-331/S-173 and increased seepage to the L-31N Canal south of S-331 with no change to operating criteria for S-18C and S-197; additional inflow volumes to L31N Canal, if resultant from the field test, are expected to be primarily managed with the C111 South Detention Area using S-332 B, S-332C, and S-332D. "	Please see response to comment 29 above.
31	FDACS	9) Page 2-31 Table 2-8 AGRICULTURE- Alternative A: Negligible: Less water is passed to the SDCS as compared with IOP. Recommend deleting "less water is passed to the SDCS as compared with IOP" since the data under ERTP operations shows otherwise. ERTP has led to significant damage to agricultural crops because of the large diversions of flow to the SDCS.	Based on current available information, the Corps concludes that current water management operations are consistent with and maintain the authorized purposes of the C&SF Project to provide flood control, water supply for municipal, industrial, and agricultural uses, prevention of saltwater intrusion, water supply for ENP, and protection of fish and wildlife. The Corps and the SFWMD will continue to look at flooding concerns within the C&SF project area. In addition it is the

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			Corps understanding that the SFWMD is actively assessing recent flooding concerns identified by agencies and stakeholders within the South Dade area, for further coordination with the Corps and other interested stakeholders. The Corps strives to maintain open and cooperative communication with other Federal and state agencies, tribal representatives, and members of the general public and will continue to include all interested parties in its decision making process, considering all issues as they arise. The Corps is committed to continuing to work with agencies and stakeholders to improve deliveries to ENP, which will ultimately lead to less water delivered through the ENP-SDCS. Relaxation of G-3273 and utilization of S-356 is the best path forward for modifying current water management operations.
32	FWC	The FWC has fish, wildlife, and land management responsibilities for WCAs 2 and 3 which are managed as the Everglades and Francis S. Taylor Wildlife Management Area (EWMA). The FWC provided comments to the previously submitted draft EA on November 1, 2010, and September 5, 2013, and most recently on the scoping notice on July 11, 2014 (enclosed). Our letters provide for continued support for the relaxation of the G-3273 constraint that curtails flows from WCA 3A to ENP through NESRS. This is recognized as a positive step towards restoration by assisting in reducing high water levels in WCA 3A and furthering the MWD objective of providing increased flows to NESRS.	Thank you for your comment.
33	FWC	The proposed changes for the operating criteria at the S-197 structure include incremental discharges to assist in moderating high stages in the C-111 Canal. The incremental target flows will start with lower volumes and gradually increase. The S-197 target flows start at 50 to 100 cfs, followed by 100 to 150 cfs, and finally 500 cfs with a trigger of the S-178 Tailwater. The operating criteria changes include	Temporary minor adverse impacts have the potential to occur within ENP's Eastern Panhandle and Manatee Bay and Barnes Sound due to the shifting of some water flow from ENP Panhandle to Manatee Bay and the resultant increases in the frequency, duration, and volume of S-197 discharges; however significant impacts are not expected. Potential environmental effects would be

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		a reduction in discharge for level one opening of S-197 from approximately 800 cfs to 500 cfs. The incremental discharges at S-197 may increase the duration of discharge days; however, the flows will start with lower volumes. FWC staff recognizes that the field test duration is temporary and planned for approximately two years, with a minimum duration of one year. Since the field test will be short-term and temporary, incremental discharges would be preferred over high volume freshwater discharges at the S-197 structure to reduce abrupt changes in salinity within Manatee Bay and Barnes Sound.	limited in spatial extent to the nearshore areas of the southern estuaries. Operating criteria for S-197 will be reassessed once construction of the C-111 South Dade NDA is constructed and operable, and/or upon completion of the Increment 1 field test. It is the intention of the Corps that the operating criteria for S-197 will revert to the 2012 WCAs-ENP-SDCS Water Control Plan once all features of the C-111 South Dade and MWD Projects are constructed and operational, if supported by the analysis of the data collected during the field test.
34	FWC	FWC staff understands raising the maximum operating limit of the L-29 Canal is proposed as part of Increment 2 due to pending future acquisition of real estate interests along Tamiami Trail and additional NEPA documentation. The FWC supports raising the maximum operating limit in the L-29 Canal above 7.5 NGVD to alleviate potential prolonged high water conditions which pose a threat to fish, wildlife and habitats within the EWMA. FWC staff will continue to coordinate with the USACE for water management recommendations within the EWMA.	During the field test the current maximum operating stage limit in the L-29 Canal will be maintained at 7.5 feet NGVD. Efforts by the Corps and ENP to acquire real estate interests along Tamiami Trail Roadway are ongoing. The Corps will continue to coordinate with staff from the FWC regarding water management recommendations within the WCAs.
35	FWC	Additionally, the FWC appreciates the inclusion of "Table 4-2: State listed Species Within the Project Area and Species Determination For The Proposed Action" within the EA. The FWC concurs with the majority of the list, however, we recommend adding the Everglades mink and roseate spoonbill to the "may affect, not likely to adversely affect category."	The Corps has determined that the proposed action will have no effect on the Everglades mink and roseate spoonbill.
36	FWC	We find this project consistent with FWC's authorities under the Coastal Zone Management Act/Florida's Coastal Management Program and will continue to work with partnering agencies to conserve Florida's fish and wildlife resources.	Thank you for your comment.
37	FDOT	The FDOT's District Six staff reports that, although a primary concern of the restoration of ENP is to rehydrate NESRS, there is potential for negatively impacting flood protection in urban areas to the east. Recent projects, such as the 8.5 SMA, have improved the system for flood protection and as a result, the Corps would like to increase flows to NESRS.	No significant effects to South Dade County are expected regarding flood control under the Preferred Alternative, due to the significant reduction in WCA 3A regulatory release volume to the SDCS and inclusion of increased flood control releases from S-18C and S-197 to mitigate for increased risk of flood protection for

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			South Dade areas which may be conditionally affected by the field test. Potential effects to flood control are discussed within Section 4.6 of the EA.
38	FDOT	Based on the documentation submitted, the impacts to US-41 should be negligible considering the operational constraints documented on page 1-8 of the report.	Thank you for your comment. During the field test the current maximum operating stage limit in the L-29 Canal will be maintained at 7.5 feet NGVD, consistent with current water management operations.
39	FDOT	The only consideration to this operational constraint is the hydraulic feasibility. Considering that water in NESRS flows south, it is assumed that G-3273 is hydraulically down gradient of the L-29 Canal and US-41. If the slope of the hydraulic grade line is assumed to be 0.1 feet per mile, the stages in the L-29 Canal should be 0.7 feet higher than the stages at G-3273, since the monitoring station is 6.7 miles south of the L-29 Canal. This consideration should be raised with the Corps: *How will a level pool be maintained such that when stages at G-3273 are raised to 7.5 feet NGVD, if the stages in the L-29 Canal, 7 miles to the north, will be the same?*	Please refer to the Section 1.4 of the EA and the map provided in Figure 1-1. G-3273 lies within eastern ENP, approximately 2.5 miles west of the 8.5 SMA (Figure 1-1). An assessment of the typical hydraulic gradient between the L-29 Canal and G-3273 was included in Section 4.5 of the draft EA. Historical stage levels within NESRS from 2002-2014, as recorded in the L-29 Canal (average stage for S-333 TW gage and S-334 HW gage) and at the G-3273 monitoring gage, are shown in Figure 4-1 The daily hydrograph data from 2002 – 2014 was rank sorted to generate stage duration curves for the L-29 Canal and G-3273, which are shown in Figure 4-2. Under peak historical wet season stages, the typical stage gradient between the L-29 Canal and the G-3273 monitoring gage (located approximately 9 miles south of the L-29 Canal) is approximately 0.2 feet. Section 4.5 of the EA also includes an assessment of 2002-2014 historical flow data at S-333 and historical stage data for the L-29 Canal and G-3273 that was used to quantify the potential opportunity for hydrologic benefits to be realized through increased water stages and improved timing within NESRS with the Increment 1 G-3273 relaxation.
40	J. Capozzelli	I am writing to urgently ask you to ensure that Everglades restoration projects in the South Dade area are operated to achieve maximum ecological benefits. Any field tests and operational plans put in place must exclude flows through S-197 and keep water in the wetland habitats where it is needed for restoration to benefit birds and other wildlife. The Southern Everglades and Florida Bay contain vital foraging and nesting grounds that Roseate Spoonbills and other wading	Alternative G is expected to benefit ENP by increasing flows to NESRS. Alternative G best accomplishes this objective, while alleviating the concern of increased seepage to the L-31N Canal south of the S-331 pump station. Increased flood control releases from S-18C and S-197 were included within Alternatives E and G to mitigate for potential risks to flood protection for areas within South Dade which may be affected by a

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		birds depend upon.	combination of the following water management factors during the field test: increased seepage to the L-31N Canal south of S-331 prior to completion of C-111 south Dade NDA; increased discharges from S-331 for 8.5 SMA flood mitigation; and operation of the downstream S-33D pump station and/pr the C-111 South Dade SDA to manage L-31N Canal stages during periods of increased flows.
41		Releasing water in the wrong place negates the goals of the field test itself. The Army Corps cannot determine how the restoration projects interact or what they achieve if any water flow gained is simply sent to tide through the S-197 structure. I have read that this was proposed to accommodate a few landowners and would come at a cost of harming, rather than restoring, the Everglades and depriving it of needed freshwater.	Increased flows at S-197 doesn't negate the goals of increasing flows to NESRS and reduces the potential for the test to be stopped as a result of increased risk of flooding concerns. Field test duration is planned for approximately two years, with a minimum duration of one year. Temporary minor adverse impacts have the potential to occur within ENP's Eastern Panhandle and Manatee Bay and Barnes Sound due to the shifting of some water flow from ENP Panhandle to Manatee Bay and the resultant increases in the frequency, duration, and volume of S-197 discharges; however significant impacts are not expected. Operating criteria for S-197 will be reassessed once construction of the C-111 South Dade NDA is constructed and operable, and/or upon completion of the Increment 1 field test. It is the intention of the Corps that the operating criteria for S-197 will revert to the current 2012 WCAs-ENP-SDCS Water Control Plan once all features of the C-111 South Dade and MWD Projects are constructed and operational, if supported by the analysis of the data collected during the field test. A Monitoring Plan has been developed for the field test. The Corps Water Management Section's assessment of hydrometeorological conditions and stakeholder or agency input may suspend or discontinue the field test due to impacts greater than expected/discussed within the EA. The Corps continues to be committed to Everglades restoration efforts.
42	J. Capozzelli	Please reject Alternative G and find a better solution that will keep restoration efforts on track in the Southern Everglades	Please see response to comments 8 and 9 above. Alternatives were evaluated based on achievement of

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		and Florida Bay. I deeply admire the Everglades; I support restoration efforts and want to see that progress is being made to repair this unique ecosystem. This water must stay in restoration areas where it is needed – not pumped away where it will be lost to tide.	field test objectives and field test constraints. Alternative G best accomplishes these goals. The field test is an incremental step towards improving hydrologic conditions within NESRS and ENP.
43	J. Capozzelli	Please support restoration moving forward and protect the ecosystems of the Southern Everglades and Florida Bay. Please reject Alternative G and find a new alternative that will maximize restoration benefits. The interests of a few stakeholders should not trump the interests of the public who paid for these restoration projects and want to see them operated in a way that will provide maximum ecological benefits.	A letter soliciting comments was distributed for this action to request assistance in identifying issues and resources to be considered during the scoping process. During the comment period and planning stages of the project, FDACS and the SFWMD requested inclusion of operational changes to the C-111 Canal structures, including S-18C and S-197, within the field test due to their concerns over water levels experienced within agricultural lands located east of ENP. Since not all flood mitigation and seepage management features envisioned in the MWD and C-111 South Dade Projects are constructed, the field test Action Alternatives include consideration of additional water management operating criteria for features of the SDCS. Operational changes to S-197 proposed by the SFWMD and FDACS are included under Alternatives E and G to mitigate for potential increased risks to flood protection for areas within South Dade.
44	Florida Farm Bureau Federation	On behalf of the Florida Farm Bureau Federation we greatly appreciate the opportunity to review and comment on the EA and Draft FONSI for the first increment of the G-3273 and S-356 Pump Station Field Test and accompanying supporting documents. We are in receipt of comments from the FDACS as well as comments from the local Dade County Farm Bureau and are in agreement with their findings and concerns respectfully. It is apparent that operational decisions in the area have had a significant negative impact on farmers and residents as has been noted in their correspondence. As such we also agree with the selection of Alternative G as the preferred alternative.	Please see responses above, with respect to comments received from FDACS. It is the Corps understanding that the SFWMD is actively assessing recent flooding concerns identified by agencies and stakeholders within the South Dade area, for further coordination with the Corps and other interested stakeholders. Thank you for your comments.
45	Florida Farm Bureau Federation	It is also important to note that the Florida Farm Bureau Federation supports the balanced implementation of Everglades Restoration. The key word is “balanced” which	The Corps strives to maintain open and cooperative communication with other Federal and state agencies, tribal representatives, and members of the general

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		means decisions in the South Dade area should be made with an understanding and consideration of individual property rights as well as environmental restoration. The voice of the farmers and residents in this area has been largely ignored for quite some time and therefore it is time they are given due consideration in this process since they too are a vital component of the economy of South Dade as well as the State of Florida.	public and will continue to include all interested parties in its decision making process, considering all issues as they arise. Thank you for your comments.
46	Florida Farm Bureau Federation	Our organization looks forward to continued coordination and cooperation from state and federal agencies as we move forward with restoration efforts throughout the Everglades system. We will also remain vigilant in our efforts to strive for a balanced approach throughout the restoration process as decisions are made. Let's not lose sight that the ultimate goal in this effort is to work toward sustainability on all fronts.	The Corps strives to maintain open and cooperative communication with other Federal and state agencies, tribal representatives, and members of the general public and will continue to include all interested parties in its decision making process, considering all issues as they arise. Thank you for your comments.
47	Florida Farm Bureau Federation	One final note of concern specific to the draft report is in section 3.21 Agriculture. We strongly suggest the removal of the last sentence in this section as the word "Extensive" has not been qualified or quantified and therefore appears to be editorial in nature rather than scientifically based.	Proposed edit has been made to the EA.
48	Florida Keys Fishing Guides Association	The southern Everglades and Florida Bay are vital habitat for the bonefish, tarpon, and other sport fish that allow us to stay in business. Increased freshwater flows are needed to restore coastal habitat areas in the southern Everglades and improve the salinity of Florida Bay to ensure that these fish populations are healthy and sustainable into the future. The C-111 Spreader Canal project is already delivering some early benefits to these areas. Please do not undo this progress by choosing an alternative that will redirect waters intended for restoration out to tide.	The Corps is committed to Everglades restoration. The MWD Increment 1 field test will be the first increment in a series of three related, sequential efforts that will result in a comprehensive integrated water control plan, referred to as the COP, for the operation of the water management infrastructure associated with the MWD and C-111 South Dade Projects. The incremental approach to the development of the COP will 1) allow interim benefits towards restoration of the natural systems, 2) reduce uncertainty of operating the components of the MWD and C-111 South Dade Projects, and 3) provide information to complete the COP efficiently. The overarching project need for the field test is to increase the availability of S-333 for water deliveries from WCA 3A to ENP through NESRS for the benefit of natural resources. Operating criteria for S-197 will

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			be reassessed once construction of the C-111 South Dade NDA is constructed and operable, and/or upon completion of the Increment 1 field test.
49	Florida Keys Fishing Guides Association	The Florida Keys Fishing Guides Association urges you to protect the Everglades and Florida Bay by finding an alternative that will keep water in restoration areas where it is needed. None of the alternatives represent a step forward for the restoration of these areas. Please ensure that no additional flows of water are sent to tide through the S-197 structure.	Please see response to comment 48 above.
50	Florida Keys Fishing Guides Association	Releasing water in the wrong place effectively negates the goals of the field test itself. The Army Corps cannot determine how the restoration projects interact or what they achieve if any water flow gained is simply sent away through the S-197 structure. This was proposed to accommodate a few landowners and would come at a cost of harming, rather than restoring, the Everglades and depriving it of needed freshwater. This water must stay in restoration areas where it is needed – not pumped away where it will be lost to tide.	Please see response to comment 48 above.
51	Florida Keys Fishing Guides Association	Please reject Alternative G and find a better solution that will keep restoration efforts on track in the Southern Everglades and Florida Bay. The Florida Keys Fishing Guides Association supports Everglades restoration efforts and wants to make sure progress is being made to repair this unique ecosystem.	Please see response to comment 48 above.
52	Dade County Farm Bureau	Our organization has been closely following the operations of management of water in the South Dade Area for many years. We have also attended meetings and made public comment on the impacts that recent operational decisions have had on the growers of South Dade. To say that it has had a negative impact would be an understatement. The financial losses and private property rights that some of our members have experienced, need to be recognized by the governmental entities that are responsible.	Based on current available information, the Corps concludes that current water management operations are consistent with and maintain the authorized purposes of the C&SF Project to provide flood control, water supply for municipal, industrial, and agricultural uses, prevention of saltwater intrusion, water supply for ENP, and protection of fish and wildlife. The Corps and the SFWMD will continue to look at flooding concerns within the C&SF project area. In addition it is the Corps understanding that the SFWMD is actively assessing recent flooding concerns identified by agencies and stakeholders within the South Dade area, for further coordination with the Corps and other interested stakeholders. The Corps strives to maintain

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			open and cooperative communication with other Federal and state agencies, tribal representatives, and members of the general public and will continue to include all interested parties in its decision making process, considering all issues as they arise. The Corps is committed to continuing to work with agencies and stakeholders to improve deliveries to ENP, which will ultimately lead to less water delivered through the ENP-SDCS. Relaxation of G-3273 and utilization of S-356 is the best path forward for modifying current water management operations.
53	Dade County Farm Bureau	After viewing the Florida State Clearing House comments we believe that the water issues are finally starting to be addressed. The most important dialog we can have is to be working together to solve the problems. FDACS supports the selection of Alternative G as the preferred alternative. This allows for the pumping stations approved in the MWD Project to be operating as designed and voted, approved and funded approved by Congress. The potential flooding of the residents and agricultural lands in South Dade are being tested. Allowing for emergency water releases through S-197 can assist with the current sub-surface flooding that has been occurring for the past 2-3 years.	Increased flood control releases from S-18C and S-197 were included within Alternatives E and G to mitigate for potential risks to flood protection for areas within South Dade which may be affected by a combination of the following water management factors during the field test: increased seepage to the L-31N Canal south of S-331 prior to completion of C-111 south Dade NDA; increased discharges from S-331 for 8.5 SMA flood mitigation; and operation of the downstream S-33D pump station and/pr the C-111 South Dade SDA to manage L-31N Canal stages during periods of increased flows. S-197 will be operated consistent with Appendix A during the field test. Based on current available information, the Corps concludes that current water management operations are consistent with and maintain the authorized purposes of the C&SF Project to provide flood control, water supply for municipal, industrial, and agricultural uses, prevention of saltwater intrusion, water supply for ENP, and protection of fish and wildlife. The Corps and the SFWMD will continue to look at flooding concerns within the C&SF project area. In addition it is the Corps understanding that the SFWMD is actively assessing recent flooding concerns identified by agencies and stakeholders within the South Dade area,

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			for further coordination with the Corps and other interested stakeholders. The Corps is committed to continuing to work with agencies and stakeholders to improve deliveries to ENP, which will ultimately lead to less water delivered through the ENP-SDCS. Relaxation of G-3273 and utilization of S-356 is the best path forward for modifying current water management operations.
54	Dade County Farm Bureau	We support the selection of Alternative G as the preferred alternative and we would also like to comment that Hurricane Season begins June 1.	Thank you for your comment.
55	Florida House of Representatives (Representative Holly Raschein District 120)	I am writing in response to your proposed first increment of testing of the MWD Project and to express concerns with the persistent high water table plaguing farmers in south Miami-Dade county. Agriculture is very important in my district and whenever I meet with growers in the area water management problems top their list of concerns.	The Corps is committed to continuing to work with agencies and stakeholders to improve deliveries to ENP, which will ultimately lead to less water delivered through the ENP-SDCS. Relaxation of G-3273 and utilization of S-356 is the best path forward for modifying current water management operations.
56	Florida House of Representatives (Representative Holly Raschein District 120)	Water Management District staff has provided me with a briefing on the current proposal (Increment 1) to begin interim use of the facilities constructed for the MWD Project. I fully support the alternative recommended on your report and sincerely hope that we can look back on this as a turning point in not only restoring sheet flow into ENP, but also to finally solving the high water problem that has been so devastating to the agricultural economy. I urge you to include in your operating plans limited use of the S-197 structure to provide much needed flood relief to agricultural produces in south Miami-Dade County.	Increased flood control releases from S-18C and S-197 were included within Alternatives E and G to mitigate for potential risks to flood protection for areas within South Dade which may be affected by a combination of the following water management factors during the field test: increased seepage to the L-31N Canal south of S-331 prior to completion of C-111 south Dade NDA; increased discharges from S-331 for 8.5 SMA flood mitigation; and operation of the downstream S-33D pump station and/pr the C-111 South Dade SDA to manage L-31N Canal stages during periods of increased flows. S-197 will be operated consistent with Appendix A during the field test. It is the Corps understanding that the SFWMD is actively assessing recent flooding concerns identified by agencies and stakeholders within the South Dade area, for further coordination with the Corps and other interested stakeholders.
57	Florida House of Representatives (Representative Holly Raschein	It is very important to recognize that while this is a vital first step for MWD and Everglades restoration, it does not address the biggest problem for agriculture, which is the continuing artificially high water table in the agricultural area as a result	Based on current available information, the Corps concludes that current water management operations are consistent with and maintain the authorized purposes of the C&SF Project to provide flood control, water supply

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	District 120)	of how the canal system is being operated. I attended both the special workshops held in Homestead last year, and I was glad to see you and your staff there to hear from the community. It is clear that the water management system is not providing adequate protection for private property and that necessary change must begin now.	for municipal, industrial, and agricultural uses, prevention of saltwater intrusion, water supply for ENP, and protection of fish and wildlife. The Corps and the SFWMD will continue to look at flooding concerns within the C&SF project area. In addition it is the Corps understanding that the SFWMD is actively assessing recent flooding concerns identified by agencies and stakeholders within the South Dade area, for further coordination with the Corps and other interested stakeholders. The Corps strives to maintain open and cooperative communication with other Federal and state agencies, tribal representatives, and members of the general public and will continue to include all interested parties in its decision making process, considering all issues as they arise. The Corps is committed to continuing to work with agencies and stakeholders to improve deliveries to ENP, which will ultimately lead to less water delivered through the ENP-SDCS. Relaxation of G-3273 and utilization of S-356 is the best path forward for modifying current water management operations.
58	Audubon of Florida Everglades Foundation National Parks Conservation Association	**Proposed alternatives represent a step backward in restoration:** With the completion of the 1-Mile Tamiami Trail Bridge, the C-111 Spreader, and the progress made in projects such as the Picayune Strand, and C-44/Indian River Lagoon-South, Everglades restoration has made great strides over the past five years. We are also seeing that restoration works. Sadly, the preferred alternative in the EA and Draft FONSI takes a step backward from the restoration progress we have made thus far and put us on a trajectory that favors local interests of a few individuals over the regional benefits that Everglades restoration was intended to provide to millions of stakeholders. The C-111 Spreader project has been operational for nearly	The Corps is committed to Everglades restoration. The MWD Increment 1 field test will be the first increment in a series of three related, sequential efforts that will result in a comprehensive integrated water control plan, referred to as the COP, for the operation of the water management infrastructure associated with the MWD and C-111 South Dade Projects. The incremental approach to the development of the COP will 1) allow interim benefits towards restoration of the natural systems, 2) reduce uncertainty of operating the components of the MWD and C-111 South Dade Projects, and 3) provide information to complete the COP efficiently.

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		three years and is showing signs of hydrologic improvement and ecological benefits in Taylor Slough and northeastern Florida Bay. The C-111 Spreader was advertised to the restoration community and most recently to Congress as a project that would undergo a five year phased implementation as a means to ramp up project performance through annual 0.1 foot stage increases at the S-18C structure, resulting in even greater ecological benefits to Taylor Slough and Florida Bay. The alternatives proposed provide a false choice between undermining ramp up of operations at S-18C or draining areas of Taylor Slough that are the focus of hydrological restoration. Neither of these actions is consistent with restoration objectives and should not be included in proposed operational plans.	The overarching project need is to increase the availability of S-333 for water deliveries from WCA 3A to ENP through NESRS for the benefit of natural resources. Steps will be taken in the future to incorporate the C-111 Spreader Canal Western Project into the federally authorized C&SF Project once the project's consistency with the 2014 WRRDA authorized project has been documented and approved by the Corps, and a Project Partnership Agreement with the SFWMD has been executed. Concurrent with the Increment 1 field test, the SFWMD will continue to operate their expedited C-111 Spreader Canal Western Project.
59	Audubon of Florida Everglades Foundation National Parks Conservation Association	**Alternative G is damaging and misguided:** The preferred alternative (Alternative G) not only precludes us from this phased implementation of the C-111 Spreader, it also reduces overall restoration benefits by diverting more freshwater away from the Everglades through the S-197 into lower Biscayne Bay, causing harm to that already stressed ecosystem. Alternative G was preferred by FDACS and the SFWMD because it provides farmers in low lying, flood prone areas with enhanced flood control. In fact, the preferred alternative favors flood control over restoration. In a letter to the Corps dated July 14, 2014, FDACS claimed that "all agricultural land east of the ENP and the Frog Pond/C-111 project and in the vicinity of the C-111 West Spreader Canal Project" have been impacted by elevated water levels. However, no details on flooding dates, locations, or levels were provided. In the C&SF Project CERP C-111 Spreader Canal Western Project Final Integrated PIR and EIS, there were safeguards for landowners built into this phased implementation plan to test and monitor the impacts of incremental increases in water stage at S-18C. In fact, as part of regular operations of the spreader project and in response to specific flood control concerns, the report explains that "factors such as antecedent	A letter dated June 30, 2014 was mailed to stakeholders, soliciting comments for the proposed action. The Corps received a letter from FDACS dated July 14, 2014 which requested the inclusion of operational changes to the C-111 Canal Structures (S-18C and S-197). The letter stated that the agricultural community in Miami-Dade has been repeatedly harmed by elevated water levels that adversely impact growers due to the lack of operational integration between the WCA, ENP, and SDCS, including the C-111 structures. Based on current available information, the Corps concludes that current water management operations are consistent with and maintain the authorized purposes of the C&SF Project to provide flood control, water supply for municipal, industrial, and agricultural uses, prevention of saltwater intrusion, water supply for ENP, and protection of fish and wildlife. The Corps and the SFWMD will continue to look at flooding concerns within the C&SF project area. In addition it is the Corps understanding that the SFWMD is actively assessing recent flooding concerns identified by agencies and stakeholders within the South Dade area, for further coordination with the Corps and other

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		water levels, local storm activity and predicted major storm events would be considered along with the above prescribed monitoring data to identify if the current incremental water level changes would exacerbate flooding." In the current EA and Draft FONSI and in response to flooding claims made by FDACS on behalf of south Dade farmers, no such systematic or quantitative approach was taken to substantiate elevated water claims that were made and yet these claims were used to justify Alternative G as the preferred alternative. Our review of the monitoring data from the area shows no obvious connection between operation of the C-111 Spreader project and increased groundwater levels to the east that may have contributed to flooding in 2013. In fact, high groundwater levels coincide with large rainfall events more than local structure operations. However, because we value farming in the region and its contribution to our economy, we support further investigation and modeling to identify the causal factors behind these claims. Such an analysis will be essential as we proceed with Everglades restoration and as sea level continues to rise.	interested stakeholders. Operational modifications at S-18C and S-197 were initially included in response to comments received during scoping. Further clarification is provided throughout the document. Increased flood control releases from S-18C and S-197 were included within Alternatives E and G to mitigate for potential risks to flood protection for areas within South Dade which may be affected by a combination of the following water management factors during the field test: increased seepage to the L-31N Canal south of S-331 prior to completion of C-111 south Dade NDA; increased discharges from S-331 for 8.5 SMA flood mitigation; and operation of the downstream S-33D pump station and/pr the C-111 South Dade SDA to manage L-31N Canal stages during periods of increased flows. It is the Corps understanding that the SFWMD is actively assessing recent flooding concerns identified by agencies and stakeholders within the South Dade area, for further coordination with the Corps and other interested stakeholders. The C-111 Spreader Canal Western Project will continue to be operated by SFWMD and provide flows to Taylor Slough. The SFWMD efforts to monitor the impacts of the project operation and ensure protection of privately-owned lands in the vicinity of the C-111 Spreader Canal Western Project area remain ongoing and inconclusive based on the limited period of monitoring data collected since June 2012. To mitigate for potential increased risk to flood protection in south Miami-Dade County areas, which may be affected by increased water levels in NESRS and associated water management operations within south Miami-Dade County during the field test, low volume releases from S-197 are included as components of Alternative G. The field test will include assessment of the combined

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			effects of increased seepage east resultant from increased stage levels in NESRS and will incorporate the ongoing SFWMD operations, monitoring, and performance assessments conducted as part of the C 111 Spreader Canal Western Project.
60	Audubon of Florida Everglades Foundation National Parks Conservation Association	**The Corps and SFWMD need to quantitatively assess flood risk:** A primary objective of Increment 1 testing is to relax the G-3273 constraint from 6.8 feet NGVD up to 7.5 feet. By relaxing this constraint, SFWMD officials have argued that farmers will be taking on additional flood risk, mainly because the C-111 South Dade North Detention Area has not yet been constructed. The lack of this detention area, according to water managers, will result in more leakage of water out of the system that may impact South Dade farmers. However, there has been no analysis of data to quantify what the risk to farmers, if any, might actually be. Assessing the potential for additional risk is reasonable and warranted. First, water levels at G-3273 have exceeded 6.8 feet nearly every year throughout the period of record (> 20 years). Second, the proposed operation of S-356 is very limited during wet periods. Therefore, it possibility that the S-356 would significantly increase flood risk seems remote and some evidence is necessary to support the hypothesis of additional flood risk. An analysis of long term structure, well, and meteorological data in South Dade would elucidate the myriad factors contributing to high groundwater levels in the region and help managers to quantify the farmers' risk of flooding by relaxing G-3273 stages. Moreover, without this analysis, it is not possible to determine if the proposed S-197 operations are commensurate with the presumed increased risk. In the Draft EA and FONSI, we see no technically defensible justification for the amount of S-197 releases needed to compensate for the presumed increased flood risk that farmers would endure with Increment 1 of testing. The language in the EA and Draft FONSI is loaded with conditional terms such as "potential flood risks," "may be affected," and "may result in,"	The flood control assessments conducted for the alternatives included a quantitative evaluation of potential effects to high water conditions within WCA 3A and a qualitative assessment of potential effects to the South-Dade County basin (south of the S-331 pump station), which is provided flood protection by operation of the S-332B/S-332C/S-332D pump stations completed under the C-111 South Dade Project and through operation of the L-31N and C-111 Canal control structures (S-176, S-177, S-18C, and S-197). It is the Corps understanding that the SFWMD is actively assessing recent flooding concerns identified by agencies and stakeholders within the South Dade area, for further coordination with the Corps and other interested stakeholders. Water managers, engineers, and hydrologists at the Corps, SFWMD, and ENP have jointly developed a process for evaluating Increment 1 that has been incorporated into in Appendix A and Appendix C, Section C.1.8.2.1 and includes the following: Preliminary methodologies for water managers to analyze the Increment 1 Field Test and evaluate implementation of Increment 1 operations relative to the Increment 1 goals, objectives, and constraints are listed below in A. through J (refer to Section C.1.8.2.1 of Appendix C). These analyses will complement the overall monitoring plan and will be used to assess and evaluate the achievement of several of the stated water management objectives from the Increment 1 monitoring plan, including to: (1) ensure existing levels of flood protection are maintained within the northern

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		yet somehow it is concluded that Alternative G "best alleviates this concern." Over the two year projection period considered (July 2012 to June 2014), the report estimates that Alternative G will increase S-197 discharges by 2,000 to 12,000 acre ft. These discharges occur almost exclusively in the wet season and wet years when the proposed S-356 operation in Increment 1 is not operational. Clearly, then, the sole reason for including the S-197 operations was to address the unsubstantiated claims of flooding and not to compensate for S-356 operations. The proposed S-197 operations are unrelated to MWD elements or operations, and unsupported with objective analysis and impede implementation of the promised benefits from the C-111 N Spreader Project.	L-31N Basin (between S-335 and S-331); (2) ensure existing levels of flood mitigation are maintained within the protected portion of the 8.5 SMA; (3) determine whether the Increment 1 contribute to flooding within the C-111 basin; and (4) determine whether the Increment 1 operational changes at S-197 are necessary to ensure existing levels of flood protection are maintained within the C-111 Basin (south of S-176), including assessment of the trigger criteria used for S-197 gate openings. These analyses as well as Increment 1 operations updates and action items will be discussed on a weekly basis between water managers from USACE and SFWMD, as well as ENP when needed, to provide collective interpretation of results and evaluate implementation of Increment 1 operations relative to the Increment 1 goals, objectives, and constraints. USACE, SFWMD, and ENP water managers will meet monthly to discuss the collected data and the results of preliminary analyses, as well as system conditions and Increment 1 operations; additional technical staff from these agencies who are involved in the Increment 1 monitoring and data assessment efforts will also participate in the monthly coordination meetings, as needed. Results from these weekly and monthly coordination meetings, including preliminary recommendations from water managers to incrementally modify the operational strategy (within the covered NEPA EA scope), will be further discussed with the PDT during regularly-scheduled interagency meetings to occur four times per year. PDT meetings will also include updates from the water quality and ecological monitoring sub-teams. The preliminary evaluation methodologies have been added to Appendix C, Section C.1.8.2.1 and includes the following: "I. Quantify the effects of the S-178 TW trigger criteria

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			for S-197 discharges on flood damage reduction performance within the C-111 South Dade Basin and describe observed ecological effects within the ENP Taylor Slough Basin, ENP Eastern Panhandle, and Manatee Bay/Barnes Sound. METHODOLOGY: The Florida Department of Agriculture and Consumer Services (FDACS) and the SFWMD requested inclusion of operational changes to the C-111 Canal structures, including S-18C and S-197, within the field test due to their concerns over water levels experienced within agricultural lands located east of ENP. Water levels observed at the following monitoring gauge locations during the Increment 1 field test (if data is available) will be evaluated using the rainfall frequency data and comparison with the corresponding stage level in the intra-annual stage frequency curves developed for the pre-project base conditions (pre-project base condition analysis methodology was previously summarized under item B): G-613, G-3350, TSB, G-864A, G-3620, G-3355, G-3901, G-789, G-3336, and G-3338; the initial set of wells recommended to assess regional groundwater levels in the South Dade area was developed following coordination with the SFWMD. Show S-178 and S-197 discharges under this test (monthly/seasonal/annual) and also tabulate/plot to compare with intra-annual flow frequency exceedance curves for pre-project base conditions (July 2002 through May or June 2015). Identify timing and frequency of S-178 trigger criteria during the Increment 1 field test. Assessment by water managers will be integrated with input from the ecological monitoring sub-team. “ During the Increment 1 field test, the S-356 pump station will manage seepage from NESRS to the L-31N Canal resulting from the relaxation of the G-3273 stage constraint on S-333, returning this seepage volume to

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			NESRS and away from the urbanized areas of central Miami-Dade County. Increased flood control releases from S-18C and S-197 were included within Alternatives E and G to mitigate for potential risks to flood protection for areas within South Miami-Dade County which may be affected during the field test by changes to the basin inflows from the S-331 pump station and increased seepage to the L-31N Canal south of the S-331 pump station, prior to the construction and operation of the C-111 South Dade Project NDA. Any increased seepage to the L-31N Canal south of the S-331 pump station will not be able to be managed by the S-356 pump station. For Increment 1, the cause of the cited increased potential risk to flood protection for areas within South Miami-Dade County is therefore independent from the S-356 operations, except under conditions where the S-356 is turned off due to WCA 3A stages exceeding the Increment 1 Action Line; when S-356 is turned off, higher stages in NESRS from the field test relaxation of the G-3273 constraint may further result in additional discharges from G-211 and S-331 to South Miami-Dade County. The net effect of reduced WCA 3A regulatory discharges to NESRS combined with increased flood control releases from S-331/S-173 and increased seepage to the L-31N Canal south of S-331 is not able to be quantified prior to completion of the field test and associated hydrologic monitoring. The field test hydrologic monitoring will aid in quantifying both long-term and intra-annual/seasonal effects of increased stages within NESRS. Additional inflow volumes to L-31N Canal, if resultant from the field test, are expected to be primarily managed with the C-111 South Detention Area using S-332 B, S-332C, and S-332D, given the significant reduction in WCA 3A regulatory releases to the SDCS.

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			The C-111 Spreader Canal Western Project will continue to be operated by SFWMD and provide flows to Taylor Slough. The SFWMD efforts to monitor the impacts of the project operation and ensure protection of privately-owned lands in the vicinity of the C-111 Spreader Canal Western Project area remain ongoing and inconclusive based on the limited period of monitoring data collected since June 2012. To mitigate for potential increased risk to flood protection in south Miami-Dade County areas, which may be affected by increased water levels in NESRS and associated water management operations within south Miami-Dade County during the field test, low volume releases from S-197 are included as components of Alternative G. The field test will include assessment of the combined effects of increased seepage east resultant from increased stage levels in NESRS and will incorporate the ongoing SFWMD operations, monitoring, and performance assessments conducted as part of the C 111 Spreader Canal Western Project. To address stakeholder concerns regarding the impact of Increment 1 operations, if any, on flooding within South Dade Agricultural area from south of the S-331 structure to the S-197 structure, the USACE will rely upon the SFWMD to continue monitoring and perform the flood impact analysis required in the C-111 Spreader Canal Western Project Monitoring Appendix. The USACE will supplement the SFWMD flood impact analysis with an assessment of groundwater stages and structure flows that occur in areas south of the S-331 structure, north of the S-176 control structure. The EA (Section 2.1.5) and Operational Strategy documents that additional S-197 discharges (above S-197 discharge events under the 2012 WCP operating criteria) would only occur under conditions when the WCA 3A stage is above the Increment 1 Action Line

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			(Figure 2-1 and Appendix A), S-18C is fully open, and the tailwater stage at S-178 exceeds 2.4 feet NGVD. When the WCA 3A stage is above the Increment 1 Action Line, the S-356 pump station is turned off to allow S-333 to make maximum releases to NESRS subject only to the L-29 constraint. Under normal hydrologic conditions during the 2002-2014 hydrologic assessment period, as characterized by mean water levels on Figure 3-1 of the EA, WCA 3A stages would be expected to exceed the Increment 1 Action Level and trigger the first criteria for Increment 1 additional S-197 low-volume releases during the months of September and October; under extreme wet hydrologic conditions, WCA 3A stages during 2012-2014 have historically exceeded the Increment 1 Action Level for all or portions of the period from late May through mid-December. Given the inability to precisely forecast the hydrologic conditions that will be observed during the proposed field test, a comprehensive assessment of historical data was conducted within the EA to anticipate the potential hydrologic effects of the alternatives. When the WCA 3A stage does not exceed the Increment 1 Action Level, which is expected to include most of the early to middle wet season (e.g. June through August) during normal hydrologic conditions, S-356 will be used to control the stage in the L-31N Canal between 5.5 and 5.8 feet NGVD.
61	Audubon of Florida Everglades Foundation National Parks Conservation Association	**Proposed alternatives are unacceptable:** In conclusion, we find all of the proposed alternatives, and in particular Alternative G, unacceptable. By ignoring the phased implementation schedule of the C-111 Spreader, these operations would take a step backward from our current path of restoration and would be based on politics rather than science. Although agency staff have verbally suggested that these proposed changes in S-197 operations will sunset when Contract 8 is in place, the language in the EA and Draft FONSI is much less clear. In fact, the document states that managers will revert to the current S-197 operations "if	Please see response to comment 58 above. Incremental increases at S-18C are not expected to be implemented by the SFWMD during the planned duration of the field test. Operating criteria for S-197 will be reassessed once construction of the C-111 South Dade NDA is constructed and operable, and/or upon completion of the Increment 1 field test. It is the intention of the Corps that the operating criteria for S-197 will revert to the 2012 WCAs-ENP-SDCS Water Control Plan (USACE 2012c) once all features of the C-111 South Dade and MWD Projects are constructed and

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		supported by the analysis of data collected during the field test" and "will be reassessed" when the NDA is operable and/or the test is completed. In other words, it is not a definitive sun setting of these proposed operational changes at S-197 and will likely represent a permanent withdrawal of expected C-111 Spreader benefits. Our position is that restoration should proceed as planned in the recently authorized C-111 PIR and EIS and that any operational changes at S-197 should be based on rigorous modeling and analysis of data and that operations only be modified as needed through knowledge gained from modeling, monitoring, and assessment of new information following project implementation.	operational, if supported by the analysis of the data collected during the field test.
62	Everglades Law Center	For the reasons explained below, the draft EA does not comply with the requirements of the NEPA. The Corps' selection of Alternative G as its preferred alternative is arbitrary and capricious as it is based on unsupported assertions that doing so is necessary to avoid flooding in local agricultural areas. The Corps further fails to adequately examine the potentially significant environmental impacts associated with sending flows through the S-197 structure. These impacts include diverting significant amounts of freshwater away from Florida Bay and Taylor Slough where it is ecologically needed and impeding the ability of other CERP projects to deliver water to ENP. We urge the Corps to abandon its plans to utilize the S-197 structure and select an alternative that is truly aimed at helping restore the natural system.	The project is in full compliance with NEPA. Environmental effects for each resource are discussed in Section 4.0. Adverse environmental effects associated with implementing the Preferred Alternative are expected to be minimal based on the short duration of the field test and the generally beneficial nature of this action. Temporary minor adverse impacts have the potential to occur within ENP's Eastern Panhandle and Manatee Bay and Barnes Sound due to increases in the frequency, duration, and volume of S-197 discharges estimated from a period of analysis limited to historical operations between July 2012 and June 2014; however significant impacts are not expected. Potential environmental effects would be limited in spatial extent to the nearshore areas of the southern estuaries. This information is fully disclosed within the NEPA document. The C-111 Spreader Canal Western Project will continue to be operated by SFWMD and provide flows to Taylor Slough.
63(I)		**I. The National Environmental Policy Act** The NEPA" is America's "basic national charter for protection of the environment." 40 C.F.R. § 1500.1(a). NEPA ensures that federal agencies "will have available, and will	Field test duration is planned for approximately two years, with a minimum duration of one year. A monitoring plan has been developed for the field test to evaluate potential effects as a result of the field test. The impacts of the field test were determined not to be

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		carefully consider, detailed information concerning significant environmental impacts" and that such information "will be made available to the larger [public] audience." Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349 (1989). To this end, NEPA requires federal agencies to prepare a detailed Environmental Impact Statement (EIS) for any "major federal action significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(C). To determine whether the environmental impact of a proposed project is significant enough to warrant the preparation of an EIS, the agency will often prepare an Environmental Assessment (EA). An EA is "a concise public document that briefly provides evidence and analysis for determining whether to prepare an EIS or a finding of no significant impact." 40 C.F.R. § 1508.9. See also 33 C.F.R. § 230.10. The Eleventh Circuit has held that when an EA is performed on a project, the Corps must take a "hard look" and "must make a convincing case" for a Finding of No Significant Impact and decision not to perform an EIS. Hill v. Boy, 144 F.3d 1446 (11th Cir. 1990). If "substantial questions as to whether a project…may cause significant degradation of some human environmental factor," an EIS must be prepared. Idaho Sporting Congress v. Thomas, 137 F.3d 1146, 1149 (9th Cir. 1998). **When NEPA Requires the Preparation of an EIS** The Council on Environmental Quality ("CEQ") has promulgated regulations to guide agencies in determining whether a proposed project will have "significant" impacts to the environment. See 40 C.F.R. § 1508.27. Whether an action will have a "significant" impact on the environment, thus warranting the preparation of an EIS, requires considerations of both "context" and "intensity." "Context" means that the significance of an action must be analyzed in several different contexts (i.e. national, regional, and local significance of the action). "Intensity" refers to the severity of the impact.	significant as discussed in the FONSI. An EIS is not warranted. The Corps Water Management Section's assessment of hydrometeorological conditions and stakeholder or agency input may suspend or discontinue the field test due to impacts greater than expected/discussed within the EA. The project is in full compliance with the NEPA.

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		Courts have held that a plaintiff need not show that significant effects will in fact occur, but if a plaintiff raises substantial questions whether a project may have a significant effect, an EIS must be prepared. Idaho Sporting Congress, 137 F.3d at 1150 (emphasis in original). As the court in Klamath Siskiyou Ctr. V. Boody, 468 F.3d 549, 562 (9th Cir.2006) observed, "this is a low standard." Id. The following sections raise substantial questions that the Proposed Action may have a significant impact on the environment and impede the restoration of America's Everglades.	
64(II)	Everglades Law Center	**II. The EA Violates NEPA** The draft EA runs afoul of NEPA because it fails to provide sufficient support for the Corps' decision to select Alternative G as its preferred alternative, and fails to adequately consider and analyze the environmental effects and alternatives to the proposed action.	A range of alternatives were considered and evaluated as the field test was developed. Alternatives differed based on" (1) the degree of relaxation of the G-3273 stage constraint; (2) use of Column 2 operations as defined in the 2012 WCAs-ENP-SDCS Water Control Plan; and (3) inclusion of operational changes to C-111 Canal structures S-197. Six alternatives (including the No Action Alternative) were evaluated based on achievement of field test objectives and field test constraints. Potential environmental effects were also evaluated within Section 4.0. A robust environmental effects analysis was performed. Climatologic and hydrologic conditions within WCA 3A, ENP, and the adjacent LEC demonstrate a wide range of variability over this period. Given the inability to precisely forecast the hydrologic conditions that will be observed during the proposed field test, a comprehensive assessment of historical data was conducted to anticipate the potential hydrologic effects of the alternatives. The project is in full compliance with the NEPA.
65(II) (a)(1)	Everglades Law Center	**A. The Corps' Selection of Alternative G as the Preferred Alternative is Arbitrary and Capricious.**	Please see response to comment 59 and 60 above. Based on current available information, the Corps concludes that current water management operations are

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		The fundamental flaw in the Corps' selection of Alternative G is that it is based on conjecture and false assumptions. The Corps seems to assume that (1) there are increased groundwater levels in nearby agricultural areas, (2) these groundwater levels are the result of restoration activities and other water management operations, (3) that mitigating for increased groundwater levels is the responsibility of the Corps under the CS&F Project, and (4) the Corps must use S-197 to mitigate for these potential flood control risks. As we discuss below, the Corps fails to provide adequate support for any of these assumptions and therefore its selection of alternative G as the preferred alternative is arbitrary and capricious. **1. There is no evidence of increased groundwater levels in nearby agricultural areas and that the alleged increases in groundwater levels are the result of water management operations.** The Corps appears to rely largely on letters from SFWMD and FDACS to support its decision of selecting Alternative G as the preferred alternative. Letters from the FDACS contain sweeping assertions that the "agricultural economy in Miami-Dade has been repeatedly harmed by elevated water levels that adversely impact growers due to the lack of operational integration between the WCAs, ENP, and the SDCS, including the C-111 structures". The areas of negative impact include all agricultural land east of ENP and the Frog Pond/C-111 project and in the vicinity of the C-111 West Spreader Canal Project." However, FDACS fails to provide any data or proof of causation that these operations have any role in adverse impacts to agricultural lands. In fact, FDACS fails to establish that any adverse impacts have actually occurred in agricultural land, whether or not those impacts were caused by these projects. There is no data or modeling in the EA or the appendices establishing that there are in fact elevated water levels, much less that operations are "repeatedly harming" farmers in Miami-	consistent with and maintain the authorized purposes of the C&SF Project to provide flood control, water supply for municipal, industrial, and agricultural uses, prevention of saltwater intrusion. The Corps and the SFWMD will continue to look at flooding concerns within the C&SF project area. In addition it is the Corps understanding that the SFWMD is actively assessing recent flooding concerns identified by agencies and stakeholders within the South Dade area, for further coordination with the Corps and other interested stakeholders. Water managers, engineers, and hydrologists at the Corps, SFWMD, and ENP have jointly developed a process for evaluating Increment 1 that has been incorporated into in Appendix A and Appendix C, Section C.1.8.2.1 and includes the following: Preliminary methodologies for water managers to analyze the Increment 1 Field Test and evaluate implementation of Increment 1 operations relative to the Increment 1 goals, objectives, and constraints are listed below in A. through J (refer to Section C.1.8.2.1 of Appendix C). These analyses will complement the overall monitoring plan and will be used to assess and evaluate the achievement of several of the stated water management objectives from the Increment 1 monitoring plan, including to: (1) ensure existing levels of flood protection are maintained within the northern L-31N Basin (between S-335 and S-331); (2) ensure existing levels of flood mitigation are maintained within the protected portion of the 8.5 SMA; (3) determine whether the Increment 1 contribute to flooding within the C-111 basin; and (4) determine whether the Increment 1 operational changes at S-197 are necessary to ensure existing levels of flood protection are maintained within the C-111 Basin (south of S-176), including assessment of the trigger criteria

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		County. There is also no discussion or quantification of the alleged level of harm that has occurred.	used for S-197 gate openings. These analyses as well as Increment 1 operations updates and action items will be discussed on a weekly basis between water managers from USACE and SFWMD, as well as ENP when needed, to provide collective interpretation of results and evaluate implementation of Increment 1 operations relative to the Increment 1 goals, objectives, and constraints. USACE, SFWMD, and ENP water managers will meet monthly to discuss the collected data and the results of preliminary analyses, as well as system conditions and Increment 1 operations; additional technical staff from these agencies who are involved in the Increment 1 monitoring and data assessment efforts will also participate in the monthly coordination meetings, as needed. Results from these weekly and monthly coordination meetings, including preliminary recommendations from water managers to incrementally modify the operational strategy (within the covered NEPA EA scope), will be further discussed with the PDT during regularly-scheduled interagency meetings to occur four times per year. PDT meetings will also include updates from the water quality and ecological monitoring sub-teams. The preliminary evaluation methodologies have been added to Appendix C, Section C.1.8.2.1 and includes the following: "I. Quantify the effects of the S-178 TW trigger criteria for S-197 discharges on flood damage reduction performance within the C-111 South Dade Basin and describe observed ecological effects within the ENP Taylor Slough Basin, ENP Eastern Panhandle, and Manatee Bay/Barnes Sound. METHODOLOGY: The Florida Department of Agriculture and Consumer Services (FDACS) and the SFWMD requested inclusion of operational changes to

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			the C-111 Canal structures, including S-18C and S-197, within the field test due to their concerns over water levels experienced within agricultural lands located east of ENP. Water levels observed at the following monitoring gauge locations during the Increment 1 field test (if data is available) will be evaluated using the rainfall frequency data and comparison with the corresponding stage level in the intra-annual stage frequency curves developed for the pre-project base conditions (pre-project base condition analysis methodology was previously summarized under item B): G-613, G-3350, TSB, G-864A, G-3620, G-3355, G-3901, G-789, G-3336, and G-3338; the initial set of wells recommended to assess regional groundwater levels in the South Dade area was developed following coordination with the SFWMD. Show S-178 and S-197 discharges under this test (monthly/seasonal/annual) and also tabulate/plot to compare with intra-annual flow frequency exceedance curves for pre-project base conditions (July 2002 through May or June 2015). Identify timing and frequency of S-178 trigger criteria during the Increment 1 field test. Assessment by water managers will be integrated with input from the ecological monitoring sub-team.
65(II)(a)(2)	Everglades Law Center	**2. The Corps fails to point to any specific data demonstrating that flows from the S-197 are necessary for flood control.** The EA states that alternatives G and E include "increased flood control releases from the S-18C and S-197" to "mitigate for potential risks to flood protection area… " The EA does not contain any data, however, to support the notion that flows from the S-197 are necessary for flood control. No analysis is included or referenced in the EA to show increased flood impacts by not utilizing the S-197 structure. To the extent that the Corps believes that the S-197 flows are necessary to avoid increased groundwater levels in	Please see response to comment 59 and 60 above. The Proposed Action will maintain the authorized purposes of the Central and Southern Florida Project, which include to provide flood control, water supply for municipal, industrial, and agricultural uses, prevention of saltwater intrusion, water supply for ENP, and protection of fish and wildlife.

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		agricultural lands, there is no data supporting the Corps' position. Moreover, the CS&F project has five authorized purposes: flood control, water supply, prevention of saltwater intrusion, water supply for ENP and protection of fish and wildlife. There is no explanation as to why minimizing groundwater levels even falls within the authorized purpose of "flood control" under the C&SF Project, particularly if these flows are being used in a similar manner as the South Miami-Dade agricultural drawdowns to enable agricultural interests to plant their crops earlier in the season. In fact, by diverting water away from Taylor Slough and Florida Bay, the Corps is acting in contravention of the C&SF purposes of supplying water to Everglades National Park and protecting fish and wildlife. NEPA demands more than just conclusory, self-serving statements that use of the S-197 structure is necessary to avoid flooding in local agricultural areas. The Corps must provide a reasoned explanation for why flooding would occur without this operational component. Seattle Audubon Soc'y v. Mosely, 798 F.Supp. 1473, 1482 (W.D. Wash.1992) ("[t]he agency may not rely on conclusory statements unsupported by data, authorities, or explanatory information."); Earth Island Inst. v. U.S. Forest Service, 442F.3d 1147, 1160 (9th Cir. 2006) (An agency has acted arbitrarily and capriciously when it fails to make a reasoned decision based on an evaluation of evidence).	
65(II)(a)(3)	Everglades Law Center	**3. If there is a lack of data the Corps must do its homework in the face of scientific uncertainty.** "The very purpose of NEPA's requirement that an EIS be prepared for all actions that may significantly affect the environment is to obviate the need for speculation by insuring that available data is gathered and analyzed prior to the implementation of the proposed action." Foundation for N. Am. Wild Sheep v. U.S. Dep't of Agric., 681 F.2d 1172, 1179 (9th Cir. 1982). The CEQ regulations require three mandatory obligations on	Please see response to comment 59 and 60 above. In addition, field test duration is planned for approximately two years, with a minimum duration of one year. A monitoring plan has been developed for the field test to evaluate potential effects as a result of the field test. The impacts of the field test were determined not to be significant as discussed in the FONSI. An EIS is not warranted. The Corps Water Management Section's assessment of hydrometeorological conditions and stakeholder or agency input may suspend or discontinue the field test due to impacts greater than expected/discussed within the EA. The project is in full

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		the Corps in the face of uncertainty: (1) a duty to disclose the scientific uncertainty; (2) a duty to complete independent research and gather information if no adequate information exists (unless the costs are exorbitant or the means of obtaining the information are not known); and (3) a duty to evaluate the potential, reasonable foreseeable impacts in the absence of relevant information, using a four-step process. 40 C.F.R. § 1502.22. As one federal appeals court explained, the regulations require the "disclosure and analysis of the costs of uncertainty [and] the costs of proceeding without more and better information." Southern Oregon Citizens Against Toxic Sprays, Inc. v. Clark, 720 F.2d 1475, 1478 (9th Cir. 1983). "Section 1502.22 clearly contemplates original research if necessary" and "NEPA law requires research whenever the information is significant. As long as the information is…essential or significant, it must be provided when the costs are not exorbitant in light of the size of the project and the possible harm to the environment." Save Our Ecosystems v. Clark, 747 F.2d 1240, 1244 n.5 (9th Cir. 1984). Therefore, the Corps has a high burden of obtaining and analyzing this information in assessing which alternatives to pursue. The Corps' failure to complete independent research and gather information if no adequate information exists and evaluate the potential, reasonable foreseeable impacts in the absence of relevant information violates NEPA. See Cabinet Res. Group v. U.S. Fish and Wildlife Serv., 465 F.Supp.2d 1067, 1100 (D. Mt. 2006) (finding that agency's failure "to attempt any assessment of the importance of the missing information calls into question the validity of the [agency's] conclusions about the impacts of the proposed action" and setting aside the EIS. There is a complete lack of data or analysis to support any claims of flooding caused by C-111 operations. The FDAC letters urging the proposed operations do not provide reference to any data or analysis to support the request. Moving forward with Alternative G fails on this basis.	compliance with the NEPA.

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65(II)(a)(4)	Everglades Law Center	**4. The Corps must examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made.** This is a central tenant of federal administrative law under the Administrative Procedure Act. At this point the decision is based on mere speculation. This is similar to what the Corps did in 2007-2008 when it reversed its initial plans to eliminate the south Miami-Dade agricultural drawdowns as part of BBCW Phase 1 without any data and analysis linking the elimination of the drawdowns to flooding in agricultural areas. In 2011, the Everglades Law Center submitted requests under the Freedom of Information Act to the Corps and U.S. Fish & Wildlife Service, requesting information relating the annual agricultural drawdowns, including possible adverse effects from their elimination. As we explained in our May 27, 2014 letter to the Corps regarding the drawdowns, the documents received in response to that request provided no information indicating that the Corps or any other government agency has to date modeled or otherwise systematically evaluated the effects of eliminating the drawdowns.4 The Corps has not presented any information regarding review of data that would demonstrate its operations have caused increased flooding to agricultural interests in the region. There is no data with respect to flooding that can establish a rational connection between such flood claims from agriculture and the selection of alternative G. With respect to listed species, such as the endangered smalltooth sawfish, recovery depends in part on action to "minimize the disruption of natural/historic freshwater flow regimes including timing, quality, and quantity and maintain or restore water quality." The proposed project could disrupt natural/historic freshwater flows diverting freshwater from where it is need in Taylor Slough and Northeast Florida Bay.	Please see response to comment 59 and 60 above. The Corps and the SFWMD will continue to look at flooding concerns within the C&SF project area. In addition it is the Corps understanding that the SFWMD is actively assessing recent flooding concerns identified by agencies and stakeholders within the South Dade area, for further coordination with the Corps and other interested stakeholders. In addition, field test duration is planned for approximately two years, with a minimum duration of one year. A monitoring plan has been developed for the field test to evaluate potential effects as a result of the field test. The impacts of the field test were determined not to be significant as discussed in the FONSI. An EIS is not warranted. The Corps Water Management Section's assessment of hydrometeorological conditions and stakeholder or agency input may suspend or discontinue the field test due to impacts greater than expected/discussed within the EA. The project is in full compliance with the NEPA. (Note that during the Phase I BBCW planning process, elimination of seasonal agricultural drawdowns was considered by the PDT; however, none of the final array of alternatives included this management measure.) Informal consultation was initiated with the USFWS on January 6, 2015 with submission of a complete initiation package (Appendix D). Concurrence on these determinations was received from USFWS on February 10, 2015. USFWS supports the project and concurs with the Corps determinations pursuant to the Endangered Species Act for effects on federally listed species and critical habitat. Upon completion of an assessment for species under NMFS purview it was determined that the Proposed Action would have no effect on these species; therefore, consultation with

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		Other species including the American Crocodile, the Roseate Spoonbill designated as threatened in the State of Florida and the Reddish Egret listed as a Species of Special Concern in Florida are impacted by salinity water quality in Florida Bay, as are economically valuable game fish like red drum, spotted sea trout, common snook and gray snapper. Data that evidences connection between the health of these species and the quality, quantity, timing and delivery of freshwater to Florida Bay should be reviewed. The preferred alternative should have a rational connection between the freshwater needs of these species and their habitat and the amount of water being delivered to Taylor Slough and Northeast Florida Bay.	NMFS was not necessary. The Proposed Action was fully coordinated under the Endangered Species Act and is in full compliance with the Act.
66(II)	Everglades Law Center	**B. The Draft EA Fails to "Rigorously Explore and Objectively Evaluate" All Reasonable Alternatives.** NEPA requires a "detailed statement" of "alternatives to the proposed action." 42 U.S.C. § 4332(2) (c). The alternatives analysis should address "the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for the choice among options by the decision maker and the public." 40 C.F.R. § 1502.14. This analysis must "rigorously explore and objectively evaluate all reasonable alternatives." 40 C.F.R. § 1502.14(a) (emphasis added). The purpose of this section is "to insist that no major federal project should be undertaken without intense consideration of other more ecologically sound courses of action, including shelving the entire project, or of accomplishing the same result by entirely different means." Environmental Defense Fund v. Corps of Engineers, 492 F.2d 1123, 1135 (5th Cir. 1974). The Council on Environmental Quality describes the alternatives requirement as the "heart" of the environmental impact statement. 40 C.F.R. § 1502.14. While an agency is not obliged to consider every alternative to every aspect of a proposed action, reviewing courts have insisted that the agency "consider such alternatives to the proposed action as	A range of alternatives were considered and evaluated as the field test was developed. Alternatives differed based on" (1) the degree of relaxation of the G-3273 stage constraint; (2) use of Column 2 operations as defined in the 2012 WCAs-ENP-SDCS Water Control Plan; and (3) inclusion of operational changes to C-111 Canal structures S-197. Six alternatives (including the No Action Alternative) were evaluated based on achievement of field test objectives and field test constraints. Potential environmental effects were also evaluated. The Preferred Alternative is expected to benefit ENP by increasing flows to NESRS. Alternatives E, F, and G best accomplish this objective relative to the No Action Alternative, and are anticipated to increase the number of days with WCA 3A unconstrained discharges to NESRS and reduce the total duration of WCA 3A regulatory releases to the SDCS. Alternatives that did not include operational changes at S-197 (Alternatives A, B, C, D, and F) were noted as uncertain with respect to field test constraint of no reduction in current flood protection. Increased flood control releases from S-18C and S-197 were included

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		may partially or completely meet the proposals goal." Natural Resources Defense Council, Inc. v. Callaway, 524 F 2d. 79, 93 (2d Cir. 1975). The "touchstone" of a court's inquiry in reviewing the sufficiency of an EIS is whether the "selection and discussion of alternatives fosters informed decision-making and informed public participation." California v. Block, 690 F.2d 753, 767 (9th Cir. 1982). The Corps must engage in a much more rigorous analysis which provides a clear basis for choice among options by the decision-maker and the public. 40 C.F.R. § 1502.14. In addition, once a broad range of alternatives are identified with varying degrees of environmental impacts, the Corps must devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits. 40 C.F.R. § 1502.14(b). The Corps has failed to "rigorously explore" and "objectively evaluate" all reasonable alternatives to the project. The EA does not include sufficient review of an alternative that would proceed with testing of the MWD and C-111 structures without modifying the C-111 Spreader Canal Western Project operations. The EA does not rigorously explore or objectively evaluate an alternative that would proceed with the phased implementation of the C-111 Spreader Canal Western Project while undertaking needed investigations to determine its effects. We encourage the Corps to go back to the drawing table and develop and rigorously review an alternative that would do just this. Alternative F does not require changes in the S-197 operation and relaxes 3273. Unlike Preferred Alternative G, Alternative F does not siphon water off the South Dade Conveyance System. These aspects of Alternative F are scientifically sound. However, Alternative F would not increase the stages of S-18C and therefore the system would not realize the benefits of increased freshwater into the spreader, as the	within Alternatives E and G mitigate for potential risks to flood protection for areas within South Dade which may be affected by a combination of the following water management factors during the field test: increased seepage to the L-31N Canal south of S-331 prior to completion of C-111 south Dade NDA; increased discharges from S-331 for 8.5 SMA flood mitigation; and operation of the downstream S-33D pump station and/pr the C-111 South Dade SDA to manage L-31N Canal stages during periods of increased flows. Alternatives B, C, and D were eliminated from detailed evaluation for the reasons outline in Section 2.3 of the EA. Alternative F was carried through Section 4.0, along with Alternatives A, E, and G. The EA is consistent with the requirements of NEPA. A range of alternatives were considered and a robust analysis was performed given the information available at the time. Incremental increases at S-18C are not expected to be implemented by the SFWMD during the planned duration of the Increment 1 field test. The overarching project need is to increase the availability of S-333 for water deliveries from WCA 3A to ENP through NESRS for the benefit of natural resources. Steps will be taken in the future to incorporate the C-111 Spreader Canal Western Project into the federally authorized C&SF Project once the project's consistency with the 2014 WRRDA authorized project has been documented and approved by the Corps, and a Project Partnership Agreement with the SFWMD has been executed. Concurrent with the Increment 1 field test, the SFWMD will continue to operate their expedited C-111 Spreader Canal Western Project.

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		Modified Water Deliveries Project was sold to Congress. The Corps failed to consider a more ecologically sound course of action, which would have involved analyzing an alternative similar to Alternative F that would also raise the stages of S-18C as planned. The Corps' analysis of Preferred Alternative G relies on anecdotal references to increased flooding on agricultural land without any data to demonstrate any increased flood risk. There must be a formal analysis of data to demonstrate whether any increased flooding occurred in the first place and if so, to analyze the cause of the flooding. There is no evidence in the discussion of Alternative G looking at whether the proposed changes are commensurate with increased risk. The Corps did not and cannot show a "clear basis" for its choice in selecting Alternative G as the preferred alternative because it does not have the data or analysis to justify its decision to provide additional flood control to agricultural land.	
67(II)(c)1	Everglades Law Center	**C. The Draft EA Fails to Analyze the Proposed Project's Direct, Indirect, and Cumulative Impacts.** "NEPA imposes procedural requirements designed to force agencies to take a 'hard look' at [the] environmental consequences" of their actions. Earth Island Inst. v. United States Forest Serv., 351 F.3d 1291, 1300 (9th Cir. 2003). "This includes considering all foreseeable direct and indirect impacts. Id. See also 40 C.F.R. § 1508.25 (c). This draft EA fails to consider a wide range of foreseeable direct and indirect impacts on the area's resources. In addition, many of the Corps' discussions on direct and indirect impacts are based on false assumptions. The Corps must correct these and other deficiencies and provide a thorough and well-reasoned discussion of all direct, indirect and reasonably foreseeable environmental impacts. **1. Direct Impacts**	Six alternatives (including the No Action Alternative) were evaluated based on achievement of field test objectives and field test constraints. Potential environmental effects were also evaluated within Section 4.0. A robust environmental effects analysis was performed. Climatologic and hydrologic conditions within WCA 3A, ENP, and the adjacent LEC demonstrate a wide range of variability over this period. Given the inability to precisely forecast the hydrologic conditions that will be observed during the proposed field test, a comprehensive assessment of historical data was conducted to anticipate the potential hydrologic effects of the alternatives. Field test duration is planned for approximately two years, with a minimum duration of one year. A monitoring plan has been developed for the field test to evaluate potential effects as a result of the field test. The Corps Water Management Section's assessment of

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		The EA fails to account for direct impacts of the Proposed Action on an ecosystem that is the focus of a multi-billion dollar restoration project. As the court in National Parks Conservation Ass'n v. Babbitt, 241 F.3d 722 (9th Cir. 2001) explains: The purpose of an EIS is to obviate the need for speculation by insuring that available data are gathered and analyzed prior to the implementation of the proposed action…The [agency] proposes to increase the risk of harm to the environment and then perform its studies. This approach has the process exactly backwards. Before one brings about a potentially significant and irreversible change to the environment, an EIS must be prepared that sufficiently explores the intensity of the environmental effects it acknowledges. The point is that the 'hard look' must be taken before, not after, the environmentally-threatening actions are put into effect. Thus, the Corps must perform these studies now and "cannot avoid NEPA responsibilities by cloaking itself in ignorance." Fritiofson v. Alexander, 722 F.2d 1225,1244 (5th Cir. 1985). Alternatives in the EA would lower levels at the S-18C even though the CERP, C-111 Spreader Canal project calls for incrementally raising water levels at the S-18C by one-tenth of a foot per year. The first two years of operation of the C-111 Spreader Canal Western Project have provided restoration benefits to Taylor Slough and Northeast Florida Bay. The Corps ignores the value of these benefits by selecting a preferred alternative that would backtrack and divert water away from where it is ecologically needed in Florida Bay and Taylor Slough. The EA notes the incompatibility of alternative G with the plan in the C-111 project to incrementally raise water levels in the S-18C. The Corps moved forward in selecting Alternative G as the preferred alternative without fully accounting for these impacts and discounting the adverse affects on the ecosystem	hydrometeorological conditions and stakeholder or agency input may suspend or discontinue the field test due to impacts greater than expected/discussed within the EA. Implementation of the field test would not result in significant or irreversible effects on the human environment. Based on the information analyzed within the EA, the proposed action does not require preparation of an EIS. Information and operational criteria identified from the field test will be used to develop an expanded set of operations and monitoring criteria for a subsequent operational field test (Increment 2). Operational changes based on Increment 1 are planned to be incorporated into the 2012 WCAs-ENP-SDCS Water Control Plan prior to implementing the operational strategy for Increment 2 as appropriate with supporting NEPA documentation to be conducted at that time.

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		because the "discharges would be temporary and spatially limited to nearshore areas within the southern estuaries." The Corps uses its classification of the discharges as temporary to justify the adverse impacts to the ecosystem from alternative G. However, the "field test duration is planned for approximately two years," which is not that temporary. The loss of restoration benefits for an ecosystem already on life- support could occur within the planned two-year time period of the Proposed Action. Additionally, the EA does not require that the adverse impacts from utilizing the S-197 to siphon water from Taylor Slough and Florida Bay will end within two year. "Operating criteria for S-197 will be reassessed once construction of the C-111 South Dade NDA is constructed and operable, and/or upon completion of the Increment 1 field test." The EA leaves the possibility open that the potential adverse impacts will be ongoing and permanent.	
67(II)(c)(2)	Everglades Law Center	**2. Indirect Impacts** The draft EA fails to adequately address the indirect impacts of this project. Under the CEQ regulations, an agency must consider the direct, indirect, and cumulative impacts on the environment when determining whether a federal action is "significant." 40 C.F.R. §§ 1508.8, 1508.27(b). An EA must analyze "indirect effects," which: > are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems. 40 C.F.R. § 1508.8(b). The ecosystems in the Florida Bay and Taylor Slough may be significantly affected by the diversion of significant amounts	Effects determinations for the reddish egret and roseate spoonbill are discussed in Section 4.9.2. Environmental effects related to essential fish habitat and fish and wildlife resources including game fish are discussed in Sections 4.10 and 4.8 respectively. Additional low volume freshwater releases from S-197 and potential increases in structural discharges from the L-31 N Canal considered under Alternative E would not be sufficient to affect mangrove and seagrass habitats within the coastal estuaries. Mangrove habitats provide food and refuge to a large variety of species. Seagrass habitats are heavily utilized by both juvenile and adult fishes and invertebrates for feeding and shelter. Potential minor adverse impacts associated with salinity fluctuations would be temporary and spatially limited to nearshore areas within the southern estuaries. Significant effects to fish and wildlife resources with eastern Florida Bay, Biscayne Bay, and Manatee Bay and Barnes Sound are not anticipated as a result of the test. Implementation of the field test would not result in

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		of freshwater away from these areas where it is ecologically needed. The changes in salinity levels in these areas may impact multiple species. The EA fails to account for potential impacts to the Reddish Egret and Roseate Spoonbill, two species protected in Florida. Both species depend on top minnows, which may not be sufficiently abundant to provide the food supply these birds need without necessary freshwater flows from Taylor Slough. Additionally, game fish there are vital to the economy surrounding the Florida Bay including: red drum, spotted sea trout, common snook and gray snapper. These species need estuarine conditions with low to moderate salinity for their juveniles to be able to forage. The diversion of water from Taylor Slough and Florida Bay under alternative G could impact these species that depend on a lower saline estuarine environment. Further analysis of the impacts of the Proposed Action to these species is warranted. The EA fails to adequately explain the potential impacts of the proposed project on recreational users, including boaters, fishermen, snorkelers, kayakers, divers, birders and others. These potential impacts include reduced use and enjoyment in addition to economic impacts to the businesses that depend on recreational users. A study funded by the Monroe County Tourist Development Council, The Nature Conservancy, Florida Keys Initiative, and NOAA found that natural resource based activities in Florida Bay and the Florida Keys accounts for total annual user value of $910 million. The potential impacts of the Proposed Action to game fish that are such a significant part of recreational and economic activity in Florida Bay were not considered in the EA, except to give a finding of no effect. Game fish species that could be impacted by the diversion of freshwater from Florida Bay include the red drum, spotted sea trout, common snook and gray snapper. Additionally, food sources for the Roseate Spoonbill and Reddish Egret could be impacted by diversion of freshwater from Florida Bay under Preferred Alternative G. This could impact the experience of recreational users viewing bird populations in the area.	significant impacts to recreational resources and/or businesses dependent on natural resources within Florida bay, Manatee Bay, and Barnes Sound as significant impacts to fish and wildlife resources within the southern estuaries are not expected due to the low volume of additional flow being considered and the temporary nature of the field test.

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		In addition to not identifying and discussing Preferred Alternative G's potential impact to recreational users, the EA does not address Alternative G's potential impacts to businesses that depend on recreational users of these resources. These businesses include charter boats, bait and tackle shops, marinas, guide services, dive shops, as well as local businesses that provide gas, food and services to recreational users.	
67(II)(c)(3)	Everglades Law Center	**3. Cumulative Effects** NEPA requires federal agencies to take a "hard look" at the cumulative effects of the proposed action. See Florida Wildlife Federation v. United States Army Corps of Eng'rs, 401 F.Supp.2d 1298 (holding that the agency failed to take a "hard look" at the cumulative effects of the proposed action in its EA). To accomplish this, the Corps must not only catalogue past, present and future projects but also assess the cumulative environmental impacts of those projects with the proposed project and analyze the additive cumulative impact of all these actions. See City of Carmel-By-The-Sea, 123 F.3d at 1160 (rejecting cumulative impacts analysis that referred generally to other past projects and did not discuss the additive impacts of foreseeable future projects). Further, NEPA requires that a cumulative impacts analysis provide "some quantified or detailed information" because without such information, neither the courts nor the public can be assured that the agency took the necessary hard look at the project. Neighbors of Cuddy Mountain v. United States Forest Service, 137 F.3d 1372, 1379 (9th Cir. 1998) (stating that "very general" cumulative impacts information violates NEPA). Preferred Alternative G may have significant cumulative impacts by impeding the function of other CERP projects in the area. The Proposed Action could reverse benefits from the C-111 spreader canal by diverting needed freshwater from	The field test is expected to contribute to a net beneficial cumulative impact on the regional ecosystem by increasing inflows to NESRS. Temporary minor adverse impacts have the potential to occur within ENP's Eastern Panhandle and Manatee Bay and Barnes Sound due to the shifting of some water flow from ENP Panhandle to Manatee Bay and the resultant increases in the frequency, duration, and volume of S-197 discharges estimated from a period of analysis limited to historical operations between July 2012 and June 2014; however significant impacts are not expected. Potential environmental effects would be limited in spatial extent to the nearshore areas of the southern estuaries. This information is fully disclosed within the NEPA document and in Section 4.22 which describes cumulative effects of the proposed action.

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		Taylor Slough and Northeast Florida Bay. The cumulative impact of this action when considered in the light of decades of unfavorable saline conditions in Florida Bay demonstrate the possibility that restoration efforts could be significantly compromised by the proposed action. The Corps did not analyze these potential impacts. Instead, the Corps' cumulative impact references were based only on the overall beneficial impact of CERP projects.	
67(II)(d)	Everglades Law Center	**D. The Draft EA Does Not Adequately Discuss Climate Change and Sea Level Rise** The EA fails to consider the project in the context of climate change and sea level rise. Global average sea level rose by roughly eight inches over the past century, and sea-level rise is accelerating in pace. Global average sea level rose at an average rate of 3.3 ± 0.4 mm per year between 1993 and 2006,12 compared with 1.6 ± 0.2 mm per year between 1961 and 2003.13 Although the Intergovernmental Panel on Climate Change's ("IPCC") Fourth Assessment Report projected a global mean sea-level rise in the 21st century of 18–59 cm (7 to 23 inches), the IPCC acknowledged that this estimate did not represent a "best estimate" or "upper bound" for sea-level rise because it assumed a negligible contribution from the melting of the Greenland and west Antarctic ice sheets. Recent studies documenting the accelerating ice discharge from these ice sheets indicate that the IPCC projections are a substantial underestimate. Studies that have improved upon the IPCC estimates have found that a mean global sea-level rise of at least 1 to 2 meters is highly likely within this century. Rahmstorf (2007) used the tight, observed relationship between global average temperature rise and sea-level rise over the recent observational record (~120 years) to project a global mean sea-level rise of 0.5 to 1.4 m by 2100. Other studies estimate a global mean sea-level rise by 2100 at 0.75 to 1.90 m, 0.8 to 2.0 m, 0.8 to 1.3,19 and 0.6 to 1.6 m. Moreover, studies that have reconstructed sea level rise based on the geological record, including oxygen isotope	Statements relating to climate change and sea level rise have been incorporated into Section 3.2 which describes existing climate conditions. Implementation of the proposed action would not result in significant impacts to the climate of south Florida. Field test duration is planned for approximately two years, with a minimum duration of one year. Low volume releases at S-197 has the potential to decrease flows to Taylor Slough, and subsequently Florida Bay; however concurrent with the Increment 1 field test, the SFWMD will continue to operate their expedited C-111 Spreader Canal Western Project. Due to the limited duration of the test and limited volume of additional flow potentially discharged through S-197; potential effects or negation of potential mitigation benefits provided by CERP with respect to sea level rise would not be expected to be significant. The overarching project need for the field test is to increase the availability of S-333 for water deliveries from WCA 3A to ENP through NESRS for the benefit of natural resources; providing increased flows to ENP envisioned by the MWD Project.

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		and coral records, have found that larger rates of 2.4 to 4 m per century are possible. NEPA guidance from the Council on Environmental Quality states that climate change effects should be considered in the EIS for projects that are designed for long-term utility and located in areas that are considered vulnerable to specific effects of climate change within the project's timeframe. One of the tremendous benefits provided by Everglades restoration is combating salt water intrusion resulting from sea level rise. By pulling water from the marshes of the Southern Everglades and draining Taylor Slough in ENP into lower Biscayne Bay, Alternative G may eliminate these sea level rise mitigation benefits. One of the glaring gaps in information in the Corps' analysis of Alternative G, is that the Corps assumes any flooding or increased flooding in the region results from "lack of operational integration between the WCAs, ENP and SDCS." However, the Corps has not evaluated whether any the allegedly increased flooding on farmland in the area is connected to sea level rise, a factor wholly distinct from any potential impacts from water management operations. CERP restoration projects are not a mechanism to provide flood control relief for the impacts of sea level rise. In fact restoring freshwater flows as planned for Everglades restoration, is one of the best defenses that exists for South Florida to reduce and delay the impacts of sea level rise.	
68(III)	Everglades Law Center	**III. THE CORPS MUST PREPARE AN EIS DUE TO THE PRESENCE OF A NUMBER OF SIGNIFICANCE FACTORS** CEQ has promulgated regulations to guide agencies in determining whether a proposed project will have "significant" impacts to the environment, thus warranting the preparation of an EIS. See 40 C.F.R. § 1508.27. The CEQ regulations set	Field test duration is planned for approximately two years, with a minimum duration of one year. A monitoring plan has been developed for the field test to evaluate potential effects as a result of the field test. The impacts of the field test were determined not to be significant as discussed in the FONSI. An EIS is not warranted. The Corps Water Management Section's assessment of hydrometeorological conditions and

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		forth several factors for the Corps to consider when evaluating intensity, including, but not limited to: • Unique Characteristics of the geographic area such as proximity to park lands, wetlands, or ecologically critical areas; • Whether the action is related to other actions with individually insignificant but cumulatively significant impacts; • The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration. • The degree to which the action may adversely affect an endangered or threatened species or its habitat that bas been determined to be critical under the Endangered Species Act of 1973. 40 C.F.R. § 1508.27 (emphasis added). All of these "significance factors" are present here and as explained below, the Corps must prepare an EIS.	stakeholder or agency input may suspend or discontinue the field test due to impacts greater than expected/discussed within the EA. The project is in full compliance with the NEPA.
68(III)(a)	Everglades Law Center	**A. The Geographic Region is Unique As the Project Occurs Within ENP.** On December 6, 1947, Congress declared the Everglades a national park. In 1976, the Everglades was accepted as a biosphere reserve. In 1979, Everglades National Park was listed as a World Heritage Site by UNESCO. Finally, in 1987, the Everglades was designated as a Ramsar site (Wetland of International Significance). ENP contains a unique mixture of vast subtropical wetlands, coastal marine ecosystems, and temperate wildlife species found nowhere else in the United States. ENP provides a refuge for over 20 rare, endangered, and threatened species including the Florida panther, snail kite, American crocodile, and manatee. Furthermore, it provides an important foraging and breeding habitat for over 400 species of birds. This makes	Please see Section 4.14 of the EA. As discussed under the No Action Alternative, any alterative that leads towards completion MWD Project will have positive impacts with compliance with UNECSO provisions for removal from the endangered list and maintenance of the parks Outstanding Universal Values (OUVs). As performance is of the test is a requirement for completion of MWD, this alternative will have a positive effect to restoring the OUVs.

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		Everglades National Park the most significant breeding ground for wading birds in North American and a major corridor for migration. UNESCO has placed ENP on its endangered list due to water flow issues. The stated purpose of this project is to increase water deliveries to ENP for the benefit of natural resources. Consequently, any actions that change the hydrology of the Everglades should prioritize the unique environmental concerns of this delicate ecosystem and closely evaluate any possible significant impacts.	
68(III)(b)	Everglades Law Center	**B. The Proposed Action May Have Cumulatively Significant Impacts** The Congressionally authorized goals of this project include the preservation of and supply of water to ENP. However, the proposed alternatives may impede the ability of ongoing CERP projects to deliver necessary benefits to the ENP. These include the C-111 Spreader Canal Western Project, which was fast-tracked by the SFWMD and authorized by Congress in order to restore important functions in the Everglades, including pre- drainage water quantity, hydroperiods and hydropatterns, and salinity levels. In its first two years, the C-111 Spreader Canal Western Project has shown promising increases in the amount of water being delivered to the Taylor Slough and Northeast Florida Bay. This has resulted in improved salinity levels and increased growth of submerged aquatic vegetation. The C-111 Spreader Canal Western Project's goal is to raise water levels in the S-18C by one-tenth foot per year. The EA notes that two of the proposed alternatives, E and G, are not necessarily compatible with the C-111 South Dade Project and the C-111 Spreader Canal Final Western Project. Notably, flood control measures proposed in alternatives E and G are predicted to reverse the phased implementation of the C-111 Spreader Canal Western Project by lowering water	The Corps is committed to Everglades restoration. The MWD Increment 1 field test will be the first increment in a series of three related, sequential efforts that will result in a comprehensive integrated water control plan, referred to as the COP, for the operation of the water management infrastructure associated with the MWD and C-111 South Dade Projects. The incremental approach to the development of the COP will 1) allow interim benefits towards restoration of the natural systems, 2) reduce uncertainty of operating the components of the MWD and C-111 South Dade Projects, and 3) provide information to complete the COP efficiently. Please see response to comment 59 and 60 above with respect to the referenced comment regarding rational for inclusion of S-18C and S-197 within the alternatives considered as well as continued operation of the C-111 Western Spreader Canal Project. Nearshore salinity conditions within the coastal estuaries are elevated much of the year as a result of the less than adequate freshwater flow deliveries. Based on a period of analysis limited to historical operations between July 2012 and June 2014, the frequency and volume of S-197 discharges to Manatee Bay and Barnes Sound are expected to increase as referenced in your

Comment #	Commenter	Comment	Response
		levels in the C-111 canal and diverting water to Biscayne Bay. These flood control measures propose the release of 500 cfs from the S-197 canal in order to mitigate potential flooding in agricultural areas. The EA identifies alternative G as the Preferred Alternative, identifying Alternative G as including "increased flood control releases from S-18C and S-197 to mitigate for potential risks to flood protection areas within South Dade which may be affected by [water management factors]. However, the EA does not provide support for the assertion that water management factors have any causational relationship to allegedly increased flooding in flood protection areas. The aforementioned detrimental effects to the environment and ongoing restoration efforts are swept aside because the 1) the adverse effects to Manatee Bay and Barnes Sound's salinity levels will be temporary and spatially limited; 2) assessment of the impacts on C-111 South Dade Project and C-111 Spreader Canal Eastern Project has been deferred to the planned CERP C-111 Spreader Canal Easter Project PIR; 3) incremental increases at S-18C are not expected to be implemented by SFWMD during the duration of the Increment 1 field test; and 4) the operating criteria for S-197 will be reassessed once construction of the C-111 South Dade NDA is constructed and operable, or upon completion of the Increment 1 Field Test. The EA fails to establish that above rationale is sufficient to proceed with alternative G. First, the EA does not provide any support for its assertion that detrimental effects to the salinity in Manatee Bay and Barnes Sound will be temporally and spatially limited. It notes that "significant impacts are not expected," but does not support this assertion In its first two years, the C-111 Spreader Canal Western Project has shown promising increases in the amount of water being delivered to the Taylor Slough and Northeast	comment. Overland flow of freshwater into coastal estuaries is preferred as compared with transfers through the S-197 structure, however; low volume releases to Manatee Bay and Barnes Sound through this structure are considered preferential to high volume releases which result in increased incidence of large salinity swings as well as high nutrient load delivery. Manatee Bay and Barnes Sound are relatively large bodies of water with open connections to Card Sound and the Atlantic Ocean. Waters within Manatee Bay and Barnes Sound have been documented to have shorter residence times and experience more tidal flushing relative to northeastern Florida Bay; therefore potential environmental effects are expected to be limited.

Comment #	Commenter	Comment	Response
		Florida Bay. This has resulted in improved salinity levels and increased growth of submerged aquatic vegetation. The C-111 Spreader Canal Western Project's goal is to raise water levels in the S-18C by one-tenth foot per year.	
68(III)(c)	Everglades Law Center	**C. The Proposed Action May Establish A Precedent for Future Actions.** The proposed action may establish a precedent for future actions by establishing a policy that restoration activities must be compromised due to the specter of an increase in ground water levels and unsupported claims of impacts to local agricultural areas.	The Proposed Action will maintain the authorized purposes of the Central and Southern Florida Project, which include to provide flood control, water supply for municipal, industrial, and agricultural uses, prevention of saltwater intrusion, water supply for ENP and protection of fish and wildlife. The Corps is committed to Everglades restoration. Implementation of the field test will increase the availability of S-333 for water deliveries from WCA 3A to ENP through NESRS for the benefit of natural resources.
68(III)(d)(1)	Everglades Law Center	**D. The Proposed Action May Adversely Affect Endangered Species and Designated Critical Habitat.** **1. The Project May Adversely Affect Endangered Species including the Smalltooth Sawfish and American Crocodile.** The Corps issued a no effect determination for many species including the smalltooth sawfish and American crocodile. However, we do not agree that the Proposed Action would have no affect on these species. Young crocodiles need to grow to a certain weight in order to survive their first winter in order to regulate their temperature when in colder weather. Young crocodiles require freshwater to metabolize food and grow. Freshwater that is so vital to young crocodiles in the early stages of their lives could be diverted from their habitat under preferred Alternative G. We urge the Corps to reconsider its determination of no impact to American crocodiles. Additionally, the federally listed endangered smalltooth sawfish claims Florida Bay as critical habitat. The main food source for smalltooth sawfish is mullet, which require	The Corps requested written confirmation of Federally listed threatened and endangered species that are either known to occur or are likely to occur within the project area from the USFWS by letter dated August 22, 2014. Concurrence on the presence of listed species was received on September 11, 2014. The USFWS provided an update to the concurrence letter on December 17, 2014. Informal consultation was initiated with the USFWS on January 6, 2015 with submission of a complete initiation package (Appendix D). Concurrence on these determinations was received from USFWS on February 10, 2015. USFWS supports the project and concurs with the Corps determinations pursuant to the Endangered Species Act for effects on federally listed species and critical habitat. Terms and Conditions within the USFWS Biological Opinion on the ERTP require the Corps to initiate the planning process to begin field testing and relaxing or removing the existing G-3273 gage constraint of 6.8 feet NGVD. The Proposed Action was fully coordinated under the Endangered Species Act and is in full compliance with the Act.

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		freshwater. The Proposed Action could divert significant amounts of freshwater from Northeast Florida Bay and impact the abundance of mullet in the area. This in turn could reduce the food source for smalltooth sawfish and damage their habitat. We urge the Corps to reconsider its determination of no impact to the smalltooth sawfish.	Upon completion of an assessment for species under NMFS purview it was determined that the Proposed Action would have no effect on these species; therefore, consultation with NMFS was not necessary. The NMFS did receive a copy of the EA and Draft FONSI during state and agency review. See response to comment 68(III) (d) (1).
68(III)(d)(2)	Everglades Law Center	**2. The Corps Must Engage in Consultation with the U.S. Fish & Wildlife Service and National Marine Fisheries Service Regarding the Project's Impacts to the American Crocodile and Smalltooth Sawfish.** If a federal project may affect a listed species, the action agency must engage in "consultation" with the Services under Section 7 of the ESA. Section 7 is the central enforcement provision that operates to prohibit federal agencies from authorizing, funding, or otherwise carrying out any action that is likely to "jeopardize" the continued existence of an endangered species or result in the destruction or adverse modification of the species' critical habitat. 16 U.S.C. § 1536(a) (2). The Corps initiated informal consultation with USFWS to determine the proposed action's impacts on Federally listed threatened and endangered species in the project area. On August 22, 2014, the Corps requested from USFWS a list of federally threatened and endangered species in the project area. The USFWS provided the list on September 11, 2014 and updated the list on December 17, 2014. Then, the Corps underwent effects determinations for all of the listed species. Despite the fact that Everglades is a known habitat for numerous rare, threatened, and endangered species, the Corps posited that there is no anticipated adverse effect on any threatened and endangered species by the proposed action. The EA does note that proposed action may affect, but is not likely to adversely effect, the following species and their associated critical habitat: Cape Sable seaside sparrow,	See response to comment 68(III) (d) (1) above. The Proposed Action was fully coordinated under the Endangered Species Act and is in full compliance with the Act.

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		Everglade snail kit, Florida bonneted bat, the Deltoid spurge, Small's milkpea, and Tiny polygala. On January 6, 2015, the Corps initiated informal consultation with the USFWS to request their concurrence with the "may affect, but not adversely effect" determination. The Complete Initiation Package included explanations of effects determinations for each of the listed species in the project area. However, the analysis focuses on lack of crocodiles found near the S-197 structure skirting the issue that the freshwater diverted away from Florida Bay is the threat to young crocodile populations. Likewise, the analysis of smalltooth sawfish fails to account for impacts to its food supply and how the lack of freshwater flow into sawfish habitat may impede the species' recovery. According to the EA, these effects determinations were determined based 1) on the short duration of the field test and 2) on the generally beneficial nature of this action. The analysis undertaken by the Corps is insufficient to make any effects determinations. The short duration of the field test does not speak to any effects on species that will occur during the test. The threshold for triggering formal consultation under the ESA is "very low" and "any possible effect triggers formal consultation requirements." The Service has explained, "the threshold for formal consultation must be set sufficiently low to allow Federal agencies to satisfy their duty to 'insure' under Section 7(a) (2) [that their actions do not jeopardize the species or adversely modify critical habitat]. The Corps must undergo formal consultation with the USFWS.	
69	Everglades Law Center	"NEPA emphasizes the importance of coherent and comprehensive up-front environmental analysis to ensure informed decision making to the end that the agency will not act on incomplete information, only to regret its decision after it is too late to correct." Marsh v. Oregon Natural Resources	Field test duration is planned for approximately two years, with a minimum duration of one year. A monitoring plan has been developed for the field test to evaluate potential effects as a result of the field test. The impacts of the field test were determined not to be

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		Council, 490 U.S. 360, 371 (1989). An EIS is required of an agency in order that it explores, more thoroughly than an EA, the environmental consequences of a proposed action whenever "substantial questions are raised as to whether a project may cause significant [environmental] degradation." Blue Mts. Biodiversity Project, 161 F.3d at 1216 (quoting Idaho Sporting, 137 F.3d at 1149). As evidenced by these comments, the draft EA and FONSI fail to meaningfully evaluate alternatives to the proposed action and the action's direct, indirect, and cumulative impacts. Moreover, substantial questions have been raised as to whether this project may cause a significant impact on the environment and negate the benefits of ongoing ecosystem restoration efforts. Therefore, the Corps must prepare an EIS for this project before a decision is made and it is otherwise too late.	significant as discussed in the FONSI. An EIS is not warranted. The Corps Water Management Section's assessment of hydrometerological conditions and stakeholder or agency input may suspend or discontinue the field test due to impacts greater than expected/discussed within the EA. The project is in full compliance with the NEPA.
70	Miami-Dade County Public Works and Waste Management	The latest statistics from USGS, indicate that the Average October Water Table in the 8.5 Sq. Mile Area varies between 5.5 - 6.5 feet NGVD (between 4 and 5 feet NAVD88), for the period from 2000 through 2009, representing the wettest conditions within that basin. The page A10, of Appendix A, shows that S-357 would operate between 5.5 and 6.2, which is consistent to the wet season groundwater table of the area, prior to the project implementation. See map "8_5_FPLOS_groundwater_.pdf" The page A-11 of Appendix A also states that that during the Test Phase, the S-357 pumps would be operated to maintain a stage above 5.7 feet NGVD along the canal, by adjusting the weir heights at S-357N and the pump rate at S-357. This trigger stage for S-357 is consistent the wet season groundwater table. At this point, the proposed triggers do not provide flood mitigation or flood reduction, based on the groundwater levels prior to the operation of the project. However, this maximum stage limit of 10 feet NGVD, at the southern end of the 8.5 SMA seems to be too high, since most of the land elevations	During the Increment 1 field test, the 8.5 SMA will be operated consistent with the 2011 Interim Operating Criteria and the 2012 WCP, except for minor changes during the testing protocol for S-357N. The operating criteria for the 8.5 SMA were developed to provide flood mitigation to 8.5 SMA protected area in a manner consistent with the authorized purposes of the MWD and Canal-111 South Dade Projects. Consistent with prior operations under the 2012 WCP, S-331 will continue to operate to provide flood mitigation for 8.5 SMA during periods when S-357 may be operationally constrained prior to completion of the C-111 NDA. As stated on Page A-10 Operational Strategy for 8.5 Square Mile Area: "The testing protocol for S-357N during the Increment 1 Field Test is designed to establish the operating criteria for S-357N." "The testing protocol for S-357N will be an iterative approach consisting of 4 to 5 weeks of gate changes during the wet season. The S-357N gate changes will be meant to test the hydrologic response of the system

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		within the 8.5 Sq. Mile Area are below this elevation. See attached map "8_5_FPLOS_landelevations_.pdf". A more adequate maximum stage limit should be established during the test phase.	to minor adjustments in operations at S-357N." To clarify comment, maximum stage limit of 10.0 feet is at the southern end of the 8.5 SMA Detention Area which is downstream of S-357 as stated on page A-10: "Stage limit of 10.0 feet at southern end of the 8.5 SMA Detention Area (LPDC1) (unchanged from 2012 WCP)."

March 11, 2015

Ms. Melissa Nasuti
Department of the Army
Jacksonville District Corps of Engineers
P.O. Box 4970
Jacksonville, FL 32232-0019

RE: Please Support Alternative F for the G-3273 and S-356 Field Tests

The Army Corps recently released an Environmental Assessment for a field test that will be used to determine how three key restoration projects in the Southern Everglades and Florida Bay region (Modified Water Deliveries, C-111 South Dade, and the C-111 Spreader Canal Western Project) will operate. These projects were built to restore the natural movement of water to Everglades National Park and Florida Bay.

I am writing to urgently ask you to ensure that Everglades restoration projects in the South Dade area are operated to achieve maximum ecological benefits. Any field tests and operational plans put in place must exclude flows through the S-197 and keep water in the wetland habitats where it is needed for restoration to benefit birds and other wildlife. The Southern Everglades and Florida Bay contain vital foraging and nesting grounds that Roseate Spoonbills and other wading birds depend upon.

The Army Corps preferred plan, Alternative G, would reroute some of the water currently flowing to Taylor Slough and Florida Bay out through a structure called the S-197 and away from restoration areas. Alternative G has the potential to increase salinity levels in Florida Bay. This represents a serious step back for restoration efforts.

Releasing water in the wrong place negates the goals of the field test itself. The Army Corps cannot determine how the restoration projects interact or what they achieve if any water flow gained is simply sent to tide through the S-197 structure. I have read that this was proposed to accommodate a few landowners and would come at a cost of harming, rather than restoring, the Everglades and depriving it of needed freshwater.

Please reject Alternative G and find a better solution that will keep restoration efforts on track in the Southern Everglades and Florida Bay. I deeply admire the Everglades; I support restoration efforts and want to see that progress is being made to repair this unique ecosystem. This water must stay in restoration areas where it is needed – not pumped away where it will be lost to tide.

Please support restoration moving forward and protect the ecosystems of the Southern Everglades and Florida Bay. Please reject Alternative G and find a new alternative that will maximize restoration benefits. The interests of a few stakeholder should not trump the interests of the public who paid for these restoration projects and want to see them operated in a way that will provide maximum ecological benefits.

Thank you for your help in this urgent matter. I care deeply about the Everglades. Please act to protect it.

Yours truly,

J. Capozzelli
New York, NY

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

MARJORY STONEMAN DOUGLAS BUILDING
3900 COMMONWEALTH BOULEVARD
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RICK SCOTT
GOVERNOR

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LT. GOVERNOR

JONATHAN P. STEVERSON
SECRETARY

March 30, 2015

Ms. Melissa A. Nasuti
Planning & Policy Division, Jacksonville District
U.S. Army Corps of Engineers
P.O. Box 4970
Jacksonville, FL 32232-0019

RE: Department of the Army, Jacksonville District Corps of Engineers – Draft Environmental Assessment, Proposed G-3273 Constraint Relaxation/S-356 Field Test and S-357N Operational Strategy – Miami-Dade County, Florida. SAI # FL201502067180C

Dear Ms. Nasuti:

The Florida State Clearinghouse has coordinated a review of the subject Draft Environmental Assessment (EA) under the following authorities: Presidential Executive Order 12372; Section 403.061(42), *Florida Statutes*; the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1464, as amended; and the National Environmental Policy Act, 42 U.S.C. §§ 4321-4347, as amended.

The following agencies submitted comments, concerns and recommendations regarding the Draft EA, all of which (memoranda and letters) are attached hereto, incorporated herein by this reference, and made an integral part of this letter:

- Florida Department of Environmental Protection
- South Florida Water Management District
- Florida Department of Agriculture and Consumer Services
- Florida Fish and Wildlife Conservation Commission
- Florida Department of Transportation

Based on the information contained in the Draft EA and enclosed state agency comments, the state has determined that, at this stage, the proposed federal action is consistent with the Florida Coastal Management Program (FCMP). To ensure the project's continued consistency with the FCMP, the concerns identified by our reviewing agencies must be addressed prior to project implementation. The state's continued concurrence will be based on the activity's compliance with FCMP authorities, including federal and state monitoring of the activity to ensure its continued conformance, and the adequate resolution of issues identified during this and any subsequent reviews. The state's final concurrence of the project's consistency with the FCMP

is determined during the environmental permitting process, in accordance with Section 373.428, *Florida Statutes*.

Thank you for the opportunity to review the draft document. Should you have any questions regarding this letter, please don't hesitate to contact me at Lauren.Milligan@dep.state.fl.us or (850) 245-2170.

Yours sincerely,

Lauren P. Milligan, Coordinator
Florida State Clearinghouse
Office of Intergovernmental Programs

Enclosures

ec: Ed Smith, DEP, OEP
Chad Kennedy, DEP, OEP WPB
Mindy Parrott, SFWMD
Forrest Watson, FDACS
Ray Scott, FDACS
Scott Sanders, FWC
Martin Markovich, FDOT

Project Information	
Project:	FL201502067180C
Comments Due:	03/17/2015
Letter Due:	04/05/2015
Description:	DEPARTMENT OF THE ARMY, JACKSONVILLE DISTRICT CORPS OF ENGINEERS - DRAFT ENVIRONMENTAL ASSESSMENT, PROPOSED G-3273 CONSTRAINT RELAXATION/S-356 FIELD TEST AND S-357N OPERATIONAL STRATEGY - MIAMI-DADE COUNTY, FLORIDA.
Keywords:	ACOE - DEA, G-3273 CONSTRAINT RELAXATION/S-356 FIELD TEST/S-357N OP - DADE CO.
CFDA #:	12.104

Agency Comments:

ENVIRONMENTAL PROTECTION - FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

The FDEP has provided input and guidance throughout the planning process and is supportive of initiating the G-3273 and the S-356 Pump Station operational field test. The FDEP authorized a 21-day operational test of the S-356 Pump Station (Increment 0) on October 24, 2014, and a conditional authorization to conduct a multi-year operational test of the S-356 Pump Station (Increment 1) on March 13, 2015, as part of implementing the proposed operational strategy described in Appendix A of this Draft EA and the proposed monitoring plan in Appendix C of this Draft EA. Most of the MWD to ENP Project components have been constructed, but a Combined Operations Plan has not been developed. The FDEP believes that the field test is necessary to not only move forward on implementing Increment 1, but to establish a path forward for Increment 2, and the completion of the Combined Operations Plan. The conditional authorization provided to the Corps on March 13, 2015, relied upon the recognition that all parties, including the Corps, Department of the Interior (DOI), the SFWMD, and the FDEP, are committed to implementing joint restoration projects and associated operational plans in a manner that is consistent with the objectives of the underlying Central and South Florida (C&SF) Project. It is important to recognize in this Draft EA that there is a commitment that the Corps, DOI, and the State would use all available relevant data and supporting information to inform operational planning and decision making, document decisions made, and evaluate the resulting information from those decisions to avoid adverse impacts to water quality where practicable and consistent with the purposes of this conditional authorization. The conditional authorization provided to the Corps on March 13, 2015, does not authorize the operation of the S-357N water control structure nor does the current MWD to ENP Project permit (FDEP File No. 0246512-010). A permit modification is required....

STATE - FLORIDA DEPARTMENT OF STATE

No Comment/Consistent

SOUTH FLORIDA WMD - SOUTH FLORIDA WATER MANAGEMENT DISTRICT

The SFWMD advises that the S-356 operation criteria should be included to describe how S-356 will be operated to maximize direction of excess water from L-30 and L-31N to Everglades National Park through S-356 in an efficient and flexible manner. There are places in the Draft EA where the potential inclusion in compliance calculations of S-356 as a new inflow point from the WCAs is suggested or inferred. While there should be general acknowledgment in the EA of the language of the Consent Decree on treatment of new inflows, there should also be recognition that the inclusion of S-356 in future Appendix A calculations for Long Term Limits will be considered and decided by the TAC. The monitoring plan detailed in Appendix C suggests a level of responsibility for implementing the monitoring plan that is outside the scope of currect agreements between the USACE and SFWMD. The SFWMD is currently evaluating the level of effort that would be required to support field data collection and lab analyses that are proposed. The ability of the SFWMD to commit the necessary resources and staffing is dependent on further negotiations with the USACE and DOI regarding opportunities for federla funding or cost sharing of these tasks.

AGRICULTURE - FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES
The FDACS supports the selection of Alternative G as the Preferred Alternative, as it allows for a meaningful first use of facilities associated with the MWD Project while recognizing the significant uncertainty regarding flood protection for developed lands east of ENP and in the C-111 Basin. It also includes a mechanism to begin releases through S-197 slightly sooner while reducing the maximum discharge rate for Level 1 discharges. The Draft EA, with the proposed monitoring, provides the necessary justification for the recommendation of a one or two-year field test for this important start to the MWD Project operations. FDACS is concerned regarding the EA statements regarding the use of Column 2 to alleviate high water conditions in WCA 3. Numerous times the EA states in one form or another that, "Under historical Interim Operational Plan (IOP) and Everglades Restoration Transition Plan (ERTP) operations, the Column 2 mode of operations has also been used as an additional water management tool for WCA 3A high water condtitions." While that may be true, it was not analyzed in either IOP or ERTP and should be discontinued outside the S-12 closure period. Continuing to divert WCA-3A regulatory releases and seepage flows from the Everglades into South Miami-Dade was not part of the authorized design of the MWD or C-111 Projects and FDACS views Increment 1 as the first step in curtailing or eliminating that practice.
FISH and WILDLIFE COMMISSION - FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION
The FWC's past comments provide for continued support for the relaxation of the G-3273 constraint that curtails flows from WCA 3A to ENP through NESRS. This is recognized as a positive step towards restoration of both areas. Modification and/or removal of the trigger would provide ecological benefits by assisting reduction of high water levels in WCA 3A and furthering the Modified Water Deliveries objective of providing increased flows to NESRS. The proposed changes for the operating criteria at the S-197 structure include incremental discharges to assist in moderating high stages in the C-111 Canal. Though the incremental discharges at S-197 may increase the duration of discharge days, the flows will start with lower volumes. Since the field test will be short-term and temporary, these discharges would be preferred over high volume freshwater discharges at the S-197 structure to reduce abrupt changes in salinity within Manatee Bay and Barnes Sound.
TRANSPORTATION - FLORIDA DEPARTMENT OF TRANSPORTATION
The FDOT's District Six staff reports that, although a primary concern of the restoration of Everglades National Park is to rehydrate the NESRS, there is a potential for negatively impacting flood protection in the urban areas to the east. Recent projects, such as the 8.5-Square Mile Area, have improved the system for flood protection and as a result, the USACE would like to increase flows to NESRS. Based on the documentation submitted, the impacts to US-41 should be negligible considering the operational constraints documented on Page 1-8 of the report. The only consideration to this operational constraint is the hydraulic feasibility. Considering that water in the NESRS flows south, it is assumed that G-3273 is hydraulically down gradient of the L-29 Canal and US-41. If the slope of the hydraulic grade line is assumed to be 0.1 ft. per mile, the stages in the L-29 Canal should be 0.7 ft. higher than the stages at G-3273, since the monitoring station is 6.7 miles south of the L-29 Canal. The following consideration should be raised: How will a level pool be maintained such that when stages at G-3273 are raised to 7.5 ft. NGVD, if the stages in the L-29 Canal, 7 miles to the north, will be the same?

For more information or to submit comments, please contact the Clearinghouse Office at:

3900 COMMONWEALTH BOULEVARD, M.S. 47
TALLAHASSEE, FLORIDA 32399-3000
TELEPHONE: (850) 245-2161
FAX: (850) 245-2190

Visit the Clearinghouse Home Page to query other projects.

Memorandum

TO: Lauren Milligan, Florida State Clearinghouse

THROUGH: Edward C. Smith, Director
Office of Ecosystem Projects

FROM: Frank Powell, Inger Hansen, Rhapsodie Osborne, and Natalie Barfield
Office of Ecosystem Projects

DATE: March 27, 2015

SUBJECT: Department of the Army, Jacksonville District Corps of Engineers – Draft Environmental Assessment, Proposed G-3273 Constraint Relaxation/S-356 Field Test and S-357N Operational Strategy – Miami-Dade County, Florida.

SAI #: FL201502067180C

Summary:
The Jacksonville District, U.S. Army Corps of Engineers (Corps) has prepared a Draft Environmental Assessment (EA) for an operations field test that will include relaxation of the Gauge-3273 (G-3273) constraint, operation of the S-356 Pump Station, and implementation of an operational strategy for the S-357N water control structure following completion of construction. The field test is the first in a series of sequential efforts that are intended to incorporate constructed features of the Modified Water Deliveries to Everglades National Park (MWD to ENP) and C-111 South Dade projects into a comprehensive operations plan, referred to as the Combined Operating Plan (COP).

The purpose of this field test is to evaluate relaxing the existing G-3273 stage constraint to enable increased water deliveries from Water Conservation Area (WCA) 3 to Everglades National Park (ENP) through the Northeast Shark River Slough (NESRS) for the benefit of natural resources. The field test will also implement a testing protocol to assist in defining operating criteria for the new 8.5 Square Mile Area S-357N water control structure following completion of construction. The field test will be the first increment in a series of three related sequential efforts that will result in a COP, for the operation of the water management infrastructure connected to the MWD to ENP and C-111 South Dade Projects. Operations in the project area are currently governed by the WCAs, ENP, and ENP to South Dade Conveyance System (SDCS) Water Control Plan (WCP). The Corps is initiating the G-3273 and the S-356 Pump Station operations field test to relax the current operational stage constraint for inflow into NESRS at the G-3273, and operate the S-356 Pump Station for control of seepage into the L-31N Canal.

The field test will maintain the current operating limit constraint of 7.5 feet National Geodetic Vertical Datum (1929, NGVD) in the L-29 Canal, while relaxing the G-3273

stage constraint and utilizing the S-356 Pump Station for control of seepage into the L-31N Canal. It is anticipated that during the field test, the combined flows to NESRS through the S-333 water control structure and the S-356 Pump Station will likely be more than what would have otherwise been discharged through the S-333 water control structure under current operations. No changes to water supply operations are proposed.

Background:
The Florida Department of Environmental Protection (FDEP/Department) has previously provided both verbal and written comments regarding the incremental relaxation of the G-3272 constraint for deliveries to the ENP throughout the joint planning efforts and the State's Coastal Zone Management Program responses. Our comments on similar proposals were provided in the following letters and authorization submitted to the Corps:

- March 13, 2015, FDEP Conditional Authorization to Conduct a Multi-Year Operational Test of the S-356 Pump Station (Increment 1).
- October 24, 2014, FDEP Conditional Authorization to Conduct a 21-Day Operational Test of the S-356 Pump Station (Increment 0).
- July 14, 2014, FDEP Clearinghouse letter for Scoping Notice – Proposed Operations Field Test (SAI # FL201308236696C);
- September 6, 2013, FDEP Memo with the South Florida Water Management District (SFWMD) comments on the Corps' draft EA for the Proposed G-3273 Planned Deviation from the 2012 Water Conservation Areas, Everglades National Park and ENP-South Dade Conveyance System Water Control Plan (SAI # FL201308236696C);
- November 16, 2012, FDEP letter requesting additional information for a two-year S-356 Pump Station and G-3273 gauge constraint relaxation field test request for the MWD to ENP Project (FDEP File No. 0246512). The letter contained both SFWMD and FDEP comments on the proposed testing project;
- July 8, 2011, FDEP Clearinghouse letter for Scoping Notice – Combined Operations Plan, MWD (SAI # FL201105255769);
- November 9, 2010, FDEP Memo to the State Clearinghouse regarding the Corps' draft EA for Temporary Deviation from Interim Operation Plan (IOP) Table ES-1; S-333: G-3273 Constraint (SAI # FL201009295486C); and
- December 9, 2009, FDEP Memo to Susan Conner (Corps) providing comments on the G-3273 Modification field test.

Comments:
The Department has provided input and guidance throughout the planning process and is supportive of initiating the G-3273 and the S-356 Pump Station operational field test. The Department authorized a 21-day operational test of the S-356 Pump Station (Increment 0) on October 24, 2014, and a conditional authorization to conduct a multi-year operational test of the S-356 Pump Station (Increment 1) on March 13, 2015, as part of implementing the proposed operational strategy described in Appendix A of this Draft EA and the

proposed monitoring plan in Appendix C of this Draft EA. Most of the MWD to ENP Project components have been constructed, but a Combined Operations Plan has not been developed. The Department believes that the field test is necessary to not only move forward on implementing Increment 1, but to establish a path forward for Increment 2, and the completion of the Combined Operations Plan.

The conditional authorization provided to the Corps on March 13, 2015, relied upon the recognition that all parties, including the Corps, Department of the Interior (DOI), the SFWMD, and the FDEP, are committed to implementing joint restoration projects and associated operational plans in a manner that is consistent with the objectives of the underlying Central and South Florida (C&SF) Project. It is important to recognize in this Draft EA that there is a commitment that the Corps, DOI, and the State would use all available relevant data and supporting information to inform operational planning and decision making, document decisions made, and evaluate the resulting information from those decisions to avoid adverse impacts to water quality where practicable and consistent with the purposes of this conditional authorization.

The conditional authorization provided to the Corps on March 13, 2015, does not authorize the operation of the S-357N water control structure nor does the current MWD to ENP Project permit (FDEP File No. 0246512-010). A permit modification is required in order to operate the S-357N water control structure.

The conditional authorization provided to the Corps on March 13, 2015, relied upon adherence to Section 8.3 of the Recommendations Chapter in the Central Everglades Planning Project (CEPP), Project Implementation Report (PIR), where Section 8.3 provides the expectations and guiding principles associated with water quality for ENP and the Southern Estuaries. The Department requests that the CEPP water quality language, as illustrated below, is included into this Draft EA and that an explanation is provided as to how the Corps plans to follow these guiding principles to resolve only potential water quality issues associated with the proposed field test.

> "*Restoration of the Everglades requires projects that address hydrologic restoration as well as water quality improvement. This has been recognized by the National Academy of Sciences in its most recent biennial report where it noted that near-term progress to address both water quality and water quantity improvements in the central Everglades is needed to prevent further declines of the ecosystem. The significant amount of water resulting from CEPP is contemplated to significantly improve restoration of the Everglades. Both the Federal and State parties recognize that water quantity and quality restoration should be pursued concurrently and have collaborated to develop and concur on a suite of restoration strategies being implemented by the State to improve water quality ("State Restoration Strategies"), as well as other State and Federal restoration projects, both underway and planned, to best achieve Everglades hydrologic objectives. Specific examples of Federally authorized projects*

include the Everglades Restoration Transition Plan, Modified Water Deliveries to Everglades National Park Project, and the Tamiami Trail Next Steps Project.[5] One of the goals of these projects and their associated operating plans, as well as certain components of the CERP awaiting authorization or that are being planned as part of the CEPP is to improve water quantity and quality in the Everglades through more natural water flow within the remnant Everglades which includes the water conservation areas and ENP. Variations in flows of the C&SF system may result from a variety of reasons. These reasons include natural phenomena (e.g. weather) and updates to the operating manuals to achieve the purposes of the C&SF Project such as flood control and water supply.

One goal of the Consent Decree[6] is to restore and maintain water quality within ENP. The Consent Decree established, among other things, long-term water quality limits for water entering ENP to achieve this goal. The existing limits for ENP are flow dependent and, generally, increased volume of water results in a lower allowable concentration of phosphorus to maintain the overall load of phosphorus entering the ENP. There will be redistribution of flows and increased water volume above existing flows associated with system restoration efforts beyond the current State Restoration Strategies projects. The USACE and its Federal and State partners recognize that to achieve long-term hydrologic improvement, water quality may be impacted, particularly as measured by the current Consent Decree Appendix A compliance methodology. The USACE and the State partners agree that the monitoring locations/stations for inflows to ENP will require revision. An evaluation of this and other aspects of the compliance methodology are currently being conducted by the Technical Oversight Committee (TOC).

In an effort to address these potential impacts and determine updates to Appendix A to reflect increased inflows and new discharges into ENP since the Consent Decree was entered, the parties to the Consent Decree have established a process and scope for evaluating and identifying necessary revisions to the Appendix A compliance methodology utilizing the scientific expertise of the TOC. The TOC may consider all relevant data, including the 20 years of data collected since Appendix A was implemented. Ultimately, such evaluations and changes to the Appendix A compliance methodology would be recommended by the Consent Decree's TOC for potential agreement by all parties. Failure to develop a mutually agreed upon and scientifically supportable revised compliance methodology will impact the State's ability to implement or approve these projects.

The aforementioned State Restoration Strategies will be implemented under a Clean Water Act discharge permit that incorporates and requires implementation of corrective actions required under a State law Consent Order, as well as a Framework Agreement between the U.S. Environmental Protection Agency and the State discharge permitting agency, the Florida Department of Environmental Protection, to ensure

compliance with Clean Water Act and State water quality requirements for existing flows into the Everglades. The Clean Water Act permit for the State facilities, the associated Consent Order (including a detailed schedule for the planning, design, construction, and operation of the new project features), and technical support documents were reviewed by, and addressed all of, the U.S. Environmental Protection Agency's previous objections related to the draft National Pollutant Discharge Elimination System ("NPDES") permits, prior to issuance.

All parties are committed to implementing the State Restoration Strategies, joint restoration projects, and associated operational plans, in an adaptive manner that is consistent with the objectives of the underlying C&SF Project. The USACE and the State will use all available relevant data and supporting information to inform operational planning and decision making, document decisions made, and evaluate the resulting information from those decisions to avoid adverse impacts to water quality where practicable and consistent with the purposes of the C&SF Project. Based upon current and best available technical information, the Federal parties believe at this time that the State Restoration Strategies, implemented in accordance with the State issued Consent Order and other joint restoration projects, are sufficient and anticipated to achieve water quality requirements for existing flows to the Everglades. If there is an exceedance of the Appendix A compliance limits, which results from a change in operation of a Federal project, and it has been determined that an exceedance cannot be remedied without additional water quality measures, the Federal and State partners agree to meet to determine the most appropriate course of action, including what joint measures should be undertaken as a matter of shared responsibility. These discussions will include whether it is appropriate to exercise any applicable cost share authority. If additional measures are required and mutually agreed upon, then they shall be implemented in accordance with an approved process, such as a general reevaluation report or limited reevaluation report, and if necessary, supported through individual project partnership agreements. Failure to develop mutually agreed upon measures and cost share for these measures may impact the State's ability to operate the Federal project features."

5 The next phase of bridging for Tamiami Trail roadway as authorized by Congress.
6 *United States v. South Florida Water Management District, et al.*, Case No. 88-1886-CIV-Moreno (U.S.D.C., S.D. Fla.).

The Draft EA should include recognition that the Technical Oversight Committee will consider and decide if future Consent Decree Appendix A calculations for Long Term Limits will include the S-356 Pump Station.

Specific Comments:

Page 1-12 and Bullet F of FONSI – Permits, Licenses, and Entitlements

- Please reference the Everglades Forever Act Permit by permit ID number. Please add all permits and their FDEP file numbers that would be affected to this statement. This information should also be referenced on Page 1-12 of the Draft EA, Section 1.10 Permits, Licenses, and Entitlements whereas currently only permit (File No. 0246512-010) is referenced.

Page 1-4 – Project Background

- Page 1-4 states, "An operational test conducted in 2009 indicated that the S-357 pump station and other 8.5 SMA features may not adequately mitigate the southwest corner of the 8.5 SMA. To ensure utilization of the S-357 Pump Station at maximum design capacity following completion of the NDA, new hydrologic modeling identified an additional east-west seepage collection canal (C-358) was needed to properly mitigate groundwater stages in the southwest corner (east of L-357W). A gated control structure (S-357N), currently planned for construction in fiscal year 2015, will connect the C-358 seepage collection canal to the existing C-357 Canal, upstream of S-357." This indicates the need to install and obtain a permit for the operations of the S-357N water control structure as the permit currently does not authorize pumping from the C-358 Canal or the operation of the S-357N water control structure.

  Given that the S-357N water control structure installation is currently scheduled for completion in February 2016, please modify the FONSI bullet (b) that states, "The field test may be implemented as early as May 2015" to specify how the field the test will be implemented without construction of the S-357N water control structure. Additionally, per the Department's comment below on Appendix A-4, please modify the FONSI bullet (b) to specify how the field test will be implemented without construction of the North Detention Area or Contract 8.

Appendix A-2 – Introduction

- Please acknowledge "This Operational Strategy also defines a testing protocol for S-357N operating criteria that will be incorporated into the first field test following completion of the C-358 seepage collection canal and associated S-357N." The MWD to ENP Project permit (FDEP File No. 0246512) will need to be modified to allow for operations of the S-357N water control structure.

- Regarding "Increment 1 includes additional water management operating criteria for features of the SDCS including S-197 (in addition to the S-197 operating criteria defined in the 2012 WCP)," please acknowledge that the operations plan for the S-197 Control Structure Project permit (FDEP File No. 0306639) may need to be modified in order for operations to vary from the current Operation Plan on file with the Department.

- In order to completely reference all permits associated with affected structures, please specify, that the current Operational Protocol on file with the Department for the S-357 Pump Station (FDEP File No. 0317442) does not vary from the operational criteria outlined within the 2012 Water Control Plan for WCAs, ENP, and ENP-South Dade Conveyance System, and operations for this structure will not be changed and that a modification to this permit is not necessary for the operational field test(s).

Appendix A-4 – Operational Strategy for G-3272 Constraint Relaxations/S-356 Field Test

- Please specify how the field test will be implemented without construction of the North Detention Area or Contract 8 based on the following statement, "This increase is not expected to be manageable until the construction and operation of the C-111 South Dade Project Northern Detention Area (NDA)."

The Department sincerely appreciates the opportunity to comment and looks forward to continuing our partnership with the Corps. Should you have any questions regarding our comments, please contact Natalie Barfield at (850) 245-3197.

Electronic copies to:
Ed Smith
Frank Powell
Kelli Edson
Chad Kennedy
Inger Hansen
Rhapsodie Osborne
Deinna Nicholson
Jordan Pugh

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

March 17, 2015

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

Subject: Department of the Army, Jacksonville District Corps of Engineers, Draft Environmental Assessment, Proposed G-3273 Constraint Relaxation/S-356 Field Test and S-357N Operational Strategy, Miami-Dade County, Florida SAI #FL201502067180C

Dear Ms. Milligan:

The first increment of the referenced G-3273 and S-356 pump station field test will evaluate the raising or removing of the G-3273 constraint of 6.8 feet and holding the L-29 Canal stage at 7.5 feet to enable increased water deliveries to Everglades National Park. The South Florida Water Management District (District) recognizes that this is the first step in the incremental approach to develop the final operating plan for the Modified Water Deliveries to Everglades National Park and C-111 South Dade projects. The District has reviewed the documentation provided and supports the recommended approach of testing operational strategies that will be used to prepare water control plans that will achieve Everglades restoration goals. The following agency comments are suggestions relating to aspects of the proposed operating strategy, the characterization of water quality conditions and clarification of the role of the District in the implementation of the proposed monitoring plan.

S-356 Operation. Criteria should be included to describe how S-356 will be operated to maximize direction of excess water from L-30 and L-31N to Everglades National Park (ENP) through S-356 in an efficient and flexible manner. Criteria will be developed to the extent practicable within the L-29 Stage Limit, and support the operation of S-356 in a manner which reduces the need to send water south through G-211.

S-356 and Appendix A calculations. There are places in the EA where the potential inclusion in compliance calculations of S-356 as a new inflow point from the Water Conservation Areas is suggested or inferred. While there should be general acknowledgment in the EA of the language of the Consent Decree on treatment of new inflows, there should also be recognition that the inclusion of S-356 in future Appendix A calculations for Long Term Limits will be considered and decided by the Technical Oversight Committee.

The role of the SFWMD in the Monitoring Plan. The Monitoring Plan detailed in Appendix C suggests a level of responsibility for implementing the monitoring plan that is outside the scope of current agreements between the Corps and the District. The District is currently evaluating the level of effort that would be required to support field data collection and lab analyses that are

proposed. The ability of the District to commit the necessary resources and staffing is dependent on further negotiations with Corps and the Department of Interior regarding opportunities for federal funding or cost sharing of these tasks.

Thank you for the opportunity to provide input to the Florida State Clearinghouse review of this important step toward Everglades restoration. If you have any questions or comments, please contact Thomas Teets, Division Director, Office of Everglades Policy and Coordination at 561.682.6993.

Sincerely,

Blake C. Guillory, P.E.
Executive Director
South Florida Water Management District

BCG/pv

c: Rich Budell, FDACS
Rebecca Elliott, FDACS
Ernie Marks, FFWCC
Thomas Teets, SFWMD

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Florida Department of Agriculture and Consumer Services

Commissioner Adam H. Putnam

March 19, 2015

Lauren P. Milligan, Coordinator
Florida State Clearinghouse
Florida Department of Environmental Protection
3900 Commonwealth Blvd, M.S. 47
Tallahassee, FL 32399-3000

Dear Ms. Milligan:

The Florida Department of Agriculture and Consumer Services (FDACS) appreciates the opportunity to provide comments on the Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) – Proposed G-3273 Constraint Relaxation/S-357 Field Test and S-357N Operational Strategy dated February 2015, also known as Modified Water Deliveries (MWD) Increment 1Field Test. We are submitting the following comments for consideration as part of the Florida State Clearinghouse consistency evaluation.

Recent operational decisions have had significant, adverse impacts on growers in South Miami-Dade such that their crop productivity, livelihoods, and property values are jeopardized. It is essential that we begin to operate important project features, such as S-356, as they were intended so both the Everglades and the agricultural community can see some of the benefits the MWD Project was supposed to provide.

FDACS supports the selection of Alternative G as the preferred alternative. It allows for a meaningful first use of facilities associated with the MWD Project while recognizing the significant uncertainty regarding flood protection for developed lands east of Everglades National Park (ENP) and in the C-111 Basin. It also includes a mechanism to begin releases through S-197 slightly sooner while reducing the maximum discharge rate for Level 1 discharges. The EA and Draft FONSI, with the proposed monitoring, provide the necessary justification for the recommendation of a one or two year field test for this important start to the MWD Project operations.

FDACS is concerned about the EA and Draft FONSI statements regarding the use of Column 2 to alleviate high water conditions in WCA 3. Numerous times the EA and Draft FONSI states in

one form or another that " Under historical Interim Operational Plan (IOP) and Everglades Restoration Transition Plan (ERTP) operations, the Column 2 mode of operations has also been used as an additional water management tool for WCA 3A high water conditions." While that may be true, it is not something that was analyzed in either the IOP or the ERTP and should be discontinued outside the S-12 closure period. Continuing to divert WCA-3A regulatory releases and seepage flow from the Everglades into South Miami-Dade was not part of the authorized design of the MWD or C-111 Projects and we view Increment 1 as the first step in curtailing or eliminating that practice.

We do not oppose ERTP's operational flexibility for WCA 3A and the S-12s but it should not be used to send more water into South Miami-Dade canals. Our experience has been that this contributes to a sustained high water table in the agricultural areas that has caused significant harm to crops and business losses for the landowners.

The implementation of the MWD Increment 1 Field Test will allow significant progress towards the completion of the MWD Project and the development of a Combined Operating Plan (COP). Water Conservation Area (WCA) 3, ENP, and neighboring developed lands should all benefit from a successful field test. We look forward to working with our state and federal partners on both immediate and long-term efforts to improve system operations.

Thank you for the opportunity to provide Clearinghouse comments. We are also providing detailed staff comments and suggested edits, which are attached. If you have any questions regarding FDACS' comments, please contact Ray Scott at (850) 617-1716 or Rebecca Elliott at (561) 682-6040.

Sincerely,

W. Ray Scott
Environmental Administrator

WRS/bh

FDACS Staff Comments

FDACS' review focused on actions contained in the EA and Draft FONSI – Proposed G-3273 Constraint Relaxation/S-357 Field Test and S-357N Operational Strategy dated February 2015, also known as MWD Increment 1 Field Test, which may impact private agricultural lands and agricultural operations. The comments below are specific to the items addressed and do not constitute a review of the entire EA and Draft FONSI and its supporting Appendices.

1) Statements regarding the use of Column 2 to alleviate high water conditions in WCA 3

FDACS is concerned about the EA and Draft FONSI statements regarding the use of Column 2 to alleviate high water conditions in WCA 3. Numerous times the EA and Draft FONSI states in one form or another that " Under historical IOP and ERTP operations, the Column 2 mode of operations has also been used as an additional water management tool for WCA 3A high water conditions." (Additional examples are provided below.) While that may be true, it is not something that was analyzed in either the Interim Operational Plan (IOP) or the Everglades Restoration Transitional Plan (ERTP) and, as a result, is not authorized and should be discontinued outside the S-12 closure period. Continuing to divert WCA-3A regulatory releases and seepage flow from the Everglades into South Dade was not part of the authorized design of the MWD Projects or C-111 projects and not adequately analyzed for IOP or ERTP.

Repeating this description throughout the document doesn't provide de facto authorization of operations that are not explicitly authorized.

Page 2-2 First Paragraph last sentence : "Under historical IOP and ERTP operations, the Column 2 mode of operations has also been used as an additional water management tool for WCA 3A high water conditions."

Page 2-3 Table 2-1 Alternative Descriptions Alternative A: "Column 2 Operations to manage WCA 3A during S-12 Seasonal Closure Period and high water as conducted under IOP/ERTP "

Page 2-3 Section 2.1.1: "Column 2 operations would continue to be used to manage WCA 3A during the S-12 seasonal closure period (01 November through 14 July) and high water as conducted under IOP/ERTP."

Page 2-3 to 2-4 Section 2.1.2 "Column 2 operations would continue to be used to manage WCA 3A during the S-12 seasonal closure period and high water as conducted under IOP/ERTP."

Page 2-5 Section 2.1.5 mid second paragraph: "would not be used to manage high water between August 16th and October 31st, as may be periodically conducted under IOP/ERTP."

Page 3-12 First Paragraph second to last sentence: "Under historical IOP and ERTP operations, the Column 2 mode of operations has also been used as an additional water management tool for WCA 3A high water conditions."

2) Uncertainty regarding maintaining the authorized purposes of the C&SF project and subsequent modifications

There is no conflict with authorized project purposes or uncertainty regarding maintaining the authorized purposes of the C&SF project and subsequent modifications. This is a one or two year field test in an area where all restoration projects are incomplete and operated without long term permits under interim or transitional operational plans. There is no adverse impact to any authorized purpose of the project components anticipated to be operated under the terms of the Increment 1 Field Test.

Page 2-15, paragraph 3 and Page 2-17 Table 2-7 : While appreciating the rationales applied on Page 2-15, paragraph 3, for carrying Alternatives E and G forward, there is no reason to assert uncertainty for maintaining authorized project purposes because there is no conflict with authorized project purposes. The inclusion of this uncertainty column on the Page 2-17 Table 2-7 indicates a difference in the Alternatives that does not really exist.

Recommend removing the uncertainty for "Maintain the authorized purposes of the C & SF Project and subsequent modifications ..." designation from all alternatives and Table 2-7.

3) Page 1-5, second paragraph, which provides background information regarding project authorizations, should be corrected as follows:

The C-111 South Dade Project was authorized by the Flood Control Act (FCA) of 1962 (PL 87-874). This Act authorized modifications to the existing C&SF Project as previously authorized by the FCAs of 1948 (PL 80-858) and 1954 (PL 83-566), The ENP–South Dade Conveyance System (SDCS) Project, authorized by the Flood Control Act of 1968, included the enlargement of existing canals and construction of new structures and pump stations.

4) On Page 1-9 1.6, OPERATIONAL CONSTRAINTS, we recommend the following change:

"C. No reduction in current flood protection".

Delete "current" because current operations do not provide adequate flood protection.

5) On Page 2-2, we recommend changing the last paragraph as follows:

"Modified operational protocols for S-197 were included within Alternatives E and G to assess possible changes to flood protection for areas within South Miami-Dade County which may be affected during the field test by changes to the basin inflows from the S-331 pump station and increased seepage to the L-31N Canal south of the S-331 pump station, prior to the construction and operation of the C-111 South Dade Project NDA."

These changes are needed because the plan begins S-197 releases sooner while reducing the maximum discharge rate for Level 1 discharges, but does not necessarily increase the volume of flood control discharges.

ON Page 2-15, second sentence of the last paragraph, the "Increased flood control releases" language also needs to modified.

6) Page 2-20 Section 2.4 PREFERRED ALTERNATIVE(S)

The (S) after "Alternative" is not needed and should be deleted.

7) Page 2-23 Table 2-8 HYDROLOGY

Alternative E NESRS: – "removal of G-3273 constraint" Recommend changing "removal" to "relaxation".

Alternative G ENP Eastern Panhandle and Manatee Bay/Barnes Sound: "Minor to moderate impact with increased frequency and duration of low volume S-197 discharges; frequency and duration of S-197 discharges from 200-800 cfs (Level 1 S-197 gate opening range) will be reduced; and frequency and duration of flows greater than 800 cfs similar to effects discussed for No Action Alternative (refer to **Section 4.5**)."

Recommend modifying above paragraph to remove "moderate" to be consistent with the rest of the document and change to "Negligible to minor impact from increased days with flow below 200 cfs being offset by a reduction in flow days above 200 cfs including a reduction of maximum flows from 800 cfs to 500 cfs during Level 1 S-197 discharges. Frequency and duration of flows greater than 800 cfs similar to No Action Alternative (refer to Section 4.5)."

8) Page 2-24 Table 2-8 FLOOD CONTROL –

Alternative A: South-Dade County: No significant effect, as less water is passed to the SDCS as compared with IOP.

Recommend deleting "less water is passed to the SDCS as compared with IOP" since the data under ERTP operations shows otherwise. ERTP has led to significant damage to agricultural crops because of the large diversions of flow to the SDCS.

We recommend modifying Alternative E language as follows (consistent with the item 5 recommendation):

Alternative E: "South-Dade County: no significant effect, due to significant reduction in WCA 3A regulatory release volume to the SDCS and inclusion of modified operational protocols for S-197 to assess possible changes to flood protection for South Dade areas which may be conditionally affected by the field test."

We recommend modifying Alternative F language as follows:

Alternative F: "South-Dade County: Potential negligible to minor adverse effect due to net effect of reduced WCA 3A regulatory discharges to SDCS combined with increased flood control releases from S-331/S-173and increased seepage to the L-31N Canal south of S-331 with no change to operating criteria for S-18C and S-197; additional inflow volumes to L31N Canal, if resultant from the field test, are expected to be primarily managed with the C111 South Detention Area using S-332 B, S-332C, and S-332D. "

9) Page 2-31 Table 2-8 AGRICULTURE –

Alternative A: Negligible: Less water is passed to the SDCS as compared with IOP.

Recommend deleting "less water is passed to the SDCS as compared with IOP" since the data under ERTP operations shows otherwise. ERTP has led to significant damage to agricultural crops because of the large diversions of flow to the SDCS.

Florida Fish and Wildlife Conservation Commission

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March 17, 2015

Lauren Milligan
Florida State Clearinghouse
Florida Department of Environmental Protection
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Tallahassee, FL 32399-3000
Lauren.Milligan@dep.state.fl.us

Re: SAI #FL201502067180C (Reference SAI #FL201308236696C), Department of the Army, Jacksonville District Corps of Engineers – Draft Environmental Assessment, Proposed G-3273 Constraint Relaxation/S-356 Field Test and S-357N Operational Strategy, Miami-Dade County, Florida

Dear Ms. Milligan:

Florida Fish and Wildlife Conservation Commission (FWC) staff has reviewed the above-referenced project, and provides the following comments for your consideration in accordance with the National Environmental Policy Act (NEPA) and the Coastal Zone Management Act/Florida Coastal Management Program.

The U.S. Army Corps of Engineers (USACE) has prepared an Environmental Assessment (EA) and a Proposed Finding of No Significant Impact (FONSI) for an operations field test (known as Increment 1) that will include relaxation of the Gage-3273 (G-3273) constraint and operation of water control structures S-356 and S-357N. The field test is the first in a series of sequential efforts that are intended to incorporate constructed features of the Modified Water Deliveries (MWD) to Everglades National Park (ENP) and Canal 111 (C-111) South Dade projects into system wide Central and Southern Florida (C&SF) Project operations. The field test proposed within the EA and FONSI would occur within Miami-Dade County.

The G-3273 constraint of 6.8 feet National Geodetic Vertical Datum (NGVD) was originally established as a flood protection measure. A stage of 6.8 feet NGVD at this gage has been used since 1985 as a trigger to cease S-333 discharges from flowing south into Northeast Shark River Slough (NESRS) as a protective measure for residential areas to the east, particularly in the 8.5 Square Mile Area. Many of the MWD features have been built and there are more opportunities to relax the G-3273 constraint and associated increased water deliveries from WCA 3A into NESRS.

Increment 1 will maintain the current 7.5 feet NGVD maximum operating limit in the L-29 Canal. Information and operational criteria identified from Increment 1 will be used to develop an expanded set of operations and monitoring criteria for a subsequent operational field test (Increment 2) that will raise the maximum operating limit in the L-29 Canal above 7.5 feet NGVD, up to a maximum of 8.5 feet NGVD. The third increment is development of the Combined Operating Plan (COP) that incorporates constructed features of the MWD and C-111 South Dade Projects. The objectives of Increment 1 include the following:

- Improve hydrological conditions in NESRS in ENP through relaxation of the G-3273 stage criteria to increase water deliveries from Water Conservation Area 3A (WCA 3A) to NESRS, while maintaining other C&SF Project authorized purposes.
- Use the S-356 pump station to manage seepage from NESRS to the L-31N Canal resulting from the relaxation of the G-3273 stage constraint on S-333, in conjunction with increased flows through the S-333 spillway to NESRS via the L-29 Canal.
- Improve hydrological conditions in NESRS by maximizing the flexibility and efficiently of the existing infrastructure, including use of seepage management (e.g. S-356) to complement inflows to NESRS from WCA 3A.
- Gather and analyze infrastructure performance, ecologic, hydrologic, and water quality data sufficient to support Increment 2 resulting in the following:
    - Data gathering sufficient water quality certification,
    - Refined operational criteria for the MWD and C-111 South Dade Projects, and
    - Updates to the 2012 Water Control Plan

The FWC has fish, wildlife, and land management responsibilities for WCAs 2 and 3 which are managed as the Everglades and Francis S. Taylor Wildlife Management Area (EWMA). The FWC provided comments to the previously submitted draft EA on November 1, 2010, and September 5, 2013, and most recently on the scoping notice on July 11, 2014 (enclosed). Our letters provide for continued support for the relaxation of the G-3273 constraint that curtails flows from WCA 3A to ENP through NESRS. This is recognized as a positive step towards restoration by assisting in reducing high water levels in WCA 3A and furthering the MWD objective of providing increased flows to NESRS.

The proposed changes for the operating criteria at the S-197 structure include incremental discharges to assist in moderating high stages in the C-111 Canal. The incremental target flows will start with lower volumes and gradually increase. The S-197 target flows start at 50 to 100 cubic feet per second (cfs), followed by 100 to 150 cfs, 150 to 200 cfs, and finally 500 cfs with a trigger of the S-178 Tailwater. The operating criteria changes include a reduction in discharge for level one opening of S-197 from approximately 800 cfs to 500 cfs. The incremental discharges at S-197 may increase the duration of discharge days, however, the flows will start with lower volumes. FWC staff recognizes that the field test duration is temporary and planned for approximately two years, with a minimum duration of one year. Since the field test will be short-term and temporary, incremental discharges would be preferred over high volume freshwater discharges at the S-197 structure to reduce abrupt changes in salinity within Manatee Bay and Barnes Sound.

FWC staff understands raising the maximum operating limit of the L-29 Canal is proposed as a part of Increment 2 due to pending future acquisition of real estate interests along Tamiami Trail and additional NEPA documentation. The FWC supports raising the maximum operating limit in the L-29 Canal above 7.5 NGVD to alleviate potential prolonged high water conditions which pose a threat to fish, wildlife and habitats within

the EWMA. FWC staff will continue to coordinate with the USACE for water management recommendations within the EWMA.

Additionally, the FWC appreciates the inclusion of "Table 4-2: State Listed Species Within The Project Area And Species Determination For The Proposed Action" within the EA. The FWC concurs with the majority of the list, however, we recommend adding the Everglades mink and roseate spoonbill to the "may affect, not likely to adversely effect" category.

We find this project consistent with FWC's authorities under the Coastal Zone Management Act/Florida's Coastal Management Program and we will continue to work with partnering agencies to conserve Florida's fish and wildlife resources. If you need any further assistance, please do not hesitate to contact Jane Chabre either by phone at (850) 410-5367 or by email at FWCConservationPlanningServices@MyFWC.com. If you have specific technical questions regarding the content of this letter, please contact Marissa Krueger by phone at (561) 882-5711 or by email at Marissa.Krueger@MyFWC.com.

Sincerely,

Ernest Marks
Regional Director

em/mk
ENV 1-3-2
G-3273 and S-356 Pump Station Field Test Draft EA_20596_031715
Enclosure

cc: Eric Summa, USACE, Eric.P.Summa@usace.army.mil
Melissa Nasuti USACE, Melissa.A.Nasuti@usace.army.mil
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July 11, 2014

Mr. Eric P. Summa, Chief
Environmental Branch, Jacksonville District
U.S. Army Corps of Engineers
P.O. Box 4970
Jacksonville, FL 32232-0019
Eric.P.Summa@usace.army.mil

Re: Department of the Army, Jacksonville District Corps of Engineers - Scoping Notice - Proposed G-3273 Operations Field Test, Relaxation of the G-3273 Constraint and Operation of Water Control Structures S-356 and S-357 N, Everglades National Park, Miami-Dade County, Florida

Dear Mr. Summa:

Florida Fish and Wildlife Conservation Commission (FWC) staff has reviewed the above-referenced project and provides the following comments for your consideration in accordance with the National Environmental Policy Act, and to assist in identifiying issues and resources to be considered during the scoping process.

The U.S. Army Corps of Engineers (COE) proposes an operations field test that includes relaxation of the existing Gage-3273 (G-3273) stage constraint. Relaxation of this constraint would enable increased water deliveries from Water Conservation Area (WCA) 3A to Everglades National Park (ENP) through Northeast Shark River Slough (NESRS). The field test would also provide data for the S-356 and S-357 N water control structures in order to develop future water management operating criteria. The proposed test would be implemented in 2015 for duration of one year, unless sufficient data was not obtained, in which case the test would be extended for up to two years.

The FWC has fish and wildlife and land management responsibilities for WCAs 2 and 3, which are managed as the Everglades and Francis S. Taylor Wildlife Management Area (EWMA). We recommend water management actions that will help reduce extreme high water levels and prolonged inundation periods within WCA 3 that result in negative impacts to its natural communities. In support of our recommendations and to assist with identifying issues that should be addressed during the planning process for this project, we would like to highlight several recent actions releveant to this scoping process. The FWC conveyed comments and recommendations on the G-3273 constraint in letters (enclosed) through the Florida State Clearinghouse dated November 1, 2010, and September 5, 2013. The FWC has also developed a position paper entitled "Hydrologic Requirements for the EWMA" dated November 20, 2013 (enclosed). This paper provides biologically based guidance for managing water levels in the Everglades to ensure restoration of fish and wildlife populations, habitats, and diversity so that the Comprehensive Everglades Restoration Plan (CERP) goals can be fully realized.

The G-3273 constraint of 6.8 feet NGVD exists as a flood protection measure and has been used since 1985 as a trigger to cease S-333 discharges from flowing south into NESRS as a protective measure for residential and agricultural areas to the east. Because many of the Modified Water Deliveries (MWD) to ENP project features have been built,

the opportunity exists for relaxation of the G-3273 constraint and subsequent increased water deliveries from WCA3A. The FWC fully supports the relaxation of the G-3273 constraint that curtails flows from WCA 3A to ENP through NESRS as a positive step towards restoration by assisting in reducing high water levels in WCA 3A, and furthering the MWD objective of providing increased flows to NESRS.

The FWC remains supportive of the COE's efforts to reduce high water levels in the WCAs and increase flows to NESRS, as recommended in our previous correspondence. We remain committed to working with partnering agencies to fulfill CERP goals and conserve Florida's fish and wildlife resources. If you, your staff, or COE staff would like to coordinate further on the recommendations contained in this letter, I can be reached at (850) 488-3831 or by email at scott.sanders@myfwc.com. If you or your staff has any specific questions regarding our comments, I encourage them to contact Ms. Marsha Ward in our Sunrise Field Office at (954) 746-1789 or at marsha.ward@myfwc.com.

Sincerely,

Scott Sanders, Director
Office of Conservation Planning Services

ss/mk/mw
ENV 1-3-2
G-3273 Operations Field Test Everglades National Park_19467_071114
Enclosures: Enclosure 1. Florida State Clearinghouse Letter Dated November 1, 2010
Enclosure 2. Florida State Clearinghouse Letter Dated September 5, 2013
Enclosure 3. FWC Position Paper Dated November 20, 2013

cc: Chuck Collins, FWC, Chuck.Collins@myFWC.com
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Melissa Nasuti, USACE, Melissa.A.Nasuti@usace.army.mil
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November 1, 2010

Lauren Milligan
Florida State Clearinghouse
Department of Environmental Protection
3900 Commonwealth Boulevard, MS 47
Tallahassee, FL 32399

Re: SAI# FL201009295486C, Draft Environmental Assessment, Temporary Deviation from IOP Tables ES-1; S-333: G-3273 Constraint – Miami-Dade County, Florida.

Dear Ms. Milligan:

The Division of Habitat and Species Conservation, Terrestrial Habitat Conservation and Restoration Section, of the Florida Fish and Wildlife Conservation Commission (FWC) has coordinated our agency's review of the above referenced project, and provides the following comments in accordance with the Coastal Zone Management Act/Florida Coastal Management Program and the National Environmental Policy Act.

The project is a temporary deviation of the G-3273 Trigger Stage stated in the 2006 Interim Operational Plan (IOP) for Protection of the Cape Sable Seaside Sparrow (*Ammodramus maritimus mirabilis*, CSSS). The trigger stage modification would be concluded by December 31 and would not affect the CSSS breeding window. The proposed action would not adversely affect water quality, as water quality would continue to be monitored at the S-12 and S-333 structure locations. The proposed action would potentially move more water into Northeast Shark River Slough (NESRS) from Water Conservation Area (WCA) 3A through S-333. The limited duration of the deviation would allow the U. S. Army Corps of Engineers' (COE) to test operations to determine how much additional water can be moved through S-333. All structure flows and canal levels would be monitored to ensure that no significant impacts occur to flood protection levels. In addition, this temporary deviation would also afford the COE an opportunity to collect data for use in the G-3273 Trigger Stage Modification Field Test.

The FWC views the relaxation of the G-3273 constraint that curtails flows from WCA 3A to Everglades National Park through NESRS as a positive step towards the restoration of both areas. As many of the Modified Water Deliveries (MWD) to Everglades National Park project features have been built, the opportunity exists for relaxation of the constraint. Modification and/or removal of the trigger would provide ecological benefits by assisting in reducing high water levels in WCA 3A and further the MWD objective of providing increased flows to NESRS.

The preferred alternative is Alternative B, which will provide an incremental modification of the G-3273 constraint up to 7.0 feet NGVD until December 31, 2010. As the FWC supports the relaxation of the constraint, we suggest Alternative C (providing incremental modification of the G-3273 constraint up to 7.2 feet NGVD until December 31, 2010) as the preferred alternative; however, we do not oppose Alternative B. Furthermore, we recommend that the testing window be extended, as we understood that testing would begin in September 2010. We believe that potential negative impacts on CSSS breeding from this deviation could be avoided by inter-agency coordination.

The FWC has fish and wildlife and land management responsibilities for WCA 2 and 3, which are managed as the Everglades and Francis S. Taylor Wildlife Management Area. Based upon our review of the information provided, we do not feel that the project as proposed would result in significant impacts to fish and wildlife resources or their habitats. The FWC supports the anticipated ecological benefits expected from this project.

We appreciate the opportunity to provide comments on this project. If you or your staff would like to coordinate further on the recommendations contained in this letter, please contact Joe Walsh at (772) 778-6354 or email him at joe.walsh@myfwc.com and he will be glad to help make the necessary arrangements. If you or your staff has any specific questions regarding our comments, I encourage them to contact Ms. Marsha Ward in our Sunrise Field Office at (954) 746-1789 or at marsha.ward@myfwc.com.

Sincerely,

Chuck Collins

Chuck Collins
Regional Director

CC/mw/jw
ENV 2-11-2/3
IOP Deviation_3065_102910
cc: Joe Walsh, FWC
Marsha Ward, FWC

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September 5, 2013

Lauren Milligan
Florida State Clearinghouse
Department of Environmental Protection
3900 Commonwealth Boulevard, MS 47
Tallahassee, FL 32399
Lauren.milligan@dep.state.fl.us

Re: SAI #FL201308236696C, Draft Environmental Assessment, Proposed G-3273 Planned Deviation from the 2012 Water Conservation Areas, Everglades National Park, and South Dade Conveyance System Water Control Plan, Miami-Dade County, Florida

Dear Ms. Milligan:

Florida Fish and Wildlife Conservation Commission (FWC) staff has reviewed the above-referenced project, and provides the following comments for your consideration in accordance with the National Environmental Policy Act and the Coastal Zone Management Act/Florida Coastal Management Program. We are also sending a copy to the U.S. Army Corps of Engineers (COE) under the Fish and Wildlife Coordination Act.

The COE proposes to temporarily relax the normal operating constraint at the G-3272 gauge from 6.8 feet National Geodetic Vertical Datum of 1929 (NGVD) to 7.5 feet NGVD and increase water flows through the S-333, S-355A, and S-355B structures. The purpose of this deviation in the Water Control Plan (WCP) for the Water Conservation Areas (WCAs), Everglades National Park (ENP), and ENP-South Dade Conveyance System (SDCS) is to assist in lowering high water levels in WCAs 3A and 3B and pass more flows into Northeast Shark River Slough (NESRS) when water levels in WCA 3A are above 12.0 feet NGVD. The G-3273 constraint of 6.8 feet NGVD exists as a flood protection measure, and has been used since 1985 as a trigger to cease S-333 discharges from flowing south into NESRS as a protective measure for residential areas to the east.

The FWC fully supports the relaxation of the G-3273 constraint that curtails flows from WCA 3A to ENP through NESRS as a positive step towards the restoration of both areas. As the Environmental Assessment states, many of the Modified Water Deliveries (MWD) to Everglades National Park project features have been built and the opportunity exists for relaxation of the constraint. Modification and/or removal of the trigger would provide ecological benefits by assisting in reducing high water levels in WCA 3A and further the MWD objective of providing increased flows to NESRS.

The preferred alternative, Alternative C, would provide an incremental modification of the G-3273 constraint up to 7.5 feet NGVD until January 2015 when water levels in Water Conservation Area (WCA) 3A are above 12.0 feet NGVD. Although FWC supports Alternative C, we ask that the COE consider implementing this approach when water levels in WCA 3A are above 10.80 feet NGVD as measured by the three-gauge average (average of gauges 63, 64, and 65). We recommend water management actions that will help reduce extreme high water levels and prolonged inundation periods within WCA 3 that result in negative impacts to its natural communities.

The FWC has fish and wildlife and land management responsibilities for WCA 2 and 3, which are managed as the Everglades and Francis S. Taylor Wildlife Management Area (EWMA). When water levels reach our high water criterion (62/63 gauge average of 11.60 feet NGVD), we close the EWMA to public access in order to reduce stress on native wildlife. A reading of 11.60 feet NGVD at the average of the 62 and 63 gauges corresponds to approximately 10.92 feet NGVD at the three-gauge average. Under these conditions, terrestrial wildlife such as white-tailed deer (*Odocoileus virginianus*), marsh rabbit (*Syvilagus palustris*), bobcat (*Lynx rufus*), and raccoon (*Procyon lotor*) utilize tree islands and levees for refuge. High water conditions reduce the amount of available food sources and the amount of dry ground, leading to crowding and increased stress levels, and mortalities. Prolonged high water conditions also impact upland habitats such as tree islands. The duration of high water events is critical. Short-term events (less than 30 days) typically result in less damage than longer duration events.

Additional support for our recommendation is the Everglades Restoration Transition Plan (ERTP) tree island performance measure. The WCP water management criteria are outlined within the ERTP and its associated performance measures and ecological targets. The recommendations within the U.S. Fish and Wildlife Service's Multi-Species Transition Strategy (MSTS) form the basis for these measures. The ERTP WCA 3A tree island performance measure provides for high-water peaks less than 10.8 feet NGVD, water levels not to exceed 10.8 feet NGVD for more than 60 days per year, and water levels less than 10.3 feet NGVD by December 31 (USACE 2012). The intent of this wet season high-water performance measure is to serve as a guide for the restoration of desired hydrology that will avoid adversely affecting tree island woody vegetation within WCA 3A, and is based on the 3-gauge average. This recommendation also improves conditions for the Everglade snail kite (*Rostrhamus sociabilis plumbeus*), wood stork (*Mycteria americana*), and other wading birds and their habitat in WCA 3A, while maintaining protection for the Cape Sable seaside sparrow (*Ammodramus maritimus mirabilis*), all of which are the objectives of ERTP.

We note that water levels in WCA 3A have exceeded 12.0 feet NGVD only three times since 1980, yet since 2005, FWC has partnered with COE and other agencies to take emergency action that lowered water levels to relieve damaging conditions for wildlife and their habitats five times. These actions support our recommendation for a more aggressive approach to relaxing the G-3273 constraint during periods of high water in WCA 3A. The FWC would be glad to work with our state and federal partners to develop appropriate water level criteria that would trigger actions during high water conditions during the implementation of this deviation.

The FWC fully supports the COE's efforts to reduce high water levels in the WCAs and increase flows to NESRS. We concur that the proposed action is consistent with our authorities contained in Florida's Coastal Zone Management Plan. We offer our staff's assistance to our state and federal partners to refine water level criteria that would trigger actions during high water conditions. If you or your staff would like to coordinate further on the recommendations contained in this letter, please contact Mr. Scott Sanders at (850) 488-3831 or email him at scott.sanders@myfwc.com, and he will be glad to help make the necessary arrangements. If you or your staff has any specific questions regarding our

comments, I encourage them to contact Ms. Marsha Ward in our Sunrise Field Office at (954) 746-1789 or at marsha.ward@myfwc.com.

Sincerely,

Nick Wiley
Executive Director

nw/ss/mw
ENV 1-3-2
Water Management Deviations – G-3273 to assist WCA-3_18019_090513
cc: Larry Williams, USFWS, Larry_Williams@fws.gov
Amy Thompson, USACE, Amy.D.Thompson@usace.army.mil
Manley Fuller, Florida Wildlife Federation, wildfed@gmail.com

Literature Cited

USACE. Everglades Restoration Transition Plan Final Environmental Impact Statement. Jacksonville, Florida, USA: Jacksonville District, 2012.

POSITION PAPER: HYDROLOGIC REQUIREMENTS
FOR
THE EVERGLADES AND FRANCIS S. TAYLOR WILDLIFE MANAGEMENT AREA
FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION
November 20, 2013

Purpose

A stated goal of the Comprehensive Everglades Restoration Plan (CERP) is "to capture fresh water that now flows unused to the ocean and the Gulf and redirect it to areas that need it most. Most of the water will be devoted to environmental restoration, reviving a dying ecosystem." The Florida Fish and Wildlife Conservation Commission (FWC) believes that guidelines currently being considered for management of water in and through this ecosystem may result in high and low water conditions that have an impact on fish and wildlife populations, habitat, and diversity, particularly certain state- and federally listed imperiled species. Such outcomes would be inconsistent with the goal of reviving a dying ecosystem; however, modifications are feasible to ensure water management guidelines are consistent with CERP goals. The purpose of this paper is to provide biologically based guidance for managing water levels in the Everglades to ensure restoration of fish and wildlife populations, habitats, and diversity so that CERP goals can be fully realized.

Executive Summary

The Florida Fish and Wildlife Conservation Commission (FWC) fully supports the stated goals of CERP. It is the position of the FWC that water levels in the Central Everglades should be managed in a manner that sustains and restores native fish and wildlife populations, habitat, and diversity. To achieve this outcome FWC asserts that water levels in the Water Conservation Areas (WCAs) should not exceed two feet in depth at the height of the wet season with water recession and ascension rates not exceeding 0.25 feet per week. The FWC has revisited the regulation schedule recommended to the U.S. Army Corps of Engineers for WCA 3A by its predecessor agency, the Florida Game and Fresh Water Fish Commission in 1980, and has reviewed the U.S. Fish and Wildlife Service's draft *Multi-Species Transition Strategy for Water Conservation Area 3A* to form this position on a biologically based water management strategy. Together, these two proposals explicitly take into account the hydrologic tolerances and limitations of a variety of species and communities that are characteristic of the Everglades. Other sources supporting this position include research on the relationship of water levels and tree islands; apple snails; maximum foraging depths for wading birds (five of which are listed as a Species of Special Concern); and over three decades of telemetry data on movements of Florida panthers in the Everglades and Big Cypress region, which correlates effectively to depths that white-tailed deer can access. In addition, this position and findings in this paper have been informed by six decades of FWC staff experience in managing the Everglades and Francis S. Taylor Wildlife Management Area (EWMA).

Comprising Water Conservation Areas 2A, 2B, 3A, and 3B, the EWMA totals 671,831 acres or 82% of the Water Conservation Areas in south Florida and roughly 30% of the remaining Everglades landscape south of the Everglades Agricultural Area. We conclude the 1980 recommendation remains generally applicable and the draft *Multi-Species Transition Strategy for Water Conservation Area 3A*, with a few exceptions noted, recommends water depths that fall within reasonable ranges. In general, the FWC recommends optimal water depths no more than two feet during the height of the wet season (late October – early November) and close to ground level during the driest time of the year (late May – early June), as measured from the average slough elevation. Extreme high water resulting from prolonged rainfall, hurricanes, or tropical storms causing water levels to exceed two feet must not be allowed to persist longer than 60 days.

Introduction

The Florida Fish and Wildlife Conservation Commission (FWC) is committed to supporting the Central Everglades Planning Project (CEPP) and working collaboratively with our partners. CEPP represents a water management plan for the Everglades that stems from and is central to the Comprehensive Everglades Restoration Plan (CERP). We intend for this document to serve as the foundation for the FWC's recommendations regarding the planning and implementation of CERP and CEPP. We acknowledge this document may need to be refined further as we work with other agencies, researchers, and stakeholders to evaluate subsequent CERP projects and other CEPP-related activities such as water regulation schedules that would affect the Everglades and Francis S. Taylor Wildlife Management Area (EWMA or Water Conservation Areas [WCAs] 2A, 2B, 3A, and 3B). It is our intent to make sure water management parameters provide for water depths and durations for this area that will sustain and restore resident fish and wildlife, including imperiled species.

There is a long history of research, biological observation, and expertise associated with identifying water management parameters most suitable for wildlife. Staff review of two documents was central to the development of this position paper; these include the draft *USFWS Multi-Species Transition Strategy for Water Conservation Area 3A* (U.S. Fish and Wildlife Service [USFWS] 2010) and the regulation schedule recommended by the Florida Game and Fresh Water Fish Commission (GFC) in 1980 (Schortemeyer 1980). Both of these documents present a multi-species approach toward determining biologically based recommendations for managing water in the EWMA.

This paper provides guidelines based on historical information for maintaining fish and wildlife diversity and richness in the largest part of the EWMA: WCA 3A. Most of the research in the EWMA has focused on WCA 3A since it is the largest of the WCAs. This paper addresses water management aspects of Everglades restoration from a fish and wildlife diversity perspective and recommends general ranges of water depths for both the peak of the wet season (October into November) and the driest part of the dry season (May into June). Additionally, this paper describes how water levels managed outside of the desired range of conditions have impacted vegetation communities, wildlife diversity, and species richness, particularly for state- and federally listed species. The FWC's position statement references the experiences and reports

the FWC and its predecessor agency, the GFC, have provided since the authorization of the Central and South Florida Project in 1948 and continuing into current CERP planning efforts.

Background

Because roughly half of the original extent of the Everglades has been lost to development and agriculture, today's water managers face a difficult task of routing the same amount of rain that historically fell through today's much-reduced system consisting of canals, levees, and impoundments while providing water supply, flood control, and conserving the remaining Everglades landscape for fish and wildlife. One of the greatest challenges for CERP is to accomplish this three-pronged mission. The WCAs in this area are now subject to extremely high water levels for extended periods of time, particularly in the southern end of WCA 3A, when the capacity of the Central and South Florida Project is exceeded by periods of high rainfall. They are also subject to artificially low water levels, and particularly in the northern part of WCA 3A, during drought periods.

The FWC and GFC have six decades of experience in managing the large part of the Everglades landscape that is today referred to as WCAs 2A, 2B, 3A, and 3B. The Central and South Florida Project was authorized by Congress in 1948, and construction of its levee and canal system, including the WCAs, began in 1952 (Light and Dineen 1994). In 1952, WCAs 2 and 3 were designated as the EWMA with the GFC as the land management agency, and in 1953 the GFC began the Everglades Impoundment Investigation with funding from the Federal Aid in Fish and Wildlife Restoration Acts (Wallace 1960). The July 1953 annual report by Clay Gifford, GFC biologist, clearly recognized even then that a multi-species approach would be required (Gifford 1953). It also acknowledged the difficulty in developing the knowledge base necessary to link engineered hydrologic regimes with the ecological needs of a complex biological community.

The GFC continued to investigate, implement, and evaluate management approaches within the EWMA. In 1960, it issued a formal status report, *Recommended Program for Conservation Area 3* (Wallace 1960), outlining the expected impacts of constructing the proposed L-67 levee system. Later, and primarily as a result of a dramatic deer die off in the WCAs in the late 1960s, the Florida Chapter of the Wildlife Society appointed the Special Study Team on the Florida Everglades, a group of five national fish and wildlife biologists, to "evaluate the...wildlife situation in the Everglades...and suggest some possible courses of action." This team was assembled at the request of the Central and Southern Florida Flood Control District (predecessor of today's South Florida Water Management District), and with agreement by the GFC. Their 1970 report, *Everglades Water and Its Ecological Implications*, also recognized the need to address a suite of native species if the WCAs were to be successfully managed (Cornell et al. 1960). For deer management, it recommended that water levels not exceed two feet during the wet season and recede to a depth of six to eight inches in February, during fawning. In 1983, staff developed a deer management approach that reduced the likelihood of catastrophic deer mortalities due to high water levels (GFC 1983).

A decade later, the GFC published its first set of comprehensive recommendations for managing water levels to support fish and wildlife in WCA 3A (Schortemeyer 1980). This report, *An*

Evaluation of Water Management for Optimum Wildlife Benefits in Conservation Area 3A, recognized three hydrologic zones in WCA 3A: an area that was negatively affected by low water and peat fires, largely lying north of Alligator Alley; an area in central WCA 3A where the sawgrass ridges, sloughs, and tree islands appeared to be relatively intact; and an area along eastern and southern WCA 3A that had suffered from prolonged high water levels. Based on an analysis of Everglades plant communities and selected wildlife species, Schortemeyer (1980) developed schedules for seven species or suites of species: the deer; the alligator, passerine birds, and the pig frog; the Everglade snail kite; wood stork; largemouth bass; diving ducks; and dabbling ducks. Recognizing that no one place would be optimal for all species, he summarized these recommendations in a proposed water regulation schedule that would allow water levels in the sawgrass community to peak at a depth of about 1.38 feet on November 1 and then gradually and steadily recede to a low of -0.05 feet by June 1. At that time, water levels would increase to the 1.38-foot depth at the beginning of November. This proposal was formally approved as a recommended schedule for WCA 3A by the GFC's Commissioners in May 1980.

The GFC continued to provide recommendations based on experience in the EWMA to water managers in the 1980s (Schortemeyer 1999), and in 1995 formed a team of biologists to participate in the interagency "Restudy" that developed CERP, which was approved in 2000. During that time, the GFC drew on its past experience, including its analysis of the effects of the extreme high-water event in 1994–1995 (Coughlin and Richards 1995, Guerra 1997), to influence the development of key performance measures used during the Restudy to evaluate alternative draft plans, particularly in WCAs 2 and 3. The GFC also gathered data from WCAs 3A and 3B in a field study that investigated the vegetative community structure and composition on the heads of tree islands from the three zones identified by Schortemeyer (1980), a fourth zone of hardwood hammocks in southwestern WCA 3A, and in WCA 3B. This study determined that both extremely high and extremely low water levels are predictors of tree and shrub species diversity on tree islands in the WCAs (Heisler et al. 2002). The information from this effort enabled the Restudy to refine its performance measures in key indicator regions in WCAs 3A and 3B. Anderson (2000) further analyzed the effects of hydrologic and topographic gradients on woody vegetation of tree islands in the dry zone of northern WCA 3A and the moderately wet zone in central WCA 3A. He concluded that the optimal hydrology to maintain the natural diversity of woody vegetation on tree islands in WCA 3A would involve fewer extremely high and low water events, and would include hydroperiods ranging from 80 to 90% inundation and average ponding depths of 0.78 to 1.41 feet. More recently, staff co-authored a report that concluded that canopy composition and structure of tree islands in WCAs 3A and 3B are strongly correlated with extremely wet and extremely dry conditions, as opposed to mean annual water levels (Wetzel et al. 2008).

The FWC has continued to contribute its knowledge and expertise after CERP was approved through contributions to the initial raising of the Tamiami Trail and into the development of the Everglades Restoration Transition Plan. Since the inception of the WCAs, FWC staff has built on its experience in managing WCAs 2 and 3 (with the exception of the portion of WCA 3A that is the Reservation of the Miccosukee Tribe of Indians of Florida), relying on field observations, field studies, and reports by other researchers (e.g, by the U.S. Geological Survey, South Florida Water Management District, and universities). An excellent summary of knowledge gained,

particularly as related to high water levels, was presented as a PowerPoint presentation to the RECOVER team by FWC biologist Tim Towles in 2009 (Towles 2009).

Hydrology of the Everglades

The hydrology of the Everglades is driven by a pattern of high levels of precipitation in late May through October and a dry season between October and May (Cornwell et al. 1970, Duever et al. 1994). It is generally accepted that the predrainage system existed as a hydrologic unit that originated in the Kissimmee headwaters, meandered through the Kissimmee River and its oxbows and marshes, and then gathered into Lake Okeechobee. Lake Okeechobee would periodically overflow into the sawgrass plains immediately south of the lake into what is now the Everglades Agricultural Area, and traveled south via sheetflow through the ridge and slough system into Shark River Slough in today's Everglades National Park (Cornwell et al. 1970, Light and Dineen 1994). The scale of this system allowed for water level fluctuations that were attenuated by marsh vegetation.

Because roughly half of the original extent of the Everglades has been lost to development and agriculture (Davis and Ogden 1994), the capacity of the Central and South Florida Project is exceeded by periods of high rainfall, particularly in the southern part of WCA 3A, where water levels tend to pond. Conversely, artificially low water levels in the northern part of WCA 3A have caused damaging peat fires during drought periods.

Imperiled Species and their Relation to Water Depth in the EWMA

Florida panther

Water depths in western WCA 3A in particular are of significance to the Florida panther. This area lies within the eastern part of the panther's breeding range (Oronato et al. 2011). Consistent with this range estimate, telemetry data confirm that panthers consistently used the western part of WCA 3A before the year 2000. Since that time, however, in spite of the fact that panther populations have increased significantly, their use of this area has dropped dramatically, coinciding with deeper water levels persisting for longer durations and fewer deer (an important prey species). MacDonald-Beyers and Labisky (2005) studied the relationship between water levels in the Big Cypress prairies and radio-collared deer and concluded that the depth at which deer movement is negatively affected is about 19.7 inches. Ensuring water levels in this historical panther breeding range can support a healthy deer herd will be critical not only to the conservation of panthers, but also to their recovery.

While panthers can and do use shallow wetlands, they rely on forested areas to stalk their prey and to rest. The tree islands and their associated thicker vegetation provide this type of habitat in western WCA 3A, but deeper water and a reduced amount of upland areas provided by tree islands would discourage panther use of this part of WCA 3A (Darrell Land, FWC, personal communication 2013). Water levels managed not to exceed a depth of two feet at the peak of the wet season and to near the ground surface at the peak of the dry season will be necessary for the panther to regain use of western WCA 3A.

Wading birds

To a large extent, the depth at which wading birds can forage is limited by the length of their bills. For the seven wading bird species (white ibis, snowy egret, little blue heron, tricolored heron, roseate spoonbill [all of which are Species of Special Concern], great egret, and great blue heron) that commonly forage in the Everglades, maximum depths at which they can forage range from about 6.3 inches to about 15.3 inches (Powell 1987). These depths need to be taken into account if the EWMA is to continue to provide foraging opportunities for these species. Recession rates are also an important factor to consider when managing wading birds. The FWC recommends recession rates averaging between 0.05 and 0.25 feet per week, with no water-level reversals, beginning in January and ending at the end of May. Water levels managed not to exceed a depth of two feet at the peak of the wet season and to near the surface at the peak of the dry season will be necessary for these species to nest and forage in the EWMA.

Everglade snail kite

Snail kites search for prey by sight, so they typically forage over relatively open wet prairies and sloughs. They capture apple snails within about four inches of the surface as the snails come to the surface to respire (Bennetts et al. 1994). Apple snails feed on the periphyton component of both wet prairies and sloughs (Browder et al. 1994). Wet prairies, as opposed to sloughs, appear to be an important area for apple snail production, particularly in areas dominated by maidencane (Karunaratne et al. 2006). Water depths greater than 1.6 feet during the peak apple snail breeding season result in fewer egg clusters and delayed egg laying that result in a larger number of juvenile snails that are too small for snail kites in the following year. The main areas where snail kites nested historically were in the WCAs and Lake Okeechobee; however, in recent years,

most of the snail kite nesting effort has been at the northern extent of its range, in the Kissimmee Chain of Lakes. This northward shift is problematic in that colder weather at the start of the nesting season would delay nesting, resulting in poor nest success for that year (Z. Welch, FWC, personal communication 2013). Water levels managed not to exceed a depth of two feet at the peak of the wet season and to near the ground surface at the peak of the dry season with ascension and recession rates not exceeding 0.25 feet per week will be necessary for snail kites to forage on apple snails in the EWMA. The science on snail kites and apple snails lead us to conclude that if water levels are not managed as prescribed above, snail kites will become further imperiled if not extirpated.

Draft *USFWS Multi-Species Transition Plan*

The USFWS (2010) recommends recommended ranges of water levels, specifically in WCA 3A, that would benefit the wood stork; Everglade snail kite and the kite's main prey species, the Florida apple snail; tree islands; and the wet prairie in southwestern WCA 3A. These individual species/community requirements were then blended to provide a multi-species approach to estimating appropriate water depths overall. This plan did not address limits to water depths for the stork, kite, or apple snail during the wet season, but instead focused on a maximum desirable depth during the pre-breeding season, starting on January 1. The following are their recommendations.

Wood stork: Water depths should peak in October and recede to about 1.16 to 2.03 feet in January. The recommended water level recession rate is about 0.84 inches per week. During the dry season (May), the minimum water depth should fall to between -0.34 and 0.52 feet.

Everglade snail kite: During the dry season (May), water levels should fall no lower than -0.34 and +0.52 feet in the southwestern part of WCA 3A.

Florida apple snail: Water depths for apple snails should reach 1.31 to 1.97 feet in January. The recession rate should be about 0.8 inches per week. During the dry season (May), the water depth should be no greater than 1.31 feet and no less than 0.33 feet), the depth at which apple snails quit moving. However, FWC staff recommends revisiting these water levels because they understand that Phil Darby, who collected the field data upon which this was based, disagrees with the USFWS' calculations, believing them to be too deep (Z. Welch, FWC, personal communication). Recession rates are important for managing for apple snails. The FWC recommends ascension rates no greater than 0.05 to 0.25 feet per week from the beginning of June to the beginning of October.

Taking into account these water depths, as well as ones estimated for tree islands and wet prairie, the USFWS (2010) developed a regulation schedule that peaked at a depth of about 2 feet.

Major Vegetation Communities in the EWMA and Their Importance to Fish and Wildlife

Three major vegetation communities occur in the EWMA: tree islands, sawgrass ridges and sloughs (collectively known as the ridge and slough system), and wet prairies. These communities support a wide variety of aquatic, wetland-dependent, and semi-terrestrial species,

including some that are listed for special protection by the State of Florida and the USFWS. Water levels managed not to exceed a depth of two feet at the peak of the wet season and to near the surface at the peak of the dry season will be necessary for the continued existence and recovery of these plant communities.

Tree islands: Tree islands are a unique structural component of the Everglades, providing habitat for wildlife species that require some component of upland habitat with trees or brush in an overall matrix of marsh. Tree islands may occur (in order of increasing height above the slough bottom) as willow strands, bayhead swamp forests, and tropical hardwood hammocks. The last of these may be found throughout the EWMA, but are more numerous in southwestern WCA 3A and southern WCA 3B. Willow strands, which may also contain other brushy species such as pond apple, provide colonial wading bird habitat (Rodgers et al. 1996), while the bayheads and tropical hardwood hammocks may be important for neotropical migrating passerine birds (Mitchell 2010, Gawlik and Rocque 1998). Alligators, turtles, and snakes lay their eggs on the dry parts of tree islands (Towles 2009).

Much attention has also been given to the higher tree islands as refugia for Everglades's wildlife species, such as deer, bobcats, marsh rabbits, raccoons, and other small mammals. During extreme high-water events, these terrestrial or semi-terrestrial species crowd onto what remains at or above water on tree islands and onto levees, where overcrowding and competition for food create physical stress (in extreme cases, resulting in death) and susceptibility to disease and parasites. This is particularly true for does, yearling, and fawns (Cornwell et al. 1970). Cornwell et al. (1970) noted that the situation became so severe during the high-water events in 1957–1958 and 1966 that all vegetation was completely removed, the bark of trees and shrubs eaten as high up as a deer could reach, and tree island soils were trampled into mud by both deer and wild hogs.

While less information is available on impacts to Everglades wildlife species other than deer, Schortemeyer (1980) noted that water reversals during periods of naturally occurring recession have caused nest failure for alligators and turtles. FWC staff has also reported opossums, grey foxes, bobcats, and raccoons crowded on levees during high-water events in 1986 and in 2005, and evidence of extensive predation on marsh rabbits during the 1986 event (unpublished GFC internal reports; T. Towles, FWC, personal communication 2013). Much of the effect on the diversity and abundance of wildlife can be inferred by changes in tree island vegetation. For example, the willow strand that supported the Andytown rookery in WCA 3A was one of the largest (over 60 acres) used by nesting wading birds before 1994; now only one-quarter acre of it remains.

High-water events are not the only threat to tree islands. While fire naturally occurred in the predrainage Everglades (Gunderson and Snyder 1994), water management has exacerbated the extent and duration of extreme drought, particularly in WCA 2 (Worth 1988) and WCA 3A. By 1970, a combination of peat fires and high water levels had severely degraded tree islands in much of WCA 2 (Cornwell et al. 1970, Light and Dineen 1994). Loss of tree islands, whether it is through flood or fire, results in loss of an important habitat component of the Everglades landscape.

The draft *USFWS Multi-Species Transition Plan* (USFWS 2010) proposes that the maximum water depths (expected to occur from mid-September to mid-October) that tree islands could tolerate was 2.5 feet for no longer than 120 days. However, FWC staff does not consider this to be interpreted as an acceptable water depth to be reached on a regular basis; a slightly lower depth of 2.46 feet would represent the deepest water that tree islands in WCA 3A can tolerate as long as this depth does not exceed 60 days. Furthermore, the plan does not examine the potential effects of extremely low water levels, such as those that contributed to conditions that burned out tree islands in northern WCA 3A.

Ridge and slough system: The ridge and slough system is typified by a generally north to south orientation of alternating ridges that support sawgrass and slough communities. The sloughs are characterized by water lilies, floating hearts, and spatterdock at the surface and submerged bladderworts, whose stems provide a substrate for growth of periphyton, a naturally occurring algal community (Gunderson 1994). Periphyton is an important contributor to the primary production in the Everglades (Browder et al. 1994). During periods of relatively high water, the fish population expands into the higher sawgrass areas (Wallace 1960). When water levels recede, fishes are concentrated into the sloughs, where they provide prey for up to 11 species of wading birds, including the federally listed wood stork and the state-listed white ibis, little blue heron, tricolored heron, snowy egret, and roseate spoonbill (Gawlik 1999). Bancroft et al. (1991) noted that the southern part of WCA 3A is a critical foraging area for overwintering wood storks during dry years, when much of their foraging habitat elsewhere has dried out. Alligator holes are an important feature in the transition area between the sloughs and the ridges, becoming critical refugia for fishes and other aquatic species during periods of low water, particularly for larger fishes (Robertson and Frederick 1994), and a source of water for deer (Loveless 1959) and presumably for other mammal species as well. During extreme drought, however, they can be destroyed by peat fires, which can also kill the alligators themselves (Schortemeyer 1980).

Wet prairies: Wet prairies are a form of marsh dominated by emergent grass-like species, usually spikerush, beakrush, and maidencane (Gunderson 1994). Periphyton is also an important component of the submerged part of this community (Browder et al. 1994). They generally have a hydroperiod of 290 to 365 days (Goodrick 1974). Wet prairies in the EWMA, particularly in southwestern WCA 3A, have historically been important habitat for the federally endangered Everglade snail kite and its prey, the apple snail. The wet prairies and the ridge and slough communities provide critical foraging habitat for a wide variety of wading birds, including those currently designated by the State as Species of Special Concern. Wet prairies also provide high-quality browse for deer as long as the water depths remain below about 20 inches, a depth above which begins to hamper deer movement (MacDonald-Beyers and Labisky 2005).

The USFWS (2010) acknowledged the need for dry-downs of wet prairies to a depth below 1.6 inches for no longer than four to six weeks every four to five years. The recommended duration range has been shortened by two weeks in order to avoid overdrying the northern part of WCA 3A.

Recommended Water Depths

In response to data indicating that the snail kite and the apple snail population in WCA 3A had greatly declined in the late 1990s and early 2000s, the USFWS worked with snail kite and apple snail researchers in 2008 to determine measures that would help return kites and the snails to their previous numbers and densities in WCA 3A. The product was the *WCA 3A Snail Kite Transition Strategy*. It was subsequently revised with input from FWC and South Florida Water Management District staffs; expanded to address the wood stork, tree islands, and wet prairie; and was renamed the *USFWS Multi-Species Transition Strategy for Water Conservation Area 3A* (USFWS 2010). We have reviewed this draft report, and considered it in light of the regulation schedule that the GFC officially recommended in 1980. We have also consulted studies conducted by others (see Towles 2009) who have investigated the effects of water levels on tree islands and the wet prairie community. The USFWS (2010) target depths are slightly deeper than those recommended by Schortemeyer (1980), having been developed for a different suite of species and habitats, primarily south of Alligator Alley (Interstate 75). In general, however, both reflect a range of desired targets with peak water levels occurring in the late October to early November timeframe, receding steadily to a low at or near ground level in late May and early June, and then rising steadily to a peak again by late October and early November. It is important to recognize that interannual variations in rainfall may not allow these targets to be reached during all years, and that actual depths will vary depending on the location at which they are measured; however, these figures provide an envelope for an ecologically acceptable hydrologic regime for WCA 3A, and perhaps for WCA 3B, for most years.

An integral component of the USFWS approach is that an interagency team would meet regularly during the year to determine the targets for each specific season based on an assessment of the species' needs. This assessment would include up-to-date monitoring data, forecasted climate conditions, and the past years' hydrology. As new information and technologies become available, these guidelines will have to be revised. It is also important to recognize that all of these targets may not be attainable during all years and that their application should not cause unintended adverse consequences.

Conclusions

- A review of the two multi-species regulation schedules that have been proposed for WCA 3A, data on the effects of hydrology on its tree islands, and maximum depths for foraging for wading birds common to the Everglades provides the basis for the FWC's position. Guidance for water level management within the EWMA generally remains as recommended by Schortemeyer (1980), with a high-water depth no more than two feet by late October to early November and then a gradual and a steady recession to a low of near ground level by late May to early June. At that time, water levels would increase back to no deeper than two feet by the end of October to early November.
- During extreme storms or unusually wet seasons, water levels may rise above the desired levels, but even then depths should not persist for longer than 60 days above desired levels. At an average water depth of two feet north of Alligator Alley, the FWC has to

close the EWMA to avoid exacerbating stress on the terrestrial and semi-terrestrial species that crowd on the highest points of tree islands and the levees.

- Recession rates are an important factor to consider when managing wading birds. The FWC recommends recession rates averaging between 0.05 and 0.25 feet per week, with no water-level reversals, beginning in January and ending at the end of May. Recession rates are also important for managing for apple snails. The FWC recommends ascension rates no greater than 0.05 to 0.25 feet per week from the beginning of June to the beginning of October.
- WCA 3B has not been subjected to a regulation schedule; thus, water levels are not dictated by human-induced extreme fluctuations. Instead, water levels are affected by precipitation, evapotranspiration, seepage, and inflow from the S-151structure. As a result, the tree islands in WCA 3B represent some of the least impacted islands north of Everglades National Park. Transferring high water levels from WCA 3A to WCA 3B via CEPP or any other water management plan is not an acceptable approach to the FWC. Staff has developed a draft management strategy for WCA 3B: water depths at the beginning of January should be 1.7 feet and recede at a rate of 0.6 inches per week until it hits a dry-season low of 0.7 feet (8.4 inches) in late May. At that time, water would rise to a depth of a little less than 1.9 feet in the first part of October, after which the water would recede gradually to the 1.7-foot level recommended for the beginning of January.
- The stated goal of CERP prioritizes water management for restoration of the Everglades ecosystem. CERP components, including CEPP, should strive not just to conserve, but to restore conditions for listed species, including the federally endangered Florida panther.
- If we continue down the path of managing the hydrology in the EWMA based on the current water regulation schedule that allows for periods of prolonged high water levels, the science and basic biology lead us to conclude that native plant and wildlife species that characterize the central Everglades will not be restored, but instead will be further harmed.
- While this paper represents our current opinion, it is the intent of FWC to continue working with partners and stakeholders to continue to refine hydrologic requirements as more information becomes available. We continue our commitment to ensuring that, in the near term, CEPP and, in the longer term, CERP realize the goal of restoration of the greater Everglades system.

LITERATURE CITED

Anderson, M.R. 2000. Hydrologic and topographic gradient effects on woody vegetation of tree islands in the Everglades Wildlife Management Area. Masters Thesis, Florida Atlantic University, Boca Raton, Florida.

Bancroft, G.T., W. Hoffman, R.J. Sawicki, and J.C. Ogden. 1991. The importance of the water conservation areas in the Everglades to the endangered wood stork (*Mycteria americana*). Conservation Biology 6(3): 392-398.

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. Chapter 21 *in* S.M. Davis and

J.C. Ogden, editors. Everglades: The ecosystem and its restoration. St. Lucie Press, Boca Raton, Florida.

Browder, J.A., P.J. Gleason, and D.R. Swift. 1994. Periphyton in the Everglades: Spatial variation, environmental correlates, and ecological implications. Chapter 16 *in* S.M. Davis and J.C. Ogden, editors. Everglades: The ecosystem and its restoration. St. Lucie Press, Boca Raton, Florida.

Cornwell, G.W., R.L. Downing, A.R. Marshall, J.N. Layne, and C.M. Lovcless. 1970. Everglades water and its ecological implications. Report of the Special Study Team of the Florida Everglades dated August 1970. The team was appointed by the Florida Chapter of the Wildlife Society in March 1970 at the request of the Central and Southern Florida Flood Control District and agreed to by the Florida Game and Fresh Water Fish Commission. 42 pp.

Coughlin, S.P., and L.B. Richards. 1995. 1994 – 1995 high water event in the Everglades and Francis S. Taylor Wildlife Management Area. Unpublished report dated November 1995, Florida Game and Fresh Water Fish Commission, West Palm Beach, Florida. 45 pp.

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. Final report to the U.S. Geological Survey. University of West Florida/U.S. Geological Survey, Pensacola, Florida.

Davis, S.M., and J.C. Ogden. 1994. Introduction. Chapter 1 *in* S.M. Davis and J.C. Ogden, editors. Everglades: The ecosystem and its restoration. St. Lucie Press, Boca Raton, Florida.

Duever, M.J., J.F. Meeder, L.C. Meeder, and J.M. McCollum. 1994. The climate of south Florida and its role in shaping the Everglades ecsosystem. Chapter 9 *in* S.M. Davis and J.C. Ogden, editors. Everglades: The ecosystem and its restoration. St. Lucie Press, Boca Raton, Florida.

Florida Game and Fresh Water Fish Commission (GFC). 1983. Everglades emergency deer hunt controversy. In-house report, Florida Game and Fresh Water Fish Commission, West Palm Beach. 29 pp.

Gawlik, D.E. (editor). 1999. South Florida wading bird report, Vol 5 (1): 1-18.

Gawlik, D.E. 2002. The effects of prey availability on the numerical response of wading birds. Ecological Monographs 72(3): 329-346.

Gawlik, D.E., and D.A. Rocque. 1998. Avian communities in bayheads, willowheads, and sawgrass marshes of the central Everglades. The Wilson Bulletin 110(1): 45-55.

Gifford, C.L. 1953. Annual progress report for investigations project as required by Federal Aid in Fish and Wildlife Restoration Acts: Everglades impoundment investigation. Report dated July 1, 1953, for Project No. W-39-R, Florida Game and Fresh Water Fish Commission. 30 pp.

Goodrick, R.L. 1974. The wet prairies of the northern Everglades. Pages 47- 51 *in* P.J. Gleason, editor. Environments of south Florida: Present and past. Miami Geological Society, Memoir 2. Miami, Florida.

Guerra, R. 1997. Effects of the 1994 and 1995 high water event on tree islands in Conservation Area 3A South. In-house report dated January 1997, Florida Game and Fresh Water Fish Commission, West Palm Beach, Florida. 20 pp.

Gunderson, L.H. 1994. Vegetation of the Everglades: Determinants of community compostion. Chapter 13 *in* S.M. Davis and J.C. Ogden, editors. Everglades: The ecosystem and its restoration. St. Lucie Press, Boca Raton, Florida.

Gunderson, L.H., and J.R. Snyder. 1994. Fire patterns in the southern Everglades. Chapter 11 *in* S.M. Davis and J.C. Ogden, editors. Everglades: The ecosystem and its restoration. St. Lucie Press, Boca Raton, Florida.

Heisler, I.L., D.T. Towles, L.A. Brandt, and R.A. Pace. 2002. Tree island vegetation and water management in the central Everglades. Chapter 9 *in*: A. van der Valk and F.H. Sklar, editors. Tree islands of the Everglades, Kluwer Academic Publishers, Boston Massachusetts.

Karunaratne, L.B., P.C. Darby, and R.E. Bennets. 2006. The effects of wetland habitat structure on Florida apple snail density. Wetlands 26(4): 1143-1150.

Light, S.S., and J.W. Dineen. 1994. Water control in the Everglades: A historical perspective. Chapter 4 *in* S.M. Davis and J.C. Ogden, editors. Everglades: The ecosystem and its restoration. St. Lucie Press, Boca Raton, Florida.

MacDonald-Beyers, K., and R.F. Labisky. 2005. Influence of flood waters on survival, reproduction, and habitat use of white-tailed deer in the Florida Everglades. Wetlands 25(3): 659-666.

Mitchell, D.P. 2010. Everglades and Francis S. Taylor Wildlife Management Area Miami Canal bird survey, spring 2010. Internal report, Florida Fish and Wildlife Conservation Commission, Sunrise, Florida. 11 pp.

Oronato, D.P., M. Criffield, M. Lotz, M. Cunningham, R. McBride, E.H. Leone, O.L. Bass, Jr., and E.C. Hellgren. 2011. Habitat selection by critically endangered Florida panthers across the diel period: Implications for land management and conservation. Animal Conservation 14: 196-205.

RECOVER (Restoration Coordination and Verification). 2007. Development and application of comprehensive Everglades Restoration Plan system-wide performance measures. RECOVER is an interagency team "responsible for linking science and the tools of science to a set of system-wide planning, evaluation, and assessment tasks" associated with CERP. Report is dated October 17, 2007, and is available at http://www.evergladesplan.org/pm/recover/perf_systemwide.aspx. Accessed on September 18, 2013.

Robertson, W.B., Jr., and P.C. Frederick. 1994. The faunal chapters: Contexts, synthesis, and departures. Chapter 28 *in* S.M. Davis and J.C. Ogden, editors. Everglades: The ecosystem and its restoration. St. Lucie Press, Boca Raton, Florida.

Rodgers, J.A., Jr., H.W. Kale, and H.T. Smith (editors). 1996. Rare and endangered biota of Florida. Volume V. Birds. University Press of Florida, Gainesville, Florida. 688 pp.

Schortemeyer, J.L. 1980. An evaluation of water management practices for optimum wildlife benefits in Conservation Area 3A. Game and Fresh Water Fish Commission, Ft. Lauderdale, June 1980. Approved by the Game and Fresh Water Fish Commission on May 23, 1980, as its position for transmission to the U.S. Army Corps of Engineers for restoration of the historic vegetation of the Everglades and its native fish and wildlife. 74 pp. + 2 unpaginated appendices.

Schortemeyer, J. 1999. Everglades fish and wildlife conservation. Memorandum dated September 7, 1999, to Tim Coughlin, Florida Fish and Wildlife Conservation Commission.

Towles, D.T. 2009. Extreme high water effects on Everglades plant and animal communities. Unpublished PowerPoint presentation to the RECOVER team. Florida Fish and Wildlife Conservation Commission, Vero Beach. 33 slides.

U.S. Fish and Wildlife Service (USFWS). 2010. USFWS multi-species transition strategy for Water Conservation 3A. Draft document dated July 1, 2010. USFWS, Vero Beach, Florida. 32 pp. + 2 appendices, paginated separately.

Wallace, H.E. 1960. Recommended program for Conservation Area 3. Report W-39-R under the Federal Aid in Fish and Wildlife Restoration Act, Florida Game and Fresh Water Fish Commission, Vero Beach. 22 pp. + 3 apppendices, paginated separately.

Wetzel, P.R., T. Pinion, D.T. Towles, and L. Heisler. 2008. Landscape analysis or tree islands vegetation in Water Conservation Area 3, Florida Everglades. Wetlands 28(2): 276-289.

Worth, D.F. 1988. Environmental response of WCA-2A to reduction in regulation schedule and marsh drawdown. South Florida Water Management District Technical Publication #88-2. 55 pp.

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March 16, 2015

Ms. Lauren P. Milligan
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Subject: **United States Army Corp of Engineers (USACE) Draft Environmental Assessment (EA) for First Increment of G-3273 & S-356 Pump Station Field Test**

Dear Ms. Milligan:

Thanks for the opportunity to review the ICAR for the Draft EA for First Increment of G-3273 & S-356 Pump Station Field Test. The Florida Department of Transportation (FDOT) would like to offer the following comments:

1.0 Report Background

In February 2015 the US Army Corps of Engineers (USACE) published a report titled "Proposed G-3273 Constraint Relaxation / S-356 Field Test and S-357 Operational Strategy." This report documents a proposal to test a modification in the water management operations of the Northeast Shark River Slough (NESRS) and related facilities. Specifically, the change in operations proposed is to allow a higher stage at the G-3273 gauging station which is located approximately 7 miles west of the Tamiami-Kendall Airport. **Figure 1-1** excerpted from the report, illustrates the location of G-3273.

2.0 Proposed Operational Modification

One primary concern of the restoration of Everglades National Park is to rehydrate the NESRS, however an issue with this objective is the potential for negatively impacting flood protection in the urban areas to the east. Recent projects such as the 8.5-Square Mile Area (8.5 SMA) have improved the system for flood protection, and as a result the USACE would like to increase flows to NESRS. The objective is to utilize the S-333 spillway in the L-29 Canal (immediately south of US-41) to send more water from WCA 3A to the east, specifically targeting 55% during the wet season and 80% in the dry season. This would reduce the use of the S-12 structures. In addition to

sending WCA 3A water to NESRS from the west, the S-336 pump station (immediately south of US-41) is intended to send water to NESRS from the east. There are seven proposed alternatives for the modifications to operations; each alternative is a variation on the mechanism for raising the maximum stage criteria at G-3273. The maximum stage criteria is 7.5 ft.-NGVD. The current maximum stage criteria is 6.8 ft.-NGVD. There is a no change alternative, a time varying alternative (with monthly variations from 6.9 ft.-NGVD to 7.5 ft.-NGVD) and five different approaches to holding a 7.5 ft.-NGVD maximum stage year round.

3.0 Impacts to US-41 / Tamiami Trail

Based on the documentation submitted, the impacts to US-41 should be negligible considering the operational constraints documented on Page 1-8 of the report (illustrated in an excepted portion of the report shown below).

1.6 OPERATIONAL CONSTRAINTS

The following operational constraints apply to the Increment 1:

A. L-29 Canal maximum operating limit of 7.5 feet NGVD, pending future acquisition of real estate interests along Tamiami Trail and additional National Environmental Policy Act (NEPA) documentation

The only consideration to this operational constraint is the hydraulic feasibility. Considering that water in the NESRS flows south, it is assumed that G-3273 is hydraulically down gradient of the L-29 Canal and US-41. If the slope of the hydraulic grade line is assumed to be 0.1 ft. per mile, the stages in the L-29 Canal should be 0.7 ft. higher than the stages at G-3273 since the monitoring station is 6.7 miles south of the L-29 Canal. This consideration should be raised with the USACE.

- *How will a level pool be maintained such that when stages at G-3273 are raised to 7.5 ft.-NGVD, if the stages in the L-29 Canal, 7-miles to the north, will be the same?*

If there are any questions, please contact Lisa Colmenares, District Planning Manager at (305) 470-5386.

Sincerely,

Gus Pego, P.E.
District Secretary

cc: Harold Desdunes, P.E.
Chris Tavella, P.E.
Aileen Boucle, AICP
Ricardo F. Salazar, P.E.

Exhibit A

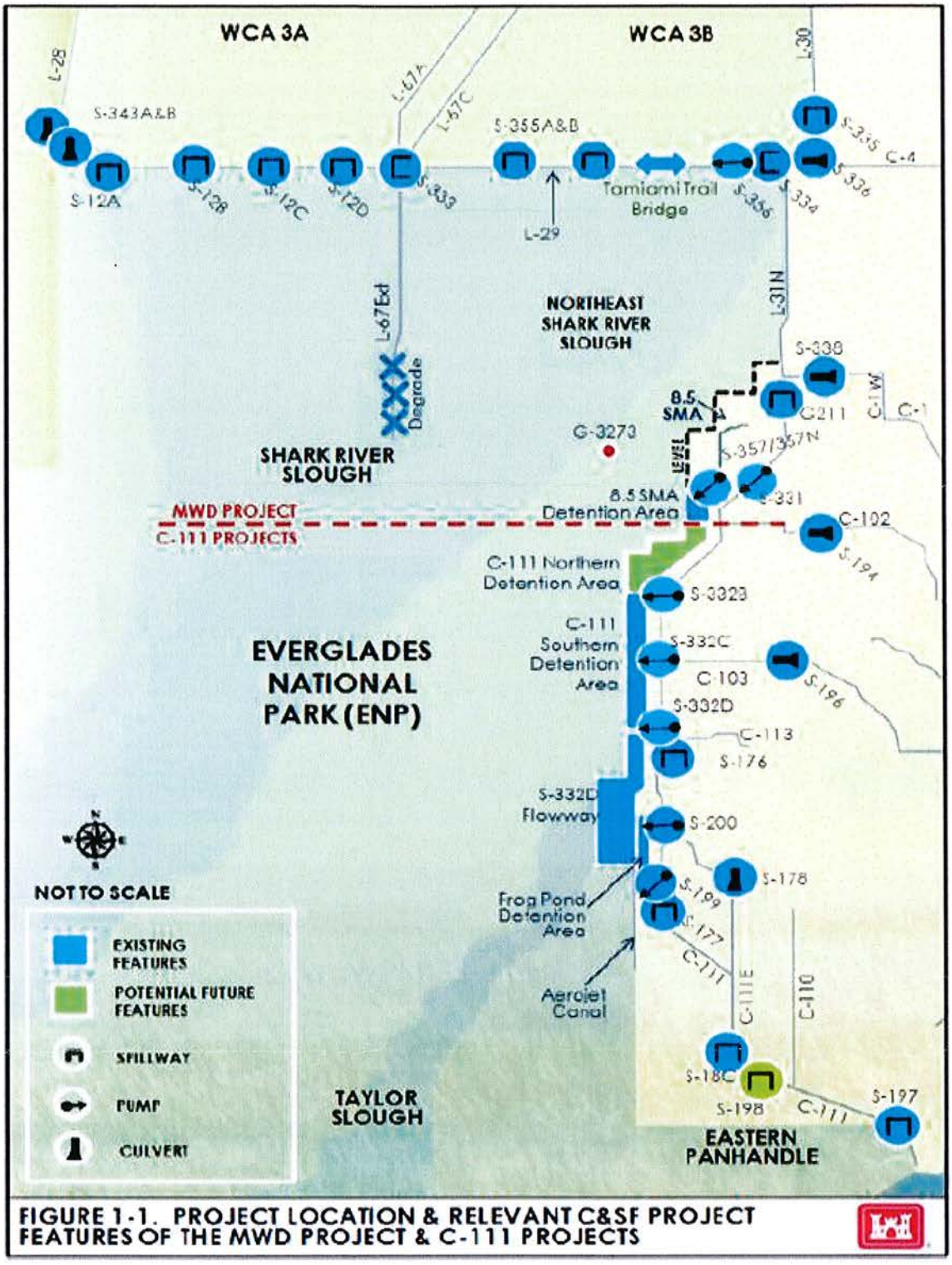

FIGURE 1-1. PROJECT LOCATION & RELEVANT C&SF PROJECT FEATURES OF THE MWD PROJECT & C-111 PROJECTS

SCH-10G-NEPA. Corps
2015-0782

RECEIVED
FEB 26 2015
DEP Office of
Intergovt'l Programs

COUNTY: MIAMI-DADE

DATE: 2/5/2015
COMMENTS DUE DATE: 3/17/2015
CLEARANCE DUE DATE: 4/5/2015
SAI#: FL201502067180C
REFER TO: FL201308236696C

MESSAGE:

STATE AGENCIES	WATER MNGMNT. DISTRICTS	OPB POLICY UNIT	RPCS & LOC GOVS
AGRICULTURE	SOUTH FLORIDA WMD		
ENVIRONMENTAL PROTECTION			
FISH and WILDLIFE COMMISSION			
X STATE			
TRANSPORTATION			

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 - DRAFT ENVIRONMENTAL ASSESSMENT, PROPOSED G-3273 CONSTRAINT RELAXATION/S-356 FIELD TEST AND S-357N OPERATIONAL STRATEGY - MIAMI-DADE COUNTY, FLORIDA.

To: Florida State Clearinghouse

AGENCY CONTACT AND COORDINATOR (SCH)
3900 COMMONWEALTH BOULEVARD MS-47
TALLAHASSEE, FLORIDA 32399-3000
TELEPHONE: (850) 245-2161
FAX: (850) 245-2190

EO. 12372/NEPA

- ☐ No Comment
- ☐ Comment Attached
- ☐ Not Applicable

Federal Consistency

- ☑ No Comment/Consistent
- ☐ Consistent/Comments Attached
- ☐ Inconsistent/Comments Attached
- ☐ Not Applicable

From:

Division/Bureau: Historical Resources / Historic Preservation

Reviewer: Timothy Parsons, Deputy SHPO

Date: 2/18/15

Nasuti, Melissa A SAJ

From: Ritter, Gary [Gary.Ritter@ffbf.org]
Sent: Friday, April 03, 2015 10:02 AM
To: Nasuti, Melissa A SAJ
Cc: Shinn, Charles; Ray.Scott@FreshFromFlorida.com; Rebecca Elliott (relliott@sfwmd.gov); Brady, Debbie; tom@macvicarconsulting.com
Subject: [EXTERNAL] Comments EA & Draft Finding (FONSI) G-3273 and S-356 Pump Station

Dear Ms. Nasuti,

On behalf of the Florida Farm Bureau Federation we greatly appreciate the opportunity to review and comment on the Environmental Assessment (EA) & Draft Finding of No Significant Impact (FONSI) for the first increment of the G-3273 and S-356 Pump Station Field Test and accompanying support documents. We are in receipt of comments from the Florida Department of Consumer Services (FDACS) as well as comments from the local Dade County Farm Bureau and are in agreement with their findings and concerns respectfully. It is apparent that operational decisions in the area have had a significant negative impact on farmers and residents as has been noted in their correspondence. As such we also agree with the selection of Alternative G as the preferred alternative.

It is also important to note that the Florida Farm Bureau Federation supports the balanced implementation of Everglades Restoration. The key word is “balanced” which means decisions in the South Dade area should be made with an understanding and consideration of individual property rights as well as environmental restoration. The voice of the farmers and residents in this area has been largely ignored for quite some time and therefore it is time they are given due consideration in this process since they too are a vital component of the economy of South Dade as well as the State of Florida.

Our organization looks forward to continued coordination and cooperation from state and federal agencies as we move forward with restoration efforts throughout the Everglades system. We will also remain vigilant in our efforts to strive for a balanced approach throughout the restoration process as decisions are made. Let’s not lose sight that the ultimate goal in this effort is to work toward sustainability on all fronts.

One final note of concern specific to the draft report is in section 3.21 Agriculture. We strongly suggest the removal of the last sentence in this section as the word “Extensive” has not been qualified or quantified and therefore appears to be editorial in nature rather than scientifically based.

The Miami-Dade County agricultural industry is unique in both the types of commodities produced and the method of cultivation. The majority of agricultural activities in the county are located south of Tamiami Trail and east of ENP. A variety of vegetables, fruits, and ornamentals are grown within this region and include many tropical and subtropical crops,

which are grown year-round. The most active growing season is between September and May. Because of the wet and dry rainy seasons in the area, planting times are controlled by the elevation of ground water. Soils in these agricultural areas are rocky soils and marl soils. The finer texture of the marl soils make them more suitable for tuber crops, such as potatoes and ornamentals, requiring root balls when harvested. The rocky soils, including rockdale and rockland, require a preparation process, which gives this type of farming a unique character. It is necessary to break the hard limestone outcroppings into smaller particles by scarifying or rock plowing before cultivation can take place. When the material is sufficiently pulverized, the fields are prepared in row mounds to gain added protection from the high water tables. Extensive fertilizer is used in both marls and rockland soil farming.

Sincerely,

Gary J. Ritter
Assistant Director of Government & Community Affairs
Florida Farm Bureau Federation
P: 352.727.0547

Florida House of Representatives

Representative Holly Raschein

District 120

District Office:
99198 Overseas Highway
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Email:Holly.Raschein@myfloridahouse.gov

April 2, 2015

Sent via E-mail

Colonel Alan Dodd
District Commander, Jacksonville District
U. S. Army Corps of Engineers
P.O. Box 4970
Jacksonville, FL 32232

Subject: Increment 1 of Modified Water Deliveries

Dear Colonel Dodd:

I am writing in response to your proposed first increment of testing of the Modified Water Delivery Project and to express concern with the persistent high water table plaguing farmers in south Miami-Dade County. Agriculture is very important in my District and whenever I meet with growers in the area water management problems top their list of concerns.

Water Management District staff has provided me with a briefing on the current proposal (Increment 1) to begin interim use of the facilities constructed for the Modified Water Deliveries Project. I fully support the alternative recommended in your report and sincerely hope that we can look back on this as a turning point in not only restoring sheet flow into Everglades National Park, but also to finally solving the high water problem that has been so devastating to the agricultural economy. I urge you to include in your operating plans limited use of the S-197 structure to provide much needed flood relief to agricultural producers in South Miami-Dade County.

It is very important to recognize that while this is a vital first step for Modified Water Deliveries and Everglades Restoration, it does not address the biggest problem for agriculture, which is the continuing, artificially high water table in the agricultural area as a result of how the canal system is being operated. I attended both the special workshops held in Homestead last year, and I was glad to see you and your staff there to hear from the community. It is clear that the water management system is not providing adequate protection for private property and that necessary change must begin now.

I will be watching this situation closely in the future and hope to involve the Florida Legislature as an ally in correcting what has become an intolerable situation for many of my constituents. Thank you for your attention to this issue and please feel free to contact me if you wish to discuss this issue further.

Sincerely,

Holly Raschein,
State Representative
District 120

April 5, 2015

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

Dear Ms. Nasuti,

We appreciate the opportunity to comment on the Army Corps' Environmental Assessment and Draft Finding of No Significant Impact: Proposed G-3273 Constraint Relaxation/S-356 Field Test and S-357N Operational Strategy. After reviewing this document, we have serious concerns about the preferred alternative ("Alternative G") and all the proposed alternatives impacts on Everglades National Park, Florida Bay, and the future of Everglades restoration.

The southern Everglades and Florida Bay are vital habitat for the bonefish, tarpon, and other sportfish that allow us to stay in business. Increased freshwater flows are needed to restore coastal habitat areas in the southern Everglades and improve the salinity of Florida Bay to ensure that these fish populations are healthy and sustainable into the future. The C-111 Spreader Canal project is already delivering some early benefits to these areas. Please do not undo this progress by choosing an alternative that will redirect waters intended for restoration out to tide.

The Florida Keys Fishing Guides Association urges you to protect the Everglades and Florida Bay by finding an alternative that will keep water in restoration areas where it is needed. None of the alternatives represent a step forward for the restoration of these areas. Please ensure that no additional flows of water are sent to tide through the S-197 structure.

Releasing water in the wrong place effectively negates the goals of the field test itself. The Army Corps cannot determine how the restoration projects interact or what they achieve if any water flow gained is simply sent away through the S-197 structure. This was proposed to accommodate a few landowners and would come at a cost of harming, rather than restoring, the Everglades and depriving it of needed freshwater.

This water must stay in restoration areas where it is needed – not pumped away where it will be lost to tide.

Please reject Alternative G and find a better solution that will keep restoration efforts on track in the Southern Everglades and Florida Bay. The Florida Keys Fishing Guides Association supports Everglades restoration efforts and wants to make sure progress is being made to repair this unique ecosystem.

Sincerely,

Capt. Duane Baker

Commodore, Florida Keys Fishing Guides Association

Audubon Florida
Everglades Foundation
National Parks Conservation Association

April 3, 2015

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

Dear Ms. Nasuti,

We appreciate the opportunity to comment on the Corps' *Environmental Assessment and Draft Finding of No Significant Impact: Proposed G-3273 Constrain Relaxation/S-356 Field Test and S-357N Operational Strategy* ("EA and Draft FONSI"). After reviewing the *EA and Draft FONSI*, we have serious concerns about the preferred alternative ("Alternative G") and all the proposed alternatives impacts on Everglades National Park, lower Biscayne Bay, Florida Bay, and the future of Everglades restoration.

Modified Water Deliveries Project of 1989 and C-111 South Dade Project of 1996 pre-dated the Comprehensive Everglades Restoration Plan (CERP) and were conceived as a means to improve the delivery of freshwater to Everglades National Park. In combination with the C-111 Spreader Canal Western Project, a CERP Project that was authorized just last year in the Water Resources Reform Development Act of 2014 legislation, these projects were designed explicitly to benefit the east Everglades and Florida Bay, while minimizing seepage losses to adjacent areas of south Miami-Dade County.

Proposed alternatives represent a step backward in restoration.
With the completion of the 1-mile Tamiami Trail Bridge, the C-111 Spreader, and the progress made in projects such as the Picayune Strand, and C-44/Indian River Lagoon-South, Everglades restoration has made great strides over the past five years. We are also seeing that restoration works. Sadly, the preferred alternative in the *EA and Draft FONSI* takes a step backward from the restoration progress we have made thus far and put us on a trajectory that favors local interests of a few individuals over the regional benefits that Everglades restoration was intended to provide to millions of stakeholders.

The C-111 Spreader project has been operational for nearly three years and is showing signs of hydrologic improvement and ecological benefits in Taylor Slough and northeastern Florida Bay. The C-111 Spreader was advertised to the restoration community and most recently to Congress as a project that would undergo a five-year phased implementation as a means to ramp up project performance through annual

0.1-foot stage increases at the S-18C[1] structure, resulting in even greater ecological benefits to Taylor Slough and Florida Bay. The alternatives proposed provide a false choice between undermining ramp-up of operations at S-18C or draining areas of Taylor Slough that are the focus of hydrological restoration. Neither of these actions is consistent with restoration objectives and should not be included in proposed operational plans.

Alternative G is damaging and misguided.
The preferred alternative (Alternative G) not only precludes us from this phased implementation of the C-111 Spreader, it also reduces overall restoration benefits by diverting more freshwater away from the Everglades through the S-197 into lower Biscayne Bay, causing harm to that already stressed ecosystem.

Alternative G was preferred by FDACS and the SFWMD because it provides farmers in low-lying, flood-prone areas with enhanced flood control. In fact, the preferred alternative favors flood control over restoration. In a letter to the Corps dated July 14, 2014, FDACS claimed that "all agricultural land east of the Everglades National Park (ENP) and the Frog Pond/C-111 project and in the vicinity of the C-111 West Spreader Canal Project" have been impacted by elevated water levels. However, no details on flooding dates, locations, or levels were provided.

In the *Central And Southern Florida Project Comprehensive Everglades Restoration Plan C-111 Spreader Canal Western Project Final Integrated Project Implementation Report And Environmental Impact Statement*, there were safeguards for landowners built into this phased implementation plan to test and monitor the impacts of incremental increases in water stage at S-18C. In fact, as part of regular operations of the spreader project and in response to specific flood control concerns, the report explains that "factors such as antecedent water levels, local storm activity and predicted major storm events would be considered along with the above prescribed monitoring data to identify if the current incremental water level changes would exacerbate flooding."

In the current *EA and Draft FONSI* and in response to flooding claims made by FDACS on behalf of south Dade farmers, no such systematic or quantitative approach was taken to substantiate elevated water claims that were made and yet these claims were used to justify Alternative G as the preferred alternative. Our review of the monitoring data from the area shows no obvious connection between operation of the C-111 Spreader project and increased groundwater levels to the east that may have contributed to flooding in 2013. In fact, high groundwater levels coincide with large rainfall events more than local structure operations. However, because we value farming in the region and its contribution to our economy, we support further investigation and modeling to

[1] Figure D-10 from Annex D of the *Central And Southern Florida Project Comprehensive Everglades Restoration Plan C-111 Spreader Canal Western Project Final Integrated Project Implementation Report And Environmental Impact Statement*

identify the causal factors behind these claims. Such an analysis will be essential as we proceed with Everglades restoration and as sea level continues to rise.

The Corps and SFWMD need to quantitatively assess flood risk.
A primary objective of Increment 1 testing is to relax the G-3273 constraint from 6.8 feet NGVD up to 7.5 feet. By relaxing this constraint, SFWMD officials have argued that farmers will be taking on additional flood risk, mainly because the C-111 South Dade North Detention Area has not yet been constructed. The lack of this detention area, according to water managers, will result in more leakage of water out of the system that may impact South Dade farmers. However, there has been no analysis of data to quantify what the risk to farmers, if any, might actually be.

Assessing the potential for additional risk is reasonable and warranted. First, water levels at G-3273 have exceeded 6.8 feet nearly every year throughout the period of record (> 20 years). Second, the proposed operation of S-356 is very limited during wet periods. Therefore, it possibility that the S-356 would significantly increase flood risk seems remote and some evidence is necessary to support the hypothesis of additional flood risk. An analysis of long-term structure, well, and meterological data in South Dade would elucidate the myriad factors contributing to high groundwater levels in the region and help managers to quantify the farmers' risk of flooding by relaxing G-3273 stages. Moreover, without this analysis, it is not possible to determine if the proposed S-197 operations are commensurate with the presumed increased risk.

In the *Draft EA and FONSI*, we see no technically defensible justification for the amount of S-197 releases needed to compensate for the presumed increased flood risk that farmers would endure with Increment 1 of testing. The language in the *EA and Draft FONSI* is loaded with conditional terms such as "potential flood risks," "may be affected," and "may result in," yet somehow it is concluded that Alternative G "best alleviates this concern." Over the two-year projection period considered (July 2012 to June 2014), the report estimates that Alternative G will increase S-197 discharges by 2,000 to 12,000 acre-ft. These discharges occur almost exclusively in the wet season and wet years when the proposed S-356 operation in Increment 1 is not operational. Clearly, then, the sole reason for including the S-197 operations was to address the unsubstantiated claims of flooding and not to compensate for S-356 operations. The proposed S-197 operations are unrelated to Modified Water Deliveries elements or operations, and unsupported with objective analysis and impede implementation of the promised benefits from the C-111 N Spreader Project.

Proposed alternatives are unacceptable.
In conclusion, we find all of the proposed alternatives, and in particular Alternative G, unacceptable. By ignoring the phased implementation schedule of the C-111 Spreader, these operations would take a step backward from our current path of restoration and would be based on politics rather than science. Although agency staff have verbally

suggested that these proposed changes in S-197 operations will sunset when Contract 8 is in place, the language in the *EA and Draft FONSI* is much less clear. In fact, the document states that managers will revert to the current S-197 operations "if supported by the analysis of data collected during the field test" and "will be reassessed" when the North Detention Area is operable and/or the test is completed. In other words, it is not a definitive sunsetting of these proposed operational changes at S-197 and will likely represent a permanent withdrawal of expected C-111 Spreader benefits.

Our position is that restoration should proceed as planned in the recently authorized C-111 PIR and EIS and that any operational changes at S-197 should be based on rigorous modeling and analysis of data and that operations only be modified as needed through knowledge gained from modeling, monitoring, and assessment of new information following project implementation.

Sincerely,

Tabitha Cale, Everglades Policy Associate
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Dr. Thomas Van Lent, Director of Science and Policy
Everglades Foundation
1800 Old Cutler Road, Suite 625
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Cara Capp, Everglades Restoration Program Manager
National Parks Conservation Association
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Everglades Law Center, Inc.

Defending Florida's Ecosystems and Communities

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Phone: (561) 568-6740
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April 4, 2015

Melissa Nasuti
U.S. Army Corps of Engineers Jacksonville District
P.O. Box 4970
Jacksonville, FL 32232-0019
Melissa.a.nasuti@usace.army.mil

RE: Comments on Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the Proposed G-3273 Constraint Relaxation/S-356 Field Test and S-357N Operational Strategy.

Dear Ms. Nasuti,

On behalf of Tropical Audubon Society we submit theses comments on the Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the Proposed G-3273 Constraint Relaxation/S-356 Field Test and S-357N Operational Strategy in Miami-Dade County, Florida.

For the reasons explained below, the draft EA does not comply with the requirements of the National Environmental Policy Act (NEPA). The Corps' selection of Alternative G as its preferred alternative is arbitrary and capricious as it is based on unsupported assertions that doing so is necessary to avoid flooding in local agricultural areas. The Corps further fails to adequately examine the potentially significant environmental impacts associated with sending flows through the S-197 structure. These impacts include diverting significant amounts of freshwater away from Florida Bay and Taylor Slough where it is ecologically needed and impeding the ability of other Comprehensive Everglades Restoration Plan ("CERP") projects to deliver water to Everglades National Park. We urge the Corps to abandon its plans to utilize the S-197 structure and select an alternative that is truly aimed at helping restore the natural system.

I. The National Environmental Policy Act

An Overview

The National Environmental Policy Act ("NEPA") is America's "basic national charter for protection of the environment." 40 C.F.R. § 1500.1(a). NEPA ensures that federal agencies "will have available, and will carefully consider, detailed information concerning significant environmental impacts" and that such information "will be made available to the larger [public] audience." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989).

To this end, NEPA requires federal agencies to prepare a detailed Environmental Impact Statement (EIS) for any "major federal action significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(C). To determine whether the environmental impact of a proposed project is significant enough to warrant the preparation of an EIS, the agency will often prepare an Environmental Assessment (EA). An EA is "a concise public document that briefly provides evidence and analysis for determining whether to prepare an EIS or a finding of no significant impact." 40 C.F.R. § 1508.9. *See also* 33 C.F.R. § 230.10. The Eleventh Circuit has held that when an EA is performed on a project, the Corps must take a "hard look" and "must make a convincing case" for a Finding of No Significant Impact and decision not to perform an EIS. *Hill v. Boy,* 144 F.3d 1446 (11th Cir. 1990). If "substantial questions as to whether a project...may cause significant degradation of some human environmental factor," an EIS must be prepared. *Idaho Sporting Congress v. Thomas*, 137 F.3d 1146, 1149 (9th Cir. 1998).

When NEPA Requires the Preparation of an EIS

The Council on Environmental Quality ("CEQ") has promulgated regulations to guide agencies in determining whether a proposed project will have "significant" impacts to the environment. *See* 40 C.F.R. § 1508.27. Whether an action will have a "significant" impact on the environment, thus warranting the preparation of an EIS, requires considerations of both "context" and "intensity." "Context" means that the significance of an action must be analyzed in several different contexts (i.e. national, regional, and local significance of the action). "Intensity" refers to the severity of the impact.

Courts have held that a plaintiff need not show that significant effects will in fact occur, but if a plaintiff raises substantial questions whether a project *may* have a significant effect, an EIS must be prepared. *Idaho Sporting Congress*, 137 F.3d at 1150 (emphasis in original). As the court in *Klamath Siskiyou Ctr. V. Boody*, 468 F.3d 549, 562 (9th Cir. 2006) observed, "this is a low standard." *Id.*

The following sections raise substantial questions that the Proposed Action may have a significant impact on the environment and impede the restoration of America's Everglades.

II. THE EA VIOLATES NEPA

The draft EA runs afoul of NEPA because it fails to provide sufficient support for the Corps' decision to select Alternative G as its preferred alternative, and fails to adequately consider and analyze the environmental effects and alternatives to the proposed action.

A. The Corps' Selection of Alternative G as the Preferred Alternative is Arbitrary and Capricious.

The fundamental flaw in the Corps' selection of Alternative G is that it is based on conjecture and false assumptions. The Corps seems to assume that (1) there are increased groundwater levels in nearby agricultural areas, (2) these groundwater levels are the result of restoration activities and other water management operations, (3) that mitigating for increased groundwater levels is the responsibility of the Corps under the CS&F Project, and (4) the Corps must use S-197 to mitigate for these potential flood control risks. As we discuss below, the Corps fails to provide adequate support for any of these assumptions and therefore its selection of alternative G as the preferred alternative is arbitrary and capricious.

1. There is no evidence of increased groundwater levels in nearby agricultural areas and that the alleged increases in groundwater levels are the result of water management operations.

The Corps appears to rely largely on letters from SFWMD and FDACS to support its decision of selecting Alternative G as the preferred alternative.

Letters from the Florida Department of Agriculture and Consumer Services ("FDACS") contain sweeping assertions that the "agricultural economy in Miami-Dade has been repeatedly harmed by elevated water levels that adversely impact growers due to the lack of operational integration between the WCAs, ENP, and the SDCS, including the C-111 structures. The areas of negative impact include all agricultural land east of ENP and the Frog Pond/C-111 project and in the vicinity of the C-111 West Spreader Canal Project."[1] However, FDACS fails to provide any data or proof of causation that these operations have any role in adverse impacts to agricultural lands. In fact, FDACS fails to establish that any adverse impacts have actually occurred in agricultural land, whether or not those impacts were caused by these projects. There is no data or modeling in the EA or the appendices establishing that there are in fact elevated water levels, much less that operations are "repeatedly harming" farmers in Miami-County. There is also no discussion or quantification of the alleged level of harm that has occurred.

2. The Corps fails to point to any specific data demonstrating that flows from the S-197 are necessary for flood control.

The EA states that alternatives G and E include "increased flood control releases from the S-18C and S-197" to "mitigate for potential risks to flood protection area... "[2] The EA

[1] EA Appx. D FDAC Letters, July 14, 2014 Letter to Melissa Nasuti from Rebecca Elliot.
[2] EA at p. 2-2

does not contain any data, however, to support the notion that flows from the S-197 are necessary for flood control. No analysis is included or referenced in the EA to show increased flood impacts by not utilizing the S-197 structure.

To the extent that the Corps believes that the S-197 flows are necessary to avoid increased groundwater levels in agricultural lands, there is no data supporting the Corps' position. Moreover, the CS&F project has five authorized purposes: flood control, water supply, prevention of saltwater intrusion, water supply for ENP and protection of fish and wildlife. There is no explanation as to why minimizing groundwater levels even falls within the authorized purpose of "flood control" under the Central and Southern Florida Project, particularly if these flows are being used in a similar manner as the South Miami-Dade agricultural drawdowns to enable agricultural interests to plant their crops earlier in the season. In fact, by diverting water away from Taylor Slough and Florida Bay, the Corps is acting in contravention of the C&SF purposes of supplying water to Everglades National Park and protecting fish and wildlife.

NEPA demands more than just conclusory, self-serving statements that use of the S-197 structure is necessary to avoid flooding in local agricultural areas. The Corps must provide a reasoned explanation for why flooding would occur without this operational component. *Seattle Audubon Soc'y v. Mosely*, 798 F.Supp. 1473, 1482 (W.D. Wash. 1992) ("[t]he agency may not rely on conclusory statements unsupported by data, authorities, or explanatory information."); *Earth Island Inst. v. U.S. Forest Service*, 442 F.3d 1147, 1160 (9th Cir. 2006) (An agency has acted arbitrarily and capriciously when it fails to make a reasoned decision based on an evaluation of evidence).

3. If there is a lack of data the Corps must do its homework in the face of scientific uncertainty.

"[T]he very purpose of NEPA's requirement that an EIS be prepared for all actions that may significantly affect the environment is to obviate the need for []speculation by insuring that available data is gathered and analyzed prior to the implementation of the proposed action." *Foundation for N. Am. Wild Sheep v. U.S. Dep't of Agric.*, 681 F.2d 1172, 1179 (9th Cir. 1982).

The CEQ regulations require three mandatory obligations on the Corps in the face of uncertainty: (1) a duty to disclose the scientific uncertainty; (2) a duty to complete independent research and gather information if no adequate information exists (unless the costs are exorbitant or the means of obtaining the information are not known); and (3) a duty to evaluate the potential, reasonable foreseeable impacts in the absence of relevant information, using a four-step process. 40 C.F.R. § 1502.22. As one federal appeals court explained, the regulations require the "disclosure and analysis of the costs of uncertainty [and] the costs of proceeding without more and better information." *Southern Oregon Citizens Against Toxic Sprays, Inc. v. Clark*, 720 F.2d 1475, 1478 (9th Cir. 1983). "Section 1502.22 clearly contemplates original research if necessary" and "NEPA law requires research whenever the information is significant. As long as the information is...essential or significant, it must be provided when the costs are not

exorbitant in light of the size of the project and the possible harm to the environment." *Save Our Ecosystems v. Clark*, 747 F.2d 1240, 1244 n.5 (9th Cir. 1984). Therefore, the Corps has a high burden of obtaining and analyzing this information in assessing which alternatives to pursue.

The Corps' failure to complete independent research and gather information if no adequate information exists and evaluate the potential, reasonable foreseeable impacts in the absence of relevant information violates NEPA. *See Cabinet Res. Group v. U.S. Fish and Wildlife Serv.*, 465 F.Supp.2d 1067, 1100 (D. Mt. 2006) (finding that agency's failure "to attempt any assessment of the importance of the missing information calls into question the validity of the [agency's] conclusions about the impacts of the proposed action" and setting aside the EIS).

There is a complete lack of data or analysis to support any claims of flooding caused by C-111 operations. The FDAC letters urging the proposed operations do not provide reference to any data or analysis to support the request. Moving forward with Alternative G fails on this basis.

4. The Corps must examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made.

This is a central tenant of federal administrative law under the Administrative Procedure Act.[3] At this point the decision is based on mere speculation. This is similar to what the Corps did in 2007-2008 when it reversed its initial plans to eliminate the south Miami-Dade agricultural drawdowns as part of BBCW Phase 1 without any data and analysis linking the elimination of the drawdowns to flooding in agricultural areas. In 2011, the Everglades Law Center submitted requests under the Freedom of Information Act to the Corps and U.S. Fish & Wildlife Service, requesting information relating the annual agricultural drawdowns, including possible adverse effects from their elimination. As we explained in our May 27, 2014 letter to the Corps regarding the drawdowns, the documents received in response to that request provided no information indicating that the Corps or any other government agency has to date modeled or otherwise systematically evaluated the effects of eliminating the drawdowns.[4]

The Corps has not presented any information regarding review of data that would demonstrate its operations have caused increased flooding to agricultural interests in the region. There is no data with respect to flooding that can establish a rational connection between such flood claims from agriculture and the selection of alternative G.

With respect to listed species, such as the endangered smalltooth sawfish, recovery depends in part on action to "[m]inimize the disruption of natural/historic freshwater

[3] *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).
[4] *See* Letter from Jason Totoiu, Everglades Law Center, to Colonel Alan M. Dodd, U.S. Army Corps of Engineers, May 27, 2014.

flow regimes including timing, quality, and quantity and maintain or restore water quality."[5] The proposed project could disrupt natural/historic freshwater flows diverting freshwater from where it is need in Taylor Slough and Northeast Florida Bay. Other species including the American Crocodile, the Roseate Spoonbill designated as threatened in the State of Florida and the Reddish Egret listed as a Species of Special Concern in Florida are impacted by salinity water quality in Florida Bay, as are economically valuable game fish like red drum, spotted sea trout, common snook and gray snapper. Data that evidences connection between the health of these species and the quality, quantity, timing and delivery of freshwater to Florida Bay should be reviewed. The preferred alternative should have a rational connection between the freshwater needs of these species and their habitat and the amount of water being delivered to Taylor Slough and Northeast Florida Bay.

B. The Draft EA Fails to "Rigorously Explore and Objectively Evaluate" All Reasonable Alternatives.

NEPA requires a "detailed statement" of "alternatives to the proposed action." 42 U.S.C. § 4332(2)(c). The alternatives analysis should address "the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for the choice among options by the decisionmaker and the public." 40 C.F.R. § 1502.14. This analysis must "rigorously explore and objectively evaluate all reasonable alternatives." 40 C.F.R. § 1502.14(a) (emphasis added).

The purpose of this section is "to insist that no major federal project should be undertaken without intense consideration of other more ecologically sound courses of action, including shelving the entire project, or of accomplishing the same result by entirely different means." *Environmental Defense Fund v. Corps of Engineers*, 492 F.2d 1123, 1135 (5th Cir. 1974). The Council on Environmental Quality describes the alternatives requirement as the "heart" of the environmental impact statement. 40 C.F.R. § 1502.14. While an agency is not obliged to consider every alternative to every aspect of a proposed action, reviewing courts have insisted that the agency "consider such alternatives to the proposed action as may partially or completely meet the proposals goal." *Natural Resources Defense Council, Inc. v. Callaway*, 524 F 2d. 79, 93 (2d Cir. 1975).

The "touchstone" of a court's inquiry in reviewing the sufficiency of an EIS is whether the "selection and discussion of alternatives fosters informed decision-making and informed public participation." *California v. Block*, 690 F.2d 753, 767 (9th Cir. 1982). The Corps must engage in a much more rigorous analysis which provides a clear basis for choice among options by the decision-maker and the public. 40 C.F.R. § 1502.14. In addition, once a broad range of alternatives are identified with varying degrees of environmental impacts, the Corps must devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits. 40 C.F.R. § 1502.14(b).

[5] http://www.nmfs.noaa.gov/pr/pdfs/recovery/draft_smalltoothsawfish.pdf at p. viii.

The Corps has failed to "rigorously explore" and "objectively evaluate" all reasonable alternatives to the project. The EA does not include sufficient review of an alternative that would proceed with testing of the MWD and C-111 structures without modifying the C-111 Spreader Canal Western Project operations. The EA does not rigorously explore or objectively evaluate an alternative that would proceed with the phased implementation of the C-111 Spreader Canal Western Project while undertaking needed investigations to determine its effects. We encourage the Corps to go back to the drawing table and develop and rigorously review an alternative that would do just this.

Alternative F does not require changes in the S-197 operation and relaxes 3273. Unlike Preferred Alternative G, Alternative F does not siphon water off the South Dade Conveyance System. These aspects of Alternative F are scientifically sound. However, Alternative F would not increase the stages of 18C and therefore the system would not realize the benefits of increased freshwater into the spreader, as the Modified Water Deliveries Project was sold to Congress. The Corps failed to consider a more ecologically sound course of action, which would have involved analyzing an alternative similar to Alternative F that would also raise the stages of 18C as planned.

The Corps' analysis of Preferred Alternative G relies on anecdotal references to increased flooding on agricultural land without any data to demonstrate any increased flood risk. There must be a formal analysis of data to demonstrate whether any increased flooding occurred in the first place and if so, to analyze the cause of the flooding. There is no evidence in the discussion of Alternative G looking at whether the proposed changes are commensurate with increased risk. The Corps did not and cannot show a "clear basis" for its choice in selecting Alternative G as the preferred alternative because it does not have the data or analysis to justify its decision to provide additional flood control to agricultural land.

C. The Draft EA Fails to Analyze the Proposed Project's Direct, Indirect, and Cumulative Impacts.

"NEPA imposes procedural requirements designed to force agencies to take a 'hard look' at [the] environmental consequences" of their actions. *Earth Island Inst. v. United States Forest Serv.*, 351 F.3d 1291, 1300 (9th Cir. 2003). "This includes considering all foreseeable direct and indirect impacts. *Id. See also* 40 C.F.R. § 1508.25 (c).

This draft EA fails to consider a wide range of foreseeable direct and indirect impacts on the area's resources. In addition, many of the Corps' discussions on direct and indirect impacts are based on false assumptions. The Corps must correct these and other deficiencies and provide a thorough and well-reasoned discussion of all direct, indirect and reasonably foreseeable environmental impacts.

1. Direct Impacts

The EA fails to account for direct impacts of the Proposed Action on an ecosystem that is the focus of a multi-billion dollar restoration project. As the court in *National Parks Conservation Ass'n v. Babbitt*, 241 F.3d 722 (9th Cir. 2001) explains:

> The purpose of an EIS is to obviate the need for speculation by insuring that available data are gathered and analyzed *prior* to the implementation of the proposed action…The [agency] proposes to increase the risk of harm to the environment and then perform its studies…This approach has the process exactly backwards. Before one brings about a potentially significant and irreversible change to the environment, an EIS must be prepared that sufficiently explores the intensity of the environmental effects it acknowledges…The point is…that the 'hard look' must be taken before, no after, the environmentally-threatening actions are put into effect.[6]

Thus, the Corps must perform these studies now and "cannot avoid NEPA responsibilities by cloaking itself in ignorance." *Fritiofson v. Alexander*, 722 F.2d 1225, 1244 (5th Cir. 1985).

Alternatives in the EA would lower levels at the S-18C even though the CERP, C-111 Spreader Canal project calls for incrementally raising water levels at the S-18C by one-tenth of a foot per year. The first two years of operation of the C-111 Spreader Canal Western Project have provided restoration benefits to Taylor Slough and Northeast Florida Bay. The Corps ignores the value of these benefits by selecting a preferred alternative that would backtrack and divert water away from where it is ecologically needed in Florida Bay and Taylor Slough. The EA notes the incompatibility of alternative G with the plan in the C-111 project to incrementally raise water levels in the S-18C. The Corps moved forward in selecting Alternative G as the preferred alternative without fully accounting for these impacts and discounting the adverse affects on the ecosystem because the "discharges would be temporary and spatially limited to nearshore areas within the southern estuaries."[7] The Corps uses its classification of the discharges as temporary to justify the adverse impacts to the ecosystem from alternative G. However, the "[f]ield test duration is planned for approximately two years," which is not that temporary. The loss of restoration benefits for an ecosystem already on life-support could occur within the planned two-year time period of the Proposed Action. Additionally, the EA does not require that the adverse impacts from utilizing the S-197 to siphon water from Taylor Slough and Florida Bay will end within two year. "[O]perating criteria for S-197 will be reassessed once construction of the C-111 South Dade NDA is constructed and operable, and/or upon completion of the Increment 1 field test."[8] The EA leaves the possibility open that the potential adverse impacts will be ongoing and permanent.

2. Indirect Impacts

[6] *Id.* at 733 (emphasis added) (internal citations omitted). *See also,* 40 C.F.R. §§ 1500.1(b), 1502.5, 1506.1.
[7] EA at p. 2-15
[8] EA at p. 15.

The draft EA fails to adequately address the indirect impacts of this project. Under the CEQ regulations, an agency must consider the direct, indirect, and cumulative impacts on the environment when determining whether a federal action is "significant." 40 C.F.R. §§ 1508.8, 1508.27(b).

> An EA must analyze "indirect effects," which:
>
> are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems. 40 C.F.R. § 1508.8(b).

The ecosystems in the Florida Bay and Taylor Slough may be significantly affected by the diversion of significant amounts of freshwater away from these areas where it is ecologically needed. The changes in salinity levels in these areas may impact multiple species. The EA fails to account for potential impacts to the Reddish Egret and Roseate Spoonbill, two species protected in Florida. Both species depend on top minnows, which may not be sufficiently abundant to provide the food supply these birds need without necessary freshwater flows from Taylor Slough. Additionally, game fish there are vital to the economy surrounding the Florida Bay including: red drum, spotted sea trout, common snook and gray snapper. These species need estuarine conditions with low to moderate salinity for their juveniles to be able to forage. The diversion of water from Taylor Slough and Florida Bay under alternative G could impact these species that depend on a lower saline estuarine environment. Further analysis of the impacts of the Proposed Action to these species is warranted.

The EA fails to adequately explain the potential impacts of the proposed project on recreational users, including boaters, fishermen, snorkelers, kayakers, divers, birders and others. These potential impacts include reduced use and enjoyment in addition to economic impacts to the businesses that depend on recreational users. A study funded by the Monroe County Tourist Development Council, The Nature Conservancy, Florida Keys Initiative, and NOAA found that natural resource based activities in Florida Bay and the Florida Keys accounts for total annual user value of $910 million.[9] The potential impacts of the Proposed Action to game fish that are such a significant part of recreational and economic activity in Florida Bay were not considered in the EA, except to give a finding of no effect. Game fish species that could be impacted by the diversion of freshwater from Florida Bay include the red drum, spotted sea trout, common snook and gray snapper. Additionally, food sources for the Roseate Spoonbill and Reddish Egret could be impacted by diversion of freshwater from Florida Bay under Preferred Alternative G. This could impact the experience of recreational users viewing bird populations in the area.

[9] "Linking the Economy and Environment of Florida Keys/Florida Bay" http://sanctuaries.noaa.gov/science/socioeconomic/floridakeys/pdfs/visnonmarkexecsum9596.pdf at p. 4.

In addition to not identifying and discussing Preferred Alternative G's potential impact to recreational users, the EA does not address Alternative G's potential impacts to businesses that depend on recreational users of these resources. These businesses include charter boats, bait and tackle shops, marinas, guide services, dive shops, as well as local businesses that provide gas, food and services to recreational users.

3. Cumulative Effects

NEPA requires federal agencies to take a "hard look" at the cumulative effects of the proposed action. *See Florida Wildlife Federation v. United States Army Corps of Eng'rs*, 401 F.Supp.2d 1298 (holding that the agency failed to take a "hard look" at the cumulative effects of the proposed action in its EA). To accomplish this, the Corps must not only catalogue past, present and future projects but also *assess* the cumulative environmental impacts of those projects with the proposed project and *analyze* the additive cumulative impact of all these actions. *See City of Carmel-By-The-Sea*, 123 F.3d at 1160 (rejecting cumulative impacts analysis that referred generally to other past projects and did not discuss the additive impacts of foreseeable future projects). Further, NEPA requires that a cumulative impacts analysis provide "some quantified or detailed information" because without such information, neither the courts nor the public can be assured that the agency took the necessary hard look at the project. *Neighbors of Cuddy Mountain v. United States Forest Service*, 137 F.3d 1372, 1379 (9th Cir. 1998) (stating that "very general" cumulative impacts information violates NEPA).

Preferred Alternative G may have significant cumulative impacts by impeding the function of other CERP projects in the area. The Proposed Action could reverse benefits from the C-111 spreader canal by diverting needed freshwater from Taylor Slough and Northeast Florida Bay. The cumulative impact of this action when considered in the light of decades of unfavorable saline conditions in Florida Bay demonstrate the possibility that restoration efforts could be significantly compromised by the proposed action. The Corps did not analyze these potential impacts. Instead, the Corps' cumulative impact references were based only on the overall beneficial impact of CERP projects.[10]

D. The Draft EA Does Not Adequately Discuss Climate Change and Sea Level Rise.

The EA fails to consider the project in the context of climate change and sea level rise.

Global average sea level rose by roughly eight inches over the past century, and sea-level rise is accelerating in pace.[11] Global average sea level rose at an average rate of 3.3 ± 0.4 mm per year between 1993 and 2006,[12] compared with 1.6 ± 0.2 mm per year between

[10] EA at p. 4-63.
[11] Karl, T. R., J. M. Melillo, and T. C. Peterson. 2009. Global Climate Change Impacts in the United States, Cambridge University Press.
[12] Rahmstorf, S. 2007. A semi-empirical approach to projecting future sea-level rise. Science 315:368-370.

1961 and 2003.[13] Although the Intergovernmental Panel on Climate Change's ("IPCC") Fourth Assessment Report projected a global mean sea-level rise in the 21st century of 18–59 cm (7 to 23 inches), the IPCC acknowledged that this estimate did not represent a "best estimate" or "upper bound" for sea-level rise because it assumed a negligible contribution from the melting of the Greenland and west Antarctic ice sheets.[14] Recent studies documenting the accelerating ice discharge from these ice sheets indicate that the IPCC projections are a substantial underestimate.[15] Studies that have improved upon the IPCC estimates have found that a mean global sea-level rise of at least 1 to 2 meters is highly likely within this century.[16] Rahmstorf (2007) used the tight, observed relationship between global average temperature rise and sea-level rise over the recent observational record (~120 years) to project a global mean sea-level rise of 0.5 to 1.4 m by 2100. Other studies estimate a global mean sea-level rise by 2100 at 0.75 to 1.90 m,[17] 0.8 to 2.0 m,[18] 0.8 to 1.3,[19] and 0.6 to 1.6 m.[20] Moreover, studies that have reconstructed sea level rise based on the geological record, including oxygen isotope and coral records, have found that larger rates of 2.4 to 4 m per century are possible.[21]

NEPA guidance from the Council on Environmental Quality states that climate change effects should be considered in the EIS for projects that are designed for long-term utility and located in areas that are considered vulnerable to specific effects of climate change within the project's timeframe.[22]

One of the tremendous benefits provided by Everglades restoration is combatting salt water intrusion resulting from sea level rise. By pulling water from the marshes of the

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[13] Domingues, C. M., J. A. Church, N. J. White, P. J. Gleckler, S. E. Wijffels, P. M. Barker, and J. R. Dunn. 2008. Improved estimates of upper-ocean warming and multi-decadal sea-level rise. Nature 453:1090-1094.

[14] IPCC. 2007. Climate Change 2007: Synthesis Report. An Assessment of the Intergovernmental Panel on Climate Change. Available at www.ipcc.ch.

[15] Hansen, J., M. Sato, R. Ruedy, K. Lo, D. W. Lea, and M. Medina-Elizade. 2006. Global temperature change. Proceedings of the National Academy of Sciences of the United States of America 103:14288-14293; Pritchard, H. D., R. J. Arthem, D. G. Vaughan, and L. A. Edwards. 2009. Extensive dynamic thinning on the margins of the Greenland and Antarctic ice sheets. Nature 461:971-975; Rignot, E., I. Velicogna, M. R. van den Broeke, A. Monaghan, and J. T. M. Lenaerts. 2011. Acceleration of the contribution of the Greenland and Antarctic ice sheets to sea level rise. Geophysical Research Letters 38, L05503.

[16] Rahmstorf 2007; Pfeffer, W. T., J. T. Harper, and S. O'Neel. 2008. Kinematic constraints on glacier contributions to 21st-century sea-level rise. Science 321:1340-1343; Vermeer, M., and S. Rahmstorf. 2009. Global sea level linked to global temperature. Proceedings of the National Academy of Sciences of the United States of America 106:21527-21532; Grinsted, A., J. C. Moore, and S. Jevrejeva. 2010. Reconstructing sea level from paleo and projected temperatures 200 to 2100 AD. Climate Dynamics 34:461-472; Jevrejeva, S., J. C. Moore, and A. Grinsted. 2010. How will sea level respond to changes in natural and anthropogenic forcing by 2100. Geophysical Research Letters 37:L07703.

[17] Vermeer and Rahmstorf. 2009.

[18] Pfeffer et al. 2008.

[19] Grinsted et al. 2010.

[20] Jevrejeva et al. 2010.

[21] Milne, G. A., W. R. Gehrels, C. W. Hughes, and M. E. Tamisiea. 2009. Identifying the causes of sea-level change. Nature Geoscience 2:471-478.

[22] Nancy Sutley, Chair, Council of Environmental Quality, Memorandum for Heads of Federal Departments and Agencies, Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions, (February 18, 2010).

Southern Everglades and draining Taylor Slough in Everglades National Park into lower Biscayne Bay, Alternative G may eliminate these sea level rise mitigation benefits.

One of the glaring gaps in information in the Corps' analysis of Alternative G, is that the Corps assumes any flooding or increased flooding in the region results from "lack of operational integration between the WCAs, ENP and SDCS."[23] However, the Corps has not evaluated whether any the allegedly increased flooding on farmland in the area is connected to sea level rise, a factor wholly distinct from any potential impacts from water management operations. CERP restoration projects are not a mechanism to provide flood control relief for the impacts of sea level rise. In fact restoring freshwater flows as planned for Everglades restoration, is one of the best defenses that exists for South Florida to reduce and delay the impacts of sea level rise.[24]

III. THE CORPS MUST PREPARE AN EIS DUE TO THE PRESENCE OF A NUMBER OF SIGNIFICANCE FACTORS

CEQ has promulgated regulations to guide agencies in determining whether a proposed project will have "significant" impacts to the environment, thus warranting the preparation of an EIS. *See* 40 C.F.R. § 1508.27. The CEQ regulations set forth several factors for the Corps to consider when evaluating intensity, including, but not limited to:

> • Unique Characteristics of the geographic area such as proximity to park lands, wetlands, or ecologically critical areas;
>
> • Whether the action is related to other actions with individually insignificant but cumulatively significant impacts;
>
> • The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.
>
> • The degree to which the action may adversely affect an endangered or threatened species or its habitat that bas been determined to be critical under the Endangered Species Act of 1973.
>
> 40 C.F.R. § 1508.27 (emphasis added).

All of these "significance factors" are present here and as explained below, the Corps must prepare an EIS.

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[23] EA at p. 1-11.

[24] Everglades National Park, South Florida Natural Resources Center, Dan Kimball, Superintendent Everglades National Park and Erik Stabenau, Ph.D., Oceanographer, Everglades National Park, "Climate Change: Discussion on South Florida Resources at Risk" http://www.miamidade.gov/planning/library/presentations/2014-03-07-climate-change-south-florida-resources-at-risk.pdf at slide. 11.

A. The Geographic Region is Unique As the Project Occurs Within Everglades National Park.

On December 6, 1947, Congress declared the Everglades a national park. In 1976, the Everglades was accepted as a biosphere reserve. In 1979, Everglades National Park was listed as a World Heritage Site by the United Nations Educational, Scientific, and Cultural Organization (UNESCO). Finally, in 1987, the Everglades was designated as a Ramsar site (Wetland of International Significance).[25]

Everglades National Park contains a unique mixture of vast subtropical wetlands, coastal marine ecosystems, and temperate wildlife species found nowhere else in the United States. Everglades National Park provides a refuge for over 20 rare, endangered, and threated species including the Florida panther, snail kite, American crocodile, and manatee. Furthermore, it provides an important foraging and breeding habitat for over 400 species of birds. This makes Everglades National Park the most significant breeding ground for wading birds in North American and a major corridor for migration.[26]

UNESCO has placed Everglades National Park on its endangered list due to water flow issues.[27] The stated purpose of this project is to increase water deliveries to Everglades National Park for the benefit of natural resources. Consequently, any actions that change the hydrology of the Everglades should prioritize the unique environmental concerns of this delicate ecosystem and closely evaluate any possible significant impacts.[28]

B. The Proposed Action May Have Cumulatively Significant Impacts.

The Congressionally authorized goals of this project include the preservation of and supply of water to Everglades National Park.[29] However, the proposed alternatives may impede the ability of ongoing CERP projects to deliver necessary benefits to the Everglades National Park. These include the C-111 Spreader Canal Western Project, which was fast-tracked by the South Florida Water Management District and authorized by Congress[30] in order to restore important functions in the Everglades, including pre-drainage water quantity, hydroperiods and hydropatterns, and salinity levels.[31]

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[25] *Everglades National Park*, UNESCO, (March 6, 2015), http://whc.unesco.org/en/list/76
[26] *Id.*
[27] United States. Army Corps of Engineers. Jacksonville District. *Environmental Assessment and Draft Finding of No Significant Impact. Proposed G-3273 Constraint Relaxation/S-356 Field Test and S-357N Operational Strategy*. Miami Dade County, Fla. U.S. Army Corps of Engineers, 2015. Web. 6 Mar. 2015 www.saj.usace.army.mil/Portals/44/docs/Planning/EnvironmentalBranch/EnvironmentalDocs/G-3273relaxS356testS357N_op_EA_AppD_feb2015.pdf at 3-29.
[28] *Everglades National Park*, UNESCO, (March 6, 2015), http://whc.unesco.org/en/list/76
[29] United States. Army Corps of Engineers. Jacksonville District. *Environmental Assessment and Draft Finding of No Significant Impact. Proposed G-3273 Constraint Relaxation/S-356 Field Test and S-357N Operational Strategy*. Miami Dade County, Fla. U.S. Army Corps of Engineers, 2015. Web. 6 Mar. 2015 www.saj.usace.army.mil/Portals/44/docs/Planning/EnvironmentalBranch/EnvironmentalDocs/G-3273relaxS356testS357N_op_EA_AppD_feb2015.pdf at 1-4.
[30] *Id*. at 1-12.
[31] *C-111 Spreader Canal*, Comprehensive Everglades Restoration Plan (CERP), March 3, 2015, http://www.evergladesplan.org/pm/projects/proj_29_c111.aspx

In its first two years, the C-111 Spreader Canal Western Project has shown promising increases in the amount of water being delivered to the Taylor Slough and Northeast Florida Bay. This has resulted in improved salinity levels and increased growth of submerged aquatic vegetation. The C-111 Spreader Canal Western Project's goal is to raise water levels in the S-18C by one-tenth foot per year.

The EA notes that two of the proposed alternatives, E and G, are not necessarily compatible with the C-111 South Dade Project and the C-111 Spreader Canal Final Western Project. Notably, flood control measures proposed in alternatives E and G are predicted to reverse the phased implementation of the C-111 Spreader Canal Western Project by lowering water levels in the C-111 canal and diverting water to Biscayne Bay.[32] These flood control measures propose the release of 500 cfs from the S-197 canal in order to mitigate potential flooding in agricultural areas.[33]

The EA identifies alternative G as the Preferred Alternative, identifying Alternative G as including "increased flood control releases from S-18C and S-197… to mitigate for potential risks to flood protection areas within South Dade which may be affected by [water management factors].[34] However, the EA does not provide support for the assertion that water management factors have any causational relationship to allegedly increased flooding in flood protection areas.

The aforementioned detrimental effects to the environment and ongoing restoration efforts are swept aside because the 1) the adverse effects to Manatee Bay and Barnes Sound's salinity levels will be temporary and spatially limited; 2) assessment of the impacts on C-111 South Dade Project and C-111 Spreader Canal Eastern Project has been deferred to the planned CERP C-111 Spreader Canal Easter Project PIR; 3) incremental increases at S-18C are not expected to be implemented by SFWMD during the duration of the Increment 1 field test; and 4) the operating criteria for S-197 will be reassessed once construction of the C-111 South Dade NDA is constructed and operable, or upon completion of the Increment 1 Field Test.[35]

The EA fails to establish that above rationale is sufficient to proceed with alternative G. First, the EA does not provide any support for its assertion that detrimental effects to the salinity in Manatee Bay and Barnes Sound will be temporally and spatially limited. It notes that "significant impacts are not expected," but does not support this assertion

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[32] United States. Army Corps of Engineers. Jacksonville District. *Environmental Assessment and Draft Finding of No Significant Impact. Proposed G-3273 Constraint Relaxation/S-356 Field Test and S-357N Operational Strategy*. Miami Dade County, Fla. U.S. Army Corps of Engineers, 2015. Web. 6 Mar. 2015 www.saj.usace.army.mil/Portals/44/docs/Planning/EnvironmentalBranch/EnvironmentalDocs/G-3273relaxS356testS357N_op_EA_AppD_feb2015.pdf at 2-15.

[33] *Id*. at 2-16.

[34] EA at p. 2-15.

[35] United States. Army Corps of Engineers. Jacksonville District. *Environmental Assessment and Draft Finding of No Significant Impact. Proposed G-3273 Constraint Relaxation/S-356 Field Test and S-357N Operational Strategy*. Miami Dade County, Fla. U.S. Army Corps of Engineers, 2015. Web. 6 Mar. 2015 www.saj.usace.army.mil/Portals/44/docs/Planning/EnvironmentalBranch/EnvironmentalDocs/G-3273relaxS356testS357N_op_EA_AppD_feb2015.pdf at 2-15.

with any data or scientific study.[36] Second, the fact that the impacts of the flood control measures on these restoration projects has not yet been assessed cannot prove that their selection is justified; in fact, it proves the opposite. Finally, the fact that these measures are temporary and could be changed does not negate their potential immediate impact on the environment and restoration efforts. We dispute whether calling these measures temporary is appropriate in relation to the Proposed Action under Alternative G, as "the field test duration is planned for approximately two years".[37] Significant ecological damage can occur in a two-year period. The EA does not give a definite end time to the operations of S-197 defined in preferred Alternative G. The EA states that "operating criteria for S-197 will be reassessed once construction of the C-111 South Dade NDA is constructed and operable, and/or upon completion of the Increment 1 field test."[38] There is no certain end date for operations diverting water from Taylor Slough and Florida Bay and therefore nothing guarantees that the impacts will be temporary, even if two years could qualify as temporary.

Ultimately, the EA's selection of alternative G favors agricultural concerns over environmental concerns, expressly against the mandate of the SFWMD. The ostensible "flood control" measures included in the proposed action may reverse the ongoing restoration efforts of various CERP projects.

C. The Proposed Action May Establish A Precedent for Future Actions.

The proposed action may establish a precedent for future actions by establishing a policy that restoration activities must be compromised due to the specter of an increase in ground water levels and unsupported claims of impacts to local agricultural areas.

D. The Proposed Action May Adversely Affect Endangered Species and Designated Critical Habitat.

1. The Project May Adversely Affect Endangered Species including the Smalltooth Sawfish and American Crocodile.

The Corps issued a no effect determination for many species including the smalltooth sawfish and American crocodile. However, we do not agree that the Proposed Action would have no affect on these species. Young crocodiles need to grow to a certain weight in order to survive their first winter in order to regulate their temperature when in colder weather. Young crocodiles require freshwater to metabolize food and grow. Freshwater that is so vital to young crocodiles in the early stages of their lives could be diverted from their habitat under preferred Alternative G. We urge the Corps to reconsider its determination of no impact to American crocodiles.

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[36] *Id*. at 2-16.
[37] Draft FONSI at p. 1.
[38] EA at p. 2-15.

Additionally, the federally listed endangered smalltooth sawfish claims Florida Bay as critical habitat. The main food source for smalltooth sawfish is mullet, which require freshwater. The Proposed Action could divert significant amounts of freshwater from Northeast Florida Bay and impact the abundance of mullet in the area. This in turn could reduce the food source for smalltooth sawfish and damage their habitat. We urge the Corps to reconsider its determination of no impact to the smalltooth sawfish.

2. The Corps Must Engage in Consultation with the U.S. Fish & Wildlife Service and National Marine Fisheries Service Regarding the Project's Impacts to the American Crocodile and Smalltooth Sawfish.

If a federal project may affect a listed species, the action agency must engage in "consultation" with the Services under Section 7 of the ESA. Section 7 is the central enforcement provision that operates to prohibit federal agencies from authorizing, funding, or otherwise carrying out any action that is likely to "jeopardize" the continued existence of an endangered species or result in the destruction or adverse modification of the species' critical habitat. 16 U.S.C. § 1536(a)(2).

The Corps initiated informal consultation with USFWS to determine the proposed action's impacts on Federally listed threated and endangered species in the project area. On August 22, 2014, the Corps requested from USFWS a list of federally threatened and endangered species in the project area.[39] The USFWS provided the list on September 11, 2014 and updated the list on December 17, 2014.[40] Then, the Corps underwent effects determinations for all of the listed species.

Despite the fact that Everglades is a known habitat for numerous rare, threatened, and endangered species, the Corps posited that there is no anticipated adverse effect on any threated and endangered species by the proposed action.[41] The EA does note that proposed action may affect, but is not likely to adversely effect, the following species and their associated critical habitat: Cape Sable seaside sparrow, Everglade snail kit, Florida bonneted bat, the Deltoid spurge, Small's milkpea, and Tiny polygala.[42]

On January 6, 2015, the Corps initiated informal consultation with the USFWS to request their concurrence with the "may affect, but not adversely effect" determination.[43] The Complete Initiation Package included explanations of effects determinations for each of the listed species in the project area. However, the analysis focuses on lack of crocodiles found near the S-197 structure skirting the issue that the

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[39] United States. Army Corps of Engineers. Jacksonville District. *Environmental Assessment and Draft Finding of No Significant Impact. Proposed G-3273 Constraint Relaxation/S-356 Field Test and S-357N Operational Strategy*. Miami Dade County, Fla. U.S. Army Corps of Engineers, 2015. Web. 6 Mar. 2015 www.saj.usace.army.mil/Portals/44/docs/Planning/EnvironmentalBranch/EnvironmentalDocs/G-3273relaxS356testS357N_op_EA_AppD_feb2015.pdf at 4-66.

[40] *Id*.

[41] *Id*. at 4-41

[42] *Id*.

[43] *Id*.

freshwater diverted away from Florida Bay is the threat to young crocodile populations.[44] Likewise, the analysis of smalltooth sawfish fails to account for impacts to its food supply and how the lack of freshwater flow into sawfish habitat may impede the species' recovery.[45]

According to the EA, these effects determinations were determined based 1) on the short duration of the field test and 2) on the generally beneficial nature of this action.[46] The analysis undertaken by the Corps is insufficient to make any effects determinations. The short duration of the field test does not speak to any effects on species that will occur during the test.

The threshold for triggering formal consultation under the ESA is "very low" and "any possible effect…triggers formal consultation requirements."[47] The Service has explained, "[t]he threshold for formal consultation must be set sufficiently low to allow Federal agencies to satisfy their duty to 'insure' under Section 7(a)(2) [that their actions do not jeopardize the species or adversely modify critical habitat]. The Corps must undergo formal consultation with the USFWS.

Conclusion

"NEPA emphasizes the importance of coherent and comprehensive up-front environmental analysis to ensure informed decision making to the end that the agency will not act on incomplete information, only to regret its decision after it is too late to correct." *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 371 (1989). An EIS is required of an agency in order that it explores, more thoroughly than an EA, the environmental consequences of a proposed action whenever "substantial questions are raised as to whether a project *may* cause significant [environmental] degradation." *Blue Mts. Biodiversity Project*, 161 F.3d at 1216 (quoting *Idaho Sporting*, 137 F.3d at 1149).

As evidenced by these comments, the draft EA and FONSI fail to meaningfully evaluate alternatives to the proposed action and the action's direct, indirect, and cumulative impacts. Moreover, substantial questions have been raised as to whether this project may cause a significant impact on the environment and negate the benefits of ongoing ecosystem restoration efforts. Therefore, the Corps must prepare an EIS for this project before a decision is made and it is otherwise too late.

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[44] *Id.* at 40.
[45] *Id*. at 11.
[46] United States. Army Corps of Engineers. Jacksonville District. *Environmental Assessment and Draft Finding of No Significant Impact. Proposed G-3273 Constraint Relaxation/S-356 Field Test and S-357N Operational Strategy*. Miami Dade County, Fla. U.S. Army Corps of Engineers, 2015. Web. 6 Mar. 2015 www.saj.usace.army.mil/Portals/44/docs/Planning/EnvironmentalBranch/EnvironmentalDocs/G-3273relaxS356testS357N_op_EA_AppD_feb2015.pdf at 4-41.
[47] 51 Fed. Reg. 19, 949-19,950 (June 3, 1986).

Thank you for the opportunity to comment on this proposal. Please make these comments part of the official record for this project. Also, please send me all future notices, announcements, EAs, EISs, and decision notices for this project.

Sincerely,

Jason Totoiu
Executive Director

Julie Dick
Staff Attorney

Counsel for Tropical Audubon Society

Nasuti, Melissa A SAJ

From: Steelman, Marcia (PWWM) [SteelM@miamidade.gov]
Sent: Thursday, April 09, 2015 11:46 AM
To: Nasuti, Melissa A SAJ
Cc: Blanco-Pape, Marina (PWWM); Molins, Delfin (PWWM); Grossenbacher, Craig (RER)
Subject: [EXTERNAL] FW: [cerpprojectsprogram] *** Environmental Assessment & Draft Finding of No Significant Impact for First Increment of G-3273 & S-356 Pump Station Field Test available for 60-day public and agency review *** (UNCLASSIFIED)
Attachments: 8_5_FPLOS_landelevations_.pdf; 8_5_FPLOS_groundwater_.pdf; 8_5 _FPLOS_landelevations_.pdf

Here are the comments from Miami-Dade PWWM:

a. The latest statistics from USGS, indicate that the Average October Water Table in the 8.5 Sq. Mile Area varies between 5.5 -6.5 feet NGVD (between 4 and 5 feet NAVD88), for the period from 2000 through 2009, representing the wettest conditions within that basin. The page A10, of Appendix A, shows that S-357 would operate between 5.5 and 6.2, which is consistent to the wet season groundwater table of the area, prior to the project implementation. See map "8_5_FPLOS_groundwater_.pdf"

b. The page A-11 of Appendix A also states that that during the Test Phase, the S-357 pumps would be operated to maintain a stage above 5.7 feet NGVD along the canal, by adjusting the weir heights at S-357N and the pump rate at S-357. This trigger stage for S-357 is consistent the wet season groundwater table.

c. At this point, the proposed triggers do not provide flood mitigation or flood reduction, based on the groundwater levels prior to the operation of the project. However, this maximum stage limit of 10 feet NGVD, at the southern end of the 8.5 SMA seems to be too high, since most of the land elevations within the 8.5 Sq. Mile Area are below this elevation. See attached map "8_5_FPLOS_landelevations_.pdf". A more adequate maximum stage limit should be established during the test phase.

Regards,

Marcia Steelman, CFM, Engineer 3

Miami-Dade County Public Works and Waste Management

Stormwater Utility Design Section

http://www.miamidade.gov/development/flooding-protection.asp

701 NW 1st Court, 5th Floor, Miami, Florida 33136

(305) 372-6691 (305) 372-6425 fax

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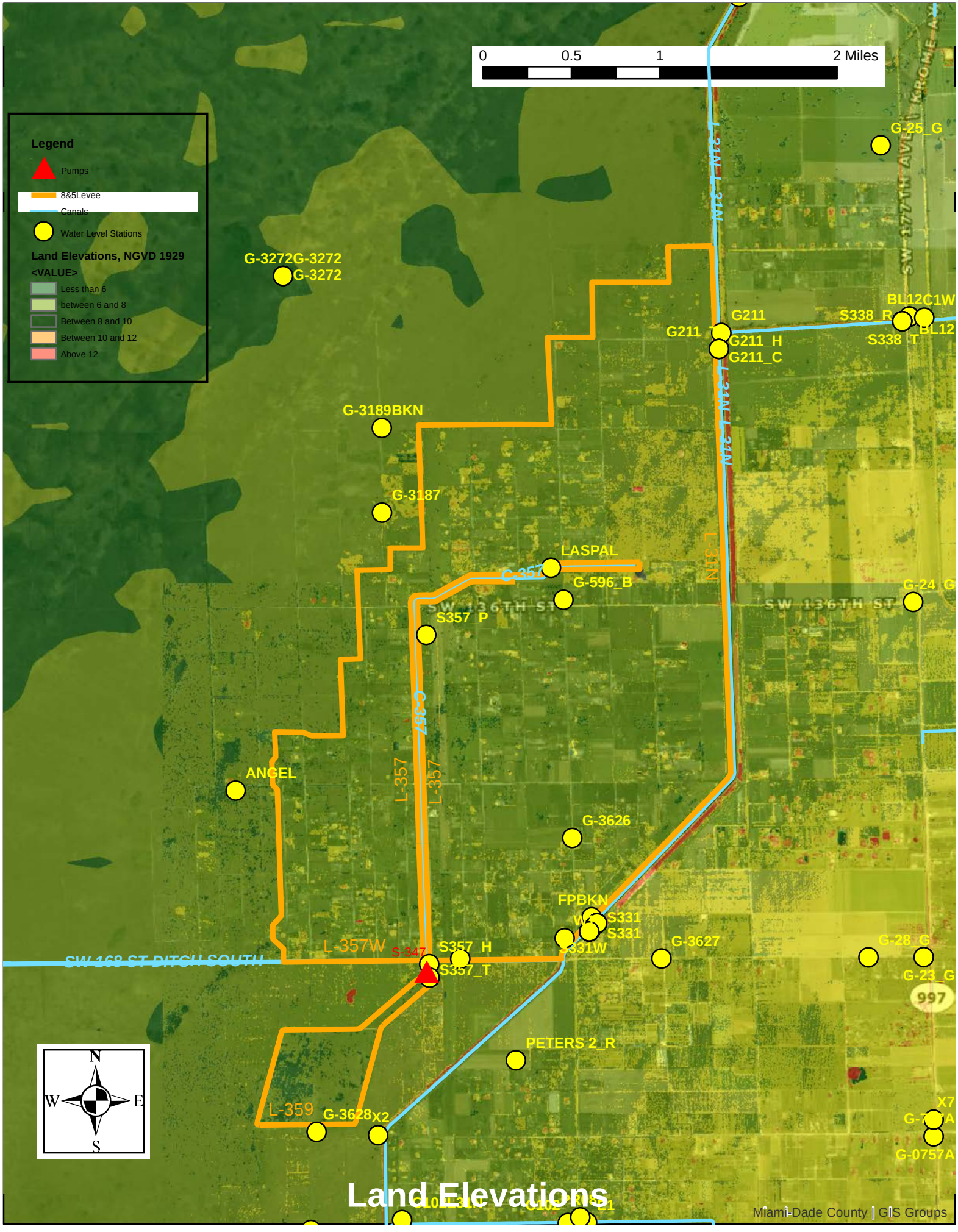
0
0.5
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2 Miles
Legend
Pumps
8&5Levee
Canals
Water Level Stations
Land Elevations, NGVD 1929
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between 6 and 8
Between 8 and 10
Between 10 and 12
Above 12
G-3272G-3272
G-3272
G-25_G
L-31N_21W
SW 177TH AVE / KROME AVE
BL12C1W
S338_R
BL12
S338_T
G211
G211_T
G211_H
G211_C
L-31N_13W
G-3189BKN
G-3187
LASPAL
C-357
G-596_B
L-31N
G-24_G
SW 136TH ST
S357_P
C-357
L-357
L-357
ANGEL
G-3626
FPBKN
S331
S331
S331W
G-3627
G-28_G
G-23_G
997
SW 168 ST DITCH SOUTH
L-357W
S-347
S357_H
S357_T
PETERS 2_R
L-359
G-3628X2
X7
G-0757A
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Land Elevations
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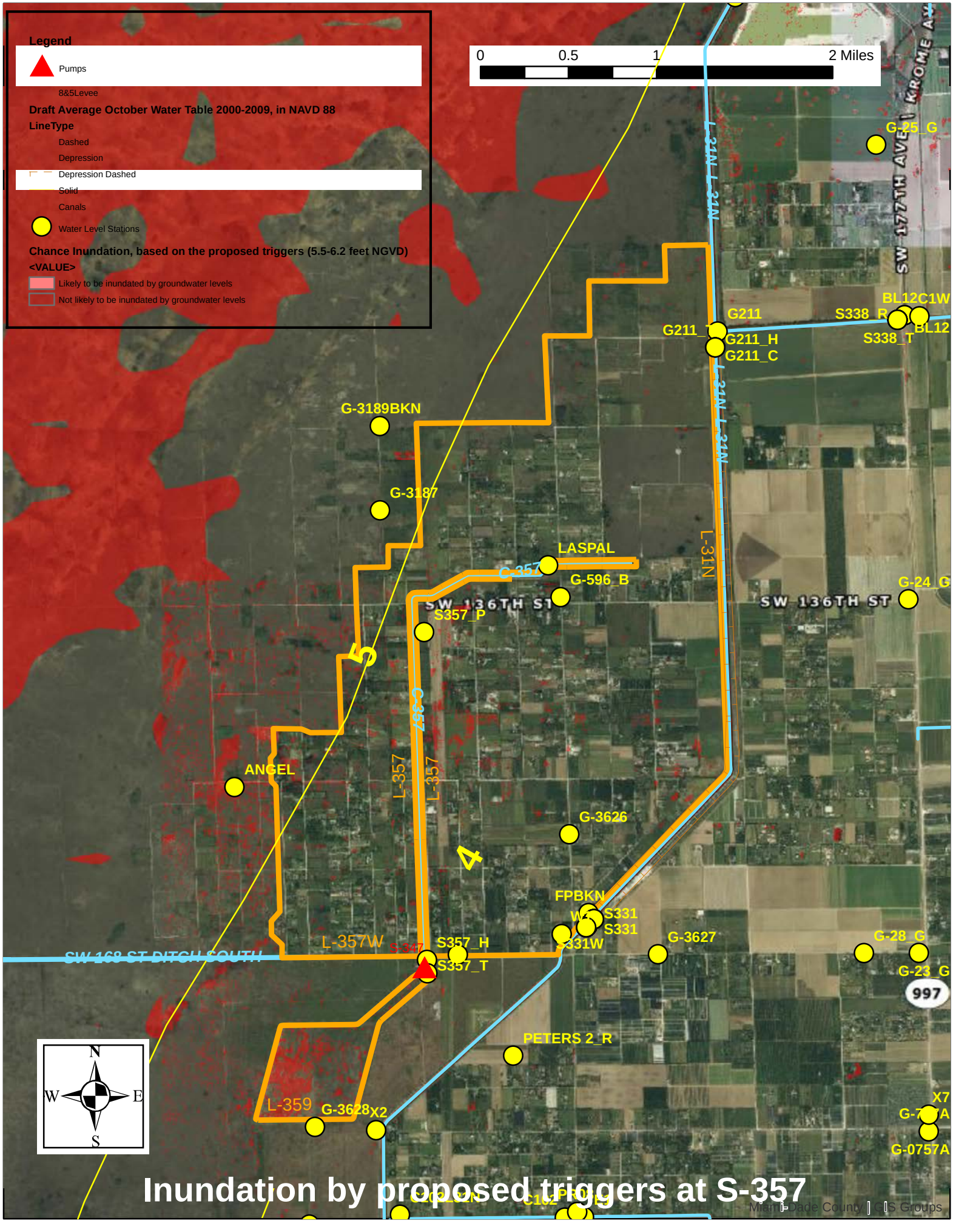
Legend
Pumps
8&5Levee
Draft Average October Water Table 2000-2009, in NAVD 88
LineType
Dashed
Depression
Depression Dashed
Solid
Canals
Water Level Stations
Chance Inundation, based on the proposed triggers (5.5-6.2 feet NGVD)
<VALUE>
Likely to be inundated by groundwater levels
Not likely to be inundated by groundwater levels
0
0.5
1
2 Miles
G-25_G
L-31N
SW 177TH AVE
BL12C1W
S338_R
BL12
S338_T
G211
G211_T
G211_H
G211_C
G-3189BKN
G-3187
LASPAL
C-357
G-596_B
L-31N
G-24_G
SW 136TH ST
S357_P
5
C-357
ANGEL
L-357
L-357
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G-3626
FPBKN
S331
S331
S331W
G-3627
G-28_G
G-23_G
997
SW 168 ST DITCH SOUTH
L-357W
S-347
S357_H
S357_T
PETERS 2_R
L-359
G-3628X2
X7
G-0757A
N
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S
Inundation by proposed triggers at S-357
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FLORIDA DEPARTMENT of STATE

RICK SCOTT
Governor

KEN DETZNER
Secretary of State

Eric P. Summa
c/o Daniel B. Hughes
Jacksonville District Corps of Engineers
701 San Marco Boulevard
Jacksonville, FL 32207-8175

April 14, 2014

Re: DHR Project Review File Number 2015-1617
Relaxation of Gage-3273 Field Test, Request for Concurrence of Determination of No Adverse Effect

Dear Mr. Summa:

Thank you for consulting with the Florida State Historic Preservation Officer (SHPO) regarding the U.S. Army Corps of Engineers' determination of *no adverse effect* for the relaxation of the G-3273 constraint. Our review was conducted in accordance with Section 106 of the *National Historic Preservation Act of 1966*, as amended, and its implementing regulations in *36 CFR Part 800: Protection of Historic Properties*.

Our review of this project is based on consultation with staff at the Corps of Engineers as well as information contained within the Environmental Assessment and Draft Finding of No Adverse Effect for the proposed activity. We would like to thank the Corps for its efforts to ensure that our staff understood both the short-term test activities and the long-term goals of the project.

While the proposed project will have an effect on historic properties, we concur with the Corps' determination of no adverse effect. Our concurrence is based on the limited two year duration of the test and the understanding that the maximum gage relaxation will not exceed water levels or flow rates in excess of those currently experienced during heavy/prolonged rain events. Since this is only the first phase of a larger, multi-phased project, it is possible that future project activities may cause adverse effects.

If you have any questions concerning these comments, please contact me at Timothy.Parsons@DOS.MyFlorida.com, or at 850.245.6333 or 800.847.7278.

Sincerely,

Timothy A. Parsons, Ph.D., RPA
Deputy State Historic Preservation Officer
for Compliance and Review

Miccosukee Tribe of Indians
of Florida

COL Alan M. Dodd
Commander Jacksonville District
U.S. Army Corps of Engineers
701 San Marco Blvd
Jacksonville, FL 32207-8175

May 15, 2015

Re: S-356 Pump Station Incremental Testing

Dear Col. Dodd:

The Miccosukee Tribe of Indians of Florida cannot give support to extended testing of the S-356 pump station, and Increment-1 at this time. The operation of this pump station may have a direct impact on the Miccosukee camps along Tamiami Trail and the conditions of these camps are a priority. We understand, and have empathy for the farm lands south of Tamiami Trail. However, the water quality concerns and flooding concerns originally raised when the pump station was first constructed have never been fully addressed.

To discuss these matters more fully please contact my Office or the Acting Director of Water Resources, James M. Erskine at 305-223-8380.

Sincerely,

Colley Billie
Chairman

Cc. James Riley, US ACE Environmental Engineer
Kimberly Taplin, US ACE Tribal Liaison

United States Department of the Interior

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

May 22, 2015

Colonel Alan M. Dodd
U.S. Army Corps of Engineers
Post Office Box 4970
Jacksonville, Florida 32232-0019

Service Consultation Code: 04EF2000-2015-I-0062
Date Received: January 27, 2015
Project: G-3273 Constraint Relaxation / S-356 Field Test and S-357N Operational Strategy
County: Miami-Dade

Dear Colonel Dodd:

The U.S. Fish and Wildlife Service (Service) has reviewed your letter dated March 27, 2015, concerning Increment 1 of the G-3273 Constraint Relaxation / S-356 Field Test and S-357N Operational Strategy. This letter is submitted in response to your request that we reaffirm our continued support for the project and confirm our previous conclusion that the test is not likely to adversely affect threatened and endangered species. It is also intended to document the operational flexibilities that the U.S. Army Corps of Engineers (Corps) proposes to employ this year within the Everglades Restoration Transition Plan (ERTP) Phase I, as well as the Dye Tracer Test for western Shark River Slough.

PROJECT DESCRIPTION

The G-3273 constraint relaxation is intended to increase the availability of water deliveries from the S-333 in WCA-3A to Everglades National Park (ENP) through Northeast Shark River Slough (NESRS) for the benefit of natural resources. Currently, the use of S-333 is periodically restricted by the existing G-3273 stage constraint of 6.8 feet NGVD. The G-3273 constraint has existed since 1985 as a flood protection measure for residential areas to the east of ENP. Since 1985 many features have been built, including protective levees around the 8.5 Square Mile Area (SMA) and much of the C-111 South Dade Project detention areas to the south providing opportunities to begin relaxation of the G-3273. The S-356 pump will also be tested during this first increment. The pump is designed to return seepage back into the L-29 canal and to make that water available to ENP through NESRS. Lastly, the current water control plan for water flowing from the water conservation areas to ENP and the South Dade Conveyance System (WCAs-ENP-SDCS) does not contain water management operating criteria for the planned spillway (S-357N) located in the 8.5 SMA. Therefore, interim water management operating criteria for the planned 8.5 SMA gated culvert S-357N will be implemented in conjunction with Increment 1.

SERVICE RESPONSE

As a result of the consultation on this project, the Corps agreed to provide an on-going analysis that compares flows through S-12A, S-12B, S-12C, and S-12D that would have occurred with ERTP and observed flows with Increment 1. This analysis will continue for the duration of the test to ascertain the effects of the G-3273 relaxation on structural flows at the S-12s. This information will be integral in determining future operations of the S-12s as we continue our consultation on ERTP Phase 2. Additionally, after the conclusion of Increment 1, it is anticipated that Increment 2 of the test will allow for increased stages within the L-29 canal up to 8 feet possibly as early as 2016 or 2017, further increasing the options available for the S-12 structures, especially S-12A and S-12B.

The Service continues to support the G-3273 Constraint Relaxation / S-356 Field Test and S-357N Operational Strategy and reiterates our previous determinations pursuant to the Endangered Species Act for effects on federally listed species and critical habitat as stated in our February 10, 2015, letter.

In addition, based on our discussions with Corps staff on May 14, 2015, the Service understands that the Corps' plans to employ operational flexibilities within ERTP this year include maximizing flows through the S-12 structures from the east to the west as capacity allows. This flexibility will ensure that regulatory releases from Water Conservation Area 3A (WCA-3A) are prioritized to the east to the extent practicable to reduce flows into western Shark River Slough where the Cape Sable seaside sparrow, subpopulation A, occurs. In addition, when conditions allow, the Service understands that the Corps will delay opening and/or closure of the S-12A, S-343A/B, S-344, and S-12B structures beyond their current restrictions to further limit flow into western Shark River Slough. In order to provide increased benefits to sparrow populations east of Shark River Slough, the Service understands that the Corps will work in conjunction with the Service and the South Florida Water Management District to alter the order of pumping at the S-332B, S-332C, and S-332D structures to meet sparrow needs when conditions allow. Finally, the Service understands that ERTP includes the provision for preemptive releases. Preemptive releases are used to create storage within WCA-3A when large adjustments to inflow into WCA-3A or large regional rainfall events are forecasted. This flexibility will assist to maintain target stages within WCA-3A and allow for further flexibility in discharges through the S-12 and S-333 structures. The Service supports the Corps' planned use of these existing flexibilities within ERTP Phase 1 to the maximum extent possible to protect the Cape Sable seaside sparrow and its habitat with the goal of maximizing the number of consecutive dry days within the nesting season and decreasing the number of days of discontinuous hydroperiod.

The Service also understands that the Corps is planning to implement the Dye Tracer Test in order to identify the source of water entering western Shark River Slough. The results of the Dye Tracer Test may be used to formulate future reasonable and prudent alternative measures to address water flow into Cape Sable seaside sparrow, subpopulation A, habitat.

Within the context of the ongoing, reinitiated consultation concerning future ERTP operations after this year, we look forward to continuing our discussion of additional options that could further enhance survival and recovery of the Cape Sable seaside sparrow, including, but not

limited to, increasing duration of closures of the S-12A and S-12B, utilizing existing infrastructure to divert water away from S-12A and S-12B, utilizing potential storage within WCA-3B to moderate maximum stages in WCA-3A, increasing capacity of the S-333, degrading the L-67 extension, and investigating the source of seepage in western WCA-3A.

Thank you for the opportunity to respond to your letter. If you have any questions regarding this letter, please contact Miles Meyer at 772-469-4281, or via email at Miles_Meyer@fws.gov.

Sincerely yours,

Larry W Williams

Larry Williams
State Supervisor
Florida Ecological Services