# APPENDIX D

# PERTINENT CORRESPONDENCE

## D.1: NATIONAL ENVIRONMENTAL POLICY ACT CORREPONDENCE

## D.2: ENDANGERED SPECIES ACT COMPLIANCE

## D.3: NATIONAL HISTORIC PRESERVATION ACT COMPLIANCE

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# APPENDIX D.1 NATIONAL ENVIRONMENTAL POLICY ACT CORREPONDENCE

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## D.1 Pertinent Correspondence

This appendix contains pertinent correspondence related to the Combined Operational Plan (COP) and the National Environmental Policy Act (NEPA). A brief description of pertinent correspondence is provided below. Copies of the correspondence, as well as comment response tables generated to address comments received, follow.

**Notice of Intent to Prepare an Environmental Impact Statement**

- September 8, 2017: Notice of Intent Federal Register

**National Environmental Policy Act (NEPA) Cooperating Agency Letters**

- September 22, 2017: Invitation Cooperating Agency South Florida Water Management District (SFWMD)
- September 22, 2017: Invitation Cooperating Agency Everglades National Park (ENP)
- September 22, 2017: Invitation Cooperating Agency U.S. Fish and Wildlife Service (USFWS)
- October 13, 2017: Invitation Cooperating Agency Miccosukee Tribe of Indians of Florida
- October 13, 2017: Invitation Cooperating Agency Seminole Tribe of Florida
- October 13, 2017: Invitation Cooperating Agency Seminole Nation of Oklahoma
- October 20, 2017: Acceptance Cooperating Agency Letter SFWMD
- November 01, 2017: Acceptance Cooperating Agency Letter ENP

**Government to Government Coordination Letters**

- September 22, 2017: Miccosukee Tribe of Indians of Florida
- September 22, 2017: Seminole Tribe of Florida
- September 22, 2017: Seminole Nation of Oklahoma

**NEPA Scoping Letters and Responses**

- September 22, 2017: NEPA Scoping Letter
- USACE NEPA Scoping Comment Response Matrix
- NEPA Scoping Letters Received

**Additional Correspondence**

- February 28, 2018: Everglades Law Center, National Parks Conservation Association (NPCA), Everglades Foundation, Audubon Florida Comments on COP Round 1 Alternatives
- April 5, 2018: Everglades Law Center, NPCA, Everglades Foundation, and Audubon Florida Comments on COP Round 1 Alternatives and USACE Response dated May 10, 2018
- August 14, 2018: Everglades Foundation Comments on COP Alternatives

- September 5, 2018: SFWMD Comments on Water Quality Concerns and USACE Response dated October 4, 2018
- September 7, 2018: SFWMD Comments on Water Quality Concerns and USACE Response dated October 17, 2018
- December 13, 2018: Audubon Florida, Bonefish & Tarpon Trust, Captains for Clean Water, Everglades Law Center, Everglades Foundation, Florida Bay Forever, and NPCA Comments on COP Round 2 Alternatives
- March 25, 2019: Audubon Florida, Bonefish & Tarpon Trust, Captains for Clean Water, Everglades Law Center, Everglades Foundation, Florida Bay Forever, and NPCA Comments on COP Round 3 Alternative and Extreme High Water Action Line
- March 25, 2019: Everglades Foundation Comments on COP Round 3 Alternative and Extreme High Water Action Line
- March 25, 2019: Florida Department of Agriculture and Consumer Services Comments on COP Round 3 Alternative and Extreme High Water Action Line
- March 26, 2019: Florida Fish and Wildlife Conservation Commission Comments on COP Round 3 Alternative and Extreme High Water Action Line
- USACE COP Round 3 Alternative Comment Response Matrix
- June 12, 2019: Audubon Florida, Everglades Foundation, and NPCA Comments on COP Alternative Q
- June 12, 2019: Everglades Foundation Comments on COP Alternative Q
- June 12, 2019: Florida Department of Agriculture and Consumer Services Comments on COP Alternative Q
- June 13, 2019: Florida Fish and Wildlife Conservation Commission Comments on COP Alternative Q
- USACE COP Alternative Q Comment Response Matrix
- June 27, 2019: Seminole Tribe of Florida Comments on COP Alternative Q+
- July 1, 2019: Florida Department of Agriculture and Consumer Services Comments on COP Alternative Q+
- July 1, 2019: Everglades Foundation Comments on COP Alternative Q+
- USACE COP Alternative Q+ Comment Response Matrix
- July 23, 2019: Everglades Law Center on COP Alternative Q+

# APPENDIX D.1 NATIONAL ENVIRONMENTAL POLICY ACT CORREPONDENCE

# NOTICE OF INTENT TO PREPARE AN ENVIRONMENTAL IMPACT STATEMENT

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production by the nonprofit agencies listed:

*Products*

*NSN(s)—Product Name(s):*
8920–01–E62–5585—Rice, Brown, Parboiled, Long Grain, CS/Four (4) Five (5) Pound Bags
8920–01–E62–5586—Rice, Brown, Parboiled, Long Grain, CS/Two (2) Ten (10) Pound Bags
*Mandatory for:* 100% of the requirement of the Department of Defense
*Mandatory Source(s) of Supply:* VisionCorps, Lancaster, PA
*Contracting Activity:* Defense Logistics Agency Troop Support
*Distribution:* C-List

*NSN(s)—Product Name(s):*
5940–01–089–7066—Adapter, Battery Terminal, Negative Post, E
5940–01–520–6775—Adapter, Battery Terminal, Positive Post, E
*Mandatory Source(s) of Supply:* Eastern Carolina Vocational Center, Inc., Greenville, NC
*Mandatory for:* 100% of the requirement of the Department of Defense
*Contracting Activity:* Defense Logistics Agency Land and Maritime
*Distribution:* C-List

**Deletion**

The following products and services are proposed for deletion from the Procurement List

*Product*

*NSN(s)—Product Name(s):* 2910–00–740–9419—Strap, Fuel Tan
*Mandatory Source(s) of Supply:* Employment Source, Inc., Fayetteville, NC
*Contracting Activity:* Defense Logistics Agency Land and Maritime

*NSN(s)—Product Name(s):*
8410–01–414–6979—Shirt, Tuck-in, Army, Women's, Short Sleeved, Green, 4 Regula
8410–01–414–6980—Shirt, Tuck-in, Army, Women's, Short Sleeved, Green, 6 Regula
8410–01–414–6981—Shirt, Tuck-in, Army, Women's, Short Sleeved, Green, 8 Regula
8410–01–414–7023—Shirt, Tuck-in, Army, Women's, Short Sleeved, Green, 10 Regula
8410–01–414–7105—Shirt, Tuck-in, Army, Women's, Short Sleeved, Green, 12 Regula
8410–01–414–7113—Shirt, Tuck-in, Army, Women's, Short Sleeved, Green, 14 Regula
8410–01–414–7116—Shirt, Tuck-in, Army, Women's, Short Sleeved, Green, 16 Regula
8410–01–414–7118—Shirt, Tuck-in, Army, Women's, Short Sleeved, Green, 18 Regula
8410–01–414–7120—Shirt, Tuck-in, Army, Women's, Short Sleeved, Green, 20 Regula
8410–01–414–7186—Shirt, Tuck-in, Army, Women's, Short Sleeved, Green, 22 Regula
8410–01–414–7232—Shirt, Tuck-in, Army, Women's, Short Sleeved, Green, 24 Regula
8410–01–414–7233—Shirt, Tuck-in, Army, Women's, Short Sleeved, Green, 26 Regula
*Mandatory Source(s) of Supply:* Middle Georgia Diversified Industries, Inc., Dublin, GA
*Contracting Activity:* Defense Logistics Agency Troop Support

*NSN(s)—Product Name(s):* 1670–00–805–3522—Strap Set, Webbin
*Mandatory Source(s) of Supply:* Huntsville Rehabilitation Foundation, Huntsville, AL
*Contracting Activity:* Defense Logistics Agency Aviation

*NSN(s)—Product Name(s):*
8465–00–001–6487—Belt, Individual Equipment, Olive Drab, Larg
8465–00–001–6488—Belt, Individual Equipment, LC–1, Olive Drab, Mediu
8465–01–120–0674—Belt, Individual Equipment, USN/USA, LC–2, Olive Drab, Mediu
8465–01–120–0675—Belt, Individual Equipment, Olive Drab, Larg
*Mandatory Source(s) of Supply:* Mississippi Industries for the Blind, Jackson, MS
*Contracting Activity:* Defense Logistics Agency Troop Support

*Service*

*Service Type:* Grounds Maintenance Servic
*Mandatory for:* Pennington Memorial U.S. Army Reserve Center: 2164 Harding Highway East, Marion, OH
*Mandatory Source(s) of Supply:* MARCA Industries, Inc., Marion, OH
*Contracting Activity:* Dept of the Army, W6QM MICC Ft McCoy (RC)
*Service Type:* Mail and Messenger Servic
*Mandatory for:* Headquarters, Naval Facilities Engineering Command (NAVFACENGCOM), Washington, DC
*Mandatory Source(s) of Supply:* ServiceSource, Inc., Oakton, VA
*Contracting Activity:* Dept of the Navy, U.S. Fleet Forces Command
*Service Type:* Mailroom Operation Service
*Mandatory for:* Food and Drug Administration, 5100 Paint Branch Parkway, College Park, MD
*Mandatory Source(s) of Supply:* Linden Resources, Inc., Arlington, VA
*Contracting Activity:* Dept of Health And Human Services/Food and Drug Administration
*Service Type:* Mess Attendant Servic
*Mandatory for:* Willow Grove Naval Air Station Joint Reserve Base: Liberty Dining Hall, Horsham, PA
*Mandatory Source(s) of Supply:* Occupational Training Center of Burlington County, Burlington, NJ
*Contracting Activity:* Dept of tThe Navy, U.S. Fleet Forces Command

**Amy B. Jensen,**

*Director, Business Operations.*

[FR Doc. 2017–19082 Filed 9–7–17; 8:45 am]

**BILLING CODE 6353–01–P**

## DEPARTMENT OF DEFENSE

### Department of the Army, Corps of Engineers

### Intent To Prepare an Environmental Impact Statement for the Combined Operational Plan, Broward, Miami-Dade Counties, Florida

**AGENCY:** Department of the Army, U.S. Army Corps of Engineers, DOD.

**ACTION:** Notice of intent.

**SUMMARY:** The Jacksonville District, U.S. Army Corps of Engineers (Corps) is beginning preparation of a National Environmental Policy Act (NEPA) assessment for the Combined Operational Plan (COP). The purpose of the COP is to define operations for the constructed features of the Modified Water Deliveries to Everglades National Park (MWD) and Canal 111 (C–111) South Dade Projects, while maintaining the congressionally authorized purposes of the Central and Southern Florida (C&SF) Project to include flood control; water supply for agricultural irrigation, municipalities and industry; regional groundwater control and prevention of saltwater intrusion; enhancement of fish and wildlife; and recreation.

**ADDRESSES:** U.S. Army Corps of Engineers, Planning and Policy Division, Environmental Branch, P.O. Box 4970, Jacksonville, FL 32232–0019.

**FOR FURTHER INFORMATION CONTACT:** Melissa Nasuti at 904–232–1368 or email at *melissa.a.nasuti@usace.army.mil.*

**SUPPLEMENTARY INFORMATION:**

a. The COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure associated with the MWD and C–111 South Dade Projects in Miami Dade County, Florida. Development of the COP will be informed by a series of operational field tests previously conducted under the authority of the MWD Project that include incremental increases in water delivered from Water Conservation Area 3 (WCA 3) to Everglades National Park (ENP). Information gained from water management actions taken by the Corps in response to unseasonable high water levels within the WCAs in 2016 and 2017 will also be utilized to inform development of the COP.

b. Implementation of the COP is anticipated to increase the availability of water deliveries from WCA 3A to ENP through Northeast Shark River Slough and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP.

c. Water management operating criteria defined during development of the COP will be incorporated into the 2012 WCAs, ENP, and ENP to South Dade Conveyance system Water Control Plan following completion of NEPA.

d. A scoping letter will be used to invite comments from Federal, State, and local agencies, affected Indian tribes, and other interested private organizations and individuals.

e. All alternative plans will be reviewed under provisions of appropriate laws and regulations, including the Endangered Species Act, Fish and Wildlife Coordination Act, Clean Water Act, and Farmland Protection Policy Act.

f. The Draft Environmental Impact Assessment is expected to be available for public review in 2019.

Dated: August 22, 2017.

**Gina Paduano Ralph,**

*Chief, Environmental Branch.*

[FR Doc. 2017–19065 Filed 9–7–17; 8:45 am]

**BILLING CODE 3720–58–P**

## DEPARTMENT OF DEFENSE

### Department of the Army, U.S. Army Corps of Engineers

### Notice of Intent To Prepare an Integrated Environmental Impact Statement for the Lower Columbia River Federal Navigation Channel Maintenance Plan

**AGENCY:** Department of the Army, U.S. Army Corps of Engineers, DoD.

**ACTION:** Notice of intent.

**SUMMARY:** The Portland District, U.S. Army Corps of Engineers (Corps) intends to prepare an integrated Environmental Impact Statement (EIS) and Federal Navigation Channel (FNC) Maintenance Plan, hereafter referred to as the Plan. The purpose of this Plan is to ensure the continued maintenance of the 43-foot deep Lower Columbia River FNC for the next 20 years. The Port of Longview, Port of Kalama, Port of Woodland, Port of Vancouver, and the Port of Portland (collectively the Sponsor Ports) are non-federal sponsors of the project, who will have Oregon and Washington State permitting requirements to execute on the Plan. The Corps will serve as the lead federal agency for purposes of the National Environmental Policy Act (NEPA). The Sponsor Ports will serve as cooperating agencies for purposes of NEPA. The Washington ports' activities in support of the proposed project will be subject to environmental review under chapter 43.21C Revised Code of Washington (RCW), the Washington State Environmental Policy Act (SEPA). The Washington Sponsor Ports will be co-lead agencies under SEPA, and the Port of Longview will serve as the nominal SEPA lead agency for purposes of SEPA compliance. To satisfy the requirements of NEPA and SEPA, the Corps and Sponsor Ports will be jointly preparing an integrated EIS for the Plan.

**DATES:** Written comments for consideration in the development of the scope of the joint NEPA/SEPA EIS are due to the addresses below no later than Thursday, November 16, 2017. Comments may also be made at the public scoping meetings listed in this notice. Additional information related to the public scoping process will be provided through advertisements placed in regional newspapers of general circulation, Public Notice, and on the project Web site at *www.nwp.usace.army.mil/lcrchannelmaintenance.*

**ADDRESSES:** Mailed comments may be sent to: U.S. Army Corps of Engineers, Portland District, P.O. Box 2946, Attn: CENWP–PM–E, Portland, Oregon 97208–2946. Email comments to: *ColumbiaNavChannel@usace.army.mil.* All written comments and materials received, including names and addresses, will become part of the administrative record and may be released to the public.

**FOR FURTHER INFORMATION CONTACT:** For questions regarding the Plan, the EIS, or special accommodations for scoping process participation, please contact Kate Wells, Environmental Resources Specialist; Attn: CENWP–PM–E, P.O. Box 2946, Portland, Oregon 97208–2946; (503) 808–4664; *ColumbiaNavChannel@usace.army.mil.*

**SUPPLEMENTARY INFORMATION:**

*Project Background.* The Lower Columbia River FNC project includes a main channel that is 43 feet deep and generally 600 feet wide, and extends upstream of the Mouth of Columbia River, River Mile (RM) 3 to Vancouver, WA, RM 105.5. The FNC also extends into lower Oregon Slough and includes vessel turning basins at Astoria in Oregon and Longview, Kalama, and Vancouver in Washington. The FNC is maintained using a combination of dredging and hydraulic control works (pile dikes). Advanced maintenance dredging is currently approved up to 5 feet below authorized depth (−48 feet) and up to 100 feet outside the authorized channel width. For the past several years, dredging 6 to 8 million cubic yards of localized sand shoals has been required annually to provide reliable service for deep-draft navigation. The Corps' policy requires all federally maintained navigation projects to demonstrate that there is sufficient dredged material placement capacity for a minimum of 20 years. An updated Plan for the Lower Columbia River FNC is needed now because the existing dredged material placement network is nearing capacity and, if insufficient capacity exists, navigation maintenance dredging may be negatively affected. Non-federal project sponsors for the Lower Columbia River FNC include the Port of Portland individually and as representative of the Port of St. Helens in Oregon, and the Port of Longview, the Port of Kalama, the Port of Woodland, and the Port of Vancouver in Washington. These ports are stakeholders in the channel depth maintenance of the Columbia River. Maintenance of the channel depth is necessary for the ports' and other channel users' continued industrial economic development and trade promotion. In 2015, the Lower Columbia River FNC was used to transport nearly 55 million tons of cargo valued at $22 billion. Vessels drafting the full authorized channel depth of 43 feet carried approximately 11 million tons of export shipments worth nearly $3 billion in 2015. Tonnage amounts refer to Corps Waterborne Commerce Statistics Center (WCSC) data for the Columbia & Lower Willamette Rivers below Vancouver, WA, and Portland, OR, Waterway as processed by the Corps Channel Portfolio Tool (CPT). Cargo values are estimated by the CPT based on the WCSC tonnage amounts multiplied by national average commodity unit price ($ per ton) data derived from USA Trade Online (*https://usatrade.census.gov/*).

*Proposed Project.* The Corps will develop the subject Plan in accordance with the procedures for a dredged material management plan in Engineering Regulation 1105–2–100, which governs Corps project formulation, evaluation, and implementation. As a dredged material management plan, it will ensure warranted and environmentally acceptable maintenance of the 43-foot Lower Columbia River FNC for the next 20 years. Specifically, the Plan will be designed to facilitate efficient management of dredged material, accounting for variability of shoaling processes, to provide a reliable channel for deep-draft navigation. The Plan will describe the results of investigations and analyses used to make determinations as to current and forecasted dredging needs and material placement capacity, potential additional

# APPENDIX D.1 NATIONAL ENVIRONMENTAL POLICY ACT CORREPONDENCE

# NATIONAL ENVIRONMENTAL POLICY ACT COOPERATING AGENCY LETTERS

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DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
701 San Marco Boulevard
JACKSONVILLE, FLORIDA 32207-8175

REPLY TO
ATTENTION OF

Planning and Policy Division
Environmental Branch

SEP 2 2 2017

Ernie Marks, Executive Director
South Florida Water Management District
3301 Gun Club Road
West Palm Beach, Florida 33406

Dear Director Marks,

In accordance with regulations pertaining to the National Environmental Policy Act (NEPA) (Title 40 of the Code of Federal Regulations, part 1501.6), I am formally inviting the South Florida Water Management District to become a cooperating agency for the development of the Combined Operational Plan (COP). The purpose of the COP is to define operations for the constructed features of the Modified Water Deliveries (MWD) to Everglades National Park (ENP) and Canal 111 (C-111) South Dade Projects, while maintaining the congressionally authorized purposes of the Central and Southern Florida (C&SF) Project to include flood control; water supply for agricultural irrigation, municipalities and industry; regional groundwater control and prevention of saltwater intrusion; enhancement of fish and wildlife; and recreation. The Jacksonville District, U.S. Army Corps of Engineers (Corps) is beginning the NEPA process that will include development of an Environmental Impact Statement (EIS).

The COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure associated with the MWD and C-111 South Dade Projects in Miami Dade County (Figure 1). Development of the COP will be informed by a series of operational field tests previously conducted under the authority of the MWD Project that include relaxation of the Gage-3273 (G-3273) constraint and raising the maximum operating limit in the L-29 Canal up to 8.5 feet National Geodetic Vertical Datum of 1929 (*i.e.* Increment 1, Increment 1.1 and Increment 1.2, and Increment 2). Information gained from water management actions taken by the Corps in response to unseasonable high water levels within the Water Conservation Areas (WCAs) in 2016 and 2017 will also be utilized to inform development of the COP. Implementation of the COP is anticipated to increase the availability of water deliveries from WCA 3A to ENP through Northeast Shark River Slough and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP.

Water management operating criteria defined during development of the COP will be incorporated into the 2012 WCAs, ENP, and ENP to South Dade Conveyance System Water Control Plan following completion of NEPA. Development of the COP is also being pursued

to address the mandated Reasonable and Prudent Alternative of the July 22, 2016 Everglades Restoration Transition Plan Biological Opinion which requires the Corps to proceed as scheduled, and as allowable by law, for completing NEPA analysis for the COP in 2019.

Cooperating agency status involves actions and responsibilities that are more involved than a commenting or permitting agency. In the case of the COP, we believe that cooperating agencies shall assist Corps authors in developing language for the EIS, reviewing and providing edits to draft language and providing comments on those sections of the document where an agency has either regulatory authority or specialized expertise (CEQ Regulations §1051.6(a)2). This review and editing process will take place earlier than the typical review and comment associated with an EIS. If you choose not to become a cooperating agency, we will continue to coordinate as we have done in the past.

The formulation of the project alternatives will be in accordance with Engineer Regulation ER 1105-2-100 and will fully consider a range of environmental, economic and social factors. Your participation as a cooperating agency will help us fully consider the views, needs and benefits of competing interests. For additional information on becoming a cooperating agency, please see the enclosed "Rights and Responsibilities of Lead and Cooperating Agencies" (Forty Most Asked Questions Concerning CEQ's NEPA Regulations, Council on Environmental Quality, 1981). The complete list of Forty FAQs can be found at https://energy.gov/nepa/downloads/forty-most-asked-questions-concerning-ceqs-national-environmental-policy-act.

We would appreciate a response to this invitation to become a cooperating agency (as described above) within 30 days of the date of this letter. If you have any questions, please contact Melissa Nasuti at (904) 232-1368 or via email at melissa.a.nasuti@usace.army.mil.

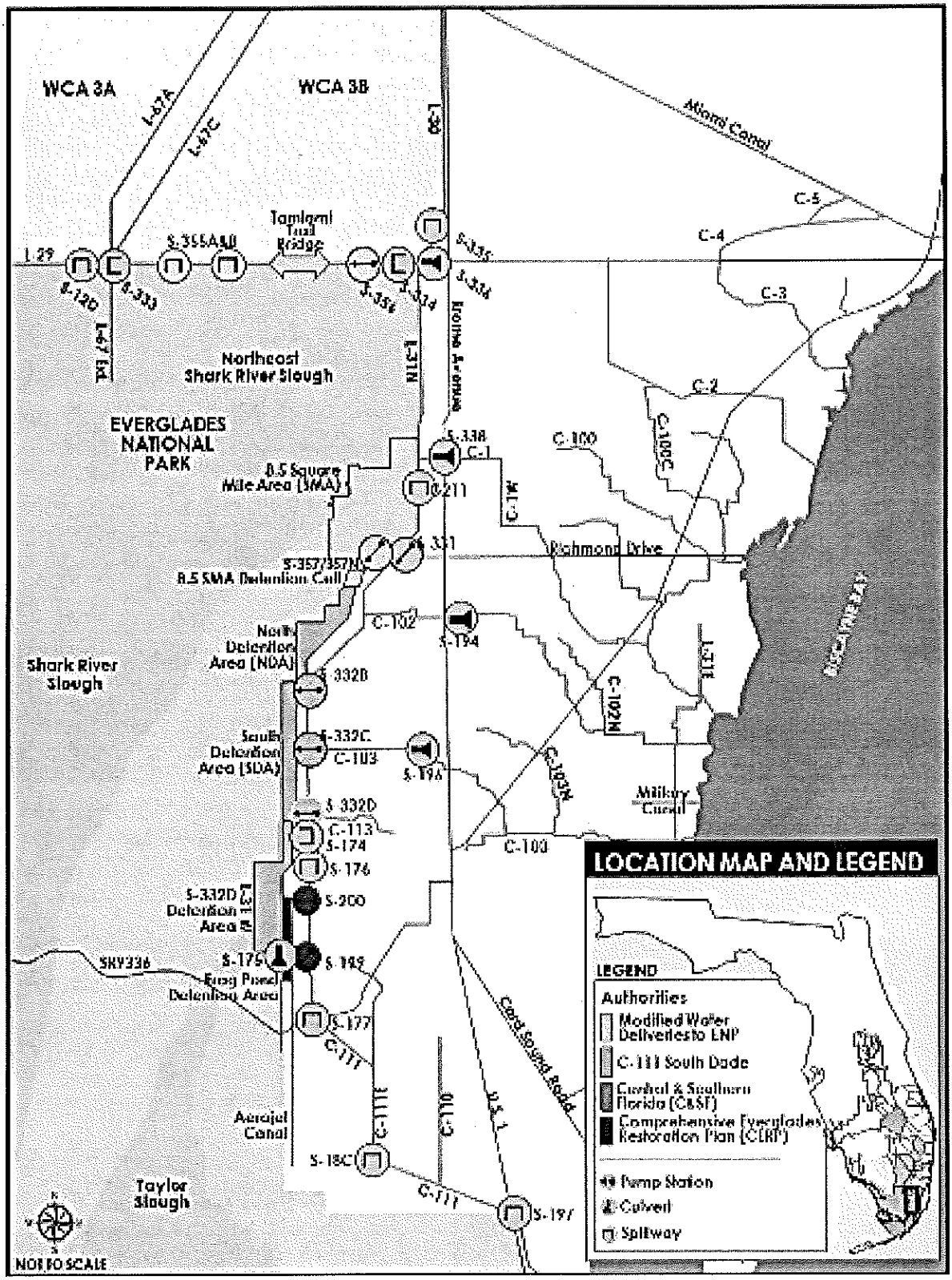
Sincerely,

Gina Paduano Ralph, Ph.D.
Chief, Environmental Branch

Enclosure

cc:

Matt Morrison, South Florida Water Management, Chief Office of Federal Policy and Coordination, 3301 Gun Club Road, West Palm Beach, Florida 33406


WCA 3A
WCA 3B
L-67A
L-67C
L-29
L-67 Ext
L-30
L-31N
Tamiami Trail Bridge
S-355A&B
S-333
S-334
S-335
S-336
S-337
S-338
Miami Canal
Florida Avenue
C-5
C-4
C-3
C-2
C-100
C-100C
C-1W
Northeast Shark River Slough
EVERGLADES NATIONAL PARK
8.5 Square Mile Area (SMA)
C-211
S-331
Richmond Drive
S-357/357N
8.5 SMA Detention Cell
C-102
S-194
North Detention Area (NDA)
Shark River Slough
S-332B
L-31E
C-102W
South Detention Area (SDA)
S-332C
C-103
S-196
C-103N
Miami Canal
S-332D
C-113
S-174
S-176
C-100
S-200
S-332D Detention Area
L-31W
SR9336
S-175
S-199
Frog Pond Detention Area
S-177
C-111
Card Sound Road
U.S. 1
L-31E-2
C-110
Aerojet Canal
S-18C
Taylor Slough
C-111
S-197
NOT TO SCALE
LOCATION MAP AND LEGEND
LEGEND
Authorities
Modified Water Deliveries to ENP
C-111 South Dade
Central & Southern Florida (C&SF)
Comprehensive Everglades Restoration Plan (CERP)
Pump Station
Culvert
Spillway

A. While a trivial violation of the regulations would not give rise to an independent cause of action, such a cause of action would arise from a substantial violation of the regulations. Section 1500.3.

13. **Use of Scoping Before Notice of Intent to Prepare EIS.** Can the scoping process be used in connection with preparation of an **environmental assessment,** i.e., before both the decision to proceed with an EIS and publication of a notice of intent?

A. Yes. Scoping can be a useful tool for discovering alternatives to a proposal, or significant impacts that may have been overlooked. In cases where an environmental assessment is being prepared to help an agency decide whether to prepare an EIS, useful information might result from early participation by other agencies and the public in a scoping process.

The regulations state that the scoping process is to be preceded by a Notice of Intent (NOI) to prepare an EIS. But that is only the minimum requirement. Scoping may be initiated earlier, as long as there is appropriate public notice and enough information available on the proposal so that the public and relevant agencies can participate effectively.

However, scoping that is done before the assessment, and in aid of its preparation, cannot substitute for the normal scoping process after publication of the NOI, unless the earlier public notice stated clearly that this possibility was under consideration, and the NOI expressly provides that written comments on the scope of alternatives and impacts will still be considered.

14a. **Rights and Responsibilities of Lead and Cooperating Agencies.** What are the respective rights and responsibilities of lead and cooperating agencies? What letters and memoranda must be prepared?

A. After a lead agency has been designated (Sec. 1501.5), that agency has the responsibility to solicit cooperation from other federal agencies that have jurisdiction by law or special expertise on any environmental issue that should be addressed in the EIS being prepared. Where appropriate, the lead agency should seek the cooperation of state or local agencies of similar qualifications. When the proposal may affect an Indian reservation, the agency should consult with the Indian tribe. Section 1508.5. The request for cooperation should come at the earliest possible time in the NEPA process.

After discussions with the candidate cooperating agencies, the lead agency and the cooperating agencies are to determine by letter or by memorandum which agencies will undertake cooperating responsibilities. To the extent possible at this stage, responsibilities for specific issues should be assigned. The allocation of responsibilities will be completed during scoping. Section 1501.7(a)(4).

Cooperating agencies must assume responsibility for the development of information and the preparation of environmental analyses at the request of the lead agency. Section 1501.6(b)(3). Cooperating agencies are now required by Section 1501.6 to devote staff resources that were normally primarily used to critique or comment on the Draft EIS after its preparation, much earlier in the NEPA process -- primarily at the scoping and Draft EIS preparation stages. If a cooperating agency determines that its resource limitations preclude any involvement, or the

degree of involvement (amount of work) requested by the lead agency, it must so inform the lead agency in writing and submit a copy of this correspondence to the Council. Section 1501.6(c).

In other words, the potential cooperating agency must decide early if it is able to devote any of its resources to a particular proposal. For this reason the regulation states that an agency may reply to a request for cooperation that "other program commitments preclude any involvement or the degree of involvement requested in the action that is the subject of the environmental impact statement." (Emphasis added). The regulation refers to the "action," rather than to the EIS, to clarify that the agency is taking itself out of all phases of the federal action, not just draft EIS preparation. This means that the agency has determined that it cannot be involved in the later stages of EIS review and comment, as well as decisionmaking on the proposed action. For this reason, cooperating agencies with jurisdiction by law (those which have permitting or other approval authority) cannot opt out entirely of the duty to cooperate on the EIS. See also Question 15, relating specifically to the responsibility of EPA.

14b. How are **disputes resolved between lead and cooperating agencies** concerning the scope and level of detail of analysis and the quality of data in impact statements?

A. Such disputes are resolved by the agencies themselves. A lead agency, of course, has the ultimate responsibility for the content of an EIS. But it is supposed to use the environmental analysis and recommendations of cooperating agencies with jurisdiction by law or special expertise to the maximum extent possible, consistent with its own responsibilities as lead agency. Section 1501.6(a)(2).

If the lead agency leaves out a significant issue or ignores the advice and expertise of the cooperating agency, the EIS may be found later to be inadequate. Similarly, where cooperating agencies have their own decisions to make and they intend to adopt the environmental impact statement and base their decisions on it, one document should include all of the information necessary for the decisions by the cooperating agencies. Otherwise they may be forced to duplicate the EIS process by issuing a new, more complete EIS or Supplemental EIS, even though the original EIS could have sufficed if it had been properly done at the outset. Thus, both lead and cooperating agencies have a stake in producing a document of good quality. Cooperating agencies also have a duty to participate fully in the scoping process to ensure that the appropriate range of issues is determined early in the EIS process.

Because the EIS is not the Record of Decision, but instead constitutes the information and analysis on which to base a decision, disagreements about conclusions to be drawn from the EIS need not inhibit agencies from issuing a joint document, or adopting another agency's EIS, if the analysis is adequate. Thus, if each agency has its own "preferred alternative," both can be identified in the EIS. Similarly, a cooperating agency with jurisdiction by law may determine in its own ROD that alternative A is the environmentally preferable action, even though the lead agency has decided in its separate ROD that Alternative B is environmentally preferable.

14c. What are the specific responsibilities of federal and state **cooperating agencies to review draft EISs**?

A. Cooperating agencies (i.e., agencies with jurisdiction by law or special expertise) and agencies that are authorized to develop or enforce environmental standards, must comment on environmental impact statements within their jurisdiction, expertise or authority. Sections 1503.2, 1508.5. If a cooperating agency is satisfied that its views are adequately reflected in the environmental impact statement, it should simply comment accordingly. Conversely, if the cooperating agency determines that a draft EIS is incomplete, inadequate or inaccurate, or it has other comments, it should promptly make such comments, conforming to the requirements of specificity in section 1503.3.

14d. How is the lead agency to treat the comments of another agency with jurisdiction by law or special expertise which has **failed or refused to cooperate or participate in scoping or EIS preparation**?

A. A lead agency has the responsibility to respond to all substantive comments raising significant issues regarding a draft EIS. Section 1503.4. However, cooperating agencies are generally under an obligation to raise issues or otherwise participate in the EIS process during scoping and EIS preparation if they reasonably can do so. In practical terms, if a cooperating agency fails to cooperate at the outset, such as during scoping, it will find that its comments at a later stage will not be as persuasive to the lead agency.

15. **Commenting Responsibilities of EPA.** Are EPA's responsibilities to review and comment on the environmental effects of agency proposals under **Section 309 of the Clean Air Act** independent of its responsibility as a cooperating agency?

A. Yes. EPA has an obligation under Section 309 of the Clean Air Act to review and comment in writing on the environmental impact of any matter relating to the authority of the Administrator contained in proposed legislation, federal construction projects, other federal actions requiring EISs, and new regulations. 42 U.S.C. Sec. 7609. This obligation is independent of its role as a cooperating agency under the NEPA regulations.

16. **Third Party Contracts.** What is meant by the term "third party contracts" in connection with the preparation of an EIS? See Section 1506.5(c). When can "third party contracts" be used?

A. As used by EPA and other agencies, the term "third party contract" refers to the preparation of EISs by contractors paid by the applicant. In the case of an EIS for a National Pollution Discharge Elimination System (NPDES) permit, the applicant, aware in the early planning stages of the proposed project of the need for an EIS, contracts directly with a consulting firm for its preparation. See 40 C.F.R. 6.604(g). The "third party" is EPA which, under Section 1506.5(c), must select the consulting firm, even though the applicant pays for the cost of preparing the EIS. The consulting firm is responsible to EPA for preparing an EIS that meets the requirements of the NEPA regulations and EPA's NEPA procedures. It is in the applicant's interest that the EIS comply with the law so that EPA can take prompt action on the NPDES permit application. The "third party contract" method under EPA's NEPA procedures is purely voluntary, though most applicants have found it helpful in expediting compliance with NEPA.

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
701 San Marco Boulevard
JACKSONVILLE, FLORIDA 32207-8175

Planning and Policy Division
Environmental Branch

SEP 22 2017

Pedro Ramos, Superintendent
Everglades and Dry Tortugas National Parks
40001 State Road 9336
Homestead, Florida 33034

Dear Mr. Ramos,

In accordance with regulations pertaining to the National Environmental Policy Act (NEPA) (Title 40 of the Code of Federal Regulations, part 1501.6), I am formally inviting Everglades National Park (ENP) to become a cooperating agency for the development of the Combined Operational Plan (COP). The purpose of the COP is to define operations for the constructed features of the Modified Water Deliveries (MWD) to ENP and Canal 111 (C-111) South Dade Projects, while maintaining the congressionally authorized purposes of the Central and Southern Florida (C&SF) Project to include flood control; water supply for agricultural irrigation, municipalities and industry; regional groundwater control and prevention of saltwater intrusion; enhancement of fish and wildlife; and recreation. The Jacksonville District, U.S. Army Corps of Engineers (Corps) is beginning the NEPA process that will include development of an Environmental Impact Statement (EIS).

The COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure associated with the MWD and C-111 South Dade Projects in Miami Dade County (Figure 1). Development of the COP will be informed by a series of operational field tests previously conducted under the authority of the MWD Project that include relaxation of the Gage-3273 (G-3273) constraint and raising the maximum operating limit in the L-29 Canal up to 8.5 feet National Geodetic Vertical Datum of 1929 (*i.e.* Increment 1, Increment 1.1 and Increment 1.2, and Increment 2). Information gained from water management actions taken by the Corps in response to unseasonable high water levels within the Water Conservation Areas (WCAs) in 2016 and 2017 will also be utilized to inform development of the COP. Implementation of the COP is anticipated to increase the availability of water deliveries from WCA 3A to ENP through Northeast Shark River Slough and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP.

Water management operating criteria defined during development of the COP will be incorporated into the 2012 WCAs, ENP, and ENP to South Dade Conveyance System Water Control Plan following completion of NEPA. Development of the COP is also being pursued to address the mandated Reasonable and Prudent Alternative of the July 22, 2016 Everglades Restoration Transition Plan Biological Opinion which requires the Corps to

proceed as scheduled, and as allowable by law, for completing NEPA analysis for the COP in 2019.

Cooperating agency status involves actions and responsibilities that are more involved than a commenting or permitting agency. In the case of the COP, we believe that cooperating agencies shall assist Corps authors in developing language for the EIS, reviewing and providing edits to draft language and providing comments on those sections of the document where an agency has either regulatory authority or specialized expertise (CEQ Regulations §1051.6(a)2). This review and editing process will take place earlier than the typical review and comment associated with an EIS. If you choose not to become a cooperating agency, we will continue to coordinate as we have done in the past.

The formulation of the project alternatives will be in accordance with Engineer Regulation ER 1105-2-100 and will fully consider a range of environmental, economic and social factors. Your participation as a cooperating agency will help us fully consider the views, needs and benefits of competing interests. For additional information on becoming a cooperating agency, please see the enclosed "Rights and Responsibilities of Lead and Cooperating Agencies" (Forty Most Asked Questions Concerning CEQ's NEPA Regulations, Council on Environmental Quality, 1981). The complete list of Forty FAQs can be found at https://energy.gov/nepa/downloads/forty-most-asked-questions-concerning-ceqs-national-environmental-policy-act.

We would appreciate a response to this invitation to become a cooperating agency (as described above) within 30 days of the date of this letter. If you have any questions, please contact Melissa Nasuti at (904) 232-1368 or via email at melissa.a.nasuti@usace.army.mil.

Sincerely,

Gina Paduano Ralph, Ph.D.
Chief, Environmental Branch

Enclosure

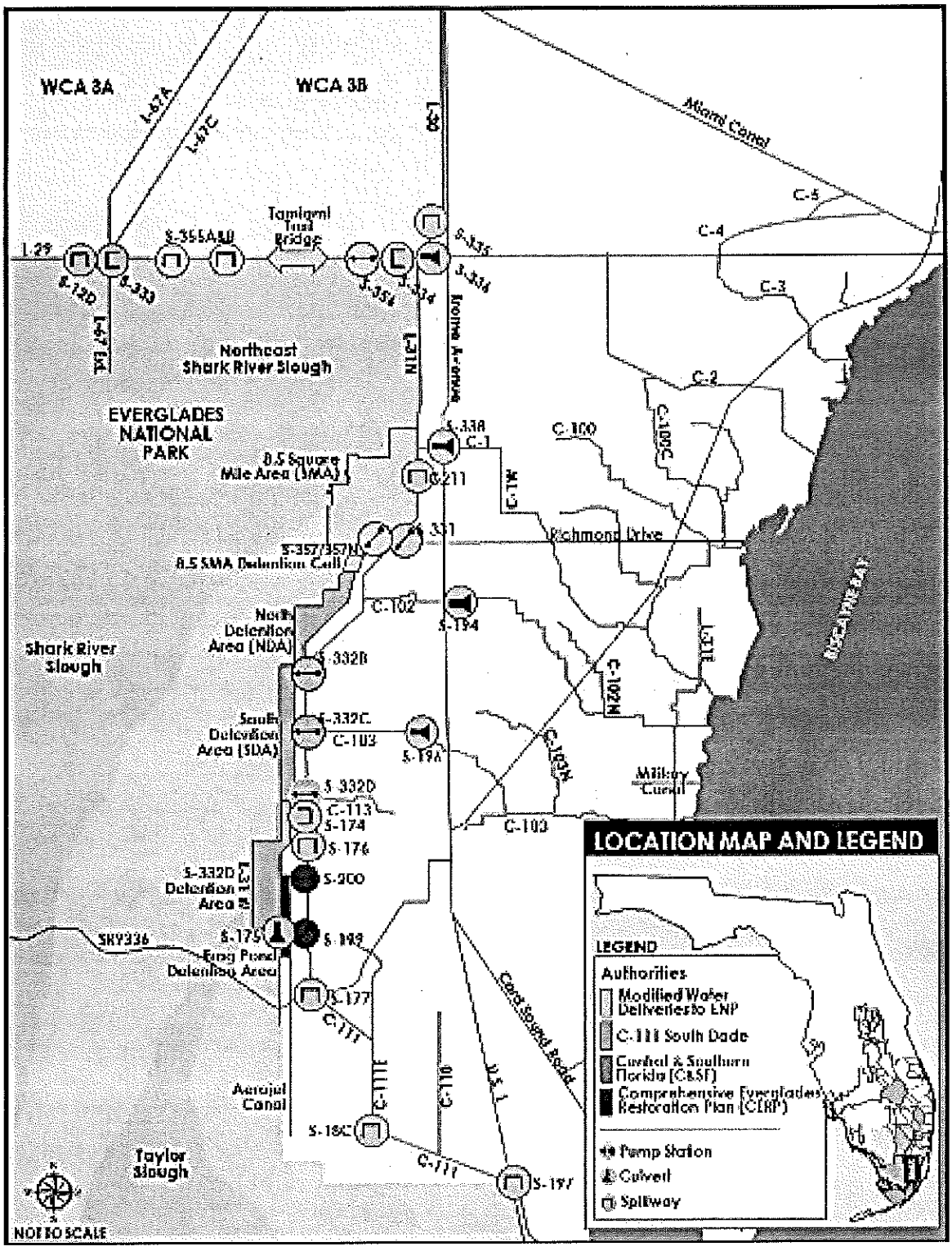



**Figure 1. Project Area**

A. While a trivial violation of the regulations would not give rise to an independent cause of action, such a cause of action would arise from a substantial violation of the regulations. Section 1500.3.

13. **Use of Scoping Before Notice of Intent to Prepare EIS.** Can the scoping process be used in connection with preparation of an **environmental assessment,** i.e., before both the decision to proceed with an EIS and publication of a notice of intent?

A. Yes. Scoping can be a useful tool for discovering alternatives to a proposal, or significant impacts that may have been overlooked. In cases where an environmental assessment is being prepared to help an agency decide whether to prepare an EIS, useful information might result from early participation by other agencies and the public in a scoping process.

The regulations state that the scoping process is to be preceded by a Notice of Intent (NOI) to prepare an EIS. But that is only the minimum requirement. Scoping may be initiated earlier, as long as there is appropriate public notice and enough information available on the proposal so that the public and relevant agencies can participate effectively.

However, scoping that is done before the assessment, and in aid of its preparation, cannot substitute for the normal scoping process after publication of the NOI, unless the earlier public notice stated clearly that this possibility was under consideration, and the NOI expressly provides that written comments on the scope of alternatives and impacts will still be considered.

14a. **Rights and Responsibilities of Lead and Cooperating Agencies.** What are the respective rights and responsibilities of lead and cooperating agencies? What letters and memoranda must be prepared?

A. After a lead agency has been designated (Sec. 1501.5), that agency has the responsibility to solicit cooperation from other federal agencies that have jurisdiction by law or special expertise on any environmental issue that should be addressed in the EIS being prepared. Where appropriate, the lead agency should seek the cooperation of state or local agencies of similar qualifications. When the proposal may affect an Indian reservation, the agency should consult with the Indian tribe. Section 1508.5. The request for cooperation should come at the earliest possible time in the NEPA process.

After discussions with the candidate cooperating agencies, the lead agency and the cooperating agencies are to determine by letter or by memorandum which agencies will undertake cooperating responsibilities. To the extent possible at this stage, responsibilities for specific issues should be assigned. The allocation of responsibilities will be completed during scoping. Section 1501.7(a)(4).

Cooperating agencies must assume responsibility for the development of information and the preparation of environmental analyses at the request of the lead agency. Section 1501.6(b)(3). Cooperating agencies are now required by Section 1501.6 to devote staff resources that were normally primarily used to critique or comment on the Draft EIS after its preparation, much earlier in the NEPA process -- primarily at the scoping and Draft EIS preparation stages. If a cooperating agency determines that its resource limitations preclude any involvement, or the

degree of involvement (amount of work) requested by the lead agency, it must so inform the lead agency in writing and submit a copy of this correspondence to the Council. Section 1501.6(c).

In other words, the potential cooperating agency must decide early if it is able to devote any of its resources to a particular proposal. For this reason the regulation states that an agency may reply to a request for cooperation that "other program commitments preclude any involvement or the degree of involvement requested in the action that is the subject of the environmental impact statement." (Emphasis added). The regulation refers to the "action," rather than to the EIS, to clarify that the agency is taking itself out of all phases of the federal action, not just draft EIS preparation. This means that the agency has determined that it cannot be involved in the later stages of EIS review and comment, as well as decisionmaking on the proposed action. For this reason, cooperating agencies with jurisdiction by law (those which have permitting or other approval authority) cannot opt out entirely of the duty to cooperate on the EIS. See also Question 15, relating specifically to the responsibility of EPA.

14b. How are **disputes resolved between lead and cooperating agencies** concerning the scope and level of detail of analysis and the quality of data in impact statements?

A. Such disputes are resolved by the agencies themselves. A lead agency, of course, has the ultimate responsibility for the content of an EIS. But it is supposed to use the environmental analysis and recommendations of cooperating agencies with jurisdiction by law or special expertise to the maximum extent possible, consistent with its own responsibilities as lead agency. Section 1501.6(a)(2).

If the lead agency leaves out a significant issue or ignores the advice and expertise of the cooperating agency, the EIS may be found later to be inadequate. Similarly, where cooperating agencies have their own decisions to make and they intend to adopt the environmental impact statement and base their decisions on it, one document should include all of the information necessary for the decisions by the cooperating agencies. Otherwise they may be forced to duplicate the EIS process by issuing a new, more complete EIS or Supplemental EIS, even though the original EIS could have sufficed if it had been properly done at the outset. Thus, both lead and cooperating agencies have a stake in producing a document of good quality. Cooperating agencies also have a duty to participate fully in the scoping process to ensure that the appropriate range of issues is determined early in the EIS process.

Because the EIS is not the Record of Decision, but instead constitutes the information and analysis on which to base a decision, disagreements about conclusions to be drawn from the EIS need not inhibit agencies from issuing a joint document, or adopting another agency's EIS, if the analysis is adequate. Thus, if each agency has its own "preferred alternative," both can be identified in the EIS. Similarly, a cooperating agency with jurisdiction by law may determine in its own ROD that alternative A is the environmentally preferable action, even though the lead agency has decided in its separate ROD that Alternative B is environmentally preferable.

14c. What are the specific responsibilities of federal and state **cooperating agencies to review draft EISs**?

A. Cooperating agencies (i.e., agencies with jurisdiction by law or special expertise) and agencies that are authorized to develop or enforce environmental standards, must comment on environmental impact statements within their jurisdiction, expertise or authority. Sections 1503.2, 1508.5. If a cooperating agency is satisfied that its views are adequately reflected in the environmental impact statement, it should simply comment accordingly. Conversely, if the cooperating agency determines that a draft EIS is incomplete, inadequate or inaccurate, or it has other comments, it should promptly make such comments, conforming to the requirements of specificity in section 1503.3.

14d. How is the lead agency to treat the comments of another agency with jurisdiction by law or special expertise which has **failed or refused to cooperate or participate in scoping or EIS preparation**?

A. A lead agency has the responsibility to respond to all substantive comments raising significant issues regarding a draft EIS. Section 1503.4. However, cooperating agencies are generally under an obligation to raise issues or otherwise participate in the EIS process during scoping and EIS preparation if they reasonably can do so. In practical terms, if a cooperating agency fails to cooperate at the outset, such as during scoping, it will find that its comments at a later stage will not be as persuasive to the lead agency.

15. **Commenting Responsibilities of EPA.** Are EPA's responsibilities to review and comment on the environmental effects of agency proposals under **Section 309 of the Clean Air Act** independent of its responsibility as a cooperating agency?

A. Yes. EPA has an obligation under Section 309 of the Clean Air Act to review and comment in writing on the environmental impact of any matter relating to the authority of the Administrator contained in proposed legislation, federal construction projects, other federal actions requiring EISs, and new regulations. 42 U.S.C. Sec. 7609. This obligation is independent of its role as a cooperating agency under the NEPA regulations.

16. **Third Party Contracts.** What is meant by the term "third party contracts" in connection with the preparation of an EIS? See Section 1506.5(c). When can "third party contracts" be used?

A. As used by EPA and other agencies, the term "third party contract" refers to the preparation of EISs by contractors paid by the applicant. In the case of an EIS for a National Pollution Discharge Elimination System (NPDES) permit, the applicant, aware in the early planning stages of the proposed project of the need for an EIS, contracts directly with a consulting firm for its preparation. See 40 C.F.R. 6.604(g). The "third party" is EPA which, under Section 1506.5(c), must select the consulting firm, even though the applicant pays for the cost of preparing the EIS. The consulting firm is responsible to EPA for preparing an EIS that meets the requirements of the NEPA regulations and EPA's NEPA procedures. It is in the applicant's interest that the EIS comply with the law so that EPA can take prompt action on the NPDES permit application. The "third party contract" method under EPA's NEPA procedures is purely voluntary, though most applicants have found it helpful in expediting compliance with NEPA.

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
701 San Marco Boulevard
JACKSONVILLE, FLORIDA 32207-8175

Planning and Policy Division
Environmental Branch

SEP 22 2017

Mr. Larry Williams, Field Supervisor
U.S. Fish and Wildlife Service
1339 20th Street
Vero Beach, FL 32960

Dear Mr. Williams,

In accordance with regulations pertaining to the National Environmental Policy Act (NEPA) (Title 40 of the Code of Federal Regulations, part 1501.6), I am formally inviting the U.S. Fish and Wildlife Service to become a cooperating agency for the development of the Combined Operational Plan (COP). The purpose of the COP is to define operations for the constructed features of the Modified Water Deliveries (MWD) to Everglades National Park (ENP) and Canal 111 (C-111) South Dade Projects, while maintaining the congressionally authorized purposes of the Central and Southern Florida (C&SF) Project to include flood control; water supply for agricultural irrigation, municipalities and industry; regional groundwater control and prevention of saltwater intrusion; enhancement of fish and wildlife; and recreation. The Jacksonville District, U.S. Army Corps of Engineers (Corps) is beginning the NEPA process that will include development of an Environmental Impact Statement (EIS).

The COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure associated with the MWD and C-111 South Dade Projects in Miami Dade County (Figure 1). Development of the COP will be informed by a series of operational field tests previously conducted under the authority of the MWD Project that include relaxation of the Gage-3273 (G-3273) constraint and raising the maximum operating limit in the L-29 Canal up to 8.5 feet National Geodetic Vertical Datum of 1929 (*i.e.* Increment 1, Increment 1.1 and Increment 1.2, and Increment 2). Information gained from water management actions taken by the Corps in response to unseasonable high water levels within the Water Conservation Areas (WCAs) in 2016 and 2017 will also be utilized to inform development of the COP. Implementation of the COP is anticipated to increase the availability of water deliveries from WCA 3A to ENP through Northeast Shark River Slough and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP.

Water management operating criteria defined during development of the COP will be incorporated into the 2012 WCAs, ENP, and ENP to South Dade Conveyance System Water Control Plan following completion of NEPA. Development of the COP is also being pursued to address the mandated Reasonable and Prudent Alternative of the July 22, 2016 Everglades Restoration Transition Plan Biological Opinion which requires the Corps to

proceed as scheduled, and as allowable by law, for completing NEPA analysis for the COP in 2019.

Cooperating agency status involves actions and responsibilities that are more involved than a commenting or permitting agency. In the case of the COP, we believe that cooperating agencies shall assist Corps authors in developing language for the EIS, reviewing and providing edits to draft language and providing comments on those sections of the document where an agency has either regulatory authority or specialized expertise (CEQ Regulations §1051.6(a)2). This review and editing process will take place earlier than the typical review and comment associated with an EIS. If you choose not to become a cooperating agency, we will continue to coordinate as we have done in the past.

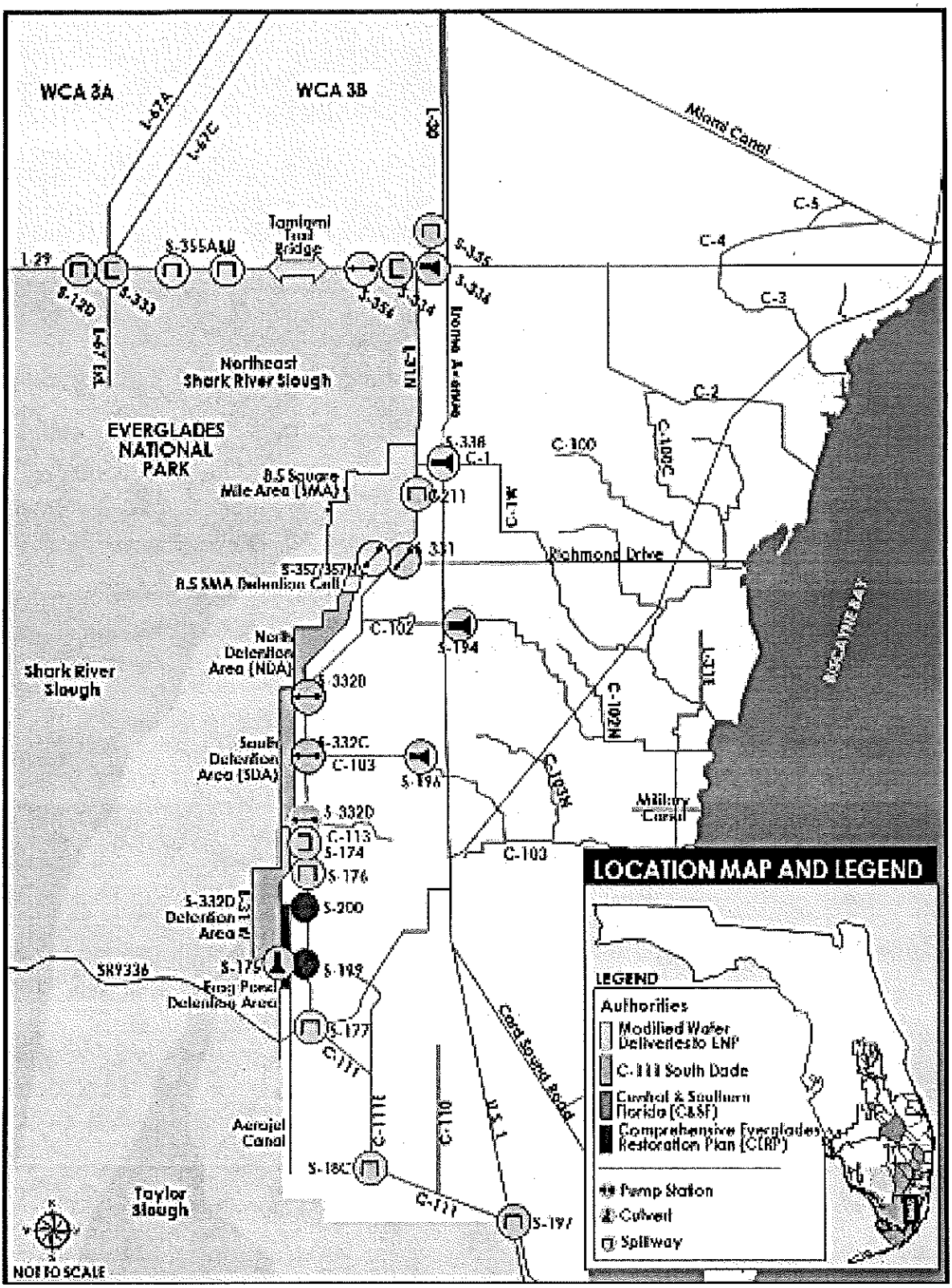
The formulation of the project alternatives will be in accordance with Engineer Regulation ER 1105-2-100 and will fully consider a range of environmental, economic and social factors. Your participation as a cooperating agency will help us fully consider the views, needs and benefits of competing interests. For additional information on becoming a cooperating agency, please see the enclosed "Rights and Responsibilities of Lead and Cooperating Agencies" (Forty Most Asked Questions Concerning CEQ's NEPA Regulations, Council on Environmental Quality, 1981). The complete list of Forty FAQs can be found at https://energy.gov/nepa/downloads/forty-most-asked-questions-concerning-ceqs-national-environmental-policy-act.

We would appreciate a response to this invitation to become a cooperating agency (as described above) within 30 days of the date of this letter. If you have any questions, please contact Melissa Nasuti at (904) 232-1368 or via email at melissa.a.nasuti@usace.army.mil.

Sincerely,

Gina Paduano Ralph, Ph.D.
Chief, Environmental Branch

Enclosure


WCA 3A
WCA 3B
L-67A
L-67C
L-29
L-67 Ext.
Tamiami Trail Bridge
S-355A&B
S-333
S-334
S-335
S-336
S-337
S-338
S-120
L-31N
Northeast Shark River Slough
EVERGLADES NATIONAL PARK
Miami Canal
C-5
C-4
C-3
C-2
C-1
C-100
C-100C
C-1W
Ingraham Avenue
8.5 Square Mile Area (SMA)
S-211
S-331
Richmond Drive
S-357/357N
8.5 SMA Detention Cell
C-102
S-194
North Detention Area (NDA)
S-3320
Shark River Slough
South Detention Area (SDA)
S-332C
C-103
S-196
L-31E
C-102N
C-103N
Military Canal
S-332D
C-113
S-174
S-176
S-200
S-332D Detention Area
S-175
S-199
SR9336
Frog Pond Detention Area
S-177
C-111
Card Sound Road
U.S. 1
Aerojet Canal
C-111E
C-110
S-18C
Taylor Slough
S-197
NOT TO SCALE
LOCATION MAP AND LEGEND
LEGEND
Authorities
Modified Water Deliveries to ENP
C-111 South Dade
Central & Southern Florida (C&SF)
Comprehensive Everglades Restoration Plan (CERP)
Pump Station
Culvert
Spillway

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If the lead agency leaves out a significant issue or ignores the advice and expertise of the cooperating agency, the EIS may be found later to be inadequate. Similarly, where cooperating agencies have their own decisions to make and they intend to adopt the environmental impact statement and base their decisions on it, one document should include all of the information necessary for the decisions by the cooperating agencies. Otherwise they may be forced to duplicate the EIS process by issuing a new, more complete EIS or Supplemental EIS, even though the original EIS could have sufficed if it had been properly done at the outset. Thus, both lead and cooperating agencies have a stake in producing a document of good quality. Cooperating agencies also have a duty to participate fully in the scoping process to ensure that the appropriate range of issues is determined early in the EIS process.

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DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
701 San Marco Boulevard
JACKSONVILLE, FLORIDA 32207-8175

REPLY TO
ATTENTION OF

OCT 13 2017

Planning and Policy Division
Environmental Branch

The Honorable Billy Cypress
Chairman, Miccosukee Tribe of Indians of Florida
Post Office Box 440021, Tamiami Station
Miami, FL 33144

Dear Chairman Cypress,

In accordance with regulations pertaining to the National Environmental Policy Act (NEPA) (40 CFR 1501.6), I am formally inviting the Miccosukee Tribe of Indians of Florida to become a cooperating agency for the development of the Combined Operational Plan (COP). The purpose of the COP is to define operations for the constructed features of the Modified Water Deliveries (MWD) to Everglades National Park (ENP) and Canal 111 (C-111) South Dade Projects, while maintaining the congressionally authorized purposes of the Central and Southern (C&SF) Project to include flood control; water supply for agricultural irrigation, municipalities and industry; regional groundwater control and prevention of saltwater intrusion; enhancement of fish and wildlife; and recreation. The Corps is beginning the NEPA process that will include development of an Environmental Impact Statement (EIS). The COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure associated with the MWD and C-111 South Dade Projects in Miami Dade County (Figure 1). Implementation of the COP is anticipated to improve water deliveries from Water Conservation Area 3A to ENP through Northeast Shark River Slough and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP.

Cooperating agency status involves actions and responsibilities that are more involved than a commenting or permitting agency. As opposed to the traditional Government-to-Government consultation, wherein the Corps will consider the Tribe's concerns regarding environmental and cultural affects during the development of the project, cooperating agencies assume responsibility for the development of information and preparation of environmental analyses as they relate to the NEPA document. In the case of the COP, we believe that cooperating agencies shall assist Corps authors in developing language for the EIS, reviewing and providing edits to draft language and providing comments on those sections of the document where an entity (such as a sovereign Tribe) has either regulatory authority or specialized expertise (40 CFR

1501.6); or when the effects are on a reservation, an Indian Tribe, may, by agreement with the lead agency, become a cooperating entity (40 CFR 1508.5).

This review and editing process will take place earlier than the typical review and comment period associated with an EIS. The formulation of the project alternatives will be in accordance with Engineer Regulation ER 1105-2-100 and will fully consider a range of environmental, economic and social factors. For additional information on becoming a cooperating agency, please see the enclosed "Rights and Responsibilities of Lead and Cooperating Agencies" (Forty Most Asked Questions Concerning CEQ's NEPA, Council on Environmental Quality, 1981). The complete list of Forty FAQs can be found at https://energy.gov/nepa/downloads/forty-most-asked-questions-concerning-ceqs-national-environmental-policy-act.

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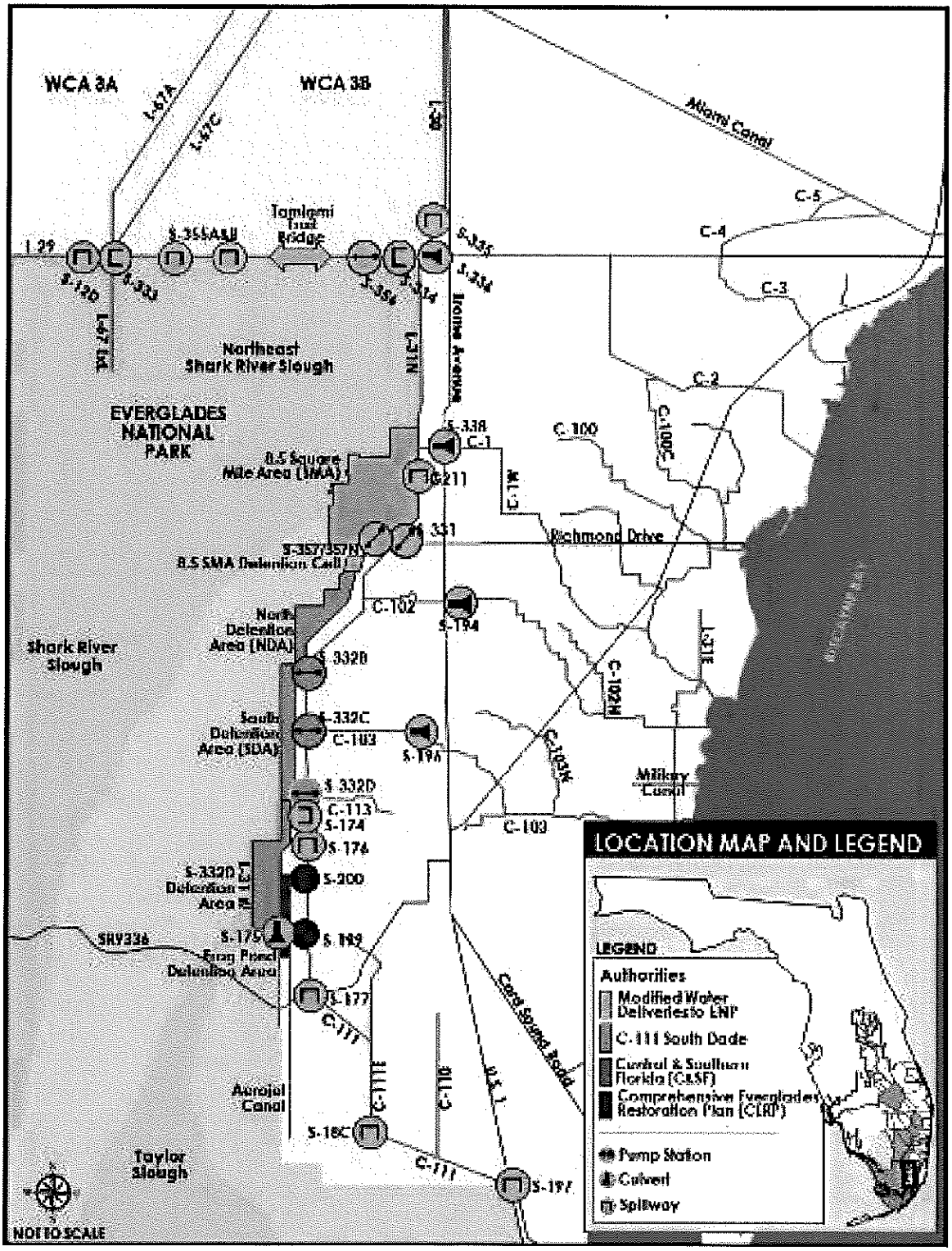
Sincerely,

Jason A. Kirk, P.E.
Colonel, U.S. Army
District Commander

Enclosure

cc:

Fred Dayhoff, NAGPRA Representative, Consultant to Miccosukee Tribe, HC 61 SR 68 Old Loop Road, Ochopee, FL 34141
Kevin Donaldson, Real Estate Services, Miccosukee Tribe of Indians of Florida, P.O. Box 440021, Tamiami Station, Miami, FL 33144
Gene Duncan, Director Water Resources Department, Miccosukee Tribe of Indians of Florida, P.O. Box 440021, Tamiami Station, Miami, FL 33144

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After discussions with the candidate cooperating agencies, the lead agency and the cooperating agencies are to determine by letter or by memorandum which agencies will undertake cooperating responsibilities. To the extent possible at this stage, responsibilities for specific issues should be assigned. The allocation of responsibilities will be completed during scoping. Section 1501.7(a)(4).

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16. **Third Party Contracts.** What is meant by the term "third party contracts" in connection with the preparation of an EIS? See Section 1506.5(c). When can "third party contracts" be used?

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DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
701 San Marco Boulevard
JACKSONVILLE, FLORIDA 32207-8175

REPLY TO
ATTENTION OF

OCT 13 2017

Planning and Policy Division
Environmental Branch

The Honorable Marcellus Osceola Jr.
Chairman, Seminole Tribe of Florida
6300 Stirling Road
Hollywood, FL 33024

Dear Chairman Osceola,

In accordance with regulations pertaining to the National Environmental Policy Act (NEPA) (40 CFR 1501.6), I am formally inviting the Seminole Tribe of Florida to become a cooperating agency for the development of the Combined Operational Plan (COP). The purpose of the COP is to define operations for the constructed features of the Modified Water Deliveries (MWD) to Everglades National Park (ENP) and Canal 111 (C-111) South Dade Projects, while maintaining the congressionally authorized purposes of the Central and Southern (C&SF) Project to include flood control; water supply for agricultural irrigation, municipalities and industry; regional groundwater control and prevention of saltwater intrusion; enhancement of fish and wildlife; and recreation. The Corps is beginning the NEPA process that will include development of an Environmental Impact Statement (EIS). The COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure associated with the MWD and C-111 South Dade Projects in Miami Dade County (Figure 1). Implementation of the COP is anticipated to improve water deliveries from Water Conservation Area 3A to ENP through Northeast Shark River Slough and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP.

Cooperating agency status involves actions and responsibilities that are more involved than a commenting or permitting agency. As opposed to the traditional Government-to-Government consultation, wherein the Corps will consider the Tribe's concerns regarding environmental and cultural affects during the development of the project, cooperating agencies assume responsibility for the development of information and preparation of environmental analyses as they relate to the NEPA document. In the case of the COP, we believe that cooperating agencies shall assist Corps authors in developing language for the EIS, reviewing and providing edits to draft language and providing comments on those sections of the document where an entity (such as a sovereign Tribe) has either regulatory authority or specialized expertise (40 CFR

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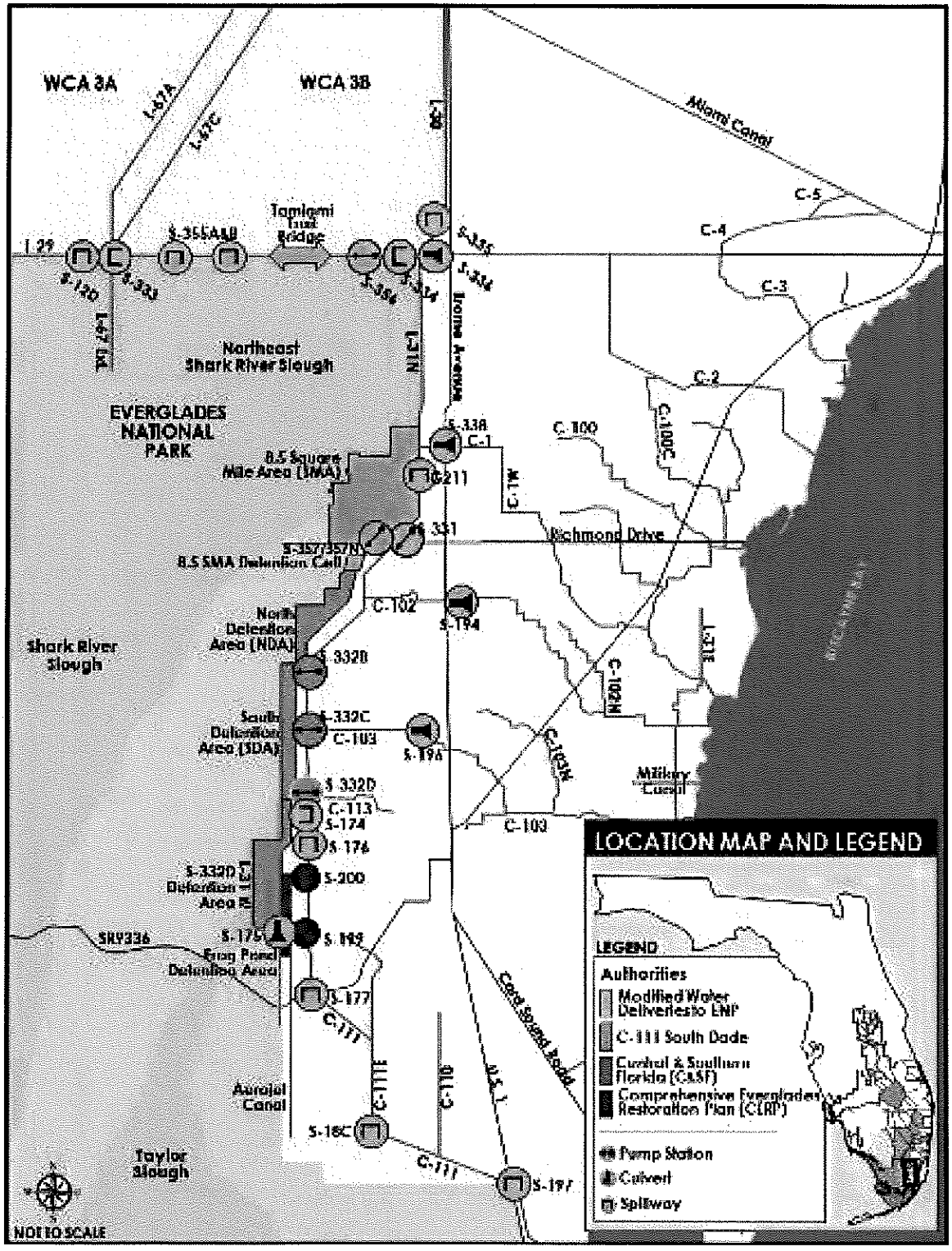
Sincerely,

for Jason A. Kirk, P.E.
Colonel, U.S. Army
District Commander

Enclosure

cc:

Dr. Paul N. Backhouse, Ph.D., Seminole Tribe of Florida, Tribal Historic Preservation Officer, Ah Tah Thi Ki Museum, 30290 Josie Billie Hwy, PMB 1004, Clewiston, Florida 33440
Cherise Maples, Director, Environmental Resource Management, Seminole Tribe of Florida, 6300 Stirling Road, Hollywood, FL 33024
Manuel Tiger, Big Cypress General Council Office, Seminole Tribe of Florida, Council Representative, 31000 Josie Billie Highway, Clewiston, FL 33440
Joe Frank, Big Cypress Board Representative, Seminole Tribe of Florida, Inc., Big Cypress Board Office, 31000 Josie Billie Hwy., Clewiston, FL 33440
Jim Shore, General Counsel, Seminole Tribe of Florida, 6300 Stirling Road, Hollywood, FL 33024
Michelle Diffenderfer, Lewis, Longman and Walker, 515 N Flagler Drive, Suite 1500, West Palm Beach, FL 33401
Patricia Power, Bose Public Affairs Group, 2000 M Street, N.W., Suite 520, Washington, D.C. 20036
Stephen A. Walker, Lewis, Longman and Walker, 515 North Flagler Drive, Suite 1500, West Palm Beach, FL 33401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L-67C
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L-67A Canal
L-67C
L-29
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EVERGLADES NATIONAL PARK
8.5 Square Mile Area (SMA)
8.5 SMA Detention Cell
Shark River Slough
North Detention Area (NDA)
South Detention Area (SDA)
S-332B
S-332C
S-332D
S-332D Detention Area
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DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
701 San Marco Boulevard
JACKSONVILLE, FLORIDA 32207-8175

REPLY TO
ATTENTION OF

OCT 13 2017

Planning and Policy Division
Environmental Branch

The Honorable Leonard Harjo
Chairman, Seminole Nation of Oklahoma
P.O. Box 1498
Wewoka, OK 74884

Dear Chairman Harjo,

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Sincerely,

Jennika M. Wilson

for Jason A. Kirk, P.E.
Colonel, U.S. Army
District Commander

Enclosure

cc:

Mr. Theodore Isham, Seminole Nation of Oklahoma, Tribal Historic Preservation P.O. Box 1498, Seminole, OK 74868
Mr. Mickey Douglas, Seminole Nation of Oklahoma, Director Environmental Protection Office, P.O. Box 1498, Wewoka, OK 74884

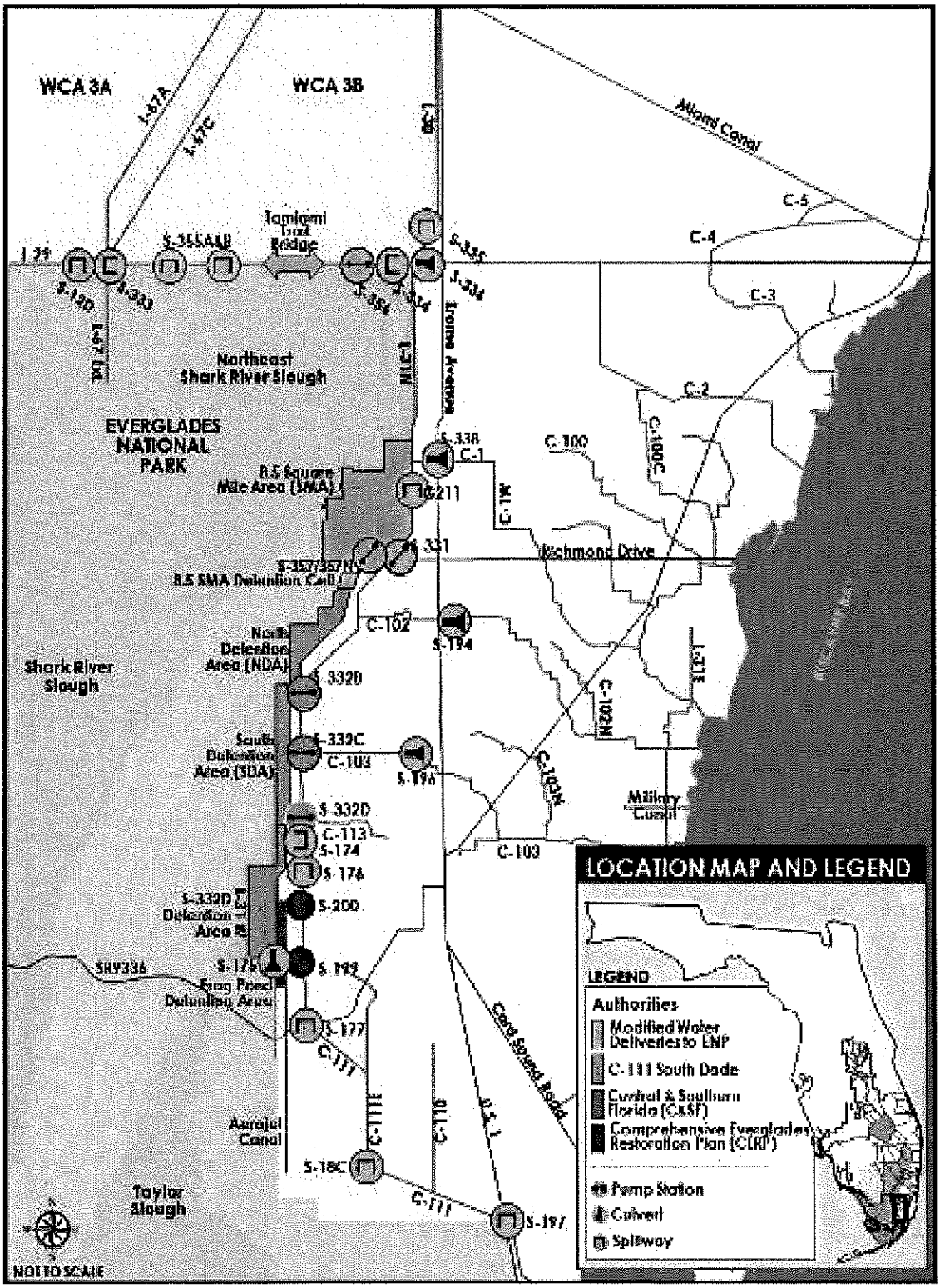


**Figure 1. Project Area**

A. While a trivial violation of the regulations would not give rise to an independent cause of action, such a cause of action would arise from a substantial violation of the regulations. Section 1500.3.

13. **Use of Scoping Before Notice of Intent to Prepare EIS.** Can the scoping process be used in connection with preparation of an **environmental assessment,** i.e., before both the decision to proceed with an EIS and publication of a notice of intent?

A. Yes. Scoping can be a useful tool for discovering alternatives to a proposal, or significant impacts that may have been overlooked. In cases where an environmental assessment is being prepared to help an agency decide whether to prepare an EIS, useful information might result from early participation by other agencies and the public in a scoping process.

The regulations state that the scoping process is to be preceded by a Notice of Intent (NOI) to prepare an EIS. But that is only the minimum requirement. Scoping may be initiated earlier, as long as there is appropriate public notice and enough information available on the proposal so that the public and relevant agencies can participate effectively.

However, scoping that is done before the assessment, and in aid of its preparation, cannot substitute for the normal scoping process after publication of the NOI, unless the earlier public notice stated clearly that this possibility was under consideration, and the NOI expressly provides that written comments on the scope of alternatives and impacts will still be considered.

14a. **Rights and Responsibilities of Lead and Cooperating Agencies.** What are the respective rights and responsibilities of lead and cooperating agencies? What letters and memoranda must be prepared?

A. After a lead agency has been designated (Sec. 1501.5), that agency has the responsibility to solicit cooperation from other federal agencies that have jurisdiction by law or special expertise on any environmental issue that should be addressed in the EIS being prepared. Where appropriate, the lead agency should seek the cooperation of state or local agencies of similar qualifications. When the proposal may affect an Indian reservation, the agency should consult with the Indian tribe. Section 1508.5. The request for cooperation should come at the earliest possible time in the NEPA process.

After discussions with the candidate cooperating agencies, the lead agency and the cooperating agencies are to determine by letter or by memorandum which agencies will undertake cooperating responsibilities. To the extent possible at this stage, responsibilities for specific issues should be assigned. The allocation of responsibilities will be completed during scoping. Section 1501.7(a)(4).

Cooperating agencies must assume responsibility for the development of information and the preparation of environmental analyses at the request of the lead agency. Section 1501.6(b)(3). Cooperating agencies are now required by Section 1501.6 to devote staff resources that were normally primarily used to critique or comment on the Draft EIS after its preparation, much earlier in the NEPA process -- primarily at the scoping and Draft EIS preparation stages. If a cooperating agency determines that its resource limitations preclude any involvement, or the

degree of involvement (amount of work) requested by the lead agency, it must so inform the lead agency in writing and submit a copy of this correspondence to the Council. Section 1501.6(c).

In other words, the potential cooperating agency must decide early if it is able to devote any of its resources to a particular proposal. For this reason the regulation states that an agency may reply to a request for cooperation that "other program commitments preclude any involvement or the degree of involvement requested in the action that is the subject of the environmental impact statement." (Emphasis added). The regulation refers to the "action," rather than to the EIS, to clarify that the agency is taking itself out of all phases of the federal action, not just draft EIS preparation. This means that the agency has determined that it cannot be involved in the later stages of EIS review and comment, as well as decisionmaking on the proposed action. For this reason, cooperating agencies with jurisdiction by law (those which have permitting or other approval authority) cannot opt out entirely of the duty to cooperate on the EIS. See also Question 15, relating specifically to the responsibility of EPA.

14b. How are **disputes resolved between lead and cooperating agencies** concerning the scope and level of detail of analysis and the quality of data in impact statements?

A. Such disputes are resolved by the agencies themselves. A lead agency, of course, has the ultimate responsibility for the content of an EIS. But it is supposed to use the environmental analysis and recommendations of cooperating agencies with jurisdiction by law or special expertise to the maximum extent possible, consistent with its own responsibilities as lead agency. Section 1501.6(a)(2).

If the lead agency leaves out a significant issue or ignores the advice and expertise of the cooperating agency, the EIS may be found later to be inadequate. Similarly, where cooperating agencies have their own decisions to make and they intend to adopt the environmental impact statement and base their decisions on it, one document should include all of the information necessary for the decisions by the cooperating agencies. Otherwise they may be forced to duplicate the EIS process by issuing a new, more complete EIS or Supplemental EIS, even though the original EIS could have sufficed if it had been properly done at the outset. Thus, both lead and cooperating agencies have a stake in producing a document of good quality. Cooperating agencies also have a duty to participate fully in the scoping process to ensure that the appropriate range of issues is determined early in the EIS process.

Because the EIS is not the Record of Decision, but instead constitutes the information and analysis on which to base a decision, disagreements about conclusions to be drawn from the EIS need not inhibit agencies from issuing a joint document, or adopting another agency's EIS, if the analysis is adequate. Thus, if each agency has its own "preferred alternative," both can be identified in the EIS. Similarly, a cooperating agency with jurisdiction by law may determine in its own ROD that alternative A is the environmentally preferable action, even though the lead agency has decided in its separate ROD that Alternative B is environmentally preferable.

14c. What are the specific responsibilities of federal and state **cooperating agencies to review draft EISs**?

A. Cooperating agencies (i.e., agencies with jurisdiction by law or special expertise) and agencies that are authorized to develop or enforce environmental standards, must comment on environmental impact statements within their jurisdiction, expertise or authority. Sections 1503.2, 1508.5. If a cooperating agency is satisfied that its views are adequately reflected in the environmental impact statement, it should simply comment accordingly. Conversely, if the cooperating agency determines that a draft EIS is incomplete, inadequate or inaccurate, or it has other comments, it should promptly make such comments, conforming to the requirements of specificity in section 1503.3.

14d. How is the lead agency to treat the comments of another agency with jurisdiction by law or special expertise which has **failed or refused to cooperate or participate in scoping or EIS preparation**?

A. A lead agency has the responsibility to respond to all substantive comments raising significant issues regarding a draft EIS. Section 1503.4. However, cooperating agencies are generally under an obligation to raise issues or otherwise participate in the EIS process during scoping and EIS preparation if they reasonably can do so. In practical terms, if a cooperating agency fails to cooperate at the outset, such as during scoping, it will find that its comments at a later stage will not be as persuasive to the lead agency.

15. **Commenting Responsibilities of EPA.** Are EPA's responsibilities to review and comment on the environmental effects of agency proposals under **Section 309 of the Clean Air Act** independent of its responsibility as a cooperating agency?

A. Yes. EPA has an obligation under Section 309 of the Clean Air Act to review and comment in writing on the environmental impact of any matter relating to the authority of the Administrator contained in proposed legislation, federal construction projects, other federal actions requiring EISs, and new regulations. 42 U.S.C. Sec. 7609. This obligation is independent of its role as a cooperating agency under the NEPA regulations.

16. **Third Party Contracts.** What is meant by the term "third party contracts" in connection with the preparation of an EIS? See Section 1506.5(c). When can "third party contracts" be used?

A. As used by EPA and other agencies, the term "third party contract" refers to the preparation of EISs by contractors paid by the applicant. In the case of an EIS for a National Pollution Discharge Elimination System (NPDES) permit, the applicant, aware in the early planning stages of the proposed project of the need for an EIS, contracts directly with a consulting firm for its preparation. See 40 C.F.R. 6.604(g). The "third party" is EPA which, under Section 1506.5(c), must select the consulting firm, even though the applicant pays for the cost of preparing the EIS. The consulting firm is responsible to EPA for preparing an EIS that meets the requirements of the NEPA regulations and EPA's NEPA procedures. It is in the applicant's interest that the EIS comply with the law so that EPA can take prompt action on the NPDES permit application. The "third party contract" method under EPA's NEPA procedures is purely voluntary, though most applicants have found it helpful in expediting compliance with NEPA.

# SOUTH FLORIDA WATER MANAGEMENT DISTRICT

October 20, 2017

Gina Paduano Ralph, Ph.D.
Chief, Environmental Branch
U.S. Army Corps of Engineers
701 San Marco Boulevard
Jacksonville, FL 32207-8175

**Subject: Request to become a Cooperating Agency for the development of the Combined Operating Plan**

Dear Ms. Ralph:

Thank you for inviting the South Florida Water Management District (District) to become a Cooperating Agency for the development of the Combined Operating Plan. Given our interest in defining operations for the C-111 South Dade and Modified Water Deliveries to Everglades National Park Projects, I accept your offer. The District is prepared to fulfill this new obligation and provide resources necessary to develop information and help prepare the environmental analyses for the Environmental Impact Statement.

If you have questions or require additional information, please contact Brenda Mills at (561) 682-6536 or via email at bmills@sfwmd.gov.

Sincerely,

Ernie Marks
Executive Director

EM/hk

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

**Everglades and Dry Tortugas National Parks**
**40001 State Road 9336**
**Homestead, Florida 33034**

In Reply refer to: L54

NOV 01 2017

Dr. Gina Ralph
Chief, Environmental Branch
Jacksonville District Corps of Engineers
Department of the Army
701 San Marco BLVD
Jacksonville, Florida 32207-8175

Dear Dr. Ralph:

We accept your invitation to become a cooperating agency for the development of the Combined Operational Plan (COP). The National Park Service is deeply invested in ensuring that the appropriate operational strategy is used to deliver the anticipated environmental benefits that the Modified Water Deliveries (MWD) and C-111 South Dade Project were developed to enable.

Our acceptance of the role of cooperating agency stems from both jurisdiction by law (40 C.F.R. § 1508.15) and special expertise (40 C.F.R. § 1508.26) criteria identified by CEQ in their January 30, 2002 memorandum that addressed the subject of "Cooperating Agencies in Implementing the Procedural Requirements of the National Environmental Policy Act."

(available here: https://www.energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/G-CEQ-CoopAgenciesImplem.pdf).

The NPS is the source of funds for the Modified Water Deliveries Project and we have special expertise in defining and quantifying environmental benefits for regional scale projects focused on restoration of the Everglades ecosystem.

Thanks for inviting us and we look forward to enthusiastically participating in a rigorous, concise, and consequential planning process that will deliver the Combined Operational Plan. We anticipate that this plan will improve water management in the Water Conservation Areas, Everglades National Park, and the South Dade Conveyance System.

Sincerely,

Pedro M. Ramos
Superintendent

# APPENDIX D.1 NATIONAL ENVIRONMENTAL POLICY ACT CORREPONDENCE

# GOVERNMENT TO GOVERNMENT COORDINATION LETTERS

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DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
701 San Marco Boulevard
JACKSONVILLE, FLORIDA 32207-8175

REPLY TO
ATTENTION OF

Planning and Policy Division
Environmental Branch

SEP 22 2017

The Honorable Billy Cypress
Chairman, Miccosukee Tribe of Indians of Florida
Post Office Box 440021, Tamiami Station
Miami, FL 33144

Dear Chairman Cypress,

I would like to formally invite you and/or your representative to participate on the Project Delivery Team (PDT) for the Combined Operational Plan (COP) and via this letter I am formally initiating Government-to-Government consultation between the Miccosukee Tribe of Indians of Florida and the Jacksonville District, U.S. Army Corps of Engineers (Corps). The Corps is beginning preparation of a National Environmental Policy Act (NEPA) assessment for the COP. The purpose of the COP is to define operations for the constructed features of the Modified Water Deliveries (MWD) to Everglades National Park (ENP) and Canal 111 (C-111) South Dade Projects, while maintaining the congressionally authorized purposes of the Central and Southern (C&SF) Project to include flood control; water supply for agricultural irrigation, municipalities and industry; regional groundwater control and prevention of saltwater intrusion; enhancement of fish and wildlife; and recreation.

The COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure associated with the MWD and C-111 South Dade Projects in Miami Dade County (Figure 1). Development of the COP will be informed by a series of operational field tests previously conducted under the authority of the MWD Project that include relaxation of the Gage-3273 (G-3273) constraint and raising the maximum operating limit in the L-29 Canal up to 8.5 feet National Geodetic Vertical Datum of 1929 (i.e. Increment 1, Increment 1.1 and Increment 1.2, and Increment 2). Information gained from water management actions taken by the Corps in response to unseasonable high water levels within the Water Conservation Areas (WCAs) in 2016 and 2017 will also be utilized to inform development of the COP. Implementation of the COP is anticipated to improve water deliveries from WCA 3A to ENP through Northeast Shark River Slough and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP.

Water management operating criteria defined during development of the COP will be incorporated into the 2012 WCAs, ENP, and ENP to South Dade Conveyance System Water Control Plan following completion of NEPA. Development of the COP is also being pursued to address the mandated Reasonable and Prudent Alternative of the July 22, 2016 Everglades Restoration Transition Plan Biological Opinion which requires the Corps to proceed as scheduled, and as allowable by law, for completing NEPA analysis for the COP in 2019.

We intend to pursue an open and public process and recognize the obligations that the Corps has to the Miccosukee Tribe of Indians of Florida including consultation under NEPA and Section 106 of the National Historic Preservation Act (NHPA). Pursuant to Executive Order 13175, Section 106 of the NHPA (16 USC 470f) and its implementing regulations (36 CFR 800), and in consideration of the Corps' Trust Responsibilities, I would like to invite the Miccosukee Tribe of Indians of Florida to participate in Government-to-Government consultation and initiate coordination with the appropriate Tribal representative regarding potential effects to cultural resources as part of our obligation for continued coordination. Additionally, the Corps invites you or your designated staff to participate on the PDT that will be conducting the technical analyses and evaluations in support of COP. If you elect, please identify the appropriate Tribal member(s) or person(s) who could represent the Tribe on the PDT. We would also appreciate a response identifying any comments you may have within 30 days of the date of this letter. If you have any questions regarding this proposed action, please feel free to contact me or you may contact Mrs. Melissa Nasuti at (904) 232-1368 or melissa.a.nasuti@usace.army.mil.

Sincerely,

Jason A. Kirk, P.E.
Colonel, U.S. Army
District Commander

Enclosure

cc:
Fred Dayhoff, NAGPRA Representative, Consultant to Miccosukee Tribe of Indians of Florida, HC 61 SR 68 Old Loop Road, Ochopee, FL 34141
Kevin Donaldson, Real Estate Services, Miccosukee Tribe of Indians of Florida, P.O. Box 440021, Tamiami Station, Miami, FL 33144
Gene Duncan, Director Water Resources Department, Miccosukee Tribe of Indians of Florida, P.O. Box 440021, Tamiami Station, Miami, FL 33144

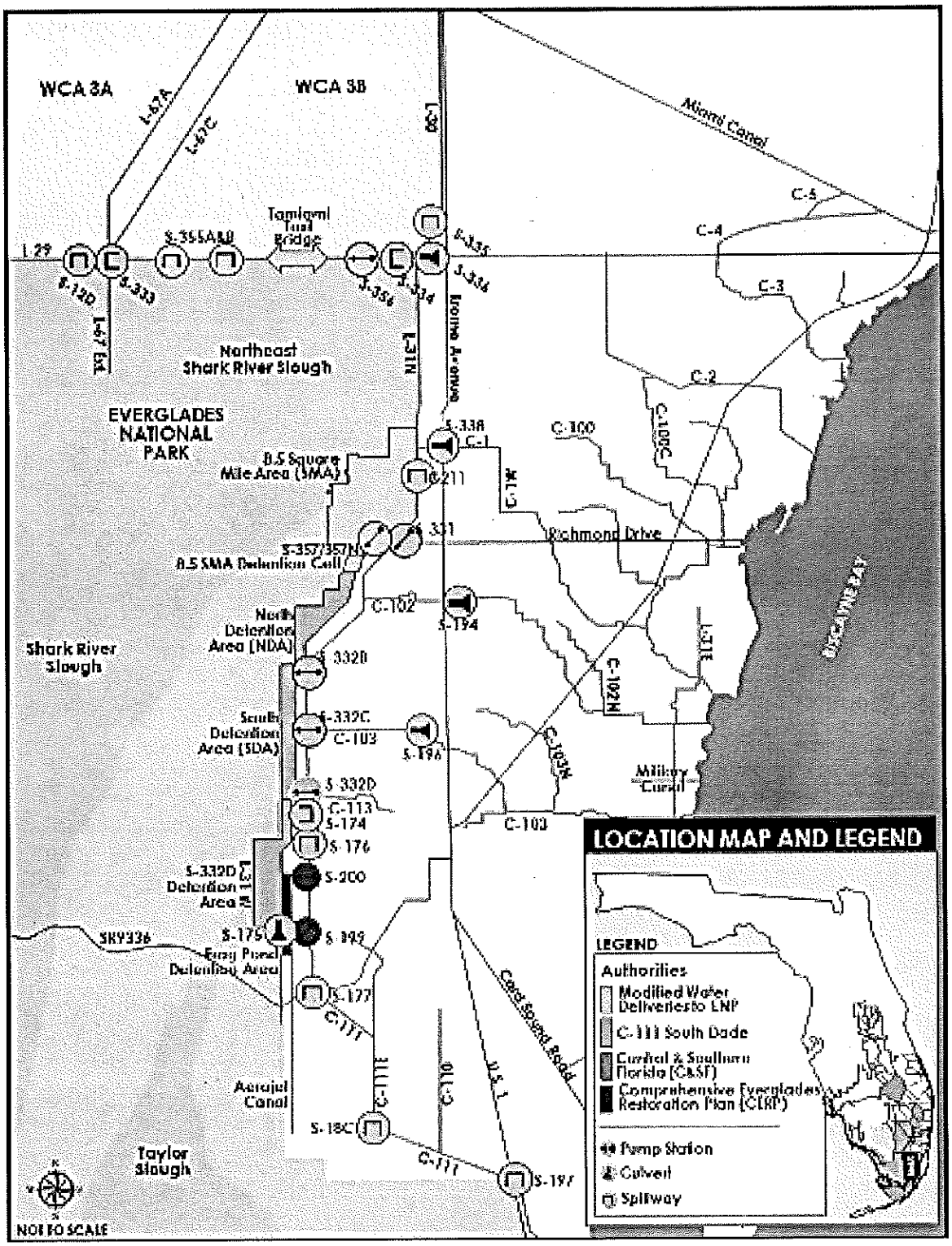


**Figure 1. Project Area**

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
701 San Marco Boulevard
JACKSONVILLE, FLORIDA 32207-8175

REPLY TO
ATTENTION OF

SEP 2 2 2017

Planning and Policy Division
Environmental Branch

The Honorable Marcellus Osceola Jr.
Chairman, Seminole Tribe of Florida
6300 Stirling Road
Hollywood, FL 33024

Dear Chairman Osceola,

I would like to formally invite you and/or your representative to participate on the Project Delivery Team (PDT) for the Combined Operational Plan (COP) and via this letter I am formally initiating Government-to-Government consultation between the Seminole Tribe of Florida and the Jacksonville District, U.S. Army Corps of Engineers (Corps). The Corps is beginning preparation of a National Environmental Policy Act (NEPA) assessment for the COP. The purpose of the COP is to define operations for the constructed features of the Modified Water Deliveries (MWD) to Everglades National Park (ENP) and Canal 111 (C-111) South Dade Projects, while maintaining the congressionally authorized purposes of the Central and Southern (C&SF) Project to include flood control; water supply for agricultural irrigation, municipalities and industry; regional groundwater control and prevention of saltwater intrusion; enhancement of fish and wildlife; and recreation.

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We intend to pursue an open and public process and recognize the obligations that the Corps has to the Seminole Tribe of Florida including consultation under NEPA and Section 106 of the National Historic Preservation Act (NHPA). Pursuant to Executive Order 13175, Section 106 of the NHPA (16 USC 470f) and its implementing regulations (36 CFR 800), and in consideration of the Corps' Trust Responsibilities and the Burial Resources Agreement with the Seminole Tribe of Florida, I would like to invite the Seminole Tribe of Florida to participate in Government-to-Government consultation and initiate coordination with the Tribal Historic Preservation Office regarding potential effects to cultural resources as part of our obligation for continued coordination. Additionally, the Corps invites you or your designated staff to participate on the PDT that will be conducting the technical analyses and evaluations in support of COP. If you elect, please identify the appropriate Tribal member(s) or person(s) who could represent the Tribe on the PDT. We would also appreciate a response identifying any comments you may have within 30 days of the date of this letter. If you have any questions regarding this proposed action, please feel free to contact me or you may contact Mrs. Melissa Nasuti at (904) 232-1368 or melissa.a.nasuti@usace.army.mil.

Sincerely,

Jason A. Kirk, P.E.
Colonel, U.S. Army
District Commander

Enclosure

cc:
Dr. Paul N. Backhouse, Ph.D., Seminole Tribe of Florida, Tribal Historic Preservation Officer, Ah Tah Thi Ki Museum, 30290 Josie Billie Hwy, PMB 1004, Clewiston, FL 33440
Cherise Maples, Director, Environmental Resource Management, Seminole Tribe of Florida, 6300 Stirling Road, Hollywood, FL 33024
Manuel Tiger, Big Cypress General Council Office, Seminole Tribe of Florida, Council Representative, 31000 Josie Billie Highway, Clewiston, FL 33440

Joe Frank, Big Cypress Board Representative, Seminole Tribe of Florida, Inc., Big Cypress Board Office, 31000 Josie Billie Hwy., Clewiston, FL 33440
Jim Shore, General Counsel, Seminole Tribe of Florida, 6300 Stirling Road, Hollywood, FL 33024
Michelle Diffenderfer, Lewis, Longman and Walker, 515 N Flagler Drive, Suite 1500, West Palm Beach, FL 33401
Patricia Power, Bose Public Affairs Group, 2000 M Street, N.W., Suite 520, Washington, D.C. 20036
Stephen A. Walker, Lewis, Longman and Walker, 515 North Flagler Drive, Suite 1500, West Palm Beach, FL 33401

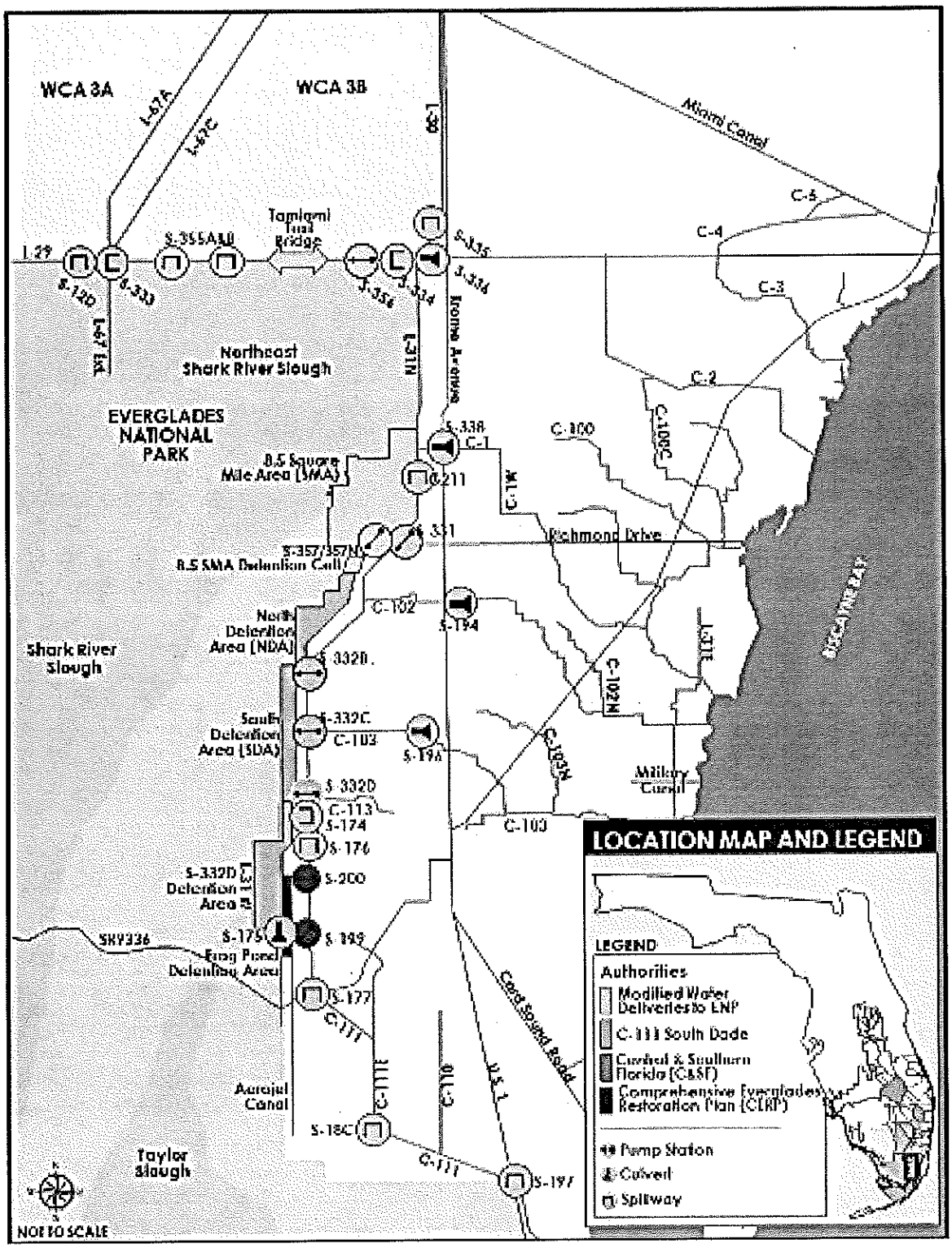


**Figure 1. Project Area**

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
701 San Marco Boulevard
JACKSONVILLE, FLORIDA 32207-8175

REPLY TO
ATTENTION OF

Planning and Policy Division
Environmental Branch

SEP 22 2017

The Honorable Leonard Harjo
Chairman, Seminole Nation of Oklahoma
P.O. Box 1498
Wewoka, OK 74884

Dear Chairman Harjo,

I would like to formally invite you and/or your representative to participate on the Project Delivery Team (PDT) for the Combined Operational Plan (COP) and via this letter I am formally initiating Government-to-Government consultation between the Seminole Nation of Oklahoma and the Jacksonville District, U.S. Army Corps of Engineers (Corps). The Corps is beginning preparation of a National Environmental Policy Act (NEPA) assessment for the COP. The purpose of the COP is to define operations for the constructed features of the Modified Water Deliveries (MWD) to Everglades National Park (ENP) and Canal 111 (C-111) South Dade Projects, while maintaining the congressionally authorized purposes of the Central and Southern (C&SF) Project to include flood control; water supply for agricultural irrigation, municipalities and industry; regional groundwater control and prevention of saltwater intrusion; enhancement of fish and wildlife; and recreation.

The COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure associated with the MWD and C-111 South Dade Projects in Miami Dade County (Figure 1). Development of the COP will be informed by a series of operational field tests previously conducted under the authority of the MWD Project that include relaxation of the Gage-3273 (G-3273) constraint and raising the maximum operating limit in the L-29 Canal up to 8.5 feet National Geodetic Vertical Datum of 1929 (*i.e.* Increment 1, Increment 1.1 and Increment 1.2, and Increment 2). Information gained from water management actions taken by the Corps in response to unseasonable high water levels within the Water Conservation Areas (WCAs) in 2016 and 2017 will also be utilized to inform development of the COP. Implementation of the COP is anticipated to improve water deliveries from WCA 3A to ENP through Northeast Shark River Slough and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP.

Water management operating criteria defined during development of the COP will be incorporated into the 2012 WCAs, ENP, and ENP to South Dade Conveyance

System Water Control Plan following completion of NEPA. Development of the COP is also being pursued to address the mandated Reasonable and Prudent Alternative of the July 22, 2016 Everglades Restoration Transition Plan Biological Opinion which requires the Corps to proceed as scheduled, and as allowable by law, for completing NEPA analysis for the COP in 2019.

We intend to pursue an open and public process and recognize the obligations that the Corps has to the Seminole Nation of Oklahoma including consultation under NEPA and Section 106 of the National Historic Preservation Act (NHPA). Pursuant to Executive Order 13175, Section 106 of the NHPA (16 USC 470f) and its implementing regulations (36 CFR 800), and in consideration of the Corps' Trust Responsibilities, I would like to invite the Seminole Nation of Oklahoma to participate in Government-to-Government consultation and initiate coordination with the Tribal Historic Preservation Office regarding potential effects to cultural resources as part of our obligation for continued coordination. Additionally, the Corps invites you or your designated staff to participate on the PDT that will be conducting the technical analyses and evaluations in support of COP. If you elect, please identify the appropriate Tribal member(s) or person(s) who could represent the Tribe on the PDT. We would also appreciate a response identifying any comments you may have within 30 days of the date of this letter. If you have any questions regarding this proposed action, please feel free to contact me or you may contact Mrs. Melissa Nasuti at (904) 232-1368 or melissa.a.nasuti@usace.army.mil.

Sincerely,

Jason A. Kirk, P.E.
Colonel, U.S. Army
District Commander

Enclosure

cc:

Mr. Theodore Isham, Seminole Nation of Oklahoma, Tribal Historic Preservation P.O. Box 1498, Seminole, OK 74868
Mr. Mickey Douglas, Seminole Nation of Oklahoma, Director Environmental Protection Office, P.O. Box 1498, Wewoka, OK 74884

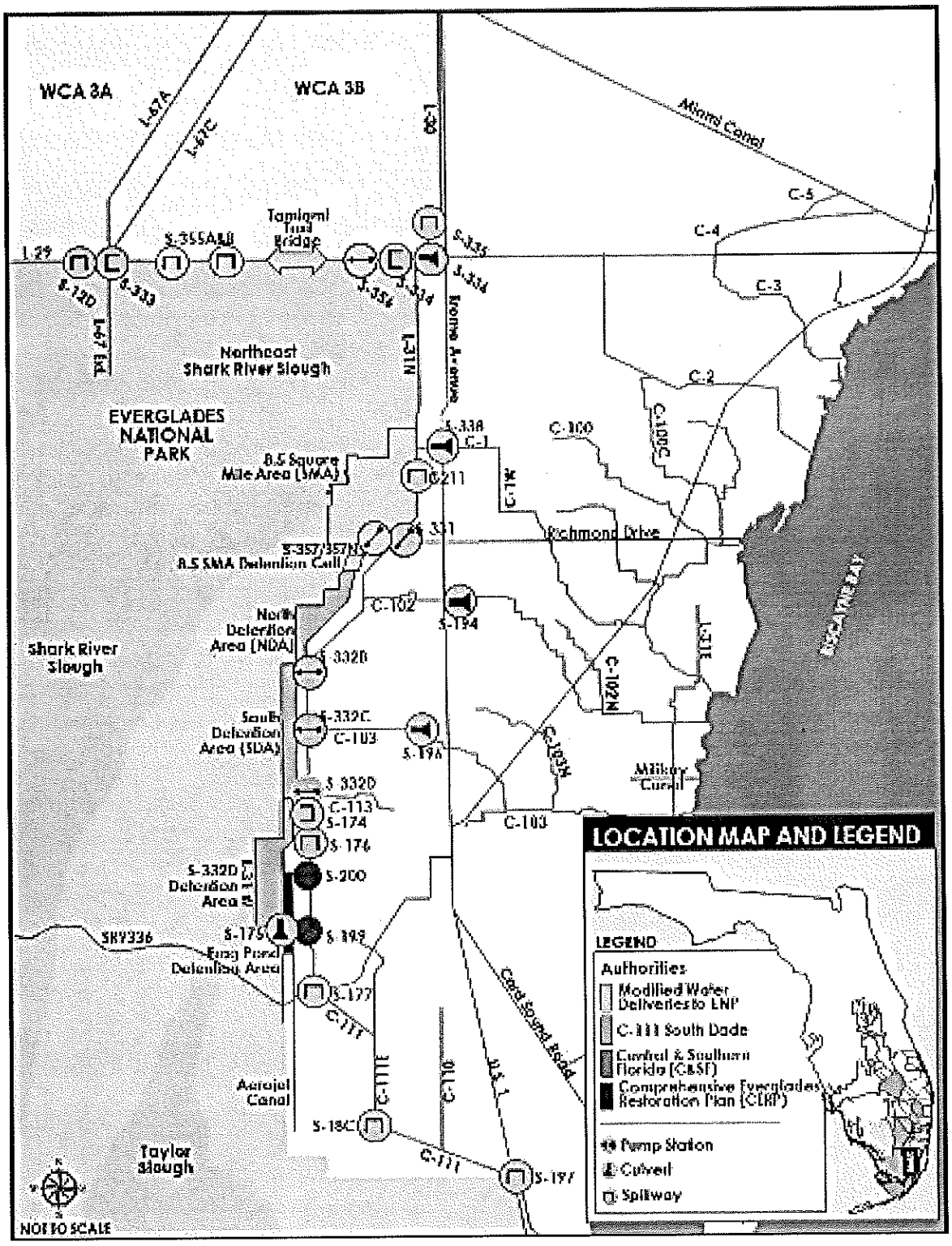


**Figure 1. Project Area**

# APPENDIX D.1 NATIONAL ENVIRONMENTAL POLICY ACT CORREPONDENCE

# NATIONAL ENVIRONMENTAL POLICY ACT SCOPING LETTERS AND RESPONSES

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DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
701 San Marco Boulevard
JACKSONVILLE, FLORIDA 32207-8175

Planning Division
Environmental Branch

SEP 22 2017

To Whom It May Concern:

The Jacksonville District, U.S. Army Corps of Engineers (Corps) is beginning preparation of a National Environmental Policy Act (NEPA) assessment for the Combined Operational Plan (COP). The purpose of the COP is to define operations for the constructed features of the Modified Water Deliveries (MWD) to Everglades National Park (ENP) and Canal 111 (C-111) South Dade Projects, while maintaining the congressionally authorized purposes of the Central and Southern Florida (C&SF) Project to include flood control; water supply for agricultural irrigation, municipalities and industry; regional groundwater control and prevention of saltwater intrusion; enhancement of fish and wildlife; and recreation.

The COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure associated with the MWD and C-111 South Dade Projects in Miami Dade County (Figure 1). Development of the COP will be informed by a series of operational field tests previously conducted under the authority of the MWD Project that include relaxation of the Gage-3273 (G-3273) constraint and raising the maximum operating limit in the L-29 Canal up to 8.5 feet National Geodetic Vertical Datum of 1929 (*i.e.* Increment 1, Increment 1.1 and Increment 1.2, and Increment 2). Information gained from water management actions taken by the Corps in response to unseasonable high water levels within the Water Conservation Areas (WCAs) in 2016 and 2017 will also be utilized to inform development of the COP. Implementation of the COP is anticipated to increase the availability of water deliveries from WCA 3A to ENP through Northeast Shark River Slough and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP.

Water management operating criteria defined during development of the COP will be incorporated into the 2012 WCAs, ENP, and ENP to South Dade Conveyance System Water Control Plan following completion of NEPA. Development of the COP is also being pursued to address the mandated Reasonable and Prudent Alternative of the July 22, 2016 Everglades Restoration Transition Plan Biological Opinion which

requires the Corps to proceed as scheduled, and as allowable by law, for completing NEPA analysis for the COP in 2019.

We invite the participation of Federal and State agencies, Native American Tribes, local agencies, interested parties and individuals in providing comments and identifying any issues or concerns. Please share this notice with any interested party. Send any comments you may have to the attention of Melissa Nasuti (904-232-1368) at the letter head address or email melissa.a.nasuti@usace.army.mil no later than 30 days from the date of this letter. All individuals who respond with comments will be included in future mailings. Others may be added to the mailing list by making a written request (postcard) to the same address or by email.

Sincerely,

Gina Paduano Ralph, Ph.D.
Chief, Environmental Branch

Enclosure

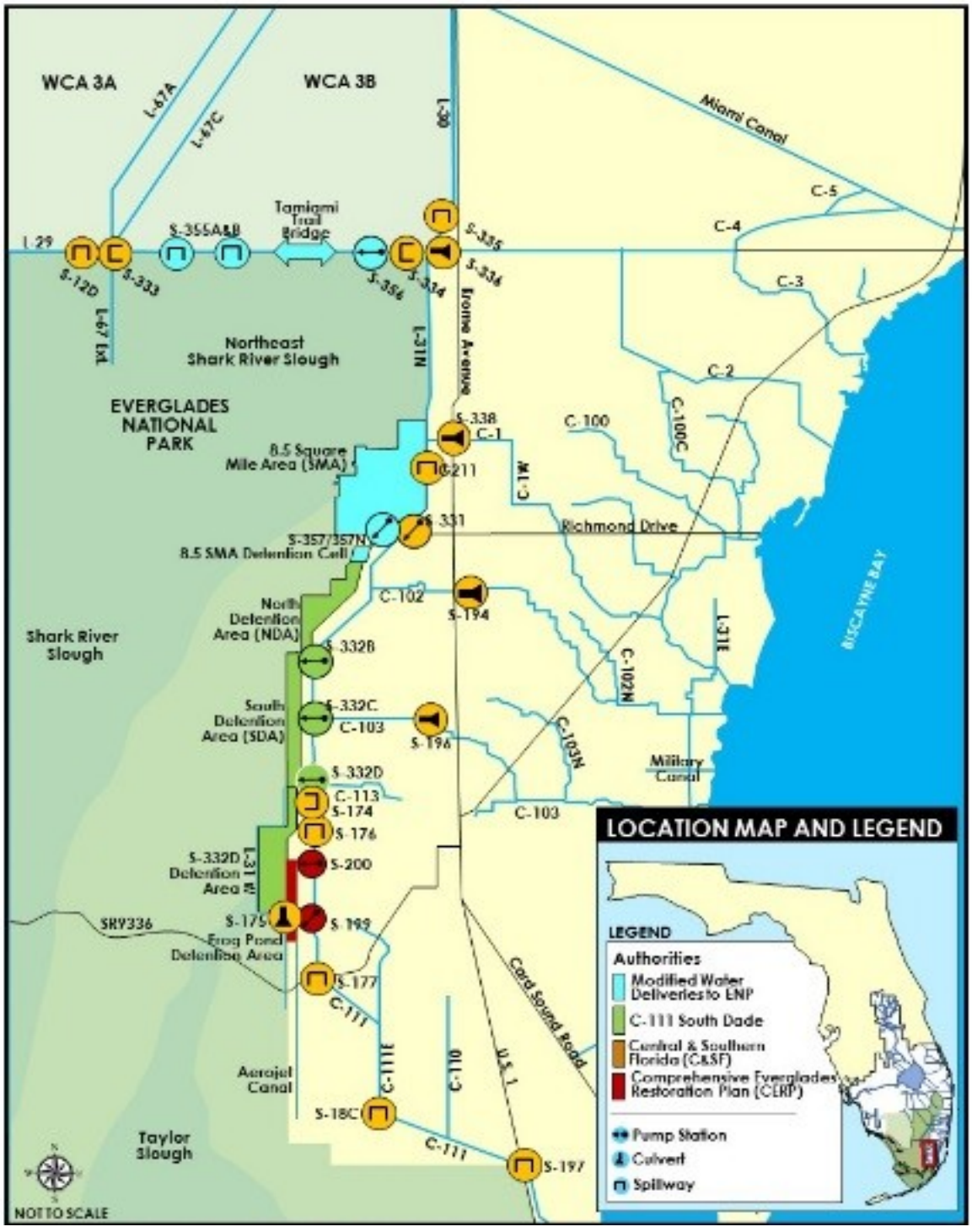


**Figure 1. Project Area**

**Table D.1-1. Combined operational plan (COP) National Environmental Policy Act (NEPA) comment response matrix.** A NEPA scoping letter dated September 22, 2017 was used to invite comments from federal, state, and local agencies, affected indian tribes, and other interested private organizations and individuals. Scoping comments were accepted through October 21, 2017. A notice of intent to prepare an Environmentallimpact Statement for COP was published in the Federal Register (FR volume 82, number 173) September 8, 2017. The following matrix has been prepared in response to the comments received from the september 22, 2017 NEPA scoping letter.

| COMMENTER | AGENCY/PUBLIC COMMENT | U.S. ARMY CORPS OF ENGINEERS (USACE) RESPONSE |
|---|---|---|
| **FEDERAL AGENCY** | | |
| **UNITED STATES ENVIRONMETAL PROTECTION AGENCY (EPA)** | | |
| **Comment Date: October 23, 2017** | | |
| **EPA - 1** | **Water Quality:** The EPA recommends the USACE consult with the Florida Department of Environmental Protection (FDEP) to determine each alternative's potential impacts to waterbodies listed on the 303(d) list of impaired waterbodies. The EPA also recommends any water quality impacts be disclosed within the NEPA document. Additionally, the EPA recommends the USACE coordinate with FDEP to ensure compliance with all applicable Clean Water Act (CWA) water quality standards. | Thank you for your comment. The Corps will coordinate and consult with the FDEP in order to obtain water quality certification. |
| **EPA - 2** | Tribal Coordination: For NEPA disclosure, the EPA recommends the USACE include feedback and input provided by the tribes within the NEPA document. Additionally, the EPA works closely with both the Miccosukee Tribe of Florida and the Seminole Tribe of Florida on environmental matters and is committed to working with other federal partners to prioritize the Tribes' water quality and water management concerns. EPA encourages consultation and coordination with the Tribes at all levels of decision-making. | The Corps intends to pursue an open and public process and recognizes the obligations that the Corps has to the Miccosukee Tribe of Indians of Florida, the Seminole Tribe of Florida, and the Seminole Nation of Oklahoma. Pursuant to Executive Order 13175 (Consultation and Coordination with Indian Tribal Governments) and in consideration of the Corp's Trust Responsibilities, the Miccosukee Tribe of Indians of Florida, the Seminole Tribe of Florida, and the Seminole Nation of Oklahoma have been asked to participate in Government-to-Government consultation via correspondence dated September 22, 2017, as part of the Corps obligation for coordination under COP. Each of the above listed Tribes were asked at the beginning of the planning process to become cooperating agencies under NEPA for COP via correspondence dated October 13, 2017. Potential impacts to historic sites and traditional cultural properties and practices will be assessed as part of the NEPA and the National Historic Preservation Act process. Each COP alternative will be designed and analyzed to consider the plan that best meets the overall project objectives while minimizing adverse impacts. |
| **EPA - 3** | Environmental Justice: The EPA recommends the USACE consider the proposed project's impacts to low income, minority populations as described in "Executive Order 12898 -Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" (February 16, 1994). The EPA recommends the USACE disclose any impacts to low income-minority communities in the NEPA document. | Environmental justice will be assessed as part of the NEPA process. Each COP alternative will be designed and analyzed to consider the plan that best meets the overall project objectives while identifying and addressing any disproportionate adverse effects to minority, low income or tribal populations. |
| **NATIVE AMERICAN TRIBES** | | |
| **SEMINOLE TRIBE OF FLORIDA** | | |
| **Comment Date: October 13, 2017** | | |
| **SEMINOLE TRIBE OF FLORIDA - 1** | Thank you for contacting the Seminole Tribe of Florida – Tribal Historic Preservation Office (STOF-THPO) regarding the Combined Operational Plan Modified Water Deliveries and C-111 South Dade Projects, Miami-Dade County, FL. The proposed undertaking area does fall within the STOF Area of Interest. Please continue to consult with us as the COP and the associated NEPA documents are developed. Regarding the offer to participate on the | Thank you for your comment. The Corps will continue to coordinate consideration of the Corps' Trust Responsibilities. Please refer to response to comment EPA-2 above. |

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| | Project Delivery Team, I will forward that on to the appropriate person. Thank you and feel free to contact us with any questions or concerns. | |
| **STATE AGENCY** | | |
| **FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES (FDACS)** | | |
| **Comment Date: October 20, 2017** | | |
| **FDACS - 1** | The Florida Department of Agriculture and Consumer Services (FDACS) appreciated the opportunity to provide scoping comments on the development of a Combined Operational Plan (COP) which is being undertaken to define operations for the constructed features of the Modified Water Deliveries (MWD) to Everglades National Park (ENP) and Canal (C-111) South Dade Projects while maintaining the congressionally authorized purposes for the Central and Southern Florida (C&SF) Project. Our comments focus on aspects of the COP that will impact private agricultural lands and agricultural operations.<br><br>In general, the COP should maintain storm event flood protection capacity lands in local basins adjacent to ENP and provide the same level of service for consumptive water uses. | The 1994 C-111 GRR planning condition represents the minimum level of flood damage reduction defined by the 1994 C-111 GRR recommended plan (ALT 6A). Alternative modeling under COP may provide improved levels of flood damage reduction above those found under ALT 6A, consistent with the identified planning considerations.<br><br>COP performance for flood protection will be evaluated against the 1994 C-111 South Dade GRR Base Condition. This base condition includes the 1994 C-111 GRR Recommended Plan (ALT 6A) and 1992 MWD GDM recommended plan, which included the 1992 mitigation plan for the 8.5 SMA. The base condition assumes that authorized 1992 MWD GDM and the 1994 C-111 GRR structural features are in place. The 1994 C-111 South Dade GRR Base Condition will be applied to determine if minimum authorized level of "flood protection" is impacted by alternatives.<br><br>Existing consumptive use permits for water supply will be maintained with implementation of the COP. |
| **FDACS - 2** | The routine diversion of water from Water Conservation Area 3A (WCA-3A) to the C-111 Basin must end with the completion of Modified Water Delivery Project, which was one of the design assumptions when the C-111 GRR was approved. S-334 and S-331 are not authorized for WCA 3A flood releases and should not be included in the COP to achieve the sharp reductions in L-29 stages required by the DOT contract even when the WCA 3A stage is high. The goal of COP should be eliminating Column 2 operations and WCA 3 A high water discharges into the South Dade Conveyance System (SDCS) barring emergency operations. | According to the 1994 C-111 GRR (Section 7.10), consistent with the original design of the South Dade County Flood control features and subsequent modifications to the system, the design of all GRR alternatives utilized S-173/S-331 as a divide structure between L-31N canal and C-111 canal under flood conditions. During normal (non-flood) periods, however, a potential for the structural features of both projects to be operated for mutual benefits was identified. A portion of the water to be returned to Northeast Shark River Slough (NESRS) via S-356 as a part of the MWD Project could be discharged southward under some conditions. Such discharges could be made only when there would be no potential increase in flood risk in the C-111 basin. The C-111 GRR (Section 6.18.1) stated, "The Modified Water Deliveries to Everglades National Park Project may permit a restoration of the historic link between the waters of the two project areas, to the benefit of the wide-ranging species that used both basins in historic times. During non-flood conditions, excess seepage water from Shark River Slough collected in L-31 N borrow canal could be passed to the C-111 system for enhanced hydrologic restoration of Taylor Slough." Operating studies were planned to include an evaluation of the need for, and availability of, supplemental water supplies for the C-111 basin.<br><br>COP will consider and evaluate alternatives which eliminate Column 2 operations and WCA 3 A high water discharges into the South Dade Conveyance System (SDCS). The COP selected plan will be the alternative which best achieves the project objectives while adhering to the project constraints. |
| **FDACS - 3** | The COP should not use S-331 to convey flood waters from the 8.5 Square Mile Area (8.5 SMA) into the SDCS if the current 8.5 SMA flood mitigation project is not adequate to provide the flood protection needed. If the project requires additional work to meet performance standards, that should be identified by Increment 2 so the use of S-331 to alleviate flooding in the 8.5 SMA is not incorporated into the COP. | COP will consider and evaluate alternatives which rely primarily of the S-357 pump station to provide flood mitigation to the 8.5 SMA. However, limited use of S-331 may be necessary to provide flood mitigation to the 8.5 SMA eastern areas and assist S-357 in maintaining flood mitigation for the 8.5 SMA when S-357 operational capacity is limited. The COP selected plan will be the alternative which best achieves the project objectives while adhering to the project constraints. |

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| **FDACS - 4** | Distribution of water during wet periods should concentrate on maximizing deliveries of water Northeast Shark River Slough (NESRS). Evaluation of the performance of proposed operation should be undertaken using the data now available. Data collected during emergency operations deviation indicates pumping at S-356 does not seem to increase the stage in the L-29 Canal when the canal is above 8.2 feet. This means that with an L-29 constraint of 8.5, the use of S-356 will not necessarily reduce the flow from WCA-3A into NESRS and adding the flow from S-356 may provide a significant benefit to the Park. This is something we should verify as the deviation operations continue since it could provide very useful information in setting the future operating protocols for S-356. | Concur. Consistent with previous field test increments, Increment 2 incorporated the described use of the S-356 structure and will test this proposal. Concurrent with the development of the COP, the Increment 2 operations will be evaluated along with modeling results to determine the most effective use of the S-356 pump station under COP conditions. |
| **FLORIDA DEPARTMENT OF TRANSPORATION (FDOT)** | | |
| **Comment Date: October 20, 2017** | | |
| **FDOT - 1** | Thank you for providing notice of NEPA study initiation for the Combined Operational Plan for the constructed features of the Modified Waters Delivery Plan. The Florida Department of Transportation is interested in remaining on the mailing list for future notifications regarding this effort. Please continue to forward this information to my attention with cc: to Jason Watts, Director, and Office of Environmental Management at the same address below. | Thank you for your comment. The Corps will continue to coordinate with the FDOT throughout the planning process for COP. |
| **FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP)** | | |
| **Comment Date: October 18, 2017** | | |
| **FDEP - 1** | The Jacksonville District, U.S. Army Corps of Engineers (Corps) issued the subject Scoping Notice to gather comments and concerns that will be addressed in a National Environmental Policy Act (NEPA) document for the Combined Operation Plan (COP). The purpose of COP is to define operations for constructed components of the Modified Water Deliveries (MWD) to Everglades National Park (ENP) and the Canal 111 (C-111) South Dade projects, while maintaining the Congressionally-authorized multiple purposes of the Central and Southern (C&SF) Project to include flood control; water supply for agricultural irrigation; municipalities, and industry; regional ground water control and prevention of saltwater intrusion; enhancement of fish and wildlife; and recreation.<br><br>A bulleted list of objective outlined by the Corps for COP include the following:<br>1. Improve water deliveries (timing, location, volume) into ENP and take steps to restore natural hydrologic condition in ENP given current C&SF infrastructure expected to be completed by the time of implementation, to the extent practical by:<br>a. Changing schedule of water deliveries so that it fluctuated in consonance with local meteorological condition, including providing | Thank you for your comment. The Corps will continue to coordinate with the FDEP throughout the planning process of COP. The bulleted list of objectives outlined by the Corps for COP has been subsequently updated to be consistent with language previously stated in the authorizing documents for the MWD and C-111 South Dade Projects. A bulleted list of objectives is provided below.<br><br><u>Objectives</u>:<br>1. Improve water deliveries (timing, location, volume) into ENP and take steps to restore natural hydrologic conditions in ENP given current C&SF infrastructure and features expected to be completed by the time of implementation, to the extent practicable by<br>a. Changing schedule of water deliveries so that it fluctuates in consonance with local meteorological conditions, including providing for long term and annual variation in ecosystem conditions in the Everglades (Timing) (P.L. 101-229, Section 101b)<br>b. Restoring NESRS as a functioning component of the Everglades hydrologic system (Location) (P.L. 101-229, Section 101b)<br>c. Adjusting the magnitude of water discharged to ENP to minimize effects of too much or too little water (Volume) (1992 MWD GDM, Section 44)<br>2. Maximize progress toward restoring historic hydrologic conditions in the Taylor Slough[1], Rocky Glades, & eastern Panhandle of ENP.<br>3. Protect the intrinsic ecological values associated with WCA-3A and ENP. |

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| | for long term and annual variation in ecosystem conditions in the Everglades (Timing).<br>b. Restoring NESRS as a functioning component of the Everglades hydrologic system (Location).<br>c. Adjusting the magnitude of water discharge to ENP to minimize efforts of too much or too little water (Volume).<br>2. Maximize progress toward restoring historic hydrologic conditions in the Taylor Slough, Rocky Glades, & eastern Panhandle of ENP.<br>3. Protect the intrinsic ecological values associated with WCA-3A and ENP.<br>4. Minimize the damaging* freshwater flows to Manatee Bay/Barnes Sound through the S197 structure and increase flows through Taylor slough and coastal creeks.<br>5. Include consideration of cultural values and tribal interests & concerns within EVA-3A and ENP.<br>6. Explore opportunities for enhancing the recovery of federally and state listed species under the Endangered Species Act, consistent with the restoration objectives, the USACE's authorities for MWD and C-111 projects and operational considerations.<br>7. Explore objectives to enhance opportunity for flood control and mitigation.<br><br>The Florida Department of Environmental Protection (Department) appreciated the opportunity to comment, and understand that the substantive details of the operating plan will be addressed in the forthcoming NEPA document, the Department previously provided comments to the Corps on the Cop Scoping Notice on July 7, 2011. | 4. Minimize the damaging freshwater flows to Manatee Bay/Barnes Sound through the S197 structure and increase flows through Taylor Slough and coastal creeks (1994 C-111 GRR, Section 5.2)<br>5. Include consideration of cultural values and tribal interests & concerns within WCA-3A and ENP.<br><br>Previously identified objectives "6" and "7" within the provided comment have now been captured under planning considerations. |
| **FDEP - 2** | The Department recognizes COP as a critical step towards completing the MWD and C-111 projects. Both the MWD and the C-111 Projects that need to be fully operational to continue the progress towards restoration of the Everglades system. The Department recommends expediting the completion of the MWD and C-111 Projects which includes COP, so that components of the Comprehensive Everglades Restoration Plan (CERP) projects can move forward in the near term as envisioned by the State of Florida's Senate Bill 10, as well as expedited projects under Central Evergaldes Project (CEPP) such as the S-333N and Old Tamiami Trail removal. | Many of the MWD and C-111 South Dade Project features have been built and/or are nearing completion including the required infrastructure identified within prior NEPA documentation (*i.e.* February 2017 Increment 1.1 and 1.2 EA and FONSI) to raise the maximum operating limit of the L-29 Canal beyond the constraint of 7.5 feet, NGVD per the 2012 Water Control Plan. Acquisition of required real estate interests and any associated improvements for the private ownership along Tamiami Trail, including receipt of Tamiami Trail Bridge and roadway channel and flowage easements from the FDOT, has also been completed. The Corps anticipates utilizing lessons learned from the 2016 and 2017 planned and temporary deviations as well as the MWD Project operational field tests (*i.e.* Increment 1, 1.1, 1.2 and 2) in the development of COP. The Corps is working as expeditiously as possible to complete planning efforts related to COP and the completion of associated NEPA documentation in 2019 to include the Final EIS and ROD. |
| **FDEP - 3** | The Department recommends that a comprehensive hydrological evaluation be conducted to ensure that the projects can be operated to meet the goals identified in the Everglades National Park Protection and Expansion Act. The evaluation should include components for the South Dade C&SF Flood protection, high water conditions in Water Conservation Areas (WCA) 2 and 3, and flood mitigation for the 8.5 Square Mile Area (SMA). | The COP study will result in a comprehensive integrated water control plan for the operation of the water management infrastructure associated with the MWD and C-111SD Projects. The COP will include regional hydrologic modeling in order to balance the ecological restoration objectives of the MWD and C-111SD projects while demonstrating compliance with the project constraints. This will include flood mitigation requirements to prevent potential project-induced flood damages in the 8.5 SMA and to maintain the level of flood damage reduction associated with the 1994 C-111 GRR-EIS Recommended Plan. |

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| | | Development of the COP will be informed by the MWD Increment 1, Increment 1.1 and 1.2, and Increment 2 field tests. Data collected in accordance with the Increment 2 monitoring plan developed in consultation with the FDOT will help to inform L-29 Canal operations to be developed for COP.<br><br>Field Test 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 Field Test operations relative to the Increment 2 goals, objectives, and constraints. USACE, SFWMD, and ENP water managers, along with FDEP, will continue to meet monthly to discuss the collected data and the results of preliminary analyses, as well as system conditions and Field Test operations; additional technical staff from these agencies who are involved in the Increment 2 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. |
| **FDEP - 4** | The Department recommends that COP be developed to have operation that are responsive to events to avoid, minimize or eliminate the need State issued Emergency Orders for High Water Conditions in the WCAs and the Ninth Amended Emergency Order for the C-111 South Dade Project. | Operational flexibility was included within the November 2017 Increment 2 EA and Proposed FONSI to allow for a rapid response to extreme high water levels in WCA 3A as a result of the numerous emergency and planned temporary deviations conducted in 2016 and 2017. It is the intent of the Corps to include operational flexibility as appropriate during plan formulation efforts for COP to prevent the need for expedited and/or emergency actions in the future. |
| **FDEP - 5** | There is a need to evaluate COP on a broader and more comprehensive scale while meeting the original objectives of both the MWD and C-111 South Dade Projects. This evaluation should consider the assessment of COP alternatives in consideration of ongoing and future State and Federal restoration efforts. The broader more comprehensive evaluation should include reevaluating inflows and outflows of WCA 3, and consideration of features that have been constructed by Federal and State parties under separate authorizations such as the Tamiami Trail Next Steps Phase I project and C-111 CERP project. | COP will define water management operations for WCA 3A and WCA 3B outlets, structures in the L-31N and C-111 Basins constructed as part of the C&SF Project and the recently constructed components of the MWD and C-111 South Dade Projects. The project team is currently reviewing baseline assumptions for the purpose of conducting hydrologic modeling to inform alternative evaluations. The existing condition is intended to represent conditions assumed in place at the time of implementation of the COP Water Control Plan in 2019. This base condition will include the following: (1) MWD Increment 1.1 and 1.2; (2) existing C&SF project infrastructure and Regulation Schedules (including 2008 LORS); (3) MWD Tamiami Trail Modifications 1-Mile Bridge and Raised Roadway; (4) Tamiami Trail Next Steps 2.6 Mile Western Bridge; (5) full construction of C-111 South Dade to include Contracts 8, 8A and 9; (6) 8.5 SMA project features to include C-358 and S-357N; (7) Miami-Dade Limestone Products Association (MD-LPA) 5-mile Seepage Cutoff wall along L-31 North; (8) current permitted operations for the SFWMD C-111 Spreader Canal project components (includes G-737 and S-199/S-200 at expanded 300 cfs each); and (9) the expanded capacity at S-333 completed by SFWMD (component of the Central Everglades Planning Project). Potential operational changes considered during plan formulation efforts during COP will take these projects into account as operational criteria and/or constructed infrastructure will be accounted for in the baseline. Changes to the 2012 Water Control Plan will need to subsequently occur as additional components of CERP are implemented.<br><br>Regulation schedule changes for WCA-1 and WCA-2 will not be included in the COP, but changes may be included in the COP alternative modeling (e.g. sensitivity run prior to the TSP) in order to ensure sufficient flexibility is included in the COP Water Control Plan to accommodate a future WCA-1 and WCA-2A Regulation Schedule study. |
| **FDEP - 6** | The Department notes that the Corps identified objectives for the development of COP that may have excluded previous identified objectives. The Department also noted that the Corps lists project constraints including the Everglades Restoration Transition Plan (ERTP) WCA-3A Regulation Schedule. The Department understanding is that COP would be developed to replace ERTP and the that ERTP was meant to be an interim transition plan, and not a constraint that would be carried forward into COP. | Maintaining Zone A of the WCA 3A Regulation Schedule to not exceed the 1960 WCA 3A 9.5 to 10.5 feet NGVD Regulation Schedule is currently identified as a project constraint; however additional relevant information resulting from the WCA Regional Flood Routing Analysis Study (Baseline and Modification Modeling, or BAMM) will be incorporated into planning efforts once the analysis is available in early 2018. Modifications to the WCA 3A Regulation Schedule below Zone A may be included within the scope of COP pending results of BAMM. Operational modifications proposed under COP will be incorporated into the 2012 Water Control Plan and supersede those identified under ERTP if operational modifications are proposed. Input will be sought from the PDT during alternative development for the COP EIS. Please see response to comment FDEP-1 with regard to the current bulleted list of objectives outlined by the Corps for COP. This list has been |

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| | | subsequently updated to be consistent with language previously stated in the authorizing documents for the MWD and C-111 South Dade Projects. |
| **FDEP - 7** | The department is particularly concerned about the newly identified objective (1c) of "Adjusting the magnitude of water discharged to ENP to minimize efforts of too much or too little water (Volume)" as this objective may be used to limit restoration flows to ENP for flood protection purposes. The Department suggests that a more appropriate objective is to maintain the current level of flood protection while maximizing ecologically beneficial flows from WCA-3 and through ENP's Shark River and Taylor Sloughs to Florida Bay. One goal of the authorized project was to construct and operate a flood mitigation project for the 8.5 SMA to ensure that restorative flows to ENP's Shark River Slough would not result in diminished or increased flood protection. The Department requests that the Corps conduct an evaluation of historical conditions compared to post mitigation condition for 8.5 SMA to develop an operation plan that maintains pre-mitigation flood control while allowing periodic event driven extreme flows through SRS. The Department is concerned that the level of flood protection for 8.5 SMA has been enhanced despite the construction of the mitigation features which results in damaging high-water stages in WCA-3. The 8.5 SMA project was authorized to provide flood mitigation and COP evaluation needs to be comprehensive in evaluating that the projects is able to provide the required flood mitigation without restricting Everglades restoration flows to ENP. | The 1983 Base Condition identifies the level of flood mitigation for the 8.5 SMA that will be maintained in the COP process; Base 1983 represents the conditions in the 8.5 SMA before MWD was implemented, consistent with the requirements set forth in the 8.5 SMA 2000 GRR Record of Decision.<br><br>The MWD field test increments were developed based on extensive evaluation of historical operations data, which have been detailed in the corresponding Environmental Assessment reports. The monitoring plans for surface water hydrology and groundwater hydrology for the MWD Incremental Field Tests (refer to Annex 2 of the Increment 2 Monitoring Plan Appendix C) will continue to provide data to assess performance of the 8.5 SMA project components, including S357 and S-357N (pending construction completion), to maintain the surface water and groundwater levels within the project areas of the 8.5 SMA, between the L-357W Levee and the L-31N Levee at the same levels as existed prior to the implementation of any MWD Project components. As included in the original Increment 1 Operational Strategy, Increment 1.1/1.2 and Increment 2 will also implement a testing protocol to assist in defining operating criteria for the new 8.5 SMA S-357N water control structure following completion of construction (currently anticipated in February 2018).<br><br>Please see response to comment FDEP-1 with regard to the current bulleted list of objectives outlined by the Corps for COP. This list has been subsequently updated to be consistent with language previously stated in the authorizing documents for the MWD and C-111 South Dade Projects. |
| **FDEP - 8** | The Department requests that continued attention to water quality is a critical part of COP formulation, and that specific actions to maintain water quality must be implemented as part of the development of COP. The concerns expressed by the Department in previous correspondence focused on the potential for exceedances of the State's phosphorous criterion due to increased flows into Shark River Slough. Other water quality issues must also be addressed during the development of COP, including the uncertainty surrounding the quantity and quality of water to be released to the Everglades Protection Area (EPA). This concern needs to be carefully evaluated in planning for COP including structure operation criterion and water velocity management that could re-suspend sediments (for example: slow opening of S-333 after extended closure). | Thank you for your comment. Water quality is being tracked and evaluated during the ongoing testing phases currently being conducted under the authority of the MWD Project (*i.e.* Increment 1, 1.1, 1.2 and 2). Information gained from the MWD Project operational field test swill be incorporated into COP operations. The Corps agrees that initial operations during the transition from dry season conditions to wet season conditions needs to be carefully managed to address potential resuspension of sediments if the operational conditions allow this to be considered in the operations. In extreme weather events, human health and safety concerns take precedence. |
| **FDEP - 9** | Regulatory Authorization: The implementation of COP will modify the operations of water management structure within the Southern Everglades and the South Miami Dade Area. Surface water management, which includes operation, is regulated by the Department under Chapters 373 and 403, Florida Statues. Any modification to the existing system may require a permit prior to implementation. The Department strongly recommends that the Corps initiate discussions with the Department early in the planning process to ensure regulatory concerns are appropriately addressed. As mentioned earlier the Department has issued multiple emergency orders to manage the | Thank you for your comment. The Corps will continue to coordinate with the FDEP to ensure all regulatory concerns are appropriately considered. The Corps agrees that working closely with the FDEP through this process is essential. |

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| | high water operation deviations of the ECAs and L-29 Canal System. The Department trusts that the development of COP will fully evaluate and address all operating conditions of this project and that the need for unplanned emergency deviations will not continue to be part of the future operating procedures. | |
| **FDEP - 10** | The Florida Department of Environmental Protection (Department) appreciates the opportunity to comment, and understand that the substantive details of the project will be addressed in the forthcoming NEPA document. Department staff looks forward to continued participation throughout the planning process. The department would like to reiterate its commitment to the restoration of the Greater Everglades ecosystem and "getting the water right." | Thank you for your comment. The Corps will continue to coordinate with the FDEP throughout the planning process for COP and encourages the FDEP to continue to attend scheduled PDT meetings for this effort. Information will be distributed to Federal and state agencies as well as stakeholders and interested parties of the public through that forum. |
| **FLORIDA FISH AND WILDLIFE CONSERVATION COMMISION (FWC)** | | |
| **Comment Date: October 24, 2017** | | |
| **FWC - 1** | FWC staff has reviewed the table of state listed species in the project area that was provided in the letter dated September 26, 2017, from USACE to U.S. Fish and Wildlife Service. The FWC staff has compared the information provided by USACE to the "Florida's Imperiled Species Management Plan" (2016), and has provided a list of state threatened (ST) wildlife consistent with the most recent version of the Imperiled Species Management Plan.<br><br>Mammals<br>Everglades mink (Mustela vison evergladensis, ST)<br><br>Birds<br>Black skimmer (Rynchops niger, ST}<br>Least tern (Sterna antillarium, ST)<br>White-crowned pigeon (Patagioenas leucocephalus, ST)<br>Little blue heron (Egretta caerulea, ST)<br>Tricolored heron (Egretta tricolor, ST)<br>Reddish egret (Egretta rufescens, ST)<br>Roseate spoonbill (Plata/ea ajaja, ST}<br>Florida sandhill crane (Antigone canadensis pratensis , ST)<br>Southeastern American kestrel (Falco sparverius paulus, ST)<br><br>A complete copy of the Florida's Imperiled Species Management Plan (2016) can be downloaded from the MyFWC.com website at http://myfwc.com/media/4 l 33 l67/floridas-imperiled-species-management -plan-20 16- 2026 .pdf | Thank you for the updated list of state listed species that have the potential to occur within the project area. This information will be incorporated into the EIS. All practicable means to avoid or minimize potential negative environmental effects to fish and wildlife resources will be incorporated into the proposed action. |
| **FWC - 2** | High-water Management Strategy | The Corps recognizes the potential effects of high water stages on fish and wildlife resources within the project area. The project team is currently in the initial stages of planning. The project team will utilize performance measures (*i.e.* depth, distribution, duration of surface flooding etc.) to evaluate alternative plans with regard to potential effects to fish and wildlife |

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| | The FWC has fish and wildlife and land management responsibilities for the EWMA and has found that hydrology, water depth, and duration of standing water are very important components of wildlife and habitat protection. The FWC has developed a position paper entitled Hydrologic Requirements for the Everglades and Francis S. Taylor Wildlife Management Area 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, habitat, and diversity so that the goals of the Comprehensive Everglades Restoration Plan (CERP) may be fully realized.<br><br>FWC staff recommends that the USACE fully incorporates information gained from the emergency and planned temporary deviations that were implemented by USACE in response to extreme high-water conditions in the EWMA. Further, staff recommends that the USACE relies on the biologically based guidance provided in FWC's position paper to develop high-water management strategies that are consistent with this guidance, provides relief for wildlife during periods of extreme high-water, and minimizes recreational impacts. | resources. These performance measures will be developed in conjunction with the PDT. Additional detailed information on performance measures will be provided as plan formulation efforts for COP continue. The provided information will be reviewed and applied as appropriate. All practicable means to avoid or minimize potential negative environmental effects to fish and wildlife resources will be incorporated into the proposed action.<br><br>The Corps anticipates utilizing lessons learned from the 2016 and 2017 planned and temporary deviations as well as the MWD Project operational field tests (*i.e.* Increment 1, 1.1, 1.2 and 2) in the development of COP. |
| **FWC - 3** | Regulation Schedules for WCA-3B and WCA-2A<br><br>The EWMA includes WCA-2, WCA-2B, WCA-3A, and WCA-3B. WCA-3B contains highly significant natural resources, managed for natural vegetative communities, wildlife and aquatic species, and recreational uses. WCA-3B supports some of the least impacted tree islands remaining in the Everglades ridge and slough landscape and the maintenance of ecologically compatible water levels is important for the wildlife and ecology. FWC staff supports the development of a regulation schedule for WCA-3B that maintains the ecological quality and supports continued recreational uses.<br><br>The COP bulleted document that was distributed to the PDT acknowledges that the USACE is considering the inclusion of WCA-2 in the COP effort. FWC staff supports incorporating WCA-2A regulation schedule revisions that improve the quantity, timing, and distribution of water to promote more natural patterns of inundation. | COP WCA-3A Regulation Schedule updates will be developed based on existing inflows from WCA-1 and WCA-2A; with limited data available for cultural resources within WCA 1 and WCA 2A and requirements for Tribal consultation, updates to the regulation schedules cannot be completed within the 2016 BO timeline for COP.<br><br>Changes to the WCA 1 and/or WCA 2A Regulation Schedules may be included in the COP alternative modeling (e.g. sensitivity run prior to the TSP) in order to ensure sufficient flexibility is included in the COP Water Control Plan to accommodate a future WCA-1 and WCA-2A Regulation Schedule study. No additional inflows to WCA 3B will be included under the COP, consistent with modifications to the MWD Project concurrent with development of the Central Everglades Planning Project. |
| **FWC - 4** | Expedite Current Projects and Plan for Future Project Components<br><br>The COP is a critical step towards developing a water control plan that makes full use of the available infrastructure and resources constructed under MWD, CERP, Tamiami Trail Next Steps (TTNS), Central Everglades Project Plan (CEPP), and other Everglades restoration programs. | COP will define water management operations for WCA 3A and WCA 3B outlets, structures in the L-31N and C-111 Basins constructed as part of the C&SF Project and the recently constructed components of the MWD and C-111 South Dade Projects. The project team is currently reviewing baseline assumptions for the purpose of conducting hydrologic modeling to inform alternative evaluations. The existing condition is intended to represent conditions assumed in place at the time of implementation of the COP Water Control Plan in 2019. This base condition will include the following: (1) MWD Increment 1.1 and 1.2; (2) existing C&SF project infrastructure and Regulation Schedules (including 2008 LORS); (3) MWD Tamiami Trail Modifications 1-Mile Bridge and Raised Roadway; (4) Tamiami Trail Next Steps 2.6 Mile Western Bridge; (5) full construction |

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| | FWC staff recommends utilizing all available resources to expedite the MWD and C-111 projects, including the COP to gain full project benefits as soon as practicable.<br><br>Expediting the remaining components of MWD and the C-111 projects will facilitate raising the L-29 canal constraint up to the 8.5 feet National Geodetic Vertical Datum (NGVD) and hasten the potential benefits of project implementation.<br><br>FWC staff also recommends that the COP operations strategy not omit or constrain the role of infrastructure projects scheduled for near-term completion. Project components such as the TTNS 2.6-mile bridge, S-333N, the removal of Old Tamiami Trail, and other restoration features will provide great benefits to preventing and managing high-water conditions in the EWMA. | of C-111 South Dade to include Contracts 8, 8A and 9; (6) 8.5 SMA project features to include C-358 and S-357N; (7) Miami-Dade Limestone Products Association (MD-LPA) 5-mile Seepage Cutoff wall along L-31 North; and (8) current permitted operations for the SFWMD C-111 Spreader Canal project components (includes G-737 and S-199/S-200 at expanded 300 cfs each); and the (9) the expanded capacity at S-333 completed by SFWMD (component of the Central Everglades Planning Project). Potential operational changes considered during plan formulation efforts during COP will take these projects into account as operational criteria and/or constructed infrastructure will be accounted for in the baseline. Changes to the 2012 Water Control Plan will need to subsequently occur as additional components of CERP are implemented. The Corps is working as expeditiously as possible to complete planning efforts related to COP and the completion of associated NEPA documentation in 2019 to include the Final EIS and ROD. |
| **FWC - 5** | L-29 Canal Constraint<br><br>FWC staff continues to support the development of a water control plan that raises the maximum operational limit of the L-29 canal and maximizes ecologically beneficial flows from the EWMA through Northeast Shark River Slough and Taylor Slough to Florida Bay. FWC staff recommends that the COP alleviate all constraints on the L-29 canal stage up to the 8.5 feet National Geodetic Vertical Datum (NGVD) to facilitate maximum sustained discharges from the EWMA to Northeast Shark River Slough and on to Florida Bay. An operational plan that maximizes opportunities to deliver water from the EWMA will help prevent high-water conditions from developing and support high- water management strategies that minimize potential impacts to area wildlife, their habitat, and recreational uses. | One of the objectives of COP is to improve water deliveries into ENP and take the necessary steps to restore natural hydrologic conditions in ENP given current C&SF infrastructure and features. Under the MWD Project Increment 2 Field Test, the November 2017 EA and Proposed FONSI recognized that under the Preferred Alternative (Alternative B), the L-29 Canal would be operated to ensure the stability and safety of Tamiami Trail (U.S. 41) between S-333 and S-334, in accordance with the September 25, 2008 Tamiami Trail Modifications Contract between the Government and the FDOT and subsequent coordination that took place during formulation efforts for Increment 2. Under the Increment 2 Field Test, the L-29 Canal inflow structures (S-333, S-355A/B, and S-356) will be operated with the intention of limiting event durations with L-29 Canal stages above 8.5 feet, NGVD to a target maximum duration of 72 hours. For each water year (May through April), the L-29 Canal inflow structures will be managed to limit the cumulative duration of L-29 Canal stages above 8.3 feet, NGVD to a maximum of 90 days, and the conditions of the Tamiami Trail roadway sub-base and roadway will be continuously monitored. Continued L-29 structure inflows which result in cumulative durations with L-29 Canal stages above 8.3 feet, NGVD for longer than 90 days will require written approval from the FDOT, given evaluation of the monitoring data by FDOT.<br><br>A separate alternative (Alternative C) that excludes operational constraints identified for the L-29 Canal (*i.e.* limited duration of L-29 Canal stages near 8.5 feet, NGVD to a maximum period of 90 days) was carried forward through the environmental effects analysis in the instance that written approval from FDOT is provided and L-29 Canal constraints are able to be removed for 8.5 SMA flood mitigation during implementation of Increment 2.<br><br>It is the intent of the Corps to incorporate lessons learned from the above mentioned monitoring data under implementation of Increment 2 and/or new information from future hydrologic modeling conducted during plan formulation efforts for COP to inform potential operational constraints on the maximum stage operating limit in the L-29 Canal. This information is needed to conclusively demonstrate the capability of the completed MWD Project components (including S-357N) to maintain flood mitigation requirements for 8.5 SMA under the raised L-29 Canal maximum operating limit of up to 8.5 feet, NGVD. |
| **SOUTH FLORIDA WATER MANAGEMENT DISTRICT (SFWMD)** | | |
| **Comment Date: October 20, 2017** | | |

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| **SFWMD - 1** | The Jacksonville District, U.S. Army Corps of Engineers (USACE) issued the subject Scoping Notice to gather comments and concerns that will be addressed in a National Environmental Policy Act (NEPA) document for the Combined Operational Plan (COP). The purpose of COP is to define operations for constructed components of the Modified Water Deliveries (MWD) to Everglades National Park (ENP) and the Canal 111 (C-111) South Dade projects, while maintaining the Congressionally-authorized multiple purposes of the Central and Southern (C&SF) Project to include flood control; water supply for agricultural irrigation, municipalities, and industry; regional ground water control and prevention of saltwater intrusion; enhancement of fish and wildlife; and recreation.<br><br>A bulleted list of objectives outlined by the USACE for COP includes the following:<br>1. Improve water deliveries (timing, location, volume) into ENP and take steps to restore natural hydrologic conditions in ENP given current C&SF infrastructure or infrastructure expected to be completed by the time of implementation, to the extent practicable by:<br>a. Changing schedule of water deliveries so that it fluctuates in consonance with local meteorological conditions, including providing for long term and annual variation in ecosystem conditions in the Everglades (Timing).<br>b. Restoring NESRS as a functioning component of the Everglades hydrologic system (Location).<br>c. Adjusting the magnitude of water discharged to ENP to minimize effects of too much or too little water (Volume).<br>2. Maximize progress toward restoring historic hydrologic conditions in the Taylor Slough, Rocky Glades, & eastern Panhandle of ENP.<br>3. Protect the intrinsic ecological values associated with WCA 3A and ENP.<br>4. Minimize the damaging freshwater flows to Manatee Bay/Barnes Sound through the S197 structure and increase flows through Taylor slough and coastal creeks.<br>5. Include consideration of cultural values and tribal interests and concerns within WCA 3A and ENP.<br>6. Explore opportunities for enhancing the recovery of federally and state listed species under the Endangered Species Act, consistent with the restoration objectives, the USACE's authorities for MWD and C-111 projects and operational considerations.<br>7. Explore objectives to enhance opportunity for flood control and mitigation. | Thank you for your comment. Please see response to comment FDEP-1 with regard to the current bulleted list of objectives outlined by the Corps for COP. This list has been subsequently updated to be consistent with language previously stated in the authorizing documents for the MWD and C-111 South Dade Projects. |

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| | The South Florida Water Management District (District) appreciates the opportunity to comment, and understands that the substantive details of the operating plan will be addressed in the forthcoming NEPA document. | |
| **SFWMD - 2** | The pre-storm QPF criteria in the FDOT agreement with the USACE specifies stage limits in the L-29 Canal which reduces flows to NESRS. New groundwater wells and soil moisture sensors will be installed soon to understand the effects of water in the L-29 Canal to the Tamiami Trail Subbase. Analysis of monitoring data will support revision of the FDOT-USACE agreement. The revised USACE-FDOT agreement needs to have clear and actionable criteria to operate the L-29 Canal. In addition, the resulting changes to the water control plan need to balance the goal of conveying water from WCA 3A to ENP and ensuring the South Dade Conveyance System can continue to provide flood protection to privately owned land in the L-31N and C-111 Basins. | Please see response to FWC-5 above. It is the intent of the Corps to incorporate lessons learned from monitoring data conducted under implementation of Increment 2 and/or new information from future hydrologic modeling conducted during plan formulation efforts for COP to inform potential operational constraints on the maximum stage operating limit in the L-29 Canal. This information is needed to conclusively demonstrate the capability of the completed MWD Project components (including S-357N) to maintain flood mitigation requirements for 8.5 SMA under the raised L-29 Canal maximum operating limit of up to 8.5 feet, NGVD. Following installation of the new groundwater wells and evaluation of the data, the Corps will coordinate with FDOT to update the requirements of the Relocation Agreement, if supported by the data.<br><br>The project team is currently in the initial stages of planning and has identified planning objectives and constraints. Planning objectives describe what the project is intended to accomplish. A constraint is a restriction that limits the extent of the planning process. Alternative plans will be formulated to meet project objectives while avoiding violations of project constraints. Implementation of COP is anticipated to increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP while maintaining the authorized purposes of the C&SF Project to include the MWD Project, C-111 South Dade Project and CERP. Planning constraints have been identified to include, but are not limited to, maintaining the level of flood damage reduction associated with the 1994 C-111 GRR Recommended Plan and maintaining required flood mitigation for 8.5 SMA. |
| **SFWMD - 3** | COP is the opportunity to eliminate Column 2 operations. Column 2 operations were an interim solution developed during IOP prior to construction of the detention areas and are archaic. Instead of Column 2, the District's South Dade Study recommended seasonal operations for the S-332B and S-332C pump stations identifying a range to maintain the L-31N Canal and allow the transition from the dry to wet season and from wet to dry season conditions. The seasonal operations were shown to be beneficial to prolonging hydroperiods during the dry season in the ENP and support agricultural production which begins at the end of the wet season. The District is very interested in including seasonal operations in the alternative development. These are a valid and proven operating strategy to replace Column 2 operations. | Concur that the intent in COP is to eliminate Column 2 operations. With each incremental testing operational strategy, the Corps has made systematic adjustments that allow for the reduction of Column 2 flows as additional construction features have been brought online. During the development of COP, the Corps will continue to incorporate new operational strategies to achieve the project goals of delivering more water to NESRS while maintaining an adequate level of flood mitigation for the adjacent 8.5 SMA properties.<br><br>COP will consider and evaluate alternatives which eliminate Column 2 operations and WCA 3 A high water discharges into the South Dade Conveyance System (SDCS). The COP selected plan will be the alternative which best achieves the project objectives while adhering to the project constraints. Refer also to the response to FDACS-2. |
| **SFWMD - 4** | There is a need to evaluate COP on a broader and more comprehensive scale while meeting the original objectives of both the MWD and C-111 South Dade Projects. COP alternative evaluation should consider ongoing and future State and Federal restoration efforts. The broader more comprehensive evaluation should include re-evaluating inflows and outflows of WCA 3 and features that have been or will be constructed by Federal and State agencies such as the Tamiami Trail Next Steps Phase I project, Old Tamiami Trail Removal, S333N, Biscayne Bay Coastal Wetlands. The evaluation should include components for the South Dade C&SF flood protection, conditions in Water Conservation Areas (WCA) 1, 2 and 3, and flood mitigation for the 8.5 Square Mile Area (SMA), L-31N and C-111 Basins. | COP WCA-3A Regulation Schedule updates will be developed based on existing inflows from WCA-1 and WCA-2A; with limited data available for cultural resources within WCA 1 and WCA 2A and requirements for Tribal consultation, updates to the regulation schedules cannot be completed within the 2016 B.O. timeline for COP.<br><br>Regulation schedule changes for WCA-1 and WCA-2 will not be included in the COP, however, COP modeling will include sensitivity runs in order to ensure sufficient flexibility is included in the COP Water Control Plan to accommodate a future WCA-1 and WCA-2A Regulation Schedule study. |

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| | Current regulation schedules for WCA 1 and WCA 2A have known shortcomings resulting in documented impacts to the observed system and shown in planning studies over the last several years. In WCA 1, a range of hydrologic stage conditions are needed to sustain a healthy landscape, but prolonged high water conditions risk transport of higher nutrient and high hardness water into the marsh interior, which would otherwise optimally remain a low-nutrient, soft water environment. In WCA-2A significant loss of habitats including a 90% reduction in the aerial extent of tree islands, a loss of ridge and slough microtopography, and a lack of good foraging and breeding habitat for wading birds have been observed.<br><br>Since WCA 1 and WCA 2A are centrally located in the South Florida water management system, a number of upstream and downstream considerations should also be made. In both cases, upstream projects including the District's Restoration Strategies program will result in changed inflow timing relative to those assumed when the current WCA regulation schedules were developed. Additionally, the regulatory decisions associated with WCA-1 and WCA-2A will directly influence the ability for downstream systems (WCA 3A or WCA-3B) to achieve desired outcomes. For example, attempts in the last several years to meet the current WCA-2A regulation schedule have produced large dry season reversals downstream in WCA-3A during critical periods in the wading bird breeding season. | |
| **SFWMD - 5** | One goal of the authorized MWD project was to construct and operate a flood mitigation project for the 8.5 SMA to ensure that restorative flows to ENP's Shark River Slough would not result in diminished or increased flood protection. To this end, the USACE needs to ensure evaluation of 8.5 SMA mitigation features during the NEPA analysis accurately reflects future performance and adjustments to the COP does not compromise maximizing flows from WCA 3 to ENP. In addition, structural modifications to 8.5 SMA mitigation features should be identified and implemented if providing flood mitigation to 8.5 SMA constrains the stages or flows in NESRS.<br><br>This same is true for evaluating the performance of the newly constructed C-111 South Dade features, their operation, which may not begin until 2018 wet season, and the need for potential modification of its features. To this end, the USACE needs to ensure evaluation of the C-111 detention areas during the NEPA analysis accurately reflects future performance of COP and does not compromise maximizing flows from WCA 3 to ENP. | The 1983 Base Condition identifies the level of flood mitigation for the 8.5 SMA that will be maintained in the COP process; Base 1983 represents the conditions in the 8.5 SMA before MWD was implemented, consistent with the requirements set forth in the 8.5 SMA 2000 GRR Record of Decision.<br><br>The MWD field test increments were developed based on extensive evaluation of historical operations data, which have been detailed in the corresponding Environmental Assessment reports. The monitoring plans for surface water hydrology and groundwater hydrology for the MWD Incremental Field Tests (refer to Annex 2 of the Increment 2 Monitoring Plan Appendix C) will continue to provide data to assess performance of the 8.5 SMA project components, including S357 and S-357N (pending construction completion), to maintain the surface water and groundwater levels within the project areas of the 8.5 SMA, between the L-357W Levee and the L-31N Levee at the same levels as existed prior to the implementation of any MWD Project components. As included in the original Increment 1 Operational Strategy, Increment 1.1/1.2 and Increment 2 will also implement a testing protocol to assist in defining operating criteria for the new 8.5 SMA S-357N water control structure following completion of construction (currently anticipated in February 2018).<br><br>The COP will establish an operational plan for the completed infrastructure of the MWD and C-111 South Dade projects. If supported by the project schedule, evaluation of structural modifications within 8.5 SMA may also be conducted concurrent with development of the COP; these evaluations may be supported by hydrologic modeling conducted by the ENP and SFWMD, independent of the COP process. |
| **SFWMD - 6** | The District recommends that COP includes operations responsive to unforeseen meteorological conditions to avoid, minimize or eliminate the need State issued Emergency Orders for High Water Conditions. This will | Operational flexibility was included within the November 2017 Increment 2 EA and Proposed FONSI to allow for a rapid response to extreme high water levels in WCA 3A as a result of the numerous emergency and planned temporary deviations |

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| | reduce the frequency of high water emergency orders and subsequent operation adjustments not covered in the water control manual. | conducted in 2016 and 2017. It is the intent of the Corps to include operational flexibility as appropriate during plan formulation efforts for COP to prevent the need for expedited and/or emergency actions in the future. |
| **SFWMD - 7** | It in the interest of the District and FDEP to ensure operations are in place to achieve the objectives of the CERP projects. The CERP Biscayne Bay Coastal Wetlands Project - Phase 1 is nearly complete and planning for Phase 2 will begin soon. This is the opportune time to consider directing flows to enhance salinities in Biscayne Bay. Although the coastal water control structures are not part of this water control plan, the divide structures are included. | Potential environmental effects to Biscayne Bay will be evaluated within the NEPA document as this area is adjacent to those structures considered under COP. COP will define operations for the completed features of the MWD and C-111 South Dade Projects, and as stated does not include the coastal water control structures associated with the Biscayne Bay Coastal Wetlands Project. Opportunities to adjust operations in the SDCS to enable additional flows to Biscayne Bay during the dry season may be explored if compatible with the identified project objectives and constraints, as previously considered with the 2015-2016 SFWMD South Dade Investigation and the Increment 1.1 and 1.2 field test. |
| **PUBLIC (ENVIRONMENTAL STAKEHOLDERS AND PRIVATE CITIZENS)** | | |
| **REEF ENVIRONMENTAL EDUCATION FOUNDATION (REEF)** | | |
| **Comment Date: October 11, 2017** | | |
| **LAD ATKINS (REEF) - 1** | The lifestyle and economy of the Florida Keys are intrinsically linked to the health of the Everglades National Park and Florida Bay. Clean water to sustain the ecosystem is key.<br><br>Restoration projects to benefit Everglades National Park and the Florida Keys have been under construction for many years, paid for by significant taxpayer investment. Now, writing an operations plan for how to use these projects is the critical next step. This is the time to achieve the ecosystem benefits we desperately need in the Keys.<br><br>Please ensure that protecting the waters of the Southern Everglades and Florida Bay is the top priority for operating restoration projects in South Miami-Dade!<br><br>These projects include the Modified Water Deliveries (MWD), C-111 South Dade, and C-111 Spreader Canal projects, which will be guided by the Combined Operation Plan (COP) currently under construction by the U.S. Army Corps of Engineers and other state and federal agencies.<br><br>As a member of the Florida Keys community, responsible operation of these projects to maximize restoration benefits for the Everglades and Florida Bay is important to me. | Thank you for your comment. Implementation of COP is anticipated to increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP. The Corps is committed to implementing COP in order to continue progress in Everglades restoration. Implementation of the Proposed Action is anticipated January 2020 following completion of the necessary NEPA documentation including the Final EIS and ROD. |
| **NATIONAL PARKS CONSERVATION ASSOCIATION (NPCA)** | | |
| **Comment Date: October 20, 2017** | | |
| **NPCA - 1** | The National Parks Conservation Association (NPCA) has long supported efforts to restore Everglades National Park (ENP) and Florida Bay. We have re- | Thank you for your comment. Implementation of COP is anticipated to increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP. The Corps is committed to implementing COP in order to continue progress in Everglades restoration. |

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| | mained actively involved in the planning processes for Modified Water Deliveries (MWD) to ENP, C-111 Spreader Canal, and the C-111 South Dade Project. After decades of work, it is finally time to flip the "on" switch and operate these plans to the maximum benefit of the ecosystem. Executing the Combined Operations Plan (COP) will bring restoration planning into on-the-ground reality.<br><br>NPCA asserts that the COP must utilize restoration infrastructure to the maximum ecological benefit of Everglades National Park and Florida Bay. As the scoping of COP moves forward, we urge the agencies to ensure that the charter mission of ecosystem restoration remain the primary focus and goal of your cumulative efforts. | Implementation of the Proposed Action is anticipated in January 2020 following completion of the necessary NEPA documentation including the Final EIS and ROD. |
| **NPCA - 2** | Specifically, the COP must ensure that key operational targets outlined in the original project documents are met, including: eliminated use of the S-197 structure and associated harmful discharges, increased canal stages of the C-111 at S-18C, and increased water to restoration levels in ENP and Florida Bay. COP must also set the stage for additional restoration benefits to come with projects that are currently in the works. These include construction of the Central Everglades Plan (CEPP), particularly CEPP South components, additional bridging of Tamiami Trail, and the Everglades Agricultural Area (EAA) Reservoir. Together, these projects will create a network of restoration infrastructure for ENP and Florida Bay.<br><br>The U.S. Department of the Interior has invested millions of taxpayer dollars for the direct benefits to ENP that must now be achieved. ENP is the anchor of the federal interest in the South Dade system. We must get the water right and make good on the investment that has been funded by Americans for the national park that is owned and valued by all. | A stated goal of the 1994 C-111 South Dade GRR and EIS includes the reduction of damaging freshwater discharges to Manatee Bay and Barnes Sound while maintaining flood protection to agricultural lands east of the C-111 Canal. Goals also include the extension of hydroperiods within the ENP Eastern Panhandle, and the promotion of additional overland flows across the ENP Eastern Panhandle towards northeast Florida Bay. Implementation of COP is anticipated to increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP by defining operations for the completed components of the MWD and C-111 South Dade Projects. Implementation of the MWD operational field tests (*i.e.* Increment 1, 1.1, 1.2 and 2) included operational criteria that increased the potential for additional low volume releases at S-197. This additional operational flexibility was included within the MWD operational field tests due to uncertainty resulting from increased stages in NESRS and the potential for increased seepage to the L-31N Canal south of S-331. It is the intent of the Corps to re-evaluate operational criteria previously defined for this structure during COP.<br><br>The SFWMD has implemented features of the C-111 Spreader Canal Western Project under the State Expedited Construction program (i.e. Accelerate Everglades Restoration Project [Acceler8]) for the purpose of expediting design and construction of a number of critical restoration projects consistent with the CERP. A Department of Army permit (SAJ-2005-9856 [IP-AAZ]) was issued to the SFWMD on October 14, 2009 for the construction and operation of the project. Initial construction of the C-111 Spreader Canal Western Project was completed in January 2012 with completion of the Frog Pond Detention Area, partial Aerojet Canal features, plugs in the C-110 Canal, and a plug at S-20A. Construction of the remaining two southern weirs along the Aerojet Canal began in November 2014 and was completed in early 2015. Construction of a new water control structure in the lower C-111 Canal (i.e. S-198, which would be located south of S-18C) and incremental increases in the open/close stage triggers at S-18C have not yet been implemented. The SFWMD initiated operation of the C-111 Spreader Canal Western Project constructed components in June 2012, in accordance with the Project Operating Manual (POM) developed with the PIR. At the request of SFWMD, a revised POM was approved in June 2016. Steps will be taken in the future to incorporate the 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 (PPA) between the Corps and SFWMD has been executed. Pending execution of the PPA, operation of the C-111 Spreader Canal Western Project is not included as part of the 2012 WCAs, ENP, and ENP to SDCS Water Control Plan (hereafter referred to as the 2012 Water Control Plan) (USACE 2012c) or within the scope of COP.<br><br>The SFWMD will continue to operate their expedited C-111 Spreader Canal Western Project. Consistent with the requirements of the February 2017 re-issued C-111 Spreader Canal regulatory permit from the Corps, the SFWMD is |

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| | | continuing to assess south Miami-Dade water conditions and existing operations, including those of the C-111 Spreader Canal Project, on a quarterly basis for a minimum of five years to ensure project features are constructed and operated not to adversely affect adjacent lands outside and within the C-111 Spreader Canal Western Project boundary with regards to water quantity, water quality, and/or flooding. The purpose of the assessment and quarterly reports are to ensure the SFWMD has the best available information to determine what operational system changes, if any, are necessary to avoid adverse water levels on adjacent lands. It is presently anticipated that additional information generated from the ongoing SFWMD monitoring within the C-111 Spreader Canal Western Project area will be considered during development of the COP. |
| **Bonefish & Tarpon Trust** | | |
| **Comment Date: October 20, 2017** | | |
| **ROSS BOUCEK (BTT) - 1** | My name is Ross Boucek, Florida Keys Initiative Manager of the Bonefish & Tarpon Trust (BTT), and I am submitting this letter on behalf of BTT. BTT appreciates the opportunity to provide our perspective on Everglades restoration, particularly in terms of how we will operate projects in the Southern Everglades. Restoration projects to improve the conditions of the Southern Everglades and Florida Bay, including Modified Waters Deliveries (ModWaters), C-111 South Dade, and C- 111 Spreader Canal, have been in the works for decades. Now it is finally time to turn these projects on, executing the Combined Operations Plan (COP), and maximize the ecological benefits they provide to Everglades National Park and Florida Bay.<br><br>BTT is a 20 year old science-based conservation organization that is focused on improving management of coastal fisheries and the habitats upon which the fisheries depend. Though our focus is on the fish species that comprise the flats fishery – Bonefish, Tarpon, Permit, and even Snook – our science and conservation work also applies to other coastal species and fisheries. Indeed, we regularly collaborate with state and federal resource management agencies, sharing our data to help improve management. We are also an angler-based organization in that we engage and represent the tens of thousands of people who participate in and rely upon the recreational fisheries for their livelihood.<br><br>The epicenter of the failure to enact Everglades restoration is Florida Bay. Florida Bay's ongoing collapse arises from failure to deliver adequate quantities of clean freshwater to the Bay via the Everglades in the appropriate locations at appropriate times. It is bitterly ironic that a similar crisis in the Bay – 30 years ago – provided much of the impetus for federal and state restoration authorization in 1988 (the East Everglades Act) and later in 2000 with the Comprehensive Everglades Restoration Plan (CERP). Despite years of study and planning, and expenditure of millions of dollars of public funds, Florida Bay is likely worse today than in 1985. This state of affairs is unacceptable and BTT urges you to develop a COP that accelerates actions to restore the Bay before it passes an ecological tipping point from which it may never recover. | A stated goal of the 1994 C-111 South Dade GRR and EIS includes the reduction of damaging freshwater discharges to Manatee Bay and Barnes Sound while maintaining flood protection to agricultural lands east of the C-111 Canal. Goals also include the extension of hydroperiods within the ENP Eastern Panhandle, and the promotion of additional overland flows across the ENP Eastern Panhandle towards northeast Florida Bay. Implementation of COP is anticipated to increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP by defining operations for the completed components of the MWD and C-111 South Dade Projects.<br><br>The project team is currently in the initial stages of planning. The project team will utilize performance measures (*i.e.* depth, distribution, duration of surface flooding etc.) to evaluate alternative plans with regard to potential effects to fish and wildlife resources within WCA 3, ENP and Florida Bay. At this time, a performance measure has been previously developed for Florida Bay that evaluates potential changes in salinity as a result of stage in the upstream marsh. In addition, the project team has initially identified the desire to utilize other available tools to evaluate potential environmental effects to Florida Bay including the use of a suitability model for seagrass and spotted juvenile sea trout. These tools as well as output from the regional hydrologic modeling will be used in the alternative effects evaluation in documenting potential effects on Florida Bay. The Corps concurs that changes in the quantity, quality, timing, and distribution of freshwater flows is essential to restoration of the south Florida ecosystem, including Florida Bay and is committed to implementing COP in order to continue progress in Everglades restoration.<br><br>The Corps intends to pursue an open and public process during COP planning efforts, engaging Members of the public will be able to attend regularly scheduled PDT team meetings and continue to provide public comment through that forum. Public meetings are also anticipated to be held prior to release of the Draft EIS. Information on the project to include announcement for PDT meetings can be obtained from the following website: http://www.saj.usace.army.mil/Missions/Environmental/Ecosystem-Restoration/G-3273-and-S-356-Pump-Station-Field-Test/ |

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| | We are concerned that Everglades restoration inadequately considers coastal fish and habitats in water management plans. Too often, water budgets are presented as annual totals and reduction in nutrients. From a fish and habitat perspective, changes in the timing, amount, and location of freshwater flows are just as important as reduction in nutrient load. Indeed, even if pristine freshwater was being discharged from Lake Okeechobee into the rivers, the ecological damage would be same. In other words, restoration must aim to restore the spatial and temporal patterns of freshwater flows into South Florida estuaries as well as address the nutrient load issues.<br><br>Our comments are also presented from multiple perspectives. In the 1980's BTT's Vice Chairman, Bill Horn, served as Assistant Secretary of the Interior for Fish, Wildlife and Parks and was engaged in negotiations to provide more timely water flows to the Bay via Taylor Slough as well as the work that produced the Modified Water Deliveries authorization in 1988. In 2007-2010 our Vice Chairman had the honor of serving two terms on the Committee on Independent Scientific Review of Everglades Restoration Progress, contributing to the 2008 and 2010 Biennial Review reports. And for 40 years, Bill has avidly fished the Florida Keys and Florida Bay in pursuit of bonefish and tarpon. It is extremely frustrating that 30 years after we learned of the need for better water management in South Florida, it still hasn't occurred at a scale sufficient to keep Florida Bay, the Caloosahatchee River, and the St. Lucie River healthy let alone restored. As anglers, policy makers and scientists, it has been devastating to watch fisheries collapse when all knowledgeable observers know what needs to be done to restore water quality in the Bay.<br><br>Florida Bay was once home to a robust bonefish fishery. Bonefish is a highly prized sport fish which is stalked in clear shallow waters, and released unharmed after an exciting catch. Following the Bay's mid-80's crisis, the bonefish population began to slide, the decline accelerating in 1999. The population hasn't recovered.<br><br>Tarpon and Snook have also suffered from the lack of Everglades restoration. These species rely upon the entire habitat mosaic of South Florida – from backwater mangrove swamps to mangrove shorelines, seagrass beds, and sandy beaches. This demonstrates how Florida Bay's ecological decline has impacted Tarpon, also a catch and release species. From Cape Sable and Flamingo south to Rabbit Key Basin and Buchanan Bank, big migratory Tarpon (Megalops Atlanticus) filter into the Bay every spring as part of the spawning run to the Atlantic waters off the Keys. Anglers and guides pursue the silver kings and routinely catch fish topping 100 pounds on fly rods. After the | |

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| | problems of the mid-80's, tarpon largely abandoned the Sandy Key Basin, which was a historic hot spot for the big silver fish, and similar abandonment is occurring in other locations. Inland, the tarpon use heavily Whitewater Bay and the Shark River complex. These Everglades waters host the full spectrum of Megalops Atlanticus from one pound juveniles to 150 pound matriarchs. Long term changes in water flows and salinity levels in these waters could put at risk the greatest remaining juvenile tarpon habitat in all of Florida.<br><br>As you might guess from our descriptions, the flats fishery is economically important. In the Florida Keys, the flats fishery has an annual economic impact of $465 million. The flats fishery is the major component of the recreational fishery in the Everglades region, which is worth nearly $1 billion annually. Restoration is essential to bringing these fish populations back to their historic levels.<br><br>It is widely recognized that failure to significantly increase freshwater flows to the Bay via Shark River and Taylor Slough is the primary cause of the Florida Bay crisis. The lack of water coming through the entire Everglades system creates hyper saline conditions that are death to a variety of important seagrasses. Large scale die offs of these grasses release excessive nutrients spurring algal blooms turning usually clear waters a sick pea soup green. Increased turbidity kills more grass, releasing more nutrients creating a death spiral. Vast swaths of previously healthy seagrass beds are now barren reaches of mud and silt, and recent observations show that these barren bottoms are eroding in some locations. Demise of the grass kills the benthic organisms that live their depriving forage fish of their food source. The loss of the forage fish causes the predatory game fish to leave too. It is an ecological and economic calamity.<br><br>The COP must utilize restoration infrastructure to maximize ecological benefits to Everglades National Park and Florida Bay. As the scoping of COP continues, we urge the agencies to ensure that the founding mission of ecosystem restoration is the primary focus and goal of your efforts. We also ask that members of the Florida Keys community, who will be directly impacted by the potential impacts of these projects and the benefits they provide to Florida Bay, be fully engaged in the COP planning process. | |
| **EVERGLADES COALITION (EC)** | | |
| **Comment Date: October 20, 2017** | | |
| **MARK PERRY & MICHAEL J. BALDWIN (EC) - 1** | On behalf of its 61 member organizations committed to the protection and restoration of America's Everglades, the Everglades Coalition submits these comments on the scoping assessment for the Combined Operational Plan | A stated goal of the 1994 C-111 South Dade GRR and EIS includes the reduction of damaging freshwater discharges to Manatee Bay and Barnes Sound while maintaining flood protection to agricultural lands east of the C-111 Canal. Goals also include the extension of hydroperiods within the ENP Eastern Panhandle, and the promotion of additional overland flows across the ENP Eastern Panhandle towards northeast Florida Bay. Implementation of COP is anticipated to increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the |

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| | (COP), to define operations for the constructed features of the Modified Water Deliveries (MWD) to Everglades National Park (ENP), C-111 Spreader Canal, and C-111 South Dade Projects.<br><br>We understand that the COP will result in a comprehensive, integrated water control plan for the operation of water management infrastructure associated with the MWD and C-111 projects. The Everglades Coalition and its member organizations have long advocated for the planning, funding, and construction of these critical projects to advance ecological restoration of the Southern Everglades and Florida Bay. MWD is a project initiated and funded by the National Park Service with the primary intention to benefit ENP, with ancillary goals for South Dade agriculture. The C-111 Spreader Canal and South Dade Projects seek to further correct the damage inflicted to Florida Bay and ENP by the C&SF Flood Control Project by reestablishing the hydrologic flow between Taylor Slough and Shark River Slough. Just like MDW, these projects keep the water in the natural areas and away from South Dade.<br><br>We appreciate the work by state and federal agencies that has resulted in the restoration infrastructure that is on the ground today and look forward to remaining engaged stakeholders through the COP planning process.<br><br>Finalizing the COP will be the realization of decades of work and millions of dollars in taxpayer investment by the American people to benefit Everglades National Park and Florida Bay. As such, maximizing ecological benefits to the Southern Everglades must be the primary focus of the COP. Specifically, the final plan should:<br>1. Eliminate the use of the S-197, as identified in the project documents.<br>2. Increase the canal stages of the C-111 at S-18C, as stated in the project documents.<br>3. Achieve restoration of water levels in ENP and Florida Bay, as stated in project documents.<br>4. Set the stage for more water deliveries to ENP and Florida Bay in anticipation of the Central Everglades Plan (CEPP), as planned in CERP.<br>5. Work to reduce harmful discharges to Barnes Sound and Manatee Bay.<br><br>With a completed network of restoration and flood control infrastructure in place, the COP can outline a plan to move away from damaging emergency operations that continue to harm the Greater Everglades ecosystem. Instead, we can rely on the restoration infrastructure that has long been planned to | Rocky Glades, and the eastern panhandle of ENP by defining operations for the completed components of the MWD and C-111 South Dade Projects. Implementation of the MWD operational field tests (*i.e.* Increment 1, 1.1, 1.2 and 2) included operational criteria that increased the potential for additional low volume releases at S-197. This additional operational flexibility was included within the MWD operational field tests due to uncertainty resulting from increased stages in NESRS and the potential for increased seepage to the L-31N Canal south of S-331. It is the intent of the Corps to re-evaluate operational criteria previously defined for this structure during COP.<br><br>The SFWMD has implemented features of the C-111 Spreader Canal Western Project under the State Expedited Construction program (i.e. Accelerate Everglades Restoration Project [Acceler8]) for the purpose of expediting design and construction of a number of critical restoration projects consistent with the CERP. A Department of Army permit (SAJ-2005-9856 [IP-AAZ]) was issued to the SFWMD on October 14, 2009 for the construction and operation of the project. Initial construction of the C-111 Spreader Canal Western Project was completed in January 2012 with completion of the Frog Pond Detention Area, partial Aerojet Canal features, plugs in the C-110 Canal, and a plug at S-20A. Construction of the remaining two southern weirs along the Aerojet Canal began in November 2014 and was completed in early 2015. Construction of a new water control structure in the lower C-111 Canal (i.e. S-198, which would be located south of S-18C) and incremental increases in the open/close stage triggers at S-18C have not yet been implemented. The SFWMD initiated operation of the C-111 Spreader Canal Western Project constructed components in June 2012, in accordance with the Project Operating Manual (POM) developed with the PIR. At the request of SFWMD, a revised POM was approved in June 2016. Steps will be taken in the future to incorporate the 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 (PPA) between the Corps and SFWMD has been executed. Pending execution of the PPA, operation of the C-111 Spreader Canal Western Project is not included as part of the 2012 WCAs, ENP, and ENP to SDCS Water Control Plan (hereafter referred to as the 2012 Water Control Plan) (USACE 2012c) or within the scope of COP.<br><br>The SFWMD will continue to operate their expedited C-111 Spreader Canal Western Project. Consistent with the requirements of the February 2017 re-issued C-111 Spreader Canal regulatory permit from the Corps, the SFWMD is continuing to assess south Miami-Dade water conditions and existing operations, including those of the C-111 Spreader Canal Project, on a quarterly basis for a minimum of five years to ensure project features are constructed and operated not to adversely affect adjacent lands outside and within the C-111 Spreader Canal Western Project boundary with regards to water quantity, water quality, and/or flooding. The purpose of the assessment and quarterly reports are to ensure the SFWMD has the best available information to determine what operational system changes, if any, are necessary to avoid adverse water levels on adjacent lands. It is presently anticipated that additional information generated from the ongoing SFWMD monitoring within the C-111 Spreader Canal Western Project area will be considered during development of the COP. |

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| | move water in a way that is both beneficial to the natural system and protective of stakeholders in Miami-Dade County.<br><br>We look forward to remaining engaged through the COP planning process and appreciate the opportunity to provide comments on the scope of this effort. Thank you for your consideration. | |
| **LAKE WORTH WATERKEEPER (LWWK)** | | |
| **Comment Date: October 21, 2017** | | |
| **REINALDO DIAZ, J.D. (LWWK) - 1** | We write in response to the public comment request regarding the COP for the MWD and C-111 SD Projects. Simply stated: Everglades' restoration is a concern for the entire state. A healthy Everglades has long reaching effects felt throughout its surrounding areas. Our health, lifestyle, and tourism industry all benefit from a healthy Everglades.<br><br>Tourism is clearly a major driver of our GDP. In 2014, over 97 million people visited our state bringing $82 billion with them (1). $4.9 billion was collected as sales tax. *Id*. 1,145,800 Floridians were employed in the tourism industry. *Id*. Here in Palm Beach County, tourism is among our major industries bringing in $7 billion and supporting 60,000 plus tourism related jobs(2). And it's no secret that the vast majority of these tourists come here for our beaches.<br><br>Despite this, it seems that decisions are being made with little to no consideration for our community's dependence on this industry. Through the Water Resource Development Act (WRDA) of 2000's *savings clause* big agriculture (predominantly big sugar) is given the highest priority in water management (3). Water contaminated with bacteria, and harmful algae promoting nutrients is pumped into Lake Okeechobee to protect the massive monoculture farms. But eventually, this water moves through our community and reaches our beaches. Bringing unsightly dark brown and dirty water that turns tourists off of our beaches, prevents them from scuba diving our reefs, or ruins their fishing day.<br>• 1 VISIT FLORIDA: TOURISM FAST FACTS, https://www.visitflorida.org/about-us/what-we-do/tourism-fast-facts/ (last visited Oct. 20, 2017).<br>• 2 PBC TOURIST DEVELOPMENT COUNCIL: ABOUT US, http://discover.pbcgov.org/touristdevelopment/Pages/default.aspx (last visited Oct. 20, 2017).<br>• 3 Water Resources Development Act of 2000 Section 601(h) (5) Savings Clause.<br>Our water is a way of life. Much like how agriculture is engrained into the culture of the interior communities: boating, diving, fishing, surfing, etc. | Thank you for your comment. The Corps recognizes that tourism is a major driver to the Florida economy and HAB events are not desirable for tourism.<br>The estuaries/beaches major source of nutrients and fresh water is from local runoff over the long term. Lake Okeechobee, while contributing a portion of the nutrient loading to the estuaries, has one of the lowest average nutrient concentration averages for the sources to the estuaries. The Corps agrees that reducing nutrient loading and freshwater pulses (which Lake Okeechobee contributes to) to the estuaries would help reduce HAB potential and works closely with the State and local government agencies to best manage the system under current constraints. Having a greater storage capacity for fresh water storage throughout the system will give the water managers more options to better manage high freshwater discharges to the estuaries from Lake Okeechobee. One of the main items needed is greater storage capacity, which is expected to improve as many projects come on like. High continuous freshwater discharges to the estuaries from all sources increase risk of HAB events. Extreme rainfall events leave few options if all storage areas are full as happened during the 2017 and 2016 WY.<br><br>Recent study conducted by Martin County involved sampling for conservative tracers, within the St Lucie estuary, associated with sanity waste (i.e. septic tanks) during suspension of Lake O flows to the estuary. It was determined that the conservative tracers associated with sanitary wastes came from local runoff not Lake Okeechobee.<br><br>The Corps is working closing with State and Federal Agencies to find better coping strategies to minimize HAB risk. While the Corps is concerned with water quality issues, it does not have the authority to control or reduce nutrient inputs to Lake Okeechobee or nutrient discharges from local runoff. |

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| | defines the culture of the coastal communities. This is the lifestyle that we like to share with tourists. But it is severely compromised by dirty water.<br>Our health is impacted when exposed to the bacteria and harmful algae brought by this dirty water. Many of the contaminants associated with farm runoff have been linked to degenerative diseases and even death.<br><br>For example, cyanobacteria thrives on the nutrients in the water that is pumped into Lake Okeechobee. When its overabundance reaches a bloom, cyanobacteria kills wildlife, most notoriously with massive fish kills. In addition, cyanobacteria produce a number of cyanotoxins, leading to serious immediate health concerns that require water closures. Cyanobacteria can also produce beta-Methylamino-L-alanine (BMAA), a substance that is a suspected causal link to a number of serious neurodegenerative diseases including Alzheimer's, Armyotrophic Lateral Sclerosis (ALS), and Parkinson's disease(4).<br><br>This is hardly the environment we want to sell to our community. Residents and tourists alike come here for clean, clear beaches. So we are asking the USACE to consider our needs in this water management plan. Let us be clear, this is by no means an attack on the interior communities surrounding Lake Okeechobee that depend on the agriculture industry. Rather, we are asking to have the coastal community's needs considered fairly and balanced with the needs of the agricultural community.<br><br>If the priority that is given to big agriculture is a matter of current convoluted policy, then we need to have a dialogue to begin the change of this policy. There is no reason to maintain the status quo if it does not benefit the state's interest. For too long big agriculture has been given top priority in water management at the expense of the surrounding communities. A balance needs to be found, to safeguard our health, lifestyle, and industry. | |
| **FLORIDA KEYS FISHING GUIDES ASSOCIATION INC. (FKFG)** | | |
| **Comment Date: October 17, 2017** | | |
| **CAPT. STEVE FRIEDMAN, COMMODOR (FKFG) - 1** | Everglades National Park and Florida Bay are incredible environmental and economic resources for those of us who live and work in the beautiful Florida Keys. For years, the health of the Southern Everglades and Florida Bay have been in decline, impacting the coral reef ecosystems and fish populations that sustain our fishing, diving, and other water based businesses – the backbone of Monroe County's $2.7 billion tourism economy.<br><br>Restoration projects to improve the conditions of the Southern Everglades and Florida Bay have been planned for decades. Now, the Combined Operational Plan (COP) will see guidelines for how the agencies operate the projects that will restore Everglades National Park, including the Modified | Thank you for your comment. Implementation of COP is anticipated to increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP. The Corps is committed to implementing COP in order to continue progress in Everglades restoration. Implementation of the Proposed Action is anticipated in 2019 following completion of the necessary NEPA documentation including the Final EIS and ROD. Please refer to comment BTT-1 for information related to potential tools the Corps will utilize to evaluate potential effects to Florida Bay. The Corps concurs that changes in the quantity, quality, timing, and distribution of freshwater flows is essential to restoration of the south Florida ecosystem, including Florida Bay. |

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| | Water Deliveries (MWD), C-111 South Dade, and C-111 Spreader Canal projects. We understand that the Army Corps and its partner agencies are accepting public comment on the scope of this operations plan.<br><br>As fishing guides and members of the Florida Keys community, we strongly assert that restoration projects must maximize ecological benefits to Everglades National Park and Florida Bay. We live and work in the heart of the ecosystem and understand firsthand the damage that has been done. Our fisheries, wildlife and important habitats continue to be plagued by lack of freshwater flow. The hyper-salinity events and seagrass die-offs are too much for this ecosystem to handle. We must give it a chance to come back. Now is the time to complete these projects. Florida Bay desperately needs more freshwater.<br><br>Americans have invested millions of taxpayer dollars in projects to restore Evergaldes National Park, which is a unique piece of our national heritage that we all own and treasure. We must ensure that all restoration infrastructure is used to protect and restore the Everglades. | |
| **PRIVATE CITIZENS** | | |
| **Comment Date: October 19, 2017** | | |
| **BRIAN O'NEILL _ 1** | Please stop killing the Estuaries for price supported sugar now. This may in fact end up being a huge RICO case. The Corps of Engineers has an ethical responsibility to RESTORE the River or Grass as expressed by Amendment 1! | There have been several state and federal efforts implemented or being implemented that improve the timing and distribution of water throughout the system. Currently, both state and federal projects are in various phases of implementation, including construction, design, and planning. The system is constantly being improved with every project that is completed. COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure associated with the MWD and C-111 South Dade Projects in Miami Dade County. Many of the MWD and C-111 South Dade Project features have been built and/or are nearing completion. Water management operating criteria defined during development of COP will be incorporated into the 2012 WCAs, ENP and ENP to SDCS Control Plan following completion of NEPA. The 2012 Water Control Plan guides operations for associated C&SF infrastructure in south Florida. Implementation of COP will allow the opportunity to send water south and increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP.<br><br>Storage south of the lake currently being considered under the State of Florida's Senate Bill 10, in combination with (1) new storage north of the Lake (being developed as part of LOWP; (2) storage reservoirs being constructed east of the lake (C-44 Reservoir and other reservoirs and STAs associated with the approved Indian River Lagoon-South Project) and west of the lake (C-43 Reservoir); and (3) completion of additional infrastructure to allow flow south of the lake under the CEPP, will serve to restore a more natural system wide hydrology within the entire Everglades ecosystem as envisioned by CERP. Benefits to the Northern Estuaries will be achieved through the continued implementation of these projects. |
| **Comment Date: October 19, 2017** | | |
| **DONNA J. LUCAS - 1** | The Everglades itself is at the very least as important as the people living in south Florida on borrowed swamp. South Florida needs more land? Take it | Programs are in place in the watershed that are specifically focused on water quality such as the FDEP's Basin Management Action Plans and the SFWMD's Lake Okeechobee Protection Program which serves as the overarching water quality restoration plans for the Northern Estuaries including Lake Okeechobee. The creation of storage north of Lake Okeechobee, |

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| | from the sea Atlantic not the fragile gulf of Florida, almost always nature will win eventually especially water. The Dutch do this excellently.<br><br>The Lake Okeechobee is really artificial now with its dams and earthen mounds. Engineers can solve the pollution problem was a plan in conjunction with the sugar plantations. The sugar needs to recycle all their water. Laden with algae this could be a source of energy to resell whomever funds it. The clean water resold or for irrigation. We build sewage treatment plants everywhere recycling poo poo into drinking water should be very easy especially if the algae diverted produces energy. This is done in many places. Only clean water back south to the people and glades. The lake is excess water from hurricanes and of course now the folks populating south Florida. Over flow needs to return to the Everglades, gulf of Florida, and people of south Florida clean. Not uncleaned to the Atlantic and her shores.<br><br>The Army Corps of Engineers is looking at the whole of Florida for a master plan even if plan designs specifically are bid for private firms. The least bureaucracy, EPA, everyone knows the rules, South Florida Water, South West Water, The Army Corps of Engineers, and good private firms. Corp of Engineers doing a master State plan not the details, as much as, the ideals. All the other just need to follow with design with proposals and then have the water districts offer contracts for bid. We do not need. Committee of legislators to collaborate on the designs, they are not smart enough to understand or be taught and slow any progress.<br><br>We have the brightest engineers in Florida, environmental and civil design, private and public. This state is already so environmentally minded. With few polluting companies. The sugar company pays corporate taxes evens out export, it has to be profitable for them too, a way for energy.<br><br>Thank you for considering recycling of sugar water. | currently being proposed under the LOWP, if authorized and appropriated, will positively affect the quality of freshwater released to the estuaries which may result in improved salinity and reduced nutrient loading to estuarine waters. |
| **Comment Date: October 19, 2017** | | |
| **JON ROBERTSON - 1** | I live in Stuart Florida and would like to see the USACE prioritize human safety by increasing the outflow capability south of the lake into the STAs and future reservoir, including removing barriers that currently restrict the capability of sending water south. In 2013, 2016 and this year the large rain events caused unnatural discharges to the east and west coasts. With a larger capacity to hold water in the lake and more storage north and south of the lake these damaging discharges would be largely decreased and increase safety for residents in the Glades, Martin county and Lee county by reducing the polluted water discharging to the coasts. | There have been several state and federal efforts implemented or being implemented that improve the timing and distribution of water throughout the system. Currently, both state and federal projects are in various phases of implementation, including construction, design, and planning. The system is constantly being improved with every project that is completed. COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure associated with the MWD and C-111 South Dade Projects in Miami Dade County. Many of the MWD and C-111 South Dade Project features have been built and/or are nearing completion. Water management operating criteria defined during development of COP will be incorporated into the 2012 WCAs, ENP and ENP to SDCS Control Plan following completion of NEPA. The 2012 Water Control Plan guides operations for associated C&SF infrastructure in south Florida. Implementation of COP will allow the opportunity to send water south and increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP. |

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| | | Storage south of the lake currently being considered under the State of Florida's Senate Bill 10, in combination with (1) new storage north of the Lake (being developed as part of LOWP; (2) storage reservoirs being constructed east of the lake (C-44 Reservoir and other reservoirs and STAs associated with the approved Indian River Lagoon-South Project) and west of the lake (C-43 Reservoir); and (3) completion of additional infrastructure to allow flow south of the lake under the CEPP, will serve to restore a more natural system wide hydrology within the entire Everglades ecosystem as envisioned by CERP. Benefits to the Northern Estuaries will be achieved through the continued implementation of these projects. |
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| **SANDY BLAIR - 1** | It is beyond my comprehension how the water system has been allowed to deteriorate to the point it is.<br><br>Polluted water from Lake Okeechobee is destroying the livelihoods of commercial fisherman, fishing guides, those who depend on tourists visiting our once-but-no-longer pristine beaches and waterways.<br><br>The sugar industry has contaminated the course of action for too long. It is time to stop pandering to a business whose very existence is a detriment to the health of the nation – the first thing doctors tell overweight patients… CUT OUT THE SWEETS i.e. SUGAR.<br><br>There is something wrong with this picture. Just do what is necessary to protect the people and the economy of the state. SEND THE WATER SOUTH. | There have been several state and federal efforts implemented or being implemented that improve the timing and distribution of water throughout the system. Currently, both state and federal projects are in various phases of implementation, including construction, design, and planning. The system is constantly being improved with every project that is completed. COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure associated with the MWD and C-111 South Dade Projects in Miami Dade County. Many of the MWD and C-111 South Dade Project features have been built and/or are nearing completion. Water management operating criteria defined during development of COP will be incorporated into the 2012 WCAs, ENP and ENP to SDCS Control Plan following completion of NEPA. The 2012 Water Control Plan guides operations for associated C&SF infrastructure in south Florida. Implementation of COP will allow the opportunity to send water south and increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP.<br><br>Storage south of the lake currently being considered under the State of Florida's Senate Bill 10, in combination with (1) new storage north of the Lake (being developed as part of LOWP; (2) storage reservoirs being constructed east of the lake (C-44 Reservoir and other reservoirs and STAs associated with the approved Indian River Lagoon-South Project) and west of the lake (C-43 Reservoir); and (3) completion of additional infrastructure to allow flow south of the lake under the CEPP, will serve to restore a more natural system wide hydrology within the entire Everglades ecosystem as envisioned by CERP. Benefits to the Northern Estuaries will be achieved through the continued implementation of these projects. |
| **Comment Date: October 20, 2017** | | |
| **BARBARA BRENNAN - 1** | I request that the Corps prioritize the impact of discharges from Lake Okeechobee on the health and safety of residents of riverside communities, the health of Florida's waters, and the renewal of the Everglades as it plans COP. | Thank you for your comment. Health and human safety is a priority for the Corps in all Federal actions pursued including daily operations of Lake Okeechobee and the operation of the C&SF Project. |
| **Comments Date: October 20, 2017** | | |
| **CHARLES WIGHTMAN - 1** | Please see the antiquated rules governing the watershed of Florida and the EEA get updated to today's times and populations of people in Florida.<br><br>It is time to place the top priorities of water management for the benefit and protection of the people and the natural resources of the state of Florida and not for BIG SUGAR & THE EEA. | Thank you for your comment. Health and human safety is a priority for the Corps in all Federal actions pursued including daily operations of Lake Okeechobee and the operation of the C&SF Project. COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure associated with the MWD and C-111 South Dade Projects in Miami Dade County. Many of the MWD and C-111 South Dade Project features have been built and/or are nearing completion. Water management operating criteria defined during development of COP will be incorporated into the 2012 WCAs, ENP and ENP to SDCS Control Plan following completion of NEPA. The 2012 Water Control Plan guides operations for associated C&SF infrastructure in south Florida. Implementation of COP will allow the opportunity to send water south and increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP. |

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| **Comment Date: October 20, 2017** | | |
| **DOUG KILPATRICK, LOWER KEYS GUIDES ASSOCIATION - 1** | The Lower Key Guides Association is comprised of over 150 members, many of whom make a living by practicing catch and release methods of fishing in and around the boundaries of Evergaldes national Park.<br><br>It is our understanding that there is currently a comment period in which the Army Corps and its affiliates are accepting public comment on the COP guidelines for restoration efforts, including Modified Water Deliveries, C-111 Spreader Canal and C-111 South Dade projects.<br><br>We understand too well the economic impact of reduction in fish population's ad habitat. The ongoing ecological issues in the Park, including the lack of fresh water flow and seagrass die-offs, cause economic losses to not only our membership but to the entire Florida economy. We urge you to understand the negative economic impacts we have felt recently, and look toward their solution, with an infrastructural restoration that is used to restore the ENP. | Thank you for your comment. Implementation of COP is anticipated to increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP. The Corps is committed to implementing COP in order to continue progress in Everglades restoration. Implementation of the Proposed Action is anticipated in 2019 following completion of the necessary NEPA documentation including the Final EIS and ROD. Please refer to comment BTT-1 for information related to potential tools the Corps will utilize to evaluate potential effects to Florida Bay. The Corps concurs that changes in the quantity, quality, timing, and distribution of freshwater flows is essential to restoration of the south Florida ecosystem, including Florida Bay. |
| **Comment Date: October 20, 2017** | | |
| **MARK HORWEDEL - 1** | I am writing in support of the COP plan. While I understand some of the limitations the Corps operates under, I am appealing to your collective conscience in helping Florida's citizens throw-off the suppression of public interests by a handful of sugar moguls and corrupt politicians who have permitted the destruction of our waterways to go unchecked for decades.<br><br>I own a property in Martin County which is baring the full brunt of pollution from Okeechobee runoff. It's shocking to witness the mess that has been made of the Indian River Lagoon and the St. Lucie River, not to mention the destruction in wildlife that has occurred.<br><br>Please accelerate your efforts to develop solutions that will spare out waterways from continues destruction, return the flow of the water south and sacrifice the demands of special interests for the public interest.<br><br>Thanks in advance for your efforts to return Florida to Floridians. | There have been several state and federal efforts implemented or being implemented that improve the timing and distribution of water throughout the system. Currently, both state and federal projects are in various phases of implementation, including construction, design, and planning. The system is constantly being improved with every project that is completed. COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure associated with the MWD and C-111 South Dade Projects in Miami Dade County. Many of the MWD and C-111 South Dade Project features have been built and/or are nearing completion. Water management operating criteria defined during development of COP will be incorporated into the 2012 WCAs, ENP and ENP to SDCS Control Plan following completion of NEPA. The 2012 Water Control Plan guides operations for associated C&SF infrastructure in south Florida. Implementation of COP will allow the opportunity to send water south and increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP.<br><br>Storage south of the lake currently being considered under the State of Florida's Senate Bill 10, in combination with (1) new storage north of the Lake (being developed as part of LOWP; (2) storage reservoirs being constructed east of the lake (C-44 Reservoir and other reservoirs and STAs associated with the approved Indian River Lagoon-South Project) and west of the lake (C-43 Reservoir); and (3) completion of additional infrastructure to allow flow south of the lake under the CEPP, will serve to restore a more natural system wide hydrology within the entire Everglades ecosystem as envisioned by CERP. Benefits to the Northern Estuaries will be achieved through the continued implementation of these projects. |
| **Comment Date: October 20, 2017** | | |
| **LISA CARRUTHERS - 1** | Please prioritize Lake Okeechobee's impact on the health and safety of glades residents and riverside communities as you plan COP. The known impacts of toxic algae must take priority over industry "wants". As a health care professional, I know that the cumulative effects of exposure to these toxins | Thank you for your comment. Health and human safety is a priority for the Corps in all Federal actions pursued including daily operations of Lake Okeechobee and the operation of the C&SF Project. |

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| | will sky rocket, causing more illness and death in future years. The run off needs to be set south, as it was intended before the interference of money motivated businessmen and politicians. | |
| **Comment Date: October 20, 2017** | | |
| **LOUIS BROUILLARD - 1** | Put me down as a voice for returning as much water possible to Florida Bay, and reducing the discharges to the coastal estuaries.<br>Ps, I do not support deep injection wells north of the lake. Frankly the sugar baron's tails have wagged the dog too long. | The construction of deep injection wells north of Lake Okeechobee is outside the scope of this project. The COP defines operations for completed features of the MWD and C-111 South Dade Projects. The associated NEPA documentation to be completed in 2019 is an operational plan, not a feasibility report that is submitted to Congress for authorization and appropriations for construction. A stated goal of the 1994 C-111 South Dade GRR and EIS includes the reduction of damaging freshwater discharges to Manatee Bay and Barnes Sound while maintaining flood protection to agricultural lands east of the C-111 Canal. Goals also include the extension of hydroperiods within the ENP Eastern Panhandle, and the promotion of additional overland flows across the ENP Eastern Panhandle towards northeast Florida Bay. The Corps concurs that changes in the quantity, quality, timing, and distribution of freshwater flows is essential to restoration of the south Florida ecosystem, including Florida Bay and is committed to implementing COP in order to continue progress in Everglades restoration. |
| **Comments Date: October 20, 2017** | | |
| **MATTHEW JONES - 1** | As a lifelong Florida citizen who grew up in Vero Beach along the Indian River Lagoon, and currently lives in Tampa, I support merging the Combined Operational Plan (COP) with the Lake Okeechobee Regulation Schedule (LORS). This is the best way for the Army Corps of Engineers to obtain a holistic understanding of how water moves throughout the entire South Florida system. It will take into account health and human safety as top priorities. I believe we have an opportunity to do for wetlands what Allan Savory has done for grasslands. I agree with the statement made by bullsugar.org in its October 19th article: "It's time to consider how much total drainage and water are available and manage it as a single, interconnected set of resources." Please enter my thoughts unto the public record regarding this issue. | Regulation schedule changes for Lake Okeechobee will not be included in the COP. The COP defines operations for completed features of the MWD and C-111 South Dade Projects. An updated Lake Okeechobee Regulation Schedule study will be completed to coincide with completion of the Herbert Hoover Dike (HHD) rehabilitation, which is currently scheduled for 2025. The Corps is working with the State of Florida to explore opportunities to accelerate implementation of HHD rehabilitation and the associated Lake Okeechobee Regulation Schedule study. |
| **Comment Date: October 20, 2017** | | |
| **ROSTY CARYK - 1** | I am a resident of Florida and am very concerned about the unacceptable control the Sugar industry has over the water quality of waters of the US in Florida. Please to prioritize Lake Okeechobee's impact on the health and safety of glades residents and riverside communities as it plans COP. | Thank you for your comment. Health and human safety is a priority for the Corps in all Federal actions pursued including daily operations of Lake Okeechobee and the operation of the C&SF Project. |
| **Comment Date: October 20, 2017** | | |
| **TOM WALLS - 1** | Please prioritize Lake Okeechobee's impact on the health and safety of glades residents and riverside communities as it plans COP.<br>"It's time to change the priorities in this system and place health and human safety above all else. It's time to consider how much total drainage and water are available and manage it as a single, interconnected set of resources." | Thank you for your comment. Health and human safety is a priority for the Corps in all Federal actions pursued including daily operations of Lake Okeechobee and the operation of the C&SF Project. |
| **Comment Date: October 20, 2017** | | |

| COMMENTER | AGENCY/PUBLIC COMMENT | U.S. ARMY CORPS OF ENGINEERS (USACE) RESPONSE |
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| **KATHLEEN MCELROY – 1** | Prioritize Lake Okeechobee's impact on the health and safety of glades residents and riverside communities as it plans COP.<br>Kathleen McElroy | Thank you for your comment. Health and human safety is a priority for the Corps in all Federal actions pursued including daily operations of Lake Okeechobee and the operation of the C&SF Project. |
| **Comment Date: October 20, 2017** | | |
| **MARY K VAN KLEUNEN - 1** | I am writing regarding my concern for the water quality in the Atlantic and Gulf as a result of the discharges from Lake Okeechobee. This needs resolution, not more studies. I support the southern reservoir and anything the Corps can do to return the water flow to its natural state and allow the Everglades to once again become a filter. This is a quality of life issue (infections, unable to enjoy the state's natural resources), as well as a business issue (tourism, fishing industry). | Programs are in place in the watershed that are specifically focused on water quality such as the FDEP's Basin Management Action Plans and the SFWMD's Lake Okeechobee Protection Program which serves as the overarching water quality restoration plans for the Northern Estuaries including Lake Okeechobee. The creation of storage north of Lake Okeechobee, currently being proposed under the LOWP, if authorized and appropriated, will positively affect the quality of freshwater released to the estuaries which may result in improved salinity and reduced nutrient loading to estuarine waters.<br>The continued implementation of projects under CERP will provide ancillary water quality benefits north and east and west of Lake Okeechobee as storage of water in reservoirs and the associated attenuation of peak flows resulting in increased residence time is expected to lead to a reduction in nutrients and sediments reaching Lake Okeechobee and the Northern Estuaries.<br><br>Water management operating criteria defined during development of COP will be incorporated into the 2012 WCAs, ENP and ENP to SDCS Control Plan following completion of NEPA. The 2012 Water Control Plan guides operations for associated C&SF infrastructure in south Florida. Implementation of COP will allow the opportunity to send water south and increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP. |
| **Comment Date: October 21, 2017** | | |
| **CHARLES GERBER - 1** | The current conditions of our waters is Criminal!! The antiquated. Regulations that allows, back pumping, and dumping overages into our rivers needs to be updated considering our current understanding of health risks and flood conditions.... Big Sugar should not "trump" the people's needs and their health concerns.<br><br>We have talked about this far too long. It is time for action! The water needs to be cleansed and flow south. The glades need it. "We the people "need it. I live on the river. The water prior to dumping was clear to the point I could see the bottom in 4-5'. Within. Hours of dumping. The water became muddy. And smelled heavy of fertilizer (not in my mind). I took friends toward the South Fork dam. Without mentioning they both said" what is that awful smell"? It didn't exist prior!!!! We all know the cause. Come on. Let's stop talking and start fixing. It doesn't require years of consideration. Big sugar should not be able to back pump. They too should feel the pain from water events!!!! Our tourist industry is in the crapper and it will eventually effect our property values as well. Change the World War II Permits Immediately they don't apply. Health issues are real. We can't even swim and fish are dying. Please look past the noise created by the self-serving arguments by big sugars lobbyists! Please help…. | There have been several state and federal efforts implemented or being implemented that improve the timing and distribution of water throughout the system. Currently, both state and federal projects are in various phases of implementation, including construction, design, and planning. The system is constantly being improved with every project that is completed. COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure associated with the MWD and C-111 South Dade Projects in Miami Dade County. Many of the MWD and C-111 South Dade Project features have been built and/or are nearing completion. Water management operating criteria defined during development of COP will be incorporated into the 2012 WCAs, ENP and ENP to SDCS Control Plan following completion of NEPA. The 2012 Water Control Plan guides operations for associated C&SF infrastructure in south Florida. Implementation of COP will allow the opportunity to send water south and increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP.<br><br>Storage south of the lake currently being considered under the State of Florida's Senate Bill 10, in combination with (1) new storage north of the Lake (being developed as part of LOWP; (2) storage reservoirs being constructed east of the lake (C-44 Reservoir and other reservoirs and STAs associated with the approved Indian River Lagoon-South Project) and west of the lake (C-43 Reservoir); and (3) completion of additional infrastructure to allow flow south of the lake under the CEPP, will serve to restore a more natural system wide hydrology within the entire Everglades ecosystem as envisioned by CERP. Benefits to the Northern Estuaries will be achieved through the continued implementation of these projects. |
| **Comment Date: October 21, 2017** | | |

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| **LAETITIA CINDRIC - 1** | I really find it stupendously insulting that after the 20-30 years of trying to reroute water south to replenish the Everglades is now back to a stupid study by the USACE. Untold millions of tax dollars spent over and over and OVER AGAIN to study the same thing. And yet, the voters vote again and again and AGAIN to purchase the land from BIG SUGAR AND BIG AG and send the damn water south. And you don't do it. You hem and you haw and corporate money changes hands and nothing gets done. Nothing gets done and nothing gets done and Big Sugar just keeps rolling along. And the Everglades are close to death. And you have NOTHING. To show for your damn existence. Nothing ever changes and nothing ever happens to break the stalemate.<br><br>Personally, I think you suck at your jobs. A bureaucratic quagmire. FIRST, DO NO HARM. We need water. We don't need more effing sugar subsidies. Incredible taxpayer waste. SEND THE ******* WATER SOUTH and stop ******* around with citizens and the environment. Get busy or get out. | There have been several state and federal efforts implemented or being implemented that improve the timing and distribution of water throughout the system. Currently, both state and federal projects are in various phases of implementation, including construction, design, and planning. The system is constantly being improved with every project that is completed. COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure associated with the MWD and C-111 South Dade Projects in Miami Dade County. Many of the MWD and C-111 South Dade Project features have been built and/or are nearing completion. Water management operating criteria defined during development of COP will be incorporated into the 2012 WCAs, ENP and ENP to SDCS Control Plan following completion of NEPA. The 2012 Water Control Plan guides operations for associated C&SF infrastructure in south Florida. Implementation of COP will allow the opportunity to send water south and increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP.<br><br>The purchasing of land within the EAA is outside the scope of COP. The Corps looks forward to working alongside the SFWMD to update the Integrated Delivery Schedule for implementation of Everglades restoration and determine the next steps in our collective restoration efforts. The passage of Senate Bill 10by the State of Florida requires a Post-Authorization Change Report (PACR) to reconfiguring the congressionally authorized Central Everglades Planning Project's A-2 Flowage Equalization Basin structure into a deep storage reservoir. Upon completion and identification of a recommended plan, the PACR would be transmitted to Congress for authorization. Once authorized by Congress, the Corps would be able to request construction funds for execution of a Project Partnership Agreement (PPA) and construction initiation.<br><br>Storage south of the lake in combination with (1) new storage north of the Lake (being developed as part of the Lake Okeechobee Watershed Restoration Project (LOWP); (2) storage reservoirs being constructed east of the lake (C-44 Reservoir and other reservoirs and STAs associated with the approved Indian River Lagoon-South Project) and west of the lake (C-43 Reservoir); and (3) completion of additional infrastructure to allow flow south of the lake, will serve to restore a more natural system wide hydrology within the enter Everglades ecosystem as envisioned by CERP. |
| **Comment Date: October 22, 2017** | | |
| **PAULA TURNER - 1** | Please prioritize Lake Okeechobee's Impact on the Health and safety of Glades residents and Riverside Communities as you Plan COP, not giving priority to the sugar industry. Consider the total drainage and Water is available and manage it as a single, interconnected resource or combine COP and LORS and manage drainage and lake levels together. Toxic Algae blooms are destroying our wildlife and rivers. Please help us with proper consideration. Thanks. | Thank you for your comment. Health and human safety is a priority for the Corps in all Federal actions pursued including daily operations of Lake Okeechobee and the operation of the C&SF Project. COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure associated with the MWD and C-111 South Dade Projects in Miami Dade County. Many of the MWD and C-111 South Dade Project features have been built and/or are nearing completion. Water management operating criteria defined during development of COP will be incorporated into the 2012 WCAs, ENP and ENP to SDCS Control Plan following completion of NEPA. The 2012 Water Control Plan guides operations for associated C&SF infrastructure in south Florida. Implementation of COP will allow the opportunity to send water south and increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP.<br><br>Programs are in place in the watershed that are specifically focused on water quality such as the FDEP's Basin Management Action Plans and the SFWMD's Lake Okeechobee Protection Program which serves as the overarching water quality restoration plans for the Northern Estuaries including Lake Okeechobee. The creation of storage north of Lake Okeechobee, currently being proposed under the LOWP, if authorized and appropriated, will positively affect the quality of freshwater released to the estuaries which may result in improved salinity and reduced nutrient loading to estuarine waters. |

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| | | Changes to LORS 2008 are outside the scope of COP. An updated Lake Okeechobee Regulation Schedule study will be completed to coincide with completion of the Herbert Hoover Dike (HHD) rehabilitation, which is currently scheduled for 2025. The Corps is working with the State of Florida to explore opportunities to accelerate implementation of HHD rehabilitation and the associated Lake Okeechobee Regulation Schedule study. |
| **Comment Date: October 20, 2017** | | |
| **ALLISON M. E.,**<br><br>**BONNIE E. BARNES**<br><br>**LAURA AND DON BROOKS**<br><br>**DAVID DIMMEL**<br><br>**CARLOS ESTAPE**<br><br>**BETHANY FOWLER**<br><br>**FRED HARTNER**<br><br>**LAUREN L. HARTNER**<br><br>**COLIN HOWE**<br><br>**JIM SPENCER**<br><br>**KEITH KROPF**<br><br>**LOUIS LINDER**<br><br>**ELENA M.F. MURATORI**<br><br>**ROBERT W. MURRAY** | The lifestyle and economy of the Florida Keys are intrinsically linked to the health of ENP and Florida Bay. Clean water to sustain the ecosystem is key.<br><br>Restoration projects to benefit ENP and the Florida Keys have been under construction for many years, paid for by significant taxpayer investment. Now, writing an operations plan for how to use these projects is the critical next step. This is the time to achieve the ecosystem benefits we desperately need in the keys.<br><br>Please ensure that protecting the waters of the southern Everglades and Florida Bay is the top priority for operating restoration projects in south Miami-Dade!<br><br>These projects include the Modified Water Deliveries (MWD), C-111 South Dade, and C-111 Spreader Canal Projects, which will be guided by the Combined Operation Plan (COP) currently under consideration by the U.S. Army Corps of Engineers and other state and federal agencies.<br><br>As a member of the Florida keys community, responsible operation of these projects to maximize restoration benefits for the everglades and Florida Bay is important to me. | Thank you for your comment. Implementation of COP is anticipated to increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP. The Corps is committed to implementing COP in order to continue progress in Everglades restoration. Implementation of the Proposed Action is anticipated in 2019 following completion of the necessary NEPA documentation including the Final EIS and ROD. |

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| **NADIA SPENCER**<br><br>**SIENNA PICHARD**<br><br>**JACOB POELMA**<br><br>**JAMES P. SCHMEISER**<br><br>**BURMLEY TRUAX**<br><br>**LISA MONGELIA** | | |
| **Comment Date: October 26, 2017** | | |
| **ALICE NAGELE - 1** | I just wanted to let you know, as an area citizen (West Palm Beach, FL), that I am for the usage of funds both to repair the H. Hoover Dike and for creating a means to move excess water away from our Indian River estuary system. | The purpose of COP is to define operations for the constructed features of the MWD to ENP and C-111 South Dade Projects. The COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure associated with these projects. Features of the MWD and C-111 South Dade Projects are located in Miami-Dade County, including portions of ENP and adjacent areas. Operations for water management within WCA 3A located in Broward County will also be considered. The Proposed Action does not include operational modifications to the current Lake Okeechobee Regulation Schedule (LORS 2008). Separate planning efforts are currently underway that will provide opportunities for better management of lake water levels and the reduction of high volume discharges to the Northern Estuaries.<br><br>The Herbert Hoover Dike Dam Safety Modification Report (DSMR) and Record of Decision (ROD) was signed on August 30, 2016. A cutoff wall was determined to be the least costly, technically acceptable risk reduction measure for remediation of the HHD embankment in areas that have been identified as high risk due to internal erosion failure modes (erosion of the internal structure of the embankment due to seepage forces). Implementation of the DSMR risk reduction project is planned from 2019 through 2025 dependent on funding. |
| **Comment Date: October 26, 2017** | | |
| **DIANE GOLDBERG - 1** | Please let me know when you will be starting the planning of the reservoir south of Lake Okeechobee to lessen the impacts on the St Lucie River, Indian River Lagoon and the Caloosahatchee. We support this plan and we need it as soon as possible. | The purchasing of land within the EAA is outside the scope of COP. The Corps looks forward to working alongside the SFWMD to update the Integrated Delivery Schedule for implementation of Everglades restoration and determine the next steps in our collective restoration efforts. The passage of Senate Bill 10 requires a Post-Authorization Change Report (PACR) to reconfigure the congressionally authorized Central Everglades Planning Project's A-2 Flowage Equalization Basin structure into a deep storage reservoir. Upon completion and identification of a recommended plan, the PACR would be transmitted to Congress for authorization. Once authorized by Congress, the Corps would be able to request construction funds for execution of a Project Partnership Agreement (PPA) and construction initiation. The Corps is currently working with the SFWMD to identify the necessary steps to complete a PACR for submission to the Assistant Secretary of the Army of Civil Works. |

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| **Comment Date: October 26, 2017** | | |
| **KRIS PAGENKOPF - 1** | The Combined Operational Plan (COP) will affect lake levels, the risk that people living below the dike face a deadly breach, and the risk that toxic algae blooms are discharged to riverside communities. I understand that the COP has to work within the 68-year-old Central and South Florida Plan, authorized by congress just after World War II. That was over 60 years ago, when Florida's population was less than 3 million (vs. 20 million today) and communities on the Caloosahatchee and St. Lucie rivers were 1/20th their current populations. We need an update of these authorizations.<br><br>But antiquated statutes are only part of the reason today's management routinely puts people at risk. A bigger part is our accounting separately for the lake's capacity for water supply and drainage from the watersheds to its north and south, and refusing to accurately measure how much water and drainage everyone in the system needs and gets. The danger of this uncoordinated management is exposed by events like Hurricane Irma. It would be common sense to prioritize dike safety during the summer and fall by keeping lake levels low and stopping unnatural inflows. That would also reduce the chances of discharging toxic algae and its associated health risks to riverside communities. But today's management system isn't governed by common sense. Instead we allow a section of the federal Water Resource Development Act (2000) called the "savings clause" to prioritize the sugar industry's drainage needs, letting them pump excess rainfall (anything over 1") all summer long into the system south of the lake, and when that's full, into the lake itself--the back-pumping that raised lake levels this year even as fears of dike failure dominated headlines.<br><br>Meanwhile the federal Lake Okeechobee Regulation Schedule (LORS) isn't required to account for the savings clause's influence on the system or to prevent the sugar industry's back-pumping into a rising lake.<br><br>It's time to change the priorities in this system and place health and human safety above all else. It's time to consider how much total drainage and water are available and manage it as a single, interconnected set of resources. Maybe the COP and LORS could be combined, managing drainage and lake levels to prioritize the people in the system.<br><br>I ask the Corps to prioritize Lake Okeechobee's impact on the health and safety of glades residents and riverside communities as it plans COP. | Changes to LORS 2008 are outside the scope of COP. The COP defines operations for completed features of the MWD and C-111 South Dade Projects. The associated NEPA documentation to be completed in 2019 is an operational plan, not a feasibility report that is submitted to Congress for authorization and appropriations for construction. The WRDA of 2000 requires CERP projects to identify water needed for the natural system to achieve CERP restoration goals and protect it from other potentially competing uses. At the same time, existing legal sources of water supply for municipal and agricultural needs must also be protected. In addition, CERP implementation cannot reduce existing levels of service for flood protection. WRDA 2000 requires the inclusion of "Savings Clause" analyses within each CERP PIR. Development of the COP is not a CERP component.<br><br>An updated Lake Okeechobee Regulation Schedule study will be completed to coincide with completion of the Herbert Hoover Dike (HHD) rehabilitation, which is currently scheduled for 2025. The Corps is working with the State of Florida to explore opportunities to accelerate implementation of HHD rehabilitation and the associated Lake Okeechobee Regulation Schedule study.<br><br>Storage south of the lake currently being considered under the State of Florida's Senate Bill 10, in combination with (1) new storage north of the Lake (being developed as part of LOWP; (2) storage reservoirs being constructed east of the lake (C-44 Reservoir and other reservoirs and STAs associated with the approved Indian River Lagoon-South Project) and west of the lake (C-43 Reservoir); and (3) completion of additional infrastructure to allow flow south of the lake under the CEPP, will serve to restore a more natural system wide hydrology within the entire Everglades ecosystem as envisioned by CERP. |
| **Comment Date: October 26, 2017** | | |
| **DON HIGG - 1** | I am a taxpayer in the state of Florida and I want to go on record requesting that your department make it a high priority to insure that the plans you put | Thank you for your comment. Implementation of COP is anticipated to increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP. The Corps is committed to implementing COP in order to continue progress in Everglades restoration. |

| COMMENTER | AGENCY/PUBLIC COMMENT | U.S. ARMY CORPS OF ENGINEERS (USACE) RESPONSE |
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| | in place for future infrastructure moves water south into Everglades National Park and Florida Bay | Implementation of the Proposed Action is anticipated in 2019 following completion of the necessary NEPA documentation including the Final EIS and ROD. |
| **Comment Date: October 26, 2017** | | |
| **BRIAN O'NEIL - 1** | Please wake up! | Thank you for your comment. Implementation of COP is anticipated to increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP. The Corps is committed to implementing COP in order to continue progress in Everglades restoration. Implementation of the Proposed Action is anticipated in 2019 following completion of the necessary NEPA documentation including the Final EIS and ROD. |
| **Comment Date: October 26, 2017** | | |
| **LORA KNIGHT - 1** | Please restore, as much as possible, the flow of water to our precious Everglades. | Thank you for your comment. Implementation of COP is anticipated to increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP. The Corps is committed to implementing COP in order to continue progress in Everglades restoration. Implementation of the Proposed Action is anticipated in 2019 following completion of the necessary NEPA documentation including the Final EIS and ROD. |
| **Comment Date: October 26, 2017** | | |
| **JUSTIN LORCH - 1** | I have lived most of my life along the St Lucie and Indian Rivers. I have watched what the discharges from Lake Okeechobee have done to these ecosystems in that time. I fear what the situations will be in the future.<br><br>I am an avid recreational angler, it's been my passion for almost 30 years now. I now travel the entire state looking for areas to fish that even come close to the productivity I used to enjoy in the St Lucie and Indian Rivers around Stuart when I was younger. These ecosystem can be restored with the help of the Army Corps of Engineers.<br><br>I feel that as fellow Engineers, you have a duty to help the policy makers understand how to more effectively manage a system that is: creating risk to life by threatening the Herbert Hoover dike by allowing the sugar industry to back pump excess water into the Lake even when the Lake is already dangerously high levels; introducing toxic and potentially dangerously polluted water into estuary systems on both coast, risk the health and safety of populations along those coasts from potentially hazardous runoffs, jeopardizing losing the Biscayne Aquifer by choking off its fresh water supply and risking salt water intrusion.<br><br>The policies and strategies that govern the management of the Lake and drainage surrounding it were put into place long before we had a good understanding of the complexity of the systems we were interfering with. We must update these policies and regulations to be beneficial to everyone involved and to start to restore the environments affected by these water management policies. As a voting citizen, I can pressure my elected officials and occasionally install new ones, but our voice can easily be drowned out | There have been several state and federal efforts implemented or being implemented that improve the timing and distribution of water throughout the system. Currently, both state and federal projects are in various phases of implementation, including construction, design, and planning. The system is constantly being improved with every project that is completed. COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure associated with the MWD and C-111 South Dade Projects in Miami Dade County. Many of the MWD and C-111 South Dade Project features have been built and/or are nearing completion. Water management operating criteria defined during development of COP will be incorporated into the 2012 WCAs, ENP and ENP to SDCS Control Plan following completion of NEPA. The 2012 Water Control Plan guides operations for associated C&SF infrastructure in south Florida. Implementation of COP will allow the opportunity to send water south and increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP.<br><br>Storage south of the lake currently being considered under the State of Florida's Senate Bill 10, in combination with (1) new storage north of the Lake (being developed as part of LOWP; (2) storage reservoirs being constructed east of the lake (C-44 Reservoir and other reservoirs and STAs associated with the approved Indian River Lagoon-South Project) and west of the lake (C-43 Reservoir); and (3) completion of additional infrastructure to allow flow south of the lake under the CEPP, will serve to restore a more natural system wide hydrology within the entire Everglades ecosystem as envisioned by CERP. Benefits to the Northern Estuaries will be achieved through the continued implementation of these projects. |

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| | by the money involved in Florida politics. Having the voice of the Army Corps of Engineers alongside ours would carry the weight needed to enact change.<br><br>Thank you for taking the time to read this. | |
| **WAYNE RALPH - 1** | We moved to Cape Coral two years and three months ago from Oregon to retire, explore and boat in paradise.<br><br>We assumed that nature here was being treated respectfully. We found its quite the opposite. Between the pollution pumped into lake O that pollutes our river systems and the locals here pumping their septic tanks into our canal systems, change is not going to happen anytime in the near future or ever as this trend appears. Florida has its natural beauty that struggles to survive despite the me first attitude of the existing residents and voting population that continues kicking the can down the road because they like it how it is.<br><br>You know what they say, if you don't like it, move on.<br><br>So we are. Adios and best wishes to you Florida. | There have been several state and federal efforts implemented or being implemented that improve the timing and distribution of water throughout the system. Currently, both state and federal projects are in various phases of implementation, including construction, design, and planning. The system is constantly being improved with every project that is completed. COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure associated with the MWD and C-111 South Dade Projects in Miami Dade County. Many of the MWD and C-111 South Dade Project features have been built and/or are nearing completion. Water management operating criteria defined during development of COP will be incorporated into the 2012 WCAs, ENP and ENP to SDCS Control Plan following completion of NEPA. The 2012 Water Control Plan guides operations for associated C&SF infrastructure in south Florida. Implementation of COP will allow the opportunity to send water south and increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP.<br><br>Storage south of the lake currently being considered under the State of Florida's Senate Bill 10, in combination with (1) new storage north of the Lake (being developed as part of LOWP; (2) storage reservoirs being constructed east of the lake (C-44 Reservoir and other reservoirs and STAs associated with the approved Indian River Lagoon-South Project) and west of the lake (C-43 Reservoir); and (3) completion of additional infrastructure to allow flow south of the lake under the CEPP, will serve to restore a more natural system wide hydrology within the entire Everglades ecosystem as envisioned by CERP. Benefits to the Northern Estuaries will be achieved through the continued implementation of these projects. |
| **Comment Date: October 26, 2017** | | |
| **MADGE ALLEN - 1** | I'm a homeowner on Gulf of Mexico access, Alligator Slough in Cape Coral, Florida. We watch the water turn from blue to brown as dangerous, dirty water is released from Lake O, down the Caloosahatchee River. This whole economy is dependent on retirees and tourists; who is going to want to live or recreate here when the whole ecosystem is destroyed from toxic water releases! Please uphold the law and will of the voters, and get the water going south...which will naturally clean the water and restore the Everglades. We are watching and keeping track! | There have been several state and federal efforts implemented or being implemented that improve the timing and distribution of water throughout the system. Currently, both state and federal projects are in various phases of implementation, including construction, design, and planning. The system is constantly being improved with every project that is completed. COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure associated with the MWD and C-111 South Dade Projects in Miami Dade County. Many of the MWD and C-111 South Dade Project features have been built and/or are nearing completion. Water management operating criteria defined during development of COP will be incorporated into the 2012 WCAs, ENP and ENP to SDCS Control Plan following completion of NEPA. The 2012 Water Control Plan guides operations for associated C&SF infrastructure in south Florida. Implementation of COP will allow the opportunity to send water south and increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP.<br><br>Storage south of the lake currently being considered under the State of Florida's Senate Bill 10, in combination with (1) new storage north of the Lake (being developed as part of LOWP; (2) storage reservoirs being constructed east of the lake (C-44 Reservoir and other reservoirs and STAs associated with the approved Indian River Lagoon-South Project) and west of the lake (C-43 Reservoir); and (3) completion of additional infrastructure to allow flow south of the lake under the CEPP, will serve to restore a more natural system wide hydrology within the entire Everglades ecosystem as envisioned by CERP. Benefits to the Northern Estuaries will be achieved through the continued implementation of these projects. |

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| **KIRSTEN LOVETT - 1** | I saw that "The COP, whatever it turns out to be, has to work within the 68-year-old Central and South Florida Plan, authorized by congress just after World War II. In other words, “Our hands are tied” by a federal decree from 68 years ago.<br><br>In January Sen. Bob Graham called for an update of these authorizations, but antiquated statutes are only part of the reason today’s management routinely puts people at risk. A bigger part is our accounting separately for the lake’s capacity for water supply and drainage from the watersheds to its north and south, and refusing to accurately measure how much water and drainage everyone in the system needs and gets. The danger of this uncoordinated management is exposed by events like Hurricane Irma.<br><br>It’s time to change the priorities in this system and place health and human safety above all else. It’s time to consider how much total drainage and water are available and manage it as a single, interconnected set of resources. | Thank you for your comment. Health and human safety is a priority for the Corps in all Federal actions pursued including daily operations of Lake Okeechobee and the operation of the C&SF Project. |
| **Comment Date: October 26, 2017** | | |
| **ED WILSON _ 1** | Please do what is right and for clean water in SW & SE FL, send water south, the sugar industry is holding everybody hostage. Did you know the sugar industry also gets federal subsidies from the farm bill, which means they never have a loss, even if the weather is bad and they lose crops they get paid, and even worse if they grow too much sugar our US government must buy it from them, so again they lose nothing. The price consumers and manufactures pay for sugar in the US is almost double that of world sugar.<br><br>DO THE RIGHT THING SOONER THEN LATER | There have been several state and federal efforts implemented or being implemented that improve the timing and distribution of water throughout the system. Currently, both state and federal projects are in various phases of implementation, including construction, design, and planning. The system is constantly being improved with every project that is completed. COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure associated with the MWD and C-111 South Dade Projects in Miami Dade County. Many of the MWD and C-111 South Dade Project features have been built and/or are nearing completion. Water management operating criteria defined during development of COP will be incorporated into the 2012 WCAs, ENP and ENP to SDCS Control Plan following completion of NEPA. The 2012 Water Control Plan guides operations for associated C&SF infrastructure in south Florida. Implementation of COP will allow the opportunity to send water south and increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP.<br><br>Storage south of the lake currently being considered under the State of Florida’s Senate Bill 10, in combination with (1) new storage north of the Lake (being developed as part of LOWP; (2) storage reservoirs being constructed east of the lake (C-44 Reservoir and other reservoirs and STAs associated with the approved Indian River Lagoon-South Project) and west of the lake (C-43 Reservoir); and (3) completion of additional infrastructure to allow flow south of the lake under the CEPP, will serve to restore a more natural system wide hydrology within the entire Everglades ecosystem as envisioned by CERP. |
| **Comment Date: October 26, 2017** | | |
| **MARK POTTER - 1** | I just wanted to take the time to express my thoughts regarding CERP and the COP being discussed. I spent the first 20 years growing up in south Florida just a couple of miles from the Everglades. I have watched all of south Florida grow out of control since the 1970’s. I left in 1978 and moved to Gainesville Florida. I am still very fond of the profoundly diverse environment the Everglades supports and appreciate the perils the continued demand on its | There have been several state and federal efforts implemented or being implemented that improve the timing and distribution of water throughout the system. Currently, both state and federal projects are in various phases of implementation, including construction, design, and planning. The system is constantly being improved with every project that is completed. COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure associated with the MWD and C-111 South Dade Projects in Miami Dade County. Many of the MWD and C-111 South Dade Project features have been built and/or are nearing completion. Water management operating criteria |

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| | resources bring. The restoration of the natural watershed from the lake to the bay is empirical to the very survival of the habitat. I believe the science and studies which call for the construction of the reservoir south of the lake be the first priority. This accomplishes two things that are very important to the project and its goals. First reducing the lake water level will reduce the pressure on the aging berm and reduce the chance of a breach. Second it will allow a secondary source of natural detoxification of the water discharges of Lake Okeechobee to occur before entering the watershed. This along with more sustainable farming practices would combine to begin the process of natural restoration of the Everglades. I am sure I have said nothing that you have not already heard. I just needed to let someone know how I feel about this and the prolonged timeline it has taken just to get this far, very frustrating and disappointing. Thanks for listening. | defined during development of COP will be incorporated into the 2012 WCAs, ENP and ENP to SDCS Control Plan following completion of NEPA. The 2012 Water Control Plan guides operations for associated C&SF infrastructure in south Florida. Implementation of COP will allow the opportunity to send water south and increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP.<br><br>Storage south of the lake currently being considered under the State of Florida's Senate Bill 10, in combination with (1) new storage north of the Lake (being developed as part of LOWP; (2) storage reservoirs being constructed east of the lake (C-44 Reservoir and other reservoirs and STAs associated with the approved Indian River Lagoon-South Project) and west of the lake (C-43 Reservoir); and (3) completion of additional infrastructure to allow flow south of the lake under the CEPP, will serve to restore a more natural system wide hydrology within the entire Everglades ecosystem as envisioned by CERP. The Corps is committed to implementing COP in order to continue progress in Everglades restoration. Implementation of the Proposed Action is anticipated in 2019 following completion of the necessary NEPA documentation including the Final EIS and ROD. |
| **Comment Date: October 26, 2017** | | |
| **MARGIE HANCOCK - 1** | Clean water and safety depend you the Army Corps of Engineers! Please Save the Everglades! | Thank you for your comment. Implementation of COP is anticipated to increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP. The Corps is committed to implementing COP in order to continue progress in Everglades restoration. Implementation of the Proposed Action is anticipated in 2019 following completion of the necessary NEPA documentation including the Final EIS and ROD. |
| **Comment Date: October 26, 2017** | | |
| **TED STEVENS - 1** | Please, stop killing our Caloosahatchee, St. Lucie River and the Indian River lagoon, by these massive releases from lake Okeechobee. This is a problem over 50 years old and that seems excessive time even for the government to get a problem fixed.<br><br>It's supposed to rain frogs during the rainy season in Florida! Until a dynamic southern storage reservoir and River of Grass flows to Florida Bay are complete, there will be no curing the problems for Okeechobee, the Caloosahatchee, St. Lucie and Florida Bay.<br><br>As with all politicians and high profile public figures I am sure you will be careful not to let the buck stop with you! | There have been several state and federal efforts implemented or being implemented that improve the timing and distribution of water throughout the system. Currently, both state and federal projects are in various phases of implementation, including construction, design, and planning. The system is constantly being improved with every project that is completed. COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure associated with the MWD and C-111 South Dade Projects in Miami Dade County. Many of the MWD and C-111 South Dade Project features have been built and/or are nearing completion. Water management operating criteria defined during development of COP will be incorporated into the 2012 WCAs, ENP and ENP to SDCS Control Plan following completion of NEPA. The 2012 Water Control Plan guides operations for associated C&SF infrastructure in south Florida. Implementation of COP will allow the opportunity to send water south and increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP.<br><br>Storage south of the lake currently being considered under the State of Florida's Senate Bill 10, in combination with (1) new storage north of the Lake (being developed as part of LOWP; (2) storage reservoirs being constructed east of the lake (C-44 Reservoir and other reservoirs and STAs associated with the approved Indian River Lagoon-South Project) and west of the lake (C-43 Reservoir); and (3) completion of additional infrastructure to allow flow south of the lake under the CEPP, will serve to restore a more natural system wide hydrology within the entire Everglades ecosystem as envisioned by CERP. Benefits to the Northern Estuaries will be achieved through the continued implementation of these projects. |
| **Comment Date: October 26, 2017** | | |
| **CHERIE ZADLO - 1** | I am writing to request your consideration and support to prioritize Lake Okeechobee's impact on the health and safety of residents, visitors and | Thank you for your comment. Health and human safety is a priority for the Corps in all Federal actions pursued including daily operations of Lake Okeechobee and the operation of the C&SF Project. COP will result in a comprehensive integrated |

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| | communities as the Army Corps of Engineers prepares its Combined Operational Plan.<br><br>There is more evidence everyday linking toxic algae blooms produced by damaging fresh water flows to ALS, Parkinson's, Alzheimer's and liver diseases alone. It's time to restore human needs over the sugar industry.<br><br>Please let me know how else I can assist the effort to move forward toward the rapid development and execution of a sound resolution. | water control plan for the operation of water management infrastructure associated with the MWD and C-111 South Dade Projects in Miami Dade County. Many of the MWD and C-111 South Dade Project features have been built and/or are nearing completion. Water management operating criteria defined during development of COP will be incorporated into the 2012 WCAs, ENP and ENP to SDCS Control Plan following completion of NEPA. The 2012 Water Control Plan guides operations for associated C&SF infrastructure in south Florida. Implementation of COP will allow the opportunity to send water south and increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP.<br><br>Programs are in place in the watershed that are specifically focused on water quality such as the FDEP's Basin Management Action Plans and the SFWMD's Lake Okeechobee Protection Program which serves as the overarching water quality restoration plans for the Northern Estuaries including Lake Okeechobee. The creation of storage north of Lake Okeechobee, currently being proposed under the LOWP, if authorized and appropriated, will positively affect the quality of freshwater released to the estuaries which may result in improved salinity and reduced nutrient loading to estuarine waters. |
| **Comment Date: October 26, 2017** | | |
| **JAN PASHKE - 1** | Please, quickly work on sending the water from Lake Okeechobee south to be cleaned, and then south from there into the Everglades, where it would naturally go! Even unpolluted water from Lake Okeechobee into the St. Lucie Estuary is harmful to the Estuary, because it disrupts the salinity of the water. Sending polluted water from Lake Okeechobee creates a nightmare!<br><br>Please, please send the water south and stop releasing it into the St Lucie Estuary! | There have been several state and federal efforts implemented or being implemented that improve the timing and distribution of water throughout the system. Currently, both state and federal projects are in various phases of implementation, including construction, design, and planning. The system is constantly being improved with every project that is completed. COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure associated with the MWD and C-111 South Dade Projects in Miami Dade County. Many of the MWD and C-111 South Dade Project features have been built and/or are nearing completion. Water management operating criteria defined during development of COP will be incorporated into the 2012 WCAs, ENP and ENP to SDCS Control Plan following completion of NEPA. The 2012 Water Control Plan guides operations for associated C&SF infrastructure in south Florida. Implementation of COP will allow the opportunity to send water south and increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP.<br><br>Storage south of the lake currently being considered under the State of Florida's Senate Bill 10, in combination with (1) new storage north of the Lake (being developed as part of LOWP; (2) storage reservoirs being constructed east of the lake (C-44 Reservoir and other reservoirs and STAs associated with the approved Indian River Lagoon-South Project) and west of the lake (C-43 Reservoir); and (3) completion of additional infrastructure to allow flow south of the lake under the CEPP, will serve to restore a more natural system wide hydrology within the entire Everglades ecosystem as envisioned by CERP. Benefits to the Northern Estuaries will be achieved through the continued implementation of these projects. |
| **NANCY R DEAN & ROBERT V DEAN - 1** | We understand the need to strengthen the Hoover Dike; however, only additional water storage will save the Everglades. | There have been several state and federal efforts implemented or being implemented that improve the timing and distribution of water throughout the system. Currently, both state and federal projects are in various phases of implementation, including construction, design, and planning. The system is constantly being improved with every project that is completed. COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure associated with the MWD and C-111 South Dade Projects in Miami Dade County. Many of the MWD and C-111 South Dade Project features have been built and/or are nearing completion. Water management operating criteria defined during development of COP will be incorporated into the 2012 WCAs, ENP and ENP to SDCS Control Plan following completion of NEPA. The 2012 Water Control Plan guides operations for associated C&SF infrastructure in south Florida. Implementation of COP will allow the opportunity to send water south and increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP. |

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| | | Storage south of the lake currently being considered under the State of Florida's Senate Bill 10, in combination with (1) new storage north of the Lake (being developed as part of LOWP; (2) storage reservoirs being constructed east of the lake (C-44 Reservoir and other reservoirs and STAs associated with the approved Indian River Lagoon-South Project) and west of the lake (C-43 Reservoir); and (3) completion of additional infrastructure to allow flow south of the lake under the CEPP, will serve to restore a more natural system wide hydrology within the entire Everglades ecosystem as envisioned by CERP<br><br>The Herbert Hoover Dike Dam Safety Modification Report (DSMR) and Record of Decision (ROD) was signed on August 30, 2016. A cutoff wall was determined to be the least costly, technically acceptable risk reduction measure for remediation of the HHD embankment in areas that have been identified as high risk due to internal erosion failure modes (erosion of the internal structure of the embankment due to seepage forces). Implementation of the DSMR risk reduction project is planned from 2019 through 2025 dependent on funding. |
| **Comment Date: October 26, 2017** | | |
| **ARLENE DORAN - 1** | Thank you for the opportunity to comment on this critical issue.<br><br>I have been on the beach when the black discharge water has rolled in and it was awful. The tourists that were there were very unhappy too. They will not be returning.<br><br>I have also seen the video of the toxic guacamole looking algae, and worry that I will see that too.<br><br>The health and future of the estuaries of the Caloosahatchee and St. Lucie rivers and the Everglades is dependent on the decisions you are making now.<br><br>Please make the changes necessary so that the threats of black water plumes and toxic algae are behind us. | There have been several state and federal efforts implemented or being implemented that improve the timing and distribution of water throughout the system. Currently, both state and federal projects are in various phases of implementation, including construction, design, and planning. The system is constantly being improved with every project that is completed. COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure associated with the MWD and C-111 South Dade Projects in Miami Dade County. Many of the MWD and C-111 South Dade Project features have been built and/or are nearing completion. Water management operating criteria defined during development of COP will be incorporated into the 2012 WCAs, ENP and ENP to SDCS Control Plan following completion of NEPA. The 2012 Water Control Plan guides operations for associated C&SF infrastructure in south Florida. Implementation of COP will allow the opportunity to send water south and increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP.<br><br>Storage south of the lake currently being considered under the State of Florida's Senate Bill 10, in combination with (1) new storage north of the Lake (being developed as part of LOWP; (2) storage reservoirs being constructed east of the lake (C-44 Reservoir and other reservoirs and STAs associated with the approved Indian River Lagoon-South Project) and west of the lake (C-43 Reservoir); and (3) completion of additional infrastructure to allow flow south of the lake under the CEPP, will serve to restore a more natural system wide hydrology within the entire Everglades ecosystem as envisioned by CERP. Benefits to the Northern Estuaries will be achieved through the continued implementation of these projects.<br><br>Programs are in place in the watershed that are specifically focused on water quality such as the FDEP's Basin Management Action Plans and the SFWMD's Lake Okeechobee Protection Program which serves as the overarching water quality restoration plans for the Northern Estuaries including Lake Okeechobee. The creation of storage north of Lake Okeechobee, currently being proposed under the LOWP, if authorized and appropriated, will positively affect the quality of freshwater released to the estuaries which may result in improved salinity and reduced nutrient loading to estuarine waters. |
| **Comment Date: October 26, 2017** | | |
| **MORGAN S ROTHE - 1** | I hope the ACOE will do everything it can to help the Everglades and Lake Okeechobee and the rivers that feed into it and out of Okeechobee by building a refurbished Hoover dike and a large enough reservoir to hold polluted water. Thank you for your service | There have been several state and federal efforts implemented or being implemented that improve the timing and distribution of water throughout the system. Currently, both state and federal projects are in various phases of implementation, including construction, design, and planning. The system is constantly being improved with every project that is completed. COP will result in a comprehensive integrated water control plan for the operation of water management |

| COMMENTER | AGENCY/PUBLIC COMMENT | U.S. ARMY CORPS OF ENGINEERS (USACE) RESPONSE |
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| | | infrastructure associated with the MWD and C-111 South Dade Projects in Miami Dade County. Many of the MWD and C-111 South Dade Project features have been built and/or are nearing completion. Water management operating criteria defined during development of COP will be incorporated into the 2012 WCAs, ENP and ENP to SDCS Control Plan following completion of NEPA. The 2012 Water Control Plan guides operations for associated C&SF infrastructure in south Florida. Implementation of COP will allow the opportunity to send water south and increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP.<br><br>Storage south of the lake currently being considered under the State of Florida's Senate Bill 10, in combination with (1) new storage north of the Lake (being developed as part of LOWP; (2) storage reservoirs being constructed east of the lake (C-44 Reservoir and other reservoirs and STAs associated with the approved Indian River Lagoon-South Project) and west of the lake (C-43 Reservoir); and (3) completion of additional infrastructure to allow flow south of the lake under the CEPP, will serve to restore a more natural system wide hydrology within the entire Everglades ecosystem as envisioned by CERP. Benefits to the Northern Estuaries will be achieved through the continued implementation of these projects.<br><br>Programs are in place in the watershed that are specifically focused on water quality such as the FDEP's Basin Management Action Plans and the SFWMD's Lake Okeechobee Protection Program which serves as the overarching water quality restoration plans for the Northern Estuaries including Lake Okeechobee. The creation of storage north of Lake Okeechobee, currently being proposed under the LOWP, if authorized and appropriated, will positively affect the quality of freshwater released to the estuaries which may result in improved salinity and reduced nutrient loading to estuarine waters.<br><br>The Herbert Hoover Dike Dam Safety Modification Report (DSMR) and Record of Decision (ROD) was signed on August 30, 2016. A cutoff wall was determined to be the least costly, technically acceptable risk reduction measure for remediation of the HHD embankment in areas that have been identified as high risk due to internal erosion failure modes (erosion of the internal structure of the embankment due to seepage forces). Implementation of the DSMR risk reduction project is planned from 2019 through 2025 dependent on funding. |
| **Comment Date: October 26, 2017** | | |
| **KATHLEEN DEMPSEY - 1** | We desperately need the reservoir to be provided south of Lake Okeechobee to preserve our state and save the dyke. At present the blue-green algae is a big problem, and it seems officials are not acting quickly. Let's get going, PLEASE! | There have been several state and federal efforts implemented or being implemented that improve the timing and distribution of water throughout the system. Currently, both state and federal projects are in various phases of implementation, including construction, design, and planning. The system is constantly being improved with every project that is completed. COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure associated with the MWD and C-111 South Dade Projects in Miami Dade County. Many of the MWD and C-111 South Dade Project features have been built and/or are nearing completion. Water management operating criteria defined during development of COP will be incorporated into the 2012 WCAs, ENP and ENP to SDCS Control Plan following completion of NEPA. The 2012 Water Control Plan guides operations for associated C&SF infrastructure in south Florida. Implementation of COP will allow the opportunity to send water south and increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP.<br><br>Storage south of the lake currently being considered under the State of Florida's Senate Bill 10, in combination with (1) new storage north of the Lake (being developed as part of LOWP; (2) storage reservoirs being constructed east of the lake (C-44 Reservoir and other reservoirs and STAs associated with the approved Indian River Lagoon-South Project) and west of the lake (C-43 Reservoir); and (3) completion of additional infrastructure to allow flow south of the lake under the CEPP, will serve |

| COMMENTER | AGENCY/PUBLIC COMMENT | U.S. ARMY CORPS OF ENGINEERS (USACE) RESPONSE |
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| | | to restore a more natural system wide hydrology within the entire Everglades ecosystem as envisioned by CERP. Benefits to the Northern Estuaries will be achieved through the continued implementation of these projects.<br><br>Programs are in place in the watershed that are specifically focused on water quality such as the FDEP's Basin Management Action Plans and the SFWMD's Lake Okeechobee Protection Program which serves as the overarching water quality restoration plans for the Northern Estuaries including Lake Okeechobee. The creation of storage north of Lake Okeechobee, currently being proposed under the LOWP, if authorized and appropriated, will positively affect the quality of freshwater released to the estuaries which may result in improved salinity and reduced nutrient loading to estuarine waters. |
| **Comment Date: October 26, 2017** | | |
| **SCOTT LOGAN - 1** | Drainage is scarce in this system, and we already knew that heavy rain fills the lake faster than we can drain it. It would be common sense to prioritize dike safety during the summer and fall by keeping lake levels low and stopping unnatural inflows. That would also reduce the chances of discharging toxic algae and its associated health risks to riverside communities. But today's management system isn't governed by common sense.<br><br>Instead we allow a section of the federal Water Resource Development Act (2000) called the "savings clause <Blockedhttp://d3n8a8pro7vhmx.cloudfront.net/bullsugar/mailings/1171/attachments/original/wrda_savings_clause.pdf?1508445650> " to prioritize the sugar industry's drainage needs, letting them pump excess rainfall (anything over 1") all summer long into the system south of the lake, and when that's full, into the lake itself--the back-pumping that raised lake levels this year even as fears of dike failure dominated headlines.<br><br>Meanwhile the federal Lake Okeechobee Regulation Schedule (LORS) isn't required to account for the savings clause's influence on the system or to prevent the sugar industry's back-pumping into a rising lake--it just tells the Corps when to flush it into the rivers. Asked last month how the industry could get away with this, SFWMD's Ernie Marks replied honestly: They have a permit.<br><br>Better, the sugar industry has--thanks to a disjointed, complicated, ancient collection of regulations--the highest priority in the system. That's why no matter how catastrophic a year Florida Bay or the Everglades or the Caloosahatchee or the St. Lucie have, the sugar industry thrives--since 1980 the crop has never had a bad year <Blockedhttp://www.bullsugar.org/sfwmd_okeechobee_phosphorus>.<br>Meanwhile liver failure clusters pop up along the river, with neurological diseases and a host of serious illnesses that we're only just beginning to trace | Changes to LORS 2008 are outside the scope of COP. The COP defines operations for completed features of the MWD and C-111 South Dade Projects. The associated NEPA documentation to be completed in 2019 is an operational plan, not a feasibility report that is submitted to Congress for authorization and appropriations for construction. The WRDA of 2000 requires CERP projects to identify water needed for the natural system to achieve CERP restoration goals and protect it from other potentially competing uses. At the same time, existing legal sources of water supply for municipal and agricultural needs must also be protected. In addition, CERP implementation cannot reduce existing levels of service for flood protection. WRDA 2000 requires the inclusion of "Savings Clause" analyses within each CERP PIR. Development of the COP is not a CERP component.<br><br>An updated Lake Okeechobee Regulation Schedule study will be completed to coincide with completion of the Herbert Hoover Dike (HHD) rehabilitation, which is currently scheduled for 2025. The Corps is working with the State of Florida to explore opportunities to accelerate implementation of HHD rehabilitation and the associated Lake Okeechobee Regulation Schedule study.<br>Storage south of the lake currently being considered under the State of Florida's Senate Bill 10, in combination with (1) new storage north of the Lake (being developed as part of LOWP; (2) storage reservoirs being constructed east of the lake (C-44 Reservoir and other reservoirs and STAs associated with the approved Indian River Lagoon-South Project) and west of the lake (C-43 Reservoir); and (3) completion of additional infrastructure to allow flow south of the lake under the CEPP, will serve to restore a more natural system wide hydrology within the entire Everglades ecosystem as envisioned by CERP. |

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| | back to toxic Lake Okeechobee discharges. And residents living in the shadow of the dam wait for the next storm and the next evacuation order. | |
| **Comment Date: October 27, 2017** | | |
| **CARLA ANCHORS - 1** | Now is the time for "Big Sugar" to give up it's hold on the land we need to create water holding areas for Lake O. They have been "King", for years and the need is great!!! DO NOT drill deep water wells or we will have MORE sinkholes all over. | The construction of deep injection wells north of Lake Okeechobee is outside the scope of this project. The COP defines operations for completed features of the MWD and C-111 South Dade Projects. Water management operating criteria defined during development of COP will be incorporated into the 2012 WCAs, ENP and ENP to SDCS Control Plan following completion of NEPA. The 2012 Water Control Plan guides operations for associated C&SF infrastructure in south Florida. Implementation of COP will allow the opportunity to send water south and increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP. |
| **Comment Date: October 27, 2017** | | |
| **DA HELLER - 1** | I regularly visit Florida to fish and enjoy the everglades and offshore areas. The catastrophic release of nutrient laden water from lake O. was a disaster that should never of happened and should not happen again. It was an environmental and economic disaster an perhaps only benefited the sugar industry.<br><br>I strongly urge you to move forward and begin an in depth review and revision of water and drainage plans with a "must" criterion that new plans contribute to healthy everglades and off shore areas and eliminate the risk of future harmful release. | There have been several state and federal efforts implemented or being implemented that improve the timing and distribution of water throughout the system. Currently, both state and federal projects are in various phases of implementation, including construction, design, and planning. The system is constantly being improved with every project that is completed. COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure associated with the MWD and C-111 South Dade Projects in Miami Dade County. Many of the MWD and C-111 South Dade Project features have been built and/or are nearing completion. Water management operating criteria defined during development of COP will be incorporated into the 2012 WCAs, ENP and ENP to SDCS Control Plan following completion of NEPA. The 2012 Water Control Plan guides operations for associated C&SF infrastructure in south Florida. Implementation of COP will allow the opportunity to send water south and increase the availability of water deliveries from WCA 3A to ENP through NESRS and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP.<br><br>Storage south of the lake currently being considered under the State of Florida's Senate Bill 10, in combination with (1) new storage north of the Lake (being developed as part of LOWP; (2) storage reservoirs being constructed east of the lake (C-44 Reservoir and other reservoirs and STAs associated with the approved Indian River Lagoon-South Project) and west of the lake (C-43 Reservoir); and (3) completion of additional infrastructure to allow flow south of the lake under the CEPP, will serve to restore a more natural system wide hydrology within the entire Everglades ecosystem as envisioned by CERP. Benefits to the Northern Estuaries will be achieved through the continued implementation of these projects.<br><br>Programs are in place in the watershed that are specifically focused on water quality such as the FDEP's Basin Management Action Plans and the SFWMD's Lake Okeechobee Protection Program which serves as the overarching water quality restoration plans for the Northern Estuaries including Lake Okeechobee. The creation of storage north of Lake Okeechobee, currently being proposed under the LOWP, if authorized and appropriated, will positively affect the quality of freshwater released to the estuaries which may result in improved salinity and reduced nutrient loading to estuarine waters. |
| **Comment Date: October 27, 2017** | | |
| **SANDY TEGER – 1** | There is no question in my mind, or that of my neighbors in Lee County, that health and human safety should rank number one in South Florida's water management system. This is clearly not the case today and must be changed. | Health and human safety is a priority for the Corps in all Federal actions pursued including daily operations of Lake Okeechobee and the operation of the C&SF Project. The COP defines operations for completed features of the MWD and C-111 South Dade Projects. The associated NEPA documentation to be completed in 2019 is an operational plan, not a feasibility report that is submitted to Congress for authorization and appropriations for construction. The WRDA of 2000 requires CERP projects to identify water needed for the natural system to achieve CERP restoration goals and protect it from other potentially competing uses. At the same time, existing legal sources of water supply for municipal and agricultural needs must |

| COMMENTER | AGENCY/PUBLIC COMMENT | U.S. ARMY CORPS OF ENGINEERS (USACE) RESPONSE |
|---|---|---|
| | It is unconscionable that we allow a section of the federal Water Resource Development Act (2000) to prioritize the sugar industry's drainage needs, letting them pump excess rainfall all summer long into the system south of the lake, and when that's full, into the lake itself. Meanwhile the federal Lake Okeechobee Regulation Schedule (LORS) isn't required to account for this influence on the system or to prevent the sugar industry's back-pumping into a rising lake--it just tells the Corps when to flush it into the rivers.<br><br>The sugar industry has the highest priority in the system and that is just plain WRONG! There is no question that the health and safety of the people of Florida should and must be our number 1 priority. | also be protected. In addition, CERP implementation cannot reduce existing levels of service for flood protection. WRDA 2000 requires the inclusion of "Savings Clause" analyses within each CERP PIR. Development of the COP is not a CERP component.<br><br>An updated Lake Okeechobee Regulation Schedule study will be completed to coincide with completion of the Herbert Hoover Dike (HHD) rehabilitation, which is currently scheduled for 2025. The Corps is working with the State of Florida to explore opportunities to accelerate implementation of HHD rehabilitation and the associated Lake Okeechobee Regulation Schedule study.<br>Storage south of the lake currently being considered under the State of Florida's Senate Bill 10, in combination with (1) new storage north of the Lake (being developed as part of LOWP; (2) storage reservoirs being constructed east of the lake (C-44 Reservoir and other reservoirs and STAs associated with the approved Indian River Lagoon-South Project) and west of the lake (C-43 Reservoir); and (3) completion of additional infrastructure to allow flow south of the lake under the CEPP, will serve to restore a more natural system wide hydrology within the entire Everglades ecosystem as envisioned by CERP. |
| **Comment Date: October 28, 2017** | | |
| **BECKY GLASS – 1** | Save the Lake and the people support changes to the water system. | Thank you for your comment. |

**Jacksonville District, US Army Corps of Engineers (USACE)**
**Combined Operations Plan (COP)**
**Supplemental NEPA**
**US Environmental Protection Agency (EPA) Scoping Comments**
**October 23, 2017**

**Water Quality:** The EPA recommends the USACE consult with the Florida Department of Environmental Protection (FDEP) to determine each alternative's potential impacts to waterbodies listed on the 303(d) list of impaired waterbodies. The EPA also recommends any water quality impacts be disclosed within the NEPA document. Additionally, the EPA recommends the USACE coordinate with FDEP to ensure compliance with all applicable Clean Water Act (CWA) water quality standards.

**Tribal Coordination:** For NEPA disclosure, the EPA recommends the USACE include feedback and input provided by the tribes within the NEPA document. Additionally, the EPA works closely with both the Miccosukee Tribe of Florida and the Seminole Tribe of Florida on environmental matters and is committed to working with other federal partners to prioritize the Tribes' water quality and water management concerns. EPA encourages consultation and coordination with the Tribes at all levels of decision-making.

**Environmental Justice**: The EPA recommends the USACE consider the proposed project's impacts to low income, minority populations as described in "Executive Order 12898 -Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" (February 16, 1994). The EPA recommends the USACE disclose any impacts to low income-minority communities in the NEPA document.

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Bradley Mueller <bradleymueller@semtribe.com>
**Sent:** Friday, October 13, 2017 1:08 PM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] Combined Operational Plan Modified Water Deliveries and C-111 South Dade Projects, Miami-Dade County, FL

October 13, 2017

Ms. Melissa Nasuti

Planning & Policy Division

Department of the Army, Jacksonville District Corps of Engineers

PO Box 4970

Jacksonville, FL 32232-0019

Phone: 904-232-1368

Email: Melissa.A.Nasuti@usace.army.mil <mailto:Melissa.A.Nasuti@usace.army.mil>

Subject: Combined Operational Plan Modified Water Deliveries and C-111 South Dade Projects, Miami-Dade County, FL

THPO Compliance Tracking Number: 0030098

Dear Ms. Nasuti,

Thank you for contacting the Seminole Tribe of Florida – Tribal Historic Preservation Office (STOF-THPO) regarding the Combined Operational Plan Modified Water Deliveries and C-111 South Dade Projects, Miami-Dade County, FL. The proposed undertaking area does fall within the STOF Area of Interest. Please continue to consult with us as the COP and the associated NEPA docuemtns ae developed. Regarding the offer to particpate on the Project Delivery Team, I will forward that on to the appropriate person. Thank you and feel free to contact us with any questions or concerns.

Respectfully,

Bradley M. Mueller, MA, Compliance Supervisor

STOF-THPO, Compliance Review Section

30290 Josie Billie Hwy, PMB 1004

Clewiston, FL 33440

Office: 863-983-6549 ext 12245

Email: bradleymueller@semtribe.com <mailto:bradleymueller@semtribe.com>

Office of Agricultural Water Policy
(850) 617-1700


The Mayo Building
407 South Calhoun Street
Tallahassee, Florida 32399-0800

# Florida Department of Agriculture and Consumer Services
## Commissioner Adam H. Putnam

October 20, 2017

Ms. Melissa Nasuti
Department of the Army
Jacksonville District Corps of Engineers
701 San Marco Boulevard
Jacksonville, FL 32207-8175

RE: Combined Operational Plan (COP) Scoping Comments

Dear Ms. Nasuti

The Florida Department of Agriculture and Consumer Services (FDACS) appreciates the opportunity to provide scoping comments on the development of a Combined Operational Plan (COP) which is being undertaken to define operations for the constructed features of the Modified Water Deliveries (MWD) to Everglades national Park (ENP) and Canal 111 (C-111) South Dade Projects while maintaining the congressionally authorized purposes for the Central and Southern Florida (C&SF) Project. Our comments focus on aspects of the COP that will impact private agricultural lands and agricultural operations.

In general, the COP should maintain storm event flood protection capacity for private lands in local basins adjacent to Everglades National Park (ENP) and provide the same level of service for consumptive water uses.

The routine diversion of water from Water Conservation Area 3A (WCA-3A) to the C-111 Basin must end with the completion of the Modified Water Delivery Project, which was one of the design assumptions when the C-111 GRR was approved. S-334 and S-331 are not authorized for WCA 3A flood releases and should not be included in the COP to achieve the sharp reductions in L-29 stages required by the DOT contract even when the WCA 3A stage is high. The goal of COP should be eliminating Column 2 operations and WCA 3A high water discharges into the South Dade Conveyance System (SDCS) barring emergency operations.

The COP should not use S-331 to convey flood waters from the 8.5 Square Mile Area (8.5 SMA) into the SDCS if the current 8.5 SMA flood mitigation project is not adequate to provide the flood protection needed. If the project requires additional work to meet performance standards, that should be identified by Increment 2 so the use of S-331 to alleviate flooding in the 8.5 SMA is not incorporated into the COP.

Distribution of water during wet periods should concentrate on maximizing deliveries of water to Northeast Shark River Slough (NESRS). Evaluation of the performance of proposed operations should be undertaken using the data now available. Data collected during the current emergency operations deviation indicates pumping at S-356 does not seem to increase the stage in the L-29 Canal when the canal is above 8.2 feet. This means that with an L-29 constraint of 8.5, the use of S-356 will not necessarily reduce the flow from WCA-3A into NESRS and adding the flow from S-356 may provide a significant benefit to the Park. This is something we should verify as the deviation operations continue since it could provide very useful information in setting the future operating protocols for S-356.

Thank you for the opportunity to provide COP scoping comments. We look forward to continued progress for Modified Water Deliveries and working with our state and federal partners to improve system-wide capabilities and restoration success. If you have any questions regarding FDACS' comments, please contact Ray Scott at (850) 617-1716 or Rebecca Elliott at (561) 682-6040.

Sincerely,

Rebecca Elliott
Water Policy Liaison
Office of Agricultural Water Policy

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Kirby, Marjorie <Marjorie.Kirby@dot.state.fl.us>
**Sent:** Friday, October 20, 2017 3:47 PM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Cc:** Watts, Jason; James, Steven C.; Salazar, Ricardo
**Subject:** [EXTERNAL] Combined Operational Plan - MWD
**Attachments:** MWD COP Sept 2017.pdf

Hello Ms. Nasuti – Thank you for providing notice of NEPA study initiation for the Combined Operational Plan for the constructed features of the Modified Waters Delivery Plan. The Florida Department of Transportation is interested in remaining on the mailing list for future notifications regarding this effort. Please continue to forward this information to my attention with cc: to Jason Watts, Director, Office of Environmental Management at the same address below. Thank you again - Margie

Marjorie Kirby

State Environmental Programs Administrator

Florida Department of Transportation

Office of Environmental Management

605 Suwannee Street, MS-37

Tallahassee, FL 32399

Tel: (850) 414-5209

FAX: (850) 414-4443

**Memorandum**

TO: Melissa Nasuti
United States Army Corps of Engineers

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

FROM: Inger Hansen, Chad Kennedy and Frank Powell
Office of Ecosystem Projects

DATE: October 18, 2017

SUBJECT: Department of the Army, Jacksonville District Corps of Engineers — Scoping Notice – Combined Operations Plan (COP).

**Background**

The Jacksonville District, U.S. Army Corps of Engineers (Corps) issued the subject Scoping Notice to gather comments and concerns that will be addressed in a National Environmental Policy Act (NEPA) document for the Combined Operational Plan (COP). The purpose of COP is to define operations for constructed components of the Modified Water Deliveries (MWD) to Everglades National Park (ENP) and the Canal 111 (C-111) South Dade projects, while maintaining the Congressionally-authorized multiple purposes of the Central and Southern (C&SF) Project to include flood control; water supply for agricultural irrigation, municipalities, and industry; regional ground water control and prevention of saltwater intrusion; enhancement of fish and wildlife; and recreation.

A bulleted list of objectives outlined by the Corps for COP include the following:

1. Improve water deliveries (timing, location, volume) into ENP and take steps to restore natural hydrologic conditions in ENP given current C&SF infrastructure or infrastructure expected to be completed by the time of implementation, to the extent practicable by:
   a. Changing schedule of water deliveries so that it fluctuates in consonance with local meteorological conditions, including providing for long term and annual variation in ecosystem conditions in the Everglades (Timing).
   b. Restoring NESRS as a functioning component of the Everglades hydrologic system (Location).
   c. Adjusting the magnitude of water discharged to ENP to minimize effects of too much or too little water (Volume).

2. Maximize progress toward restoring historic hydrologic conditions in the Taylor Slough, Rocky Glades, & eastern Panhandle of ENP.
3. Protect the intrinsic ecological values associated with WCA-3A and ENP.
4. Minimize the damaging* freshwater flows to Manatee Bay/Barnes Sound through the S197 structure and increase flows through Taylor slough and coastal creeks.
5. Include consideration of cultural values and tribal interests & concerns within WCA-3A and ENP.
6. Explore opportunities for enhancing the recovery of federally and state listed species under the Endangered Species Act, consistent with the restoration objectives, the USACE's authorities for MWD and C-111 projects and operational considerations.
7. Explore objectives to enhance opportunity for flood control and mitigation.

The Florida Department of Environmental Protection (Department) appreciates the opportunity to comment, and understands that the substantive details of the operating plan will be addressed in the forthcoming NEPA document, the Department previously provided comments to the Corps on the COP Scoping Notice on July 7, 2011.

**Comments:**

The Department recognizes COP as a critical step towards completing the MWD and C-111 projects. Both the MWD and the C-111 Projects that need to be fully operational to continue the progress towards restoration of the Everglades system. The Department recommends expediting the completion of the MWD and C-111 Projects which includes COP, so that components of the Comprehensive Everglades Restoration Plan (CERP) projects can move forward in the near term as envisioned by the State of Florida's Senate Bill 10, as well as expedited projects under Central Everglades Project (CEP) such as the S-333N and Old Tamiami Trail removal.

The Department recommends that a comprehensive hydrologic evaluation be conducted to ensure that the projects can be operated to meet the goals identified in the Everglades National Park Protection and Expansion Act. The evaluation should include components for the South Dade C&SF flood protection, high water conditions in Water Conservation Areas (WCA) 2 and 3, and flood mitigation for the 8.5 Square Mile Area (SMA).

The Department recommends that COP be developed to have operation that are responsive to events to avoid, minimize or eliminate the need State issued Emergency Orders for High Water Conditions in the WCAs and the Ninth Amended Emergency Order for the C-111 South Dade Project.

There is a need to evaluate COP on a broader and more comprehensive scale while meeting the original objectives of both the MWD and C-111 South Dade Projects. This evaluation should consider the assessment of COP alternatives in consideration of ongoing and future State and Federal restoration efforts. The broader more comprehensive evaluation should include re-evaluating inflows and outflows of WCA 3, and consideration of features that have been

constructed by Federal and State parties under separate authorizations such as the Tamiami Trail Next Steps Phase I project and C-111 CERP project.

The Department notes that the Corps identified objectives for the development of COP may have excluded previous identified objectives. The Department also noted that the Corps lists project constraints including the Everglades Restoration Transition Plan (ERTP) WCA-3A Regulation Schedule. The Department understanding is that COP would be developed to replace ERTP and the that ERTP was meant to be an interim transitional plan, and not a constraint that would be carried forward into COP.

The Department is particularly concerned about the newly identified objective (1c) of "Adjusting the magnitude of water discharged to ENP to minimize effects of too much or too little water (Volume)" as this objective may be used to limit restoration flows to ENP for flood protection purposes. The Department suggests that a more appropriate objective is to maintain the current level of flood protection while maximizing ecologically beneficial flows from WCA-3 and through ENP's Shark River and Taylor Sloughs to Florida Bay. One goal of the authorized project was to construct and operate a flood mitigation project for the 8.5 SMA to ensure that restorative flows to ENP's Shark River Slough would not result in diminished or increased flood protection. The Department request that the Corps conduct an evaluation of historical conditions compared to post mitigation conditions for 8.5 SMA to develop an operations plan that maintains pre- mitigation flood control while allowing periodic event driven extreme flows though SRS. The Department is concerned that the level of flood protection for 8.5 SMA has been enhanced despite the construction of the mitigation features which results in damaging high-water stages in WCA-3. The 8.5 SMA project was authorized to provide flood mitigation and COP evaluation needs to be comprehensive in evaluating that the projects is able to provide the required flood mitigation without restricting Everglades restoration flows to ENP.

The Department requests that continued attention to water quality is a critical part of COP formulation, and that specific actions to maintain water quality must be implemented as part of the development of COP. The concerns expressed by the Department in previous correspondence focused on the potential for exceedances of the State's phosphorus criterion due to increased flows into Shark River Slough. Other water quality issues must also be addressed during the development of COP, including the uncertainty surrounding the quantity and quality of water to be released to the Everglades Protection Area (EPA). This concern needs to be carefully evaluated in planning for COP including structure operation criterion and water velocity management that could resuspend sediments (for example: slow opening of S-333 after extended closure).

**Regulatory Authorization:**

The implementation of COP will modify the operations of water management structures within the Southern Everglades and the South Miami Dade Area. Surface water management, which includes operations, is regulated by the Department under Chapters 373 and 403, Florida Statues. Any modification to the existing system may require a permit prior to implementation. The

Department strongly recommends that the Corps initiate discussions with the Department early in the planning process to ensure regulatory concerns are appropriately addressed. As mentioned earlier, the Department has issued multiple emergency orders to manage the high water operation deviations of the WCAs and L-29 Canal System. The Department trusts that the development of COP will fully evaluate and address all operating conditions of this project and that the need for unplanned emergency deviations will not continue to be part of the future operating procedures.

The Florida Department of Environmental Protection (Department) appreciates the opportunity to comment, and understands that the substantive details of the project will be addressed in the forthcoming NEPA document. Department staff looks forward to continued participation throughout the planning process. The Department would like to reiterate its commitment to the restoration of the Greater Everglades ecosystem and "getting the water right." Should you have any questions on the comments provided, please do not hesitate to contact Ms. Inger Hansen at (561) 681-6709.

**Electronic copies to:**
Brenda Mills, SFWMD
Matthew Morrison, SFWMD
Donna George, USACE
Gina Ralph, USACE
Jed Redwine, NPS
Robert Johnson, NPS
Ed Smith, FDEP
Frank Powell, FDEP
Chad Kennedy, FDEP
Inger Hansen, FDEP
Aric Larson, FDEP
Rhapsodie Osborne, FDEP
Natalie Barfield, FDEP
Kelli Edson, FDEP
Jordan Pugh, FDEP

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October 24, 2017

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: U.S. Army Corps of Engineers (USACE) Scoping in Preparation for National Environmental Policy Act (NEPA) Assessment of the Combined Operational Plan (COP)

Dear Ms. Nasuti:

Florida Fish and Wildlife Conservation Commission (FWC) staff has reviewed the above-referenced scoping solicitation, and provides the following technical comments in accordance with FWC's authorities under Chapter 379, Florida Statutes; Chapter 68, Florida Administrative Code; and Article 4, Section 9, Florida Constitution.

**Project Description**

The U.S. Army Corps of Engineers (USACE) is beginning preparation of the National Environmental Policy Act (NEPA) assessment for the Combined Operational Plan (COP). The purpose of the COP is to define operations for the constructed features of the Modified Water Deliveries (MWD) to Everglades National Park (ENP) and Canal 111 (C-111) South Dade Projects, while maintaining the congressionally authorized purposes of the Central and Southern Florida (C&SF) Project to include flood control; water supply for agricultural irrigation, municipalities, and industry; regional groundwater control and prevention of saltwater intrusion; and enhancement of fish and wildlife and recreation.

The COP will result in a comprehensive integrated water control plan for the operation of water management infrastructure. The development of the COP will be informed by a series of previously conducted operational field tests. Additionally, the COP will incorporate information gained from water management actions taken by USACE in response to unseasonable high-water levels within the Everglades and Francis S. Taylor Wildlife Management Area (EWMA), which are comprised of Water Conservation Area (WCA) 2 and 3.

**Potentially Affected State Listed Wildlife**

FWC staff has reviewed the table of state listed species in the project area that was provided in the letter dated September 26, 2017, from USACE to U.S. Fish and Wildlife Service. The FWC staff has compared the information provided by USACE to the *"Florida's Imperiled Species Management Plan"* (2016), and has provided a list of state threatened (ST) wildlife consistent with the most recent version of the *Imperiled Species Management Plan.*

- Mammals
  - Everglades mink (*Mustela vison evergladensis*, ST)

- Birds
  - Black skimmer (*Rynchops niger,* ST)
  - Least tern (*Sterna antillarium*, ST)
  - White-crowned pigeon (*Patagioenas leucocephalus,* ST)
  - Little blue heron (E*gretta caerulea*, ST)
  - Tricolored heron (*Egretta tricolor*, ST)
  - Reddish egret (*Egretta rufescens*, ST)
  - Roseate spoonbill (*Platalea ajaja,* ST)
  - Florida sandhill crane (*Antigone canadensis pratensis,* ST)
  - Southeastern American kestrel (*Falco sparverius paulus,* ST)

A complete copy of the *Florida's Imperiled Species Management Plan* (2016) can be downloaded from the MyFWC.com website at http://myfwc.com/media/4133167/floridas-imperiled-species-management-plan-2016-2026.pdf.

**Comments and Recommendations**

Implementation of the COP is anticipated to increase the availability of water deliveries from WCA-3A to ENP through Northeast Shark River Slough and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP. FWC staff recognizes the broad scope of COP and previously provided scoping comments on July 6, 2011. FWC staff appreciates being a partner in the development of the COP through the Project Delivery Team (PDT) process and looks forward to the ecosystem-wide ecological benefits to be achieved through project implementation.

High-water Management Strategy

The FWC has fish and wildlife and land management responsibilities for the EWMA and has found that hydrology, water depth, and duration of standing water are very important components of wildlife and habitat protection. The FWC has developed a position paper entitled *Hydrologic Requirements for the Everglades and Francis S. Taylor Wildlife Management Area* 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, habitat, and diversity so that the goals of the Comprehensive Everglades Restoration Plan (CERP) may be fully realized.

FWC staff recommends that the USACE fully incorporates information gained from the emergency and planned temporary deviations that were implemented by USACE in response to extreme high-water conditions in the EWMA. Further, staff recommends that the USACE relies on the biologically based guidance provided in FWC's position paper to develop high-water management strategies that are consistent with this guidance, provides relief for wildlife during periods of extreme high-water, and minimizes recreational impacts.

Regulation Schedules for WCA-3B and WCA-2A

The EWMA includes WCA-2, WCA-2B, WCA-3A, and WCA-3B. WCA-3B contains highly significant natural resources, managed for natural vegetative communities, wildlife and aquatic species, and recreational uses. WCA-3B supports some of the least impacted tree islands remaining in the Everglades ridge and slough landscape and the maintenance of ecologically compatible water levels is important for the wildlife and ecology. FWC staff supports the development of a regulation schedule for WCA-3B that maintains the ecological quality and supports continued recreational uses.

The COP bulleted document that was distributed to the PDT acknowledges that the USACE is considering the inclusion of WCA-2 in the COP effort. FWC staff supports incorporating WCA-2A regulation schedule revisions that improve the quantity, timing, and distribution of water to promote more natural patterns of inundation.

Expedite Current Projects and Plan for Future Project Components

The COP is a critical step towards developing a water control plan that makes full use of the available infrastructure and resources constructed under MWD, CERP, Tamiami Trail Next Steps (TTNS), Central Everglades Project Plan (CEPP), and other Everglades restoration programs.

FWC staff recommends utilizing all available resources to expedite the MWD and C-111 projects, including the COP to gain full project benefits as soon as practicable. Expediting the remaining components of MWD and the C-111 projects will facilitate raising the L-29 canal constraint up to the 8.5 feet National Geodetic Vertical Datum (NGVD) and hasten the potential benefits of project implementation.

FWC staff also recommends that the COP operations strategy not omit or constrain the role of infrastructure projects scheduled for near-term completion. Project components such as the TTNS 2.6-mile bridge, S-333N, the removal of Old Tamiami Trail, and other restoration features will provide great benefits to preventing and managing high-water conditions in the EWMA.

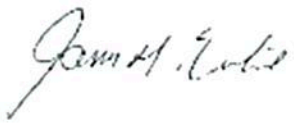
L-29 Canal Constraint

FWC staff continues to support the development of a water control plan that raises the maximum operational limit of the L-29 canal and maximizes ecologically beneficial flows from the EWMA through Northeast Shark River Slough and Taylor Slough to Florida Bay. FWC staff recommends that the COP alleviate all constraints on the L-29 canal stage up to the 8.5 feet National Geodetic Vertical Datum (NGVD) to facilitate maximum sustained discharges from the EWMA to Northeast Shark River Slough and on to Florida Bay. An operational plan that maximizes opportunities to deliver water from the EWMA will help prevent high-water conditions from developing and support high-water management strategies that minimize potential impacts to area wildlife, their habitat, and recreational uses.

FWC staff appreciates the USACE's commitment to developing the COP in a timely manner for the benefits to the overall Everglades and fully supports the efforts. We

appreciate the opportunity to provide comments and recommendation early in the process, and offer our staff support to continue working with the USACE throughout the development of COP. If you have questions or would like to coordinate further on any of the recommendations contained within this letter, please contact me directly at (561) 625-5704 or by email at James.Erskine@MyFWC.com.

Sincerely,



James Erskine, Everglades Coordinator
Office of Executive Director

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ENV 1-5-2
Combined Operational Plan for the Southern Everglades_33930_102417
Enclosure

**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 insure 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 insure restoration of fish and wildlife populations, habitats, and diversity such that CERP goals can be fully realized.

## Executive Summary

The 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 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 including 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 the Comprehensive Everglades Restoration Plan 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

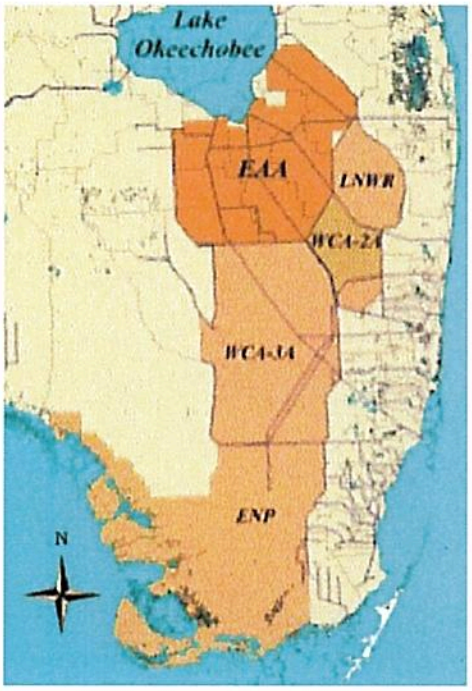
sawgrass ridges, sloughs, and tree islands appeared to be relatively intact; and an area along eastern and southern WCA 3A that had suffered from prolonged high water levels. Based on an analysis of Everglades plant communities and selected wildlife species, Schortemeyer (1980) developed schedules for 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 (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 extreme high and extreme 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 extreme 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 in what is now the Everglades Agricultural Area, and traveled south via sheetflow in the ridge and slough system to 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 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 prairie 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 the next year a larger number of juvenile snails that are too small for snail kites. 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). 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 prairie. 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 extremely 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 sloughs*: 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 prairie*: 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 in 2008 worked with snail kite and apple snail researchers 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 concludes that native plant and wildlife species which characterize the central Everglades will not be restored, but instead further harmed.
- While this paper represents our current opinion, it is the intent of FWC to continue working 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.

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**TO:** Melissa Nasuti, Environmental Branch, USACE

**FROM:** Brenda J. Mills, Everglades Policy and Coordination, SFWMD

**DATE:** October 20, 2017

**SUBJECT:** Department of the Army, Jacksonville District Corps of Engineers — Scoping Notice – Combined Operations Plan

The Jacksonville District, U.S. Army Corps of Engineers (USACE) issued the subject Scoping Notice to gather comments and concerns that will be addressed in a National Environmental Policy Act (NEPA) document for the Combined Operational Plan (COP). The purpose of COP is to define operations for constructed components of the Modified Water Deliveries (MWD) to Everglades National Park (ENP) and the Canal 111 (C-111) South Dade projects, while maintaining the Congressionally-authorized multiple purposes of the Central and Southern (C&SF) Project to include flood control; water supply for agricultural irrigation, municipalities, and industry; regional ground water control and prevention of saltwater intrusion; enhancement of fish and wildlife; and recreation.

A bulleted list of objectives outlined by the USACE for COP includes the following:

1. Improve water deliveries (timing, location, volume) into ENP and take steps to restore natural hydrologic conditions in ENP given current C&SF infrastructure or infrastructure expected to be completed by the time of implementation, to the extent practicable by:
    a. Changing schedule of water deliveries so that it fluctuates in consonance with local meteorological conditions, including providing for long term and annual variation in ecosystem conditions in the Everglades (Timing).
    b. Restoring NESRS as a functioning component of the Everglades hydrologic system (Location).
    c. Adjusting the magnitude of water discharged to ENP to minimize effects of too much or too little water (Volume).
2. Maximize progress toward restoring historic hydrologic conditions in the Taylor Slough, Rocky Glades, & eastern Panhandle of ENP.
3. Protect the intrinsic ecological values associated with WCA 3A and ENP.
4. Minimize the damaging freshwater flows to Manatee Bay/Barnes Sound through the S197 structure and increase flows through Taylor slough and coastal creeks.
5. Include consideration of cultural values and tribal interests and concerns within WCA 3A and ENP.
6. Explore opportunities for enhancing the recovery of federally and state listed species under the Endangered Species Act, consistent with the restoration objectives, the USACE's authorities for MWD and C-111 projects and operational considerations.
7. Explore objectives to enhance opportunity for flood control and mitigation.

The South Florida Water Management District (District) appreciates the opportunity to comment, and understands that the substantive details of the operating plan will be addressed in the forthcoming NEPA document.

**District Comments**

The pre-storm QPF criteria in the FDOT agreement with the USACE specifies stage limits in the L-29 Canal which reduces flows to NESRS. New groundwater wells and soil moisture sensors will be installed soon to understand the effects of water in the L-29 Canal to the Tamiami Trail Subbase. Analysis of monitoring data will support revision of the FDOT-USACE agreement. The revised USACE-FDOT agreement needs to have clear and actionable criteria to operate the L-29 Canal. In addition, the resulting changes to the water control plan need to balance the goal of conveying water from WCA 3A to ENP and ensuring the South Dade Conveyance System can continue to provide flood protection to privately owned land in the L-31N and C-111 Basins.

COP is the opportunity to eliminate Column 2 operations. Column 2 operations were an interim solution developed during IOP prior to construction of the detention areas and are archaic. Instead of Column 2, the District's South Dade Study recommended seasonal operations for the S-332B and S-332C pump stations identifying a range to maintain the L-31N Canal and allow the transition from the dry to wet season and from wet to dry season conditions. The seasonal operations were shown to be beneficial to prolonging hydroperiods during the dry season in the ENP and support agricultural production which begins at the end of the wet season. The District is very interested in including seasonal operations in the alternative development. These are a valid and proven operating strategy to replace Column 2 operations.

There is a need to evaluate COP on a broader and more comprehensive scale while meeting the original objectives of both the MWD and C-111 South Dade Projects. COP alternative evaluation should consider ongoing and future State and Federal restoration efforts. The broader more comprehensive evaluation should include re-evaluating inflows and outflows of WCA 3 and features that have been or will be constructed by Federal and State agencies such as the Tamiami Trail Next Steps Phase I project, Old Tamiami Trail Removal, S333N, Biscayne Bay Coastal Wetlands. The evaluation should include components for the South Dade C&SF flood protection, conditions in Water Conservation Areas (WCA) 1, 2 and 3, and flood mitigation for the 8.5 Square Mile Area (SMA), L-31N and C-111 Basins.

Current regulation schedules for WCA 1 and WCA 2A have known shortcomings resulting in documented impacts to the observed system and shown in planning studies over the last several years. In WCA 1, a range of hydrologic stage conditions are needed to sustain a healthy landscape, but prolonged high water conditions risk transport of higher nutrient and high hardness water into the marsh interior, which would otherwise optimally remain a low-nutrient, soft water environment. In WCA-2A significant loss of habitats including a 90% reduction in the aerial extent of tree islands, a loss of ridge and slough microtopography, and a lack of good foraging and breeding habitat for wading birds have been observed.

Since WCA 1 and WCA 2A are centrally located in the South Florida water management system, a number of upstream and downstream considerations should also be made. In both cases, upstream projects including the District's Restoration Strategies program will result in changed inflow timing relative to those assumed when the current WCA regulation schedules were developed. Additionally, the regulatory decisions associated with WCA-1 and WCA-2A will directly influence the ability for

downstream systems (WCA 3A or WCA-3B) to achieve desired outcomes. For example, attempts in the last several years to meet the current WCA-2A regulation schedule have produced large dry season reversals downstream in WCA-3A during critical periods in the wading bird breeding season.

One goal of the authorized MWD project was to construct and operate a flood mitigation project for the 8.5 SMA to ensure that restorative flows to ENP's Shark River Slough would not result in diminished or increased flood protection. To this end, the USACE needs to ensure evaluation of 8.5 SMA mitigation features during the NEPA analysis accurately reflects future performance and adjustments to the COP does not compromise maximizing flows from WCA 3 to ENP. In addition, structural modifications to 8.5 SMA mitigation features should be identified and implemented if providing flood mitigation to 8.5 SMA constrains the stages or flows in NESRS.

This same is true for evaluating the performance of the newly constructed C-111 South Dade features, their operation, which may not begin until 2018 wet season, and the need for potential modification of its features. To this end, the USACE needs to ensure evaluation C-111 detention areas during the NEPA analysis accurately reflects future performance of COP and does not compromise maximizing flows from WCA 3 to ENP.

The District recommends that COP includes operations responsive to unforeseen meteorological conditions to avoid, minimize or eliminate the need State issued Emergency Orders for High Water Conditions. This will reduce the frequency of high water emergency orders and subsequent operation adjustments not covered in the water control manual.

It in the interest of the District and FDEP to ensure operations are in place to achieve the objectives of the CERP projects. The CERP Biscayne Bay Coastal Wetlands Project - Phase 1 is nearly complete and planning for Phase 2 will begin soon. This is the opportune time to consider directing flows to enhance salinities in Biscayne Bay. Although the coastal water control structures are not part of this water control plan, the divide structures are included.

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** lad akins <Lad@reef.org>
**Sent:** Wednesday, October 11, 2017 2:17 PM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] Everglades Restoration
**Attachments:** 0914_001.pdf

Dear Ms. Nasuti,

Please find the attached letter in support of Everglades restoration efforts that include, as a top priority, consideration of Florida Bay and Florida Keys ecosystems.

Feel free to contact me with any questions you may have.

Sincerely,

Lad Akins

**********

Lad Akins

Director of Special Projects

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October 11, 2017

Melissa Nasuti
U.S. Army Corps of Engineers
Jacksonville District
Deliver via email:
Melissa.a.nasuti@usace.army.mil

Re: Everglades Restoration Needed for the Florida Keys

Dear Ms. Nasuti:

The lifestyle and economy of the Florida Keys are intrinsically linked to the health of Everglades National Park and Florida Bay. Clean water to sustain the ecosystem is key.

Restoration projects to benefit Everglades National Park and the Florida Keys have been under construction for many years, paid for by significant taxpayer investment. Now, writing an operations plan for how to use these projects is the critical next step. This is the time to achieve the ecosystem benefits we desperately need in the Keys.

**Please ensure that protecting the waters of the Southern Everglades and Florida Bay is the top priority for operating restoration projects in South Miami-Dade!** These projects include the Modified Water Deliveries (MWD), C-111 South Dade, and C-111 Spreader Canal projects, which will be guided by the Combined Operation Plan (COP) currently under consideration by the U.S. Army Corps of Engineers and other state and federal agencies.

As a member of the Florida Keys community, responsible operation of these projects to maximize restoration benefits for the Everglades and Florida Bay is important to me.

Sincerely,

LAD AKINS

Name

PO Box 370246 Key Largo FL 33037

Address

LAD@REEF.ORG

Email

October 20, 2017

Melissa Nasuti
U.S. Army Corps of Engineers, Jacksonville District
Email delivery: Melissa.a.nasuti@usace.army.mil

Re: Flip the "On" Switch for Everglades National Park and Florida Bay

Dear Ms. Nasuti:

The National Parks Conservation Association (NPCA) has long supported efforts to restore Everglades National Park (ENP) and Florida Bay. We have remained actively involved in the planning processes for Modified Water Deliveries (MWD) to ENP, C-111 Spreader Canal, and the C-111 South Dade Project. After decades of work, it is finally time to flip the "on" switch and operate these plans to the maximum benefit of the ecosystem. Executing the Combined Operations Plan (COP) will bring restoration planning into on-the-ground reality.

**NPCA asserts that the COP must utilize restoration infrastructure to the maximum ecological benefit of Everglades National Park and Florida Bay.** As the scoping of COP moves forward, we urge the agencies to ensure that the charter mission of ecosystem restoration remain the primary focus and goal of your cumulative efforts.

Specifically, the COP must ensure that key operational targets outlined in the original project documents are met, including: eliminated use of the S-197 structure and associated harmful discharges, increased canal stages of the C-111 at S-18C, and increased water to restoration levels in ENP and Florida Bay. COP must also set the stage for additional restoration benefits to come with projects that are currently in the works. These include construction of the Central Everglades Plan (CEP), particularly CEP South components, additional bridging of Tamiami Trail, and the Everglades Agricultural Area (EAA) Reservoir. Together, these projects will create a network of restoration infrastructure for ENP and Florida Bay.

The U.S. Department of the Interior has invested millions of taxpayer dollars for the direct benefits to ENP that must now be achieved. ENP is the anchor of the federal interest in the South Dade system. We must get the water right and make good on the investment that has been funded by Americans for the national park that is owned and valued by all.

Thank you for your consideration. We look forward to continued involvement in COP planning.

Sincerely,

Cara Capp

Cara Capp, Everglades Restoration Program Manager

135 San Lorenzo Ave.
Suite 860
Coral Gables, FL 33146

October 20, 2017

Melissa Nasuti
U.S. Army Corps of Engineers, Jacksonville District
Email delivery: Melissa.a.nasuti@usace.army.mil

Re: Letter on Behalf of Bonefish & Tarpon Trust to the U.S. Army Corps of Engineers on the Combined Operations Plan (COP)

Dear Ms. Nasuti,

My name is Ross Boucek, Florida Keys Initiative Manager of the Bonefish & Tarpon Trust (BTT), and I am submitting this letter on behalf of BTT. BTT appreciates the opportunity to provide our perspective on Everglades restoration, particularly in terms of how we will operate projects in the Southern Everglades. Restoration projects to improve the conditions of the Southern Everglades and Florida Bay, including Modified Waters Deliveries (ModWaters), C-111 South Dade, and C-111 Spreader Canal, have been in the works for decades. Now it is finally time to turn these projects on, executing the Combined Operations Plan (COP), and maximize the ecological benefits they provide to Everglades National Park and Florida Bay.

BTT is a 20 year old science-based conservation organization that is focused on improving management of coastal fisheries and the habitats upon which the fisheries depend. Though our focus is on the fish species that comprise the flats fishery – Bonefish, Tarpon, Permit, and even Snook – our science and conservation work also applies to other coastal species and fisheries. Indeed, we regularly collaborate with state and federal resource management agencies, sharing our data to help improve management. We are also an angler-based organization in that we engage and represent the tens of thousands of people who participate in and rely upon the recreational fisheries for their livelihood.

The epicenter of the failure to enact Everglades restoration is Florida Bay. Florida Bay's ongoing collapse arises from failure to deliver adequate quantities of clean freshwater to the Bay via the Everglades in the appropriate locations at appropriate times. It is bitterly ironic that a similar crisis in the Bay – 30 years ago – provided much of the impetus for federal and state restoration authorization in 1988 (the East Everglades Act) and later in 2000 with the Comprehensive Everglades Restoration Plan (CERP). Despite years of study and planning, and expenditure of millions of dollars of public funds, Florida Bay is likely worse today than in 1985. This state of affairs is unacceptable and BTT urges you to develop a COP that accelerates actions to restore the Bay before it passes an ecological tipping point from which it may never recover.

We are concerned that Everglades restoration inadequately considers coastal fish and habitats in water management plans. Too often, water budgets are presented as annual totals and reduction in nutrients. From a fish and habitat perspective, changes in the timing, amount, and location of freshwater flows are just as important as reduction in nutrient load. Indeed, even if pristine freshwater was being discharged from Lake Okeechobee into the rivers, the ecological damage would be same. In other words, restoration must aim to restore the spatial and temporal patterns of freshwater flows into South Florida estuaries as well as address the nutrient load issues.

Our comments are also presented from multiple perspectives. In the 1980's BTT's Vice Chairman, Bill Horn, served as Assistant Secretary of the Interior for Fish, Wildlife and Parks and was engaged in negotiations to provide more timely water flows to the Bay via Taylor Slough as well as the work that produced the Modified Water Deliveries authorization in 1988. In 2007-2010 our Vice Chairman had the honor of serving two terms on the Committee on Independent Scientific Review of Everglades Restoration Progress, contributing to the 2008 and 2010 Biennial Review reports. And for 40 years, Bill has avidly fished the Florida Keys and Florida Bay in pursuit of bonefish and tarpon. It is extremely frustrating that 30 years after we learned of the need for better water management in South Florida, it still hasn't occurred at a scale sufficient to keep Florida Bay, the Caloosahatchee River, and the St. Lucie River healthy let alone restored. As anglers, policy makers and scientists, it has been devastating to watch fisheries collapse when all knowledgeable observers know what needs to be done to restore water quality in the Bay.

Florida Bay was once home to a robust bonefish fishery. Bonefish is a highly prized sport fish which is stalked in clear shallow waters, and released unharmed after an exciting catch. Following the Bay's mid-80's crisis, the bonefish population began to slide, the decline accelerating in 1999. The population hasn't recovered.

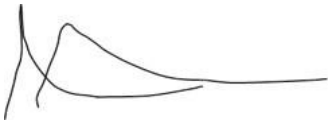
Tarpon and Snook have also suffered from the lack of Everglades restoration. These species rely upon the entire habitat mosaic of South Florida – from backwater mangrove swamps to mangrove shorelines, seagrass beds, and sandy beaches. This demonstrates how Florida Bay's ecological decline has impacted Tarpon, also a catch and release species. From Cape Sable and Flamingo south to Rabbit Key Basin and Buchanan Bank, big migratory Tarpon (*Megalops Atlanticus*) filter into the Bay every spring as part of the spawning run to the Atlantic waters off the Keys. Anglers and guides pursue the silver kings and routinely catch fish topping 100 pounds on fly rods. After the problems of the mid-80's, tarpon largely abandoned the Sandy Key Basin, which was a historic hot spot for the big silver fish, and similar abandonment is occurring in other locations. Inland, the tarpon use heavily Whitewater Bay and the Shark River complex. These Everglades waters host the full spectrum of *Megalops Atlanticus* from one pound juveniles to 150 pound matriarchs. Long term changes in water flows and salinity levels in these waters could put at risk the greatest remaining juvenile tarpon habitat in all of Florida.

As you might guess from our descriptions, the flats fishery is economically important. In the Florida Keys, the flats fishery has an annual economic impact of $465 million. The flats fishery is the major component of the recreational fishery in the Everglades region, which is worth nearly $1 billion annually. Restoration is essential to bringing these fish populations back to their historic levels.

It is widely recognized that failure to significantly increase freshwater flows to the Bay via Shark River and Taylor Slough is the primary cause of the Florida Bay crisis. The lack of water coming through the entire Everglades system creates hyper saline conditions that are death to a variety of important seagrasses. Large scale die offs of these grasses release excessive nutrients spurring algal blooms turning usually clear waters a sick pea soup green. Increased turbidity kills more grass, releasing more nutrients creating a death spiral. Vast swaths of previously healthy seagrass beds are now barren reaches of mud and silt, and recent observations show that these barren bottoms are eroding in some locations. Demise of the grass kills the benthic organisms that live their depriving forage fish of their food source. The loss of the forage fish causes the predatory game fish to leave too. It is an ecological and economic calamity.

The COP must utilize restoration infrastructure to maximize ecological benefits to Everglades National Park and Florida Bay. As the scoping of COP continues, we urge the agencies to ensure that the founding mission of ecosystem restoration is the primary focus and goal of your efforts. We also ask that members of the Florida Keys community, who will be directly impacted by the potential impacts of these projects and the benefits they provide to Florida Bay, be fully engaged in the COP planning process.

Sincerely,



Ross Boucek PhD
Bonefish &Tarpon Trust
Florida Keys Initiative
Marathon, Florida

# Everglades Coalition



October 20, 2017

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: Scoping Comments for the Combined Operational Plan for constructed features of Modified Water Deliveries to Everglades National Park, C-111 Spreader Canal, and C-111 South Dade

Dear Ms. Nasuti:

On behalf of its 61 member organizations committed to the protection and restoration of America's Everglades, the Everglades Coalition submits these comments on the scoping assessment for the Combined Operational Plan (COP), to define operations for the constructed features of the Modified Water Deliveries (MWD) to Everglades National Park (ENP), C-111 Spreader Canal, and C-111 South Dade Projects.

We understand that the COP will result in a comprehensive, integrated water control plan for the operation of water management infrastructure associated with the MWD and C-111 projects. The Everglades Coalition and its member organizations have long advocated for the planning, funding, and construction of these critical projects to advance ecological restoration of the Southern Everglades and Florida Bay. MWD is a project initiated and funded by the National Park Service with the primary intention to benefit ENP, with ancillary goals for South Dade agriculture. The C-111 Spreader Canal and South Dade Projects seek to further correct the damage inflicted to Florida Bay and ENP by the C&SF Flood Control Project by reestablishing the hydrologic flow between Taylor Slough and Shark River Slough. Just like MDW, these projects keep the water in the natural areas and away from South Dade.

We appreciate the work by state and federal agencies that has resulted in the restoration infrastructure that is on the ground today and look forward to remaining engaged stakeholders through the COP planning process.

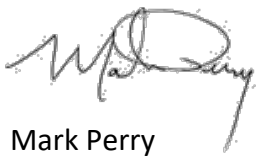
Finalizing the COP will be the realization of decades of work and millions of dollars in taxpayer investment by the American people to benefit Everglades National Park and Florida Bay. As such, maximizing ecological benefits to the Southern Everglades must be the primary focus of the COP. Specifically, the final plan should:

1. Eliminate the use of the S-197, as identified in the project documents.
2. Increase the canal stages of the C-111 at S-18C, as stated in the project documents.
3. Achieve restoration of water levels in ENP and Florida Bay, as stated in project documents.
4. Set the stage for more water deliveries to ENP and Florida Bay in anticipation of the Central Everglades Plan (CEP), as planned in CERP.
5. Work to reduce harmful discharges to Barnes Sound and Manatee Bay.

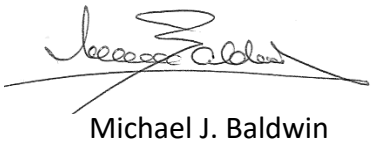
With a completed network of restoration and flood control infrastructure in place, the COP can outline a plan to move away from damaging emergency operations that continue to harm the Greater Everglades ecosystem. Instead, we can rely on the restoration infrastructure that has long been planned to move water in a way that is both beneficial to the natural system and protective of stakeholders in Miami-Dade County.

We look forward to remaining engaged through the COP planning process and appreciate the opportunity to provide comments on the scope of this effort. Thank you for your consideration.

Sincerely,



Mark Perry
Co-Chair



Michael J. Baldwin
Co-Chair

LAKE WORTH WATERKEEPER®

P.O. Box 1367, Lake Worth, FL 33460-1367
reinaldo@lakeworthwaterkeeper.org

October 21, 2017

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: Combined Operational Plan (COP) Defining Water Management Operations for the Constructed Components of the Modified Waters Deliveries (MWD) and C-111 South Dade (SD) Projects.**

*Via electronic mail*

Dear Ms. Nasuti,

We write in response to the public comment request regarding the COP for the MWD and C-111 SD Projects. Simply stated: Everglades' restoration is a concern for the entire state. A healthy Everglades has long reaching effects felt throughout its surrounding areas. Our health, lifestyle, and tourism industry all benefit from a healthy Everglades.

Tourism is clearly a major driver of our GDP. In 2014, over 97 million people visited our state bringing $82 billion with them.[1] $4.9 billion was collected as sales tax. *Id.* 1,145,800 Floridians were employed in the tourism industry. *Id.* Here in Palm Beach County, tourism is among our major industries bringing in $7 billion and supporting 60,000 plus tourism related jobs.[2] And it's no secret that the vast majority of these tourists come here for our beaches.

Despite this, it seems that decisions are being made with little to no consideration for our community's dependence on this industry. Through the Water Resource Development Act (WRDA) of 2000's *savings clause* big agriculture (predominantly big sugar) is given the highest priority in water management.[3] Water contaminated with bacteria, and harmful algae promoting nutrients is pumped into Lake Okeechobee to protect the massive monoculture farms. But eventually, this water moves through our community and reaches our beaches. Bringing unsightly dark brown and dirty water that turns tourists off of our beaches, prevents them from scuba diving our reefs, or ruins their fishing day.

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[1] VISIT FLORIDA: TOURISM FAST FACTS, https://www.visitflorida.org/about-us/what-we-do/tourism-fast-facts/ (last visited Oct. 20, 2017).
[2] PBC TOURIST DEVELOPMENT COUNCIL: ABOUT US, http://discover.pbcgov.org/touristdevelopment/Pages/default.aspx (last visited Oct. 20, 2017).
[3] Water Resources Development Act of 2000 Section 601(h)(5) Savings Clause.

Our water is a way of life. Much like how agriculture is engrained into the culture of the interior communities: boating, diving, fishing, surfing, etc. defines the culture of the coastal communities. This is the lifestyle that we like to share with tourists. But it is severely compromised by dirty water.

Our health is impacted when exposed to the bacteria and harmful algae brought by this dirty water. Many of the contaminants associated with farm runoff have been linked to degenerative diseases and even death.

For example, cyanobacteria thrives on the nutrients in the water that is pumped into Lake Okeechobee. When its overabundance reaches a bloom, cyanobacteria kills wildlife, most notoriously with massive fish kills. In addition, cyanobacteria produce a number of cyanotoxins, leading to serious immediate health concerns that require water closures. Cyanobacteria can also produce beta-Methylamino-L-alanine (BMAA), a substance that is a suspected causal link to a number of serious neurodegenerative diseases including Alzheimer's, Armyotrophic Lateral Sclerosis (ALS), and Parkinson's disease.[4]

This is hardly the environment we want to sell to our community. Residents and tourists alike come here for clean, clear beaches. So we are asking the USACE to consider our needs in this water management plan. Let us be clear, this is by no means an attack on the interior communities surrounding Lake Okeechobee that depend on the agriculture industry. Rather, we are asking to have the coastal community's needs considered fairly and balanced with the needs of the agricultural community.

If the priority that is given to big agriculture is a matter of current convoluted policy, then we need to have a dialogue to begin the change of this policy. There is no reason to maintain the status quo if it does not benefit the state's interest. For too long big agriculture has been given top priority in water management at the expense of the surrounding communities. A balance needs to be found, to safeguard our health, lifestyle, and industry.

Sincerely,

Reinaldo Diaz, J.D.
Lake Worth Waterkeeper

WATERKEEPER® ALLIANCE
MEMBER

[4] Fact Sheet Update on BMAA, Water Research Australia (March 2015), https://assets.documentcloud.org/documents/2799457/2015-BMAA-fact-sheet.pdf.

October 17, 2017

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: Combined Operational Plan Must Put Ecosystem Benefits First

Dear Ms. Nasuti:

Everglades National Park and Florida Bay are incredible environmental and economic resources for those of us who live and work in the beautiful Florida Keys. For years, the health of the Southern Everglades and Florida Bay have been in decline, impacting the coral reef ecosystems and fish populations that sustain our fishing, diving, and other water based businesses – the backbone of Monroe County's $2.7 billion tourism economy.

Restoration projects to improve the conditions of the Southern Everglades and Florida Bay have been planned for decades. Now, the Combined Operational Plan (COP) will set guidelines for how the agencies operate the projects that will restore Everglades National Park, including the Modified Water Deliveries (MWD), C-111 South Dade, and C-111 Spreader Canal projects. We understand that the Army Corps and its partner agencies are accepting public comment on the scope of this operations plan.

**As fishing guides and members of the Florida Keys community, we strongly assert that restoration projects must maximize ecological benefits to Everglades National Park and Florida Bay.** We live and work in the heart of the ecosystem and understand firsthand the damage that has been done. Our fisheries, wildlife and important habitats continue to be plagued by lack of freshwater flow. The hyper-salinity events and seagrass die-offs are too much for this ecosystem to handle. We must give it a chance to come back. Now is the time to complete these projects. Florida Bay desperately needs more freshwater.

Americans have invested millions of taxpayer dollars in projects to restore Everglades National Park, which is a unique piece of our national heritage that we all own and treasure. We must ensure that all restoration infrastructure is used to protect and restore the Everglades.

Sincerely,

On behalf of The Board of Directors of the Florida Keys Fishing Guides Association

Capt. Steve Friedman
*Commodore, F.K.F.G.A.*
P.O. Box 936
Islamorada, FL 33036
305-393-3474
fkfgacommodore@gmail.com

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Brian O'Neill <sdbfo@yahoo.com>
**Sent:** Thursday, October 19, 2017 9:41 PM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] Top Lake O Discharges to the Estuaries and Bay, NoW!!

Please stop killing the Estuaries for price supported sugar now. This may in fact end up being a huge RICO case. The Corps of Engineers has an ethical responsibility to RESTORE the River of Grass as expressed by Amendment 1!

Thank You,

Brian O'Neill
790 Beard Ave
Sebastian, FL 32958

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Donna J. Lucas <d.lucas2@me.com>
**Sent:** Thursday, October 19, 2017 10:44 PM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] Lake Okeechobee

The Everglades itself is at the very least as important as the people living in south Florida on borrowed swamp. south Florida needs more land? Take it from the sea Atlantic not the fragile gulf of Florida, almost always nature will win eventually especially water. The Dutch do this excellently.

The lake Okeechobee is really artificial now with its dams and earthen mounds. Engineers can solve the pollution problem with a plan in conjunction with the sugar plantations. The sugar needs to recycle all their water. Laden with algae this could be a source of energy to resell whom ever funds it. The clean water resold/ or for irrigation. We build sewage treatment plants everywhere recycling poo poo in to drinking water should be very easy especially if the algae diverted produces energy. This is done in many places. Only clean water back south to the people and glades. The lake is the excess water from hurricanes and of course now the folks populating south Florida. Over flow needs to return to the Everglades, gulf of Florida, and people of south Florida clean. Not uncleaned to the Atlantic and her shores.

The Army Corp of Engineers is looking at the whole of Florida for a master plan even if plan designs specifically are bid for by private firms. The least bureaucracy, EPA, everyone knows the rules, South Florida Water, South West Water, The Army Corp or Engineers, and good private firms. Corp of Engineers doing a master State plan not the details, as much as, the ideals. All the others just need to follow with design with proposals and then have the water districts offer the contracts for bid. We do not need. Committee of legislators to collaborate on the designs, they are not smart enough to understand or be taught and slow any progress.

We have the brightest engineers in Florida, environmental and civil design, private and public. This state is already so very environmentally minded. With few polluting companies. The sugar company pays corporate taxes evens out export, it has to be profitable for them too, a way for energy .

Thank you for considering recycling of sugar water.

Sent from Donna Lucas iPad

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Jon Robertson <jon.robertson25@gmail.com>
**Sent:** Thursday, October 19, 2017 9:05 PM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] COP Comments

Hello,

I live in Stuart Florida and would like to see the USACE prioritize human safety by increasing the outflow capability south of the lake into the STAs and future reservoir, including removing barriers that currently restrict the capability of sending water south. In 2013, 2016 and this year the large rain events caused unnatural discharges to the east and west coasts. With a larger capacity to hold water in the lake and more storage north and south of the lake these damaging discharges would be largely decreased and increase safety for residents in the glades, Martin county and Lee county by reducing the polluted water discharging to the coasts.

Jon robertson
Jon.robertson25@gmail.com <mailto:Jon.robertson25@gmail.com>
772-215-1506 <tel:772-215-1506>

Sent from my iPhone

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Sandy Blair <sblair1324@hotmail.com>
**Sent:** Thursday, October 19, 2017 9:02 PM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] SEND THE WATER SOUTH

It is beyond my comprehension how the water system has been allowed to deteriorate to the point it is. Polluted water from Lake Okeechobee is destroying the livelihoods of commercial fishermen, fishing guides, those who depend on tourists visiting our once-but not-longer pristine beaches and waterways.

The sugar industry has dominated the course of action for too long. It is time to stop pandering to a business whose very existence is a detriment to the health of the nation - the first thing doctors tell overweight patients...CUT OUT THE SWEETS i.e. SUGAR.

There is something wrong with this picture. Just do what is necessary to protect the people and the economy of the state. SEND THE WATER SOUTH.

Sandra Blair

1335 Danforth St SW

Palm Bay FL 32908

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** barbara brennan <bonniebrennan2@yahoo.com>
**Sent:** Friday, October 20, 2017 2:19 AM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US); Barbara Brennan
**Subject:** [EXTERNAL] Lake Okeechobee

dear Ms Nasuti,
I request that the Corps prioritize the impact of discharges from Lake Okeechobee on the health and safety of residents of riverside communities, the health of Florida's waters,and the renewal of the Everglades as it plans COP.
Thank you for your kind attention.
Sincerely,
Barbara Brennan

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** capeddie5639@gmail.com
**Sent:** Friday, October 20, 2017 1:12 PM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] Fwd: COP Comment

Sent from my iPhone

Begin forwarded message:

> From: capeddie5639@gmail.com <mailto:capeddie5639@gmail.com>
> Date: October 20, 2017 at 12:52:13 PM GMT+2
> To: melissa.a.nasuti@acoe.army.mil <mailto:melissa.a.nasuti@acoe.army.mil>
> Subject: COP Comment

Please see that the antiquated rules governing the watershed of Florida and the EEA get updated to today's times and populations of people in Florida.

It is time to place the top priorities of water management for the benefit and protection of the people and the natural resources of the state of Florida and not for BIG SUGAR & THE EEA

CHARLES WIGHTMAN 76 year disgusted Florida resident

Sent from my iPhone

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Doug Kilpatrick <tarpondoug@yahoo.com>
**Sent:** Friday, October 20, 2017 7:24 AM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] Everglades restoration

Dear Ms. Nasuti

The Lower Keys Guides Association is comprised of over 150 members, many of whom make a living by practicing catch and release methods of fishing in and around the boundaries of Everglades National Park.
It is our understanding that there is currently a comment period in which the Army Corps and its affiliates are accepting public comment on the COP guidelines for restoration efforts, including Modified Water Deliveries, c-111 Spreader Canal and c-111 South Dade projects.

We understand too well the economic impact of a reduction in fish populations and habitat. The ongoing ecological issues in the Park, including the lack of fresh water flow and seagrass die-offs, cause economic losses to not only our membership but to the entire Florida economy. We urge you to understand the negative economic impacts we have felt recently, and look toward their solution, with a infrastructural restoration that is used to restore the ENP.

Thank you,

Sincerely,

Doug Kilpatrick and the Board of Directors
Lower Keys Guides Association

Nathaniel Clarke Linville
The Angling Company
e: nathaniel.linville@yahoo.com <mailto:nathaniel.linville@yahoo.com>

Sent from my iPhone

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Mark Horwedel <Mark.Horwedel@merchantadvisorygroup.org>
**Sent:** Friday, October 20, 2017 10:17 AM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Cc:** peter@girard.us; Allan Goode (allanlgoode@gmail.com); Jim Askew; Lauren Robitaille (Lauren.Robitaille@walmart.com)
**Subject:** [EXTERNAL] COP Comment (corrected email)

Ms. Nasuti,

I am writing in support of the COP plan.

While I understand some of the limitations the Corps operates under, I am appealing to your collective conscience in helping Florida's citizens throw-off the suppression of public interests by a handful of sugar moguls and corrupt politicians who have permitted the destruction of our waterways to go unchecked for decades.

I own a property in Martin County which is baring the full brunt of pollution from Okeechobee runoff. It's shocking to witness the mess that has been made of the Indian River Lagoon and the St. Lucie River, not to mention the destruction in wildlife that has occurred.

Please accelerate your efforts to develop solutions that will spare our waterways from continued destruction, return the flow of the water south and sacrifice the demands of special interests for the public interest.

Thanks in advance for your efforts to return Florida to Floridians.

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Lisa Carruthers <lsc0818@icloud.com>
**Sent:** Friday, October 20, 2017 2:00 PM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] Okeechobee COP

Please prioritize Lake Okeechobee's impact on the health and safety of glades residents and riverside communities as you plan COP. The known impacts of toxic algae must take priority over industry "wants". As a health care professional, i know that the cumulative effects of exposure to these toxins will sky rocket, causing more illness and death in future years. The run off needs to be sent south, as it was intended before the interference of money motivated businessmen and politicians.

Lisa S. Carruthers
Aboard M/V Tapestry

Mobile 860.227.6288

"Twenty years from now you will be more disappointed by the things you didn't do than by the ones you did do. So throw off the bow lines, sail away from the safe harbor. Catch the trade winds in your sails. Explore. Dream. Discover."
Mark Twain

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** louis brouillard <southerncannuck@yahoo.com>
**Sent:** Friday, October 20, 2017 8:36 AM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] The drainage of the glades

Put me down as a voice for returning as much water as possible to Florida Bay, and reducing the discharges to the coastal estuaries.

Ps, I do not support deep injection wells north of the lake. Frankly the sugar barons tails have wagged the dog too long.

Sent from my iPhone

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Matthew Jones <matthewweadjones@gmail.com>
**Sent:** Friday, October 20, 2017 11:30 AM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] I Support Merging the COP and the LORS

Dear Melissa:

As a lifelong Florida citizen who grew up in Vero Beach along the Indian River Lagoon, and currently lives in Tampa, I support merging the Combined Operational Plan (COP) with the Lake Okeechobee Regulation Schedule (LORS).

This is the best way for the Army Corps of Engineers to obtain a holistic understanding of how water moves throughout the entire South Florida system. It will take into account health and human safety as top priorities. I believe we have an opportunity to do for wetlands what Allan Savory has done for grasslands.

I agree with the statement made by bullsugar.org <Blockedhttp://bullsugar.org> in its October 19th article: "It's time to consider how much total drainage and water are available and manage it as a single, interconnected set of resources."

Please enter my thoughts into the public record regarding this issue.

Sincerely,

Matthew Jones

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Rosty Caryk <carykr@gmail.com>
**Sent:** Friday, October 20, 2017 10:17 AM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] COP

I am a resident of Florida and am very concerned about the unacceptable control the Sugar industry has over the water quality of waters of the US in Florida. Please to prioritize Lake Okeechobee's impact on the health and safety of glades residents and riverside communities as it plans COP.

Regards,

Rosty Caryk

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Tom Walls <tomwalls@gmail.com>
**Sent:** Friday, October 20, 2017 10:41 AM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] COP feedback

To Whom It May Concern:

Please prioritize Lake Okeechobee's impact on the health and safety of glades residents and riverside communities as it plans COP.

"It's time to change the priorities in this system and place health and human safety above all else. It's time to consider how much total drainage and water are available and manage it as a single, interconnected set of resources."

--

Tom Walls

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Kathleen McElroy <yoginikate@hotmail.com>
**Sent:** Friday, October 20, 2017 8:59 PM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] COP Comments

Prioritize Lake Okeechobee's impact on the health and safety of glades residents and riverside communities as it plans COP.
Kathleen McElroy

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Mary K Van Kleunen <mvankl@aol.com>
**Sent:** Friday, October 20, 2017 4:50 PM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] COP Comments

Dear Ms. Nasuti,

I am writing regarding my concern for the water quality in the Atlantic and Gulf as a result of the discharges from Lk Okeechobee. This needs resolution, not more studies. I support the southern reservoir and anything the Corps can do to return the water flow to its natural state and allow the Everglades to once again become a filter. This is a quality of life issue (infections, unable to enjoy the state's natural resources), as well as a business issue (tourism, fishing industry).

Thank you for your consideration.

Mary K. Van Kleunen
5th generation Floridian

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Charles Gerber <chazmen5@icloud.com>
**Sent:** Saturday, October 21, 2017 8:26 AM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] Clean our water

The current conditions of our waters is Criminal!! The antiquated. Regulations that allows , back pumping, and dumping overages into our rivers needs to be updated considering our current understanding of health risks and flood conditions.... Big Sugar should not “trump” the people’s needs and their health concerns.

We have talked about this far too long. It is time for action! The water needs to be cleansed and flow south. The glades need it. “We the people “ need it.

I live on the river. The water prior to dumping was clear to the point I could see the bottom in 4-5’. Within. Hours of dumping. The water became muddy. And smelled heavy of fertilizer(not in my mind). I took freinds toward the South Fork dam. Without mentioning they both said” what is that awful smell”. It didn’t exist prior!!!! We all know the cause. Come on. Let’s stop talking and start fixing. It doesn’t require years of consideration. Big sugar should not be able to back pump. They
too should feel the pain From water events!!!! Our tourist industry is in the crapper and it will eventually effect our property values as well. Change the World War II Permits Immediately they don’t apply. Health issues are real. We can’t even swim and fish are dying.

Please look past the noise created by the self serving arguments by big sugars lobbyists!

Please help ....

Sent from my iPhone

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** laetitia cindric <cind5988@bellsouth.net>
**Sent:** Saturday, October 21, 2017 10:24 AM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] COP Comments

I really find it stupendously insulting that after the 20-30 years of trying to reroute water south to replenish the Everglades is now back to a stupid study by the AcE. Untold millions of tax dollars spent over and over and OVER AGAIN to study the same thing. And yet, the voters vote again and again and AGAIN to purchase the land from BIG SUGAR AND BIG AG and send the damn water south.
And you don't do it. You hem and you haw and corporate money changes hands and nothing gets done.
Nothing gets done and nothing gets done and Big Sugar just keeps rolling along. And the Everglades are close to death.
And you have NOTHING. To show for your damn existence. Nothing ever changes and nothing ever happens to break the stalemate.
Personally, I think you suck at your jobs. A bureaucratic quagmire. FIRST, DO NO HARM. We need water. We don't need more effing sugar subsidies.
Incredible taxpayer waste.
SEND THE FUCKING WATER SOUTH and stop fucking around with citizens and the environment.
Get busy or get out.

Sent from my iPhone

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Paula Turner <turnado@att.net>
**Sent:** Sunday, October 22, 2017 6:42 PM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] Prioritize Lake Okeechobee's Impact on Communities and Residents

Please prioritize Lake Okeechobee's Impact on the Health and safety of Glades residents and Riverside Communities as you Plan COP, not giving priority to the sugar industry. Consider the total drainage and Water is available and manage it as a single, interconnected resource or combine COP and LORS and manage drainage and lake levels together. Toxic Algea blooms are destroying our wildlife and rivers. Please help us with proper consideration. Thanks.

Sent from my MetroPCS 4G LTE Android device

October 20, 2017

Melissa Nasuti
U.S. Army Corps of Engineers
Jacksonville District
Deliver via email:
Melissa.a.nasuti@usace.army.mil

Re: Everglades Restoration Needed for the Florida Keys

Dear Ms. Nasuti:

The lifestyle and economy of the Florida Keys are intrinsically linked to the health of Everglades National Park and Florida Bay. Clean water to sustain the ecosystem is key.

Restoration projects to benefit Everglades National Park and the Florida Keys have been under construction for many years, paid for by significant taxpayer investment. Now, writing an operations plan for how to use these projects is the critical next step. This is the time to achieve the ecosystem benefits we desperately need in the Keys.

**Please ensure that protecting the waters of the Southern Everglades and Florida Bay is the top priority for operating restoration projects in South Miami-Dade!** These projects include the Modified Water Deliveries (MWD), C-111 South Dade, and C-111 Spreader Canal projects, which will be guided by the Combined Operation Plan (COP) currently under consideration by the U.S. Army Corps of Engineers and other state and federal agencies.

As a member of the Florida Keys community, responsible operation of these projects to maximize restoration benefits for the Everglades and Florida Bay is important to me.

Sincerely,

Allison Morgan Stagi

Name

150 NAUTILUS DR ISLAMORADA, FL 33036

Address

ALLISON.CARLO@ME.COM

Email

October 20, 2017

Melissa Nasuti
U.S. Army Corps of Engineers
Jacksonville District
Deliver via email:
Melissa.a.nasuti@usace.army.mil

Re: Everglades Restoration Needed for the Florida Keys

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Sincerely,

Bonnie E. Barnes BONNIE E. BARNES
Name

177 Ocean Shores Dr, Key Largo, FL 33037
Address

bonnie.ebarnes@gmail.com
Email

October 20, 2017

Melissa Nasuti
U.S. Army Corps of Engineers
Jacksonville District
Deliver via email:
Melissa.a.nasuti@usace.army.mil

Re: Everglades Restoration Needed for the Florida Keys

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Sincerely, Laura S. Brooks Don Brooks

Name Laura + Don Brooks

Address 74 Shoreland Dr. Key Largo 33037

Email laurie.brooks52@gmail.com

October 20, 2017

Melissa Nasuti
U.S. Army Corps of Engineers
Jacksonville District
Deliver via email:
Melissa.a.nasuti@usace.army.mil

Re: Everglades Restoration Needed for the Florida Keys

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Sincerely,

David Dimmel David Dimmel

Name

P.O. Box 371750 Key Largo FL 33037

Address

daviddimmel@yahoo.com

Email

October 20, 2017

Melissa Nasuti
U.S. Army Corps of Engineers
Jacksonville District
Deliver via email:
Melissa.a.nasuti@usace.army.mil

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Sincerely,

CARLOS ESTAPÉ
Name

150 NAUTILUS DR. ISLAMORADA, FL
Address

Carlos.allison@me.com
Email

October 20, 2017

Melissa Nasuti
U.S. Army Corps of Engineers
Jacksonville District
Deliver via email:
Melissa.a.nasuti@usace.army.mil

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Sincerely,

Bethany Fowler
Name

532 Plant St Key Largo, FL 33037
Address

BLF1@nce.edu
Email

October 20, 2017

Melissa Nasuti
U.S. Army Corps of Engineers
Jacksonville District
Deliver via email:
Melissa.a.nasuti@usace.army.mil

Re: Everglades Restoration Needed for the Florida Keys

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Sincerely,

Fred Hartner
Name

52 5 Andros Rd, Key Largo, FL
Address

fredhhartner@comcast.net
Email

October 20, 2017

Melissa Nasuti
U.S. Army Corps of Engineers
Jacksonville District
Deliver via email:
Melissa.a.nasuti@usace.army.mil

Re: Everglades Restoration Needed for the Florida Keys

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Sincerely,

Laura J. Hartner LAURA L. HARTNER
Name

52 S. Andros Road, Key Largo, FL 33037
Address

diver1down@comcast.net
Email

October 20, 2017

Melissa Nasuti
U.S. Army Corps of Engineers
Jacksonville District
Deliver via email:
Melissa.a.nasuti@usace.army.mil

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Sincerely,

Colin Howe
Name

70 Oleander Dr. Key Largo, FL 33037
Address

Colin.Howe15@gmail.com
Email

October 20, 2017

Melissa Nasuti
U.S. Army Corps of Engineers
Jacksonville District
Deliver via email:
Melissa.a.nasuti@usace.army.mil

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Sincerely,

Jim Spencer
Name

PO Box 370726 Key Largo, Fl 33037
Address

Seenotes@icloud.com
Email

October 20, 2017

Melissa Nasuti
U.S. Army Corps of Engineers
Jacksonville District
Deliver via email:
Melissa.a.nasuti@usace.army.mil

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Sincerely,

Keith Kropf
Name

257 Atlantic Blvd, Key Largo, FL 33037
Address

K2panman@gmail.com
Email

October 20, 2017

Melissa Nasuti
U.S. Army Corps of Engineers
Jacksonville District
Deliver via email:
Melissa.a.nasuti@usace.army.mil

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Sincerely,

Louis Lindner
Name

106003 Overseas Hwy Apt 3201
Address

lougrantUSA@gmail.com
Email

October 20, 2017

Melissa Nasuti
U.S. Army Corps of Engineers
Jacksonville District
Deliver via email:
Melissa.a.nasuti@usace.army.mil

Re: Everglades Restoration Needed for the Florida Keys

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Sincerely,

Elena M. F. Muratori Elena M F Muratori
Name

203 Charlemagne Blvd Key Largo FL 33037-3233
Address

seamaid55@yahoo.com
Email

October 20, 2017

Melissa Nasuti
U.S. Army Corps of Engineers
Jacksonville District
Deliver via email:
Melissa.a.nasuti@usace.army.mil

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Sincerely,

Robert W. Murray

Name

3278 Riviera Dr. Coral Gables FL 33134

Address

rwmurray536@gmail.com

Email

October 20, 2017

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U.S. Army Corps of Engineers
Jacksonville District
Deliver via email:
Melissa.a.nasuti@usace.army.mil

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Sincerely,

NADIA SPENCER
Name

P.O. BOX 726 KEY LARGO FL 33037
Address

Seamike@me.com
Email

October 20, 2017

Melissa Nasuti
U.S. Army Corps of Engineers
Jacksonville District
Deliver via email:
Melissa.a.nasuti@usace.army.mil

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Sincerely,

Sienna Pickard
Name

532 Plantation Street, Key Largo
Address

siennapickard@gmail.com
Email

October 20, 2017

Melissa Nasuti
U.S. Army Corps of Engineers
Jacksonville District
Deliver via email:
Melissa.a.nasuti@usace.army.mil

Re: Everglades Restoration Needed for the Florida Keys

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Sincerely,

Jacob Poelma

Name

106003 overseas Hwy APT 2303, Key Largo, FL 33037

Address

jacob.poelma@gmail.com

Email

October 20, 2017

Melissa Nasuti
U.S. Army Corps of Engineers
Jacksonville District
Deliver via email:
Melissa.a.nasuti@usace.army.mil

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Sincerely,
James P. Schmeiser

Name
James P. Schmeiser

Address
120 Second Court
Key Largo, FL. 33037

Email
diver.jim@hotmail.com

October 20, 2017

Melissa Nasuti
U.S. Army Corps of Engineers
Jacksonville District
Deliver via email:
Melissa.a.nasuti@usace.army.mil

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Sincerely,

Burnley Truax

Name

532 Plank St Key Largo 33037

Address

burnley@clark.edu

Email

October 20, 2017

Melissa Nasuti
U.S. Army Corps of Engineers
Jacksonville District
Deliver via email:
Melissa.a.nasuti@usace.army.mil

Re: Everglades Restoration Needed for the Florida Keys

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Sincerely,

Lisa Morgelia
Name

9295 SW 185 Ter, Cutler Bay FL 33157
Address

LJMorgy@gmail.com
Email

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Alice Naegele <acn727@yahoo.com>
**Sent:** Thursday, October 26, 2017 7:16 AM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] Herbert Hoover & Water Movement

Good morning,

I just wanted to let you know, as an area citizen (West Palm Beach, FL), that I am for the usage of funds both to repair the H. Hoover Dyke and for creating a means to move excess water away from our Indian River estuary system.

Thanks for your attention.

(Dr.) Alice Naegele

Sent from Yahoo Mail on Android <Blockedhttps://overview.mail.yahoo.com/mobile/?.src=Android>

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Diane Goldberg <digoldberg@bellsouth.net>
**Sent:** Thursday, October 26, 2017 7:27 AM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] reservoir

Please let me know when you will be starting the planning of the reservoir south of Lake Okeechobee to lessen the impacts on the St Lucie River, Indian River Lagoon and the Caloosahatchee. We support this plan and we need it as soon as possible.

Thank you,

Diane Goldberg

Treas. Lakelas Mint Chapter of the Florida Native Plant Society

Conservation co-chair for St Lucie Audubon

digoldberg@bellsouth.net <mailto:digoldberg@bellsouth..net>

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Kris Pagenkopf <kris_pagenkopf@hotmail.com>
**Sent:** Thursday, October 26, 2017 7:35 AM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] Combined Operational Plan (COP)/Lake Okeechobee-Glades

The Combined Operational Plan (COP) will affect lake levels, the risk that people living below the dike face a deadly breach, and the risk that toxic algae blooms are discharged to riverside communities. I understand that the COP has to work within the 68-year-old Central and South Florida Plan, authorized by congress just after World War II. That was over 60 years ago, when Florida's population was less than 3 million (vs. 20 million today) and communities on the Caloosahatchee and St. Lucie rivers were 1/20th their current populations. We need an update of these authorizations.

But antiquated statutes are only part of the reason today's management routinely puts people at risk. A bigger part is our accounting separately for the lake's capacity for water supply and drainage from the watersheds to its north and south, and refusing to accurately measure how much water and drainage everyone in the system needs and gets. The danger of this uncoordinated management is exposed by events like Hurricane Irma. It would be common sense to prioritize dike safety during the summer and fall by keeping lake levels low and stopping unnatural inflows. That would also reduce the chances of discharging toxic algae and its associated health risks to riverside communities. But today's management system isn't governed by common sense. Instead we allow a section of the federal Water Resource Development Act (2000) called the "savings clause" to prioritize the sugar industry's drainage needs, letting them pump excess rainfall (anything over 1") all summer long into the system south of the lake, and when that's full, into the lake itself--the back-pumping that raised lake levels this year even as fears of dike failure dominated headlines.

Meanwhile the federal Lake Okeechobee Regulation Schedule (LORS) isn't required to account for the savings clause's influence on the system or to prevent the sugar industry's back-pumping into a rising lake.

It's time to change the priorities in this system and place health and human safety above all else. It's time to consider how much total drainage and water are available and manage it as a single, interconnected set of resources. Maybe the COP and LORS could be combined, managing drainage and lake levels to prioritize the people in the system.

I ask the Corps to prioritize Lake Okeechobee's impact on the health and safety of glades residents and riverside communities as it plans COP.

Kris Pagenkopf
7625 SW 7th Place

Gainesville, FL 32607

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Don Higg <donhig223@gmail.com>
**Sent:** Thursday, October 26, 2017 7:42 AM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] Combined Operational Plan

I am a taxpayer in the state of Florida and I want to go on record requesting that your department make it a high priority to insure that the plans you put in place for future infrastructure moves water south into Everglades National Park and Florida Bay.

Thanks...

Donald Higginbotham

Lakeland, FL

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Brian O'Neill <sdbfo@yahoo.com>
**Sent:** Thursday, October 26, 2017 7:47 AM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] People not sugar, back pumping no more!!

Please wake up!!

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** +15613069536@tmomail.net
**Sent:** Thursday, October 26, 2017 7:49 AM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Attachments:** text_1509018371096.txt

Please restore, as much as possible, the glow of waterto our precious Everglade Lora Knight 7443 Atwood Ct Lake Worth FL 33467

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Justin Lorch <justin.lorch@gmail.com>
**Sent:** Thursday, October 26, 2017 7:56 AM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] Lake Okeechobee COP

Melissa,

I have lived most of my life along the St Lucie and Indian Rivers. I have watched what the discharges from Lake Okeechobee have done to these ecosystems in that time. I fear what the situations will be in the future.

I am an avid recreational angler, it's been my passion for almost 30 years now. I now travel the entire state looking for areas to fish that even come close to the productivity I used to enjoy in the St Lucie and Indian Rivers around Stuart when I was younger. These ecosystem can be restored with the help of the Army Corps of Engineers.

I feel that as fellow Engineers, you have a duty to help the policy makers understand how to more effectively manage a system that is: creating risk to life by threatening the Herbert Hoover dike by allowing the sugar industry to back pump excess water into the Lake even when the Lake is already dangerously high levels; introducing toxic and potentially dangerously polluted water into estuary systems on both coast, risk the health and safety of populations along those coasts from potentially hazardous runoffs, jeopardizing losing the Biscayne Aquifer by choking off its fresh water supply and risking salt water intrusion.

The policies and strategies that govern the management of the Lake and drainage surrounding it were put into place long before we had a good understanding of the complexity of the systems we were interfering with. We must update these policies and regulations to be beneficial to everyone involved and to start to restore the environments affected by these water management policies. As a voting citizen, I can pressure my elected officials and occasionally install new ones, but our voice can easily be drowned out by the money involved in Florida politics. Having the voice of the Army Corps of Engineers alongside ours would carry the weight needed to enact change.

Thank you for taking the time to read this.

Justin Lorch

Sent from my iPhone

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Wayne Ralph <wayneralph19@yahoo.com>
**Sent:** Thursday, October 26, 2017 8:06 AM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] Pollution

We moved to Cape Coral two years and three months ago from Oregon to retire, explore and boat in paradise.
We assumed that nature here was being treated respectfully. We found its quite the opposite. Between the pollution pumped into lake O that pollutes our river systems and the locals here pumping their septic tanks into our canal systems, change is not going to happen anytime in the near future or ever as this trend appears. Florida has its natural beauty that struggles to survive despite the me first attitude of the existing residents and voting population that continues kicking the can down the road because they like it how it is..
You know what they they say, if you don't like it, move on.
So we are. Adios and best wishes to you Florida.
Wayne Ralph
Cape Coral Fl.

Sent from my iPad

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Madge Allen <geosheil@aol.com>
**Sent:** Thursday, October 26, 2017 8:22 AM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] Lake O releases

I'm a homeowner on Gulf of Mexico access, Alligator Slough in Cape Coral, Florida. We watch the water turn from blue to brown as dangerous, dirty water is released from Lake O, down the Caloosahatchee River. This whole economy is dependent on retirees and tourists; who is going to want to live or recreate here when the whole ecosystem is destroyed from toxic water releases! Please uphold the law and will of the voters, and get the water going south...which will naturally clean the water and restore the Everglades. We are watching and keeping track!
Thank you,
Madge Allen
3637 NW 21st Terrace
Cape Coral FL 33993

Sent from my iPhone

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Kirsten Lovett <kirstenlovett@gmail.com>
**Sent:** Thursday, October 26, 2017 9:19 AM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] COP Lake Okochobee

Dear Ms. Nasuti,

I saw that "The COP, whatever it turns out to be, has to work within the 68-year-old Central and South Florida Plan, authorized by congress just after World War II. In other words, “Our hands are tied” by a federal decree from 68 years ago.

In January Sen. Bob Graham called for an update of these authorizations, but antiquated statutes are only part of the reason today’s management routinely puts people at risk. A bigger part is our accounting separately for the lake’s capacity for water supply and drainage from the watersheds to its north and south, and refusing to accurately measure how much water and drainage everyone in the system needs and gets. The danger of this uncoordinated management is exposed by events like Hurricane Irma.

It’s time to change the priorities in this system and place health and human safety above all else. It’s time to consider how much total drainage and water are available and manage it as a single, interconnected set of resources.

Thank you,

Kirsten Lovett
kirstenlovett@gmail.com

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Ed Wilson <edwilsonllc@gmail.com>
**Sent:** Thursday, October 26, 2017 10:13 AM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] Lake Okeechobee

Please do what is right and for clean water in SW & SE Fl, send water south, the sugar industry is holding everybody hostage. Did you know the sugar industry also gets federal subsidies from the farm bill, which means they never have a loss, even if the weather is bad and they loose crops they get paid, and even worse if they grow too much sugar our US government must but it from them, so again they loose nothing. The price consumers and manufactures pay for sugar in the US is almost double that of world sugar.

DR THE RIGHT THING SOONER THEN LATER

--

Kind Regards
Ed Wilson

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Potter,Mark <mpotter@peds.ufl.edu>
**Sent:** Thursday, October 26, 2017 10:35 AM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] COP

Melissa, I just wanted to take the time to express my thoughts regarding CERP and the COP being discussed. I spent the first 20 years growing up in south Florida just a couple of miles from the Everglades. I have watched all of south Florida grow out of control since the 1970's. I left in 1978 and moved to Gainesville Florida. I am still very fond of the profoundly diverse environment the Everglades supports and appreciate the perils the continued demand on its resources bring. The restoration of the natural watershed from the lake to the bay is empirical to the very survival of the habitat. I believe the science and studies which call for the construction of the reservoir south of the lake be the first priority. This accomplishes two things that are very important to the project and its goals. First reducing the lake water level will reduce the pressure on the aging berm and reduce the chance of a breach. Second it will allow a secondary source of natural detoxification of the water discharges of Lake Okeechobee to occur before entering the watershed. This along with more sustainable farming practices would combine to begin the process of natural restoration of the Everglades. I am sure I have said nothing that you have not already heard. I just needed to let someone know how I feel about this and the prolonged timeline it has taken just to get this far, very frustrating and disappointing. Thanks for listening.

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Margie Hancock <daisydog222@hotmail.com>
**Sent:** Thursday, October 26, 2017 10:39 AM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] Everglades

Clean waater and safety depend you

the Armp Corps of Engineers! Please Save  the Everglades!

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Ted Stevens <ted@stevensandstevens.com>
**Sent:** Thursday, October 26, 2017 10:41 AM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] St. Lucie River and Indian River estuary

Please, stop killing our Caloosahatchee, St. Lucie River and the Indian River lagoon, by these massive releases from lake Okeechobee. This is a problem over 50 years old and that seems excessive time even for the government to get a problem fixed.

It's supposed to rain frogs during the rainy season in Florida! Until a dynamic southern storage reservoir and River of Grass flows to Florida Bay are complete, there will be no curing the problems for Okeechobee, the Caloosahatchee, St. Lucie and Florida Bay.

As with all politicians and high profile public figures I am sure you will be careful not to let the buck stop with you !

Thank You,

Ted Stevens

Vice President

Computer Network Services

1857 NE Jensen Beach Blvd.

Jensen Beach FL 34957

ted@computernetworkservices.biz <mailto:ted@computernetworkservices.biz>

Office: (772) 334-8555

Fax: (772) 334-5180

P Please consider the environment before printing this email

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Cherie Zadlo <clzadlo@yahoo.com>
**Sent:** Thursday, October 26, 2017 11:12 AM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] Florida South Florida Water Management

I am writing to request your consideration and support to prioritize Lake Okeechobee's impact on the health and safety of residents, visitors and communities as the Army Corps of Engineers prepares its Combined Operational Plan.

There is more evidence everyday linking toxic algae blooms produced by damaging fresh water flows to ALS, Parkinson's, Alzheimer's and liver diseases alone. It's time to restore human needs over the sugar industry.

Please let me know how else I can assist the effort to move forward toward the rapid development and execution of a sound resolution.

Regards,

Cheryl Zadlo
Colonel, USAF (ret).

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Jan Pashke <janpashke@gmail.com>
**Sent:** Thursday, October 26, 2017 11:52 AM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] Please send the water south

Please, quickly work on sending the water from Lake Okeechobee south to be cleaned, and then south from there into the Everglades, where it would naturally go! Even unpolluted water from Lake Okeechobee into the St. Lucie Estuary is harmful to the Estuary, because it disrupts the salinity of the water. Sending polluted water from Lake Okeechobee creates a nightmare!

Please, please send the water south and stop releasing it into the St Lucie Estuary!

Thank you!
Jan Pashke

Sent from my iPad
Port St Lucie, FL

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Nancy&Bob <nancybobdean@juno.com>
**Sent:** Thursday, October 26, 2017 11:51 AM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] More Everglades Water Storage

We understand the need to strengthen the Hoover Dike; however, only additional water storage will save the Everglades.

Nancy R Dean
Robert V Dean

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Arlene Doran <adoran2000@aol.com>
**Sent:** Thursday, October 26, 2017 12:22 PM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] Lake Okeechobee drainage

Ms. Nasuti,
Thank you for the opportunity to comment on this critical issue.
I have been on the beach when the black discharge water has rolled in and it was awful. The tourists that were there were very unhappy too. They will not be returning.
I have also seen the video of the toxic guacamole looking algae, and worry that I will see that too.
The health and future of the estuaries of the Caloosahatchee and St. Lucie rivers and the Everglades is dependent on the decisions you are making now.
Please make the changes necessary so that the threats of black water plumes and toxic algae are behind us.

Sincerely,
Arlene Doran
412 Sexton Drive
Sanibel, FL

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Morgan Rothe <morganr0468@gmail.com>
**Sent:** Thursday, October 26, 2017 5:32 PM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] a reservoir and re-build the Hoover dike

I hope the ACOE will do everything it can to help the Everglades and Lake Okeechobee and the rivers that feed into it and out of Okeechobee by building a refurbished Hoover dike and a large enough reservoir to hold polluted water. Thank you for your service

Morgan S Rothe

Sarasota

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Kathleen Dempsey <kbdempsey@yahoo.com>
**Sent:** Thursday, October 26, 2017 6:45 PM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] reservoir S. of Lake O.

We desperately need the reservoir to be provided south of Lake Okeechobee to preserve our state and save the dyke. At present the blue-green algae is a big problem, and it seems officials are not acting quickly. Let's get going, PLEASE!

Kathleen Dempsey
Pompano Beach, FL

## Nasuti, Melissa A CIV USARMY CESAJ (US)

**From:** Scott Logan <scott.logan@aonhewitt.com>
**Sent:** Thursday, October 26, 2017 8:04 PM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (US)
**Subject:** [EXTERNAL] developing water and drainage plans

Dear Ms. Nasuti,

Drainage is scarce in this system, and we already knew that heavy rain fills the lake faster than we can drain it. It would be common sense to prioritize dike safety during the summer and fall by keeping lake levels low and stopping unnatural inflows. That would also reduce the chances of discharging toxic algae and its associated health risks to riverside communities. But today's management system isn't governed by common sense.

Instead we allow a section of the federal Water Resource Development Act (2000) called the "savings clause <Blockedhttp://d3n8a8pro7vhmx.cloudfront.net/bullsugar/mailings/1171/attachments/original/wrda_savings_clause.pdf?1508445650> " to prioritize the sugar industry's drainage needs, letting them pump excess rainfall (anything over 1") all summer long into the system south of the lake, and when that's full, into the lake itself--the back-pumping that raised lake levels this year even as fears of dike failure dominated headlines.

Meanwhile the federal Lake Okeechobee Regulation Schedule (LORS) isn't required to account for the savings clause's influence on the system or to prevent the sugar industry's back-pumping into a rising lake--it just tells the Corps when to flush it into the rivers. Asked last month how the industry could get away with this, SFWMD's Ernie Marks replied honestly: They have a permit.

Better, the sugar industry has--thanks to a disjointed, complicated, ancient collection of regulations--the highest priority in the system. That's why no matter how catastrophic a year Florida Bay or the Everglades or the Caloosahatchee or the St. Lucie have, the sugar industry thrives--since 1980 the crop has never had a bad year <Blockedhttp://www.bullsugar.org/sfwmd_okeechobee_phosphorus> . Meanwhile liver failure clusters pop up along the river, with neurological diseases and a host of serious illnesses that we're only just beginning to trace back to toxic Lake Okeechobee discharges. And residents living in the shadow of the dam wait for the next storm and the next evacuation order.

It's time to change the priorities in this system and place health and human safety above all else. It's time to consider how much total drainage and water are available and manage it as a single, interconnected set of resources. (Could COP and LORS be combined, managing drainage and lake levels to prioritize the people in the system?)

Please prioritize Lake Okeechobee's impact on the health and safety of glades residents and riverside communities as it plans COP

Thank you for your consideration,

Scott Logan

33131

AUDUBON OF FLORIDA
EVERGLADES FOUNDATION
NATIONAL PARKS CONSERVATION ASSOCIATION
NATURAL RESOURCES DEFENSE COUNCIL

July 7, 2011

Gina Paduano Ralph, Ph.D.
Jacksonville District Corps of Engineers
Planning Division, Environmental Branch
P.O. Box 4970
Jacksonville, FL 32232

<*Delivered via email to gina.p.ralph@usace.army.mil*>

Dear Dr. Ralph:

On behalf of the above listed organizations, we submit our scoping comments for the Combined Operational Plan (COP) for the Modified Water Deliveries (ModWaters), C-111 South Dade, and Central and South Florida (C&SF) Projects currently under consideration by the U.S. Army Corps of Engineers (Corps). The National Research Council's Third Biennial Review highlighted the opportunity for achieving restoration benefits through revised operations "in light of the rapidly deteriorating conditions in WCA-3A." We agree that near term restoration progress is critical to slow the ongoing degradation of the Everglades ecosystem. As the COP is to replace the Everglades Restoration Transition Plan (ERTP), it is critical that it achieves ecological benefits not attained under ERTP. Specifically, increased freshwater deliveries to Northeast Shark River Slough (NESRS) are paramount to improve chances of survival for endangered species including the Cape Sable Seaside Sparrow (Sparrow), Wood Stork and Everglade Snail Kite (Kite). Failure of the COP to provide true restoration benefits could result in the extinction of these species.

We first urge that as alternatives are developed, priority is placed upon maximizing the use of the one mile bridge feature of the ModWaters project upon its expected completion in 2013. It is essential to increase water stages and flooding durations in NESRS to restore the ridge and slough vegetation and habitat as outlined in the 2008 Limited Reevaluation Report, thereby restoring conditions within Everglades National Park (ENP). This is especially important during the dry season. Operations should create hydraulic conveyance capacity that results in more natural flow, timing, and distribution of water deliveries as directed in the 1989 Everglades Expansion Act and the 1992 General Design Memorandum.

The 1992 General Design Memoranda set forth three primary restoration goals: restore the Shark River Slough flowway between WCA-3A and ENP, implement rain driven

operations of flow, and increase volume to reflect naturally occurring water supplies (4,000 cubic feet per second ("cfs") peak flow). Further, the Water Resources Development Act of 2007 directed the Corps to increase flows to ENP by at least 1,400 cfs and increase connectivity of WCA-3B marshes with NESRS. While the ultimate goal of increasing flows by 4,000 cfs will require additional infrastructure modifications, the 1,400 cfs increase can be accomplished with proper utilization of the ModWaters, C-111 South Dade, and other C&SF projects considered as part of the COP. In order to see this progress, one necessity is to raise canal stages in the L-29 to 8.5' as outlined in 2008 Limited Reevaluation Report to allow the conveyance of 1,848 cfs identified for peak flow performance and longer durations of 1,350 cfs.

**C-111 Operations**

The C-111 projects are necessary if Florida Bay is to realize benefits from restoration projects upstream. Because of the massive size of the C-111 canal, it will continue to draw water out of the natural system and away from Taylor Slough—despite restoration efforts and associated operations to the north—until the full suite of C-111 projects become operational. This includes the C-111 South Dade project (both the north and south detention areas), as well as the C-111 Spreader Canal project. The C-111 South Dade project detention areas will function to reduce seepage out of ENP south of the 8.5 square mile area, and we have long urged for the completion of this pre-CERP project. However, realizing benefits for Florida Bay from these detention areas will be limited without appropriate operation of the C-111 Spreader Canal project.

The construction of the western component, or phase I, of the C-111 Spreader Canal project is virtually complete. Although this project has a separate Project Implementation Report, the structures involved in the project are listed as relevant to the COP. The full benefits of the C-111 Spreader Canal western project are not expected to accrue until stages at S-18C are raised, which will facilitate raising groundwater in the lower stretches of the C-111, effectively creating a hydraulic ridge that will reduce seepage out of ENP. In order for the COP to benefit Florida Bay by increasing flows to Taylor Slough and improving the ecological productivity of the region, proceeding with raising stages at S-18C is absolutely crucial. Therefore, a commitment to raise stages at S-18C to a point where ecological benefits are achieved in Florida Bay is an essential component of the COP.

**Development of Comprehensive Alternatives**

One of the greatest challenges in developing alternatives for the COP is the need to plan for operations of projects that will be completed at varying times. First, we urge that the principles of adaptive management be used to make affirmative changes to increase flows to NESRS as soon as possible. Adaptive management and decision-making that utilize current, on-the-ground conditions must trump maintaining the status quo because of uncertainty. Second, we urge an in-depth analysis of the ability to utilize

each feature as it comes online to achieve the earliest ecological benefits and avoid substantial delays. As an overall matter, the Corps and its partner agencies should analyze a scheduled approach to the COP. This should include a discussion of long term operational alternatives and ways of implementing portions of longer term projects as they come online.

This is particularly important given the ongoing harm occurring to endangered species, the Sparrow and Kite in particular. As we – and others[1] – have previously made clear, projects that restore historic flows to the Southern Everglades and Florida Bay (*i.e.* Tamiami Trail Next Steps and the Decompartmentalization (Decomp) projects), are needed to allow for operational changes that can truly avoid jeopardy to both the Sparrow and the Kite. To the extent that the COP that is currently being developed will only be in place until these additional projects are complete, the EIS must include a full discussion of the impacts that further delays in completing these projects will have on endangered and threatened species, and must consider ways to implement portions of additional projects as they come online. In addition, schedules to implement future restoration projects must be pursued aggressively to prevent jeopardy to the sparrow and the kite.

Water levels in WCA-3A essentially represent the seasonal and monthly limits of storage. Thus additional flexibility to meet the stated goals of the COP requires additional storage be in place. An EIS must evaluate the ability of additional features that potentially could be online or operable at the time the COP is implemented. It should also consider what options are available to increase the likelihood that and speed with which additional storage will be available in the Everglades Agricultural Area, including a timeline for making such additional storage and treatment available (as operations over the past decade have called into question the agencies' ability to control high water levels, recession rates, and low water levels during the dry season in WCA-3A with the existing infrastructure). Also, the Corps must take a hard look at increasing flows to WCA-3B through the S-151. Any reasonable discussion must evaluate the water quality impacts of proposed alternatives.

Any considerations of water levels maintained for recreation in WCA-3B or the property rights of the six privately owned parcels located along Tamiami Trail that have been

[1] As the Sustainable Ecosystem Institute's November 2007 Everglades Multi-Species Avian Ecology and Restoration Review Final Report states at page 17:

> The most disturbing information the panel received was that the design of ModWaters, has been compromised such that it will produce much less movement of water east and south than originally envisioned because the Tamiami Trail will remain an obstacle to desired flow patterns. The single most positive step that could be taken to conserve the four bird species [the Sparrow, Kite, Wood Stork, and Roseate Spoonbill] is to find the resources to fully implement ModWaters. The second is to accelerate implementation of Decomp. Until these two projects are completed conservation of these four species will be a challenge.

authorized for National Park Service acquisition should not limit the array of COP alternatives developed. The impact of these factors on the COP may be resolved before COP implementation, and therefore alternatives that do not consider these as constraints must be developed. In addition, the EIS for the COP must provide a detailed basis for any concerns related to high water conditions resulting in health and safety threats, and must evaluate those threats in light of the potential for jeopardy to endangered species.

We appreciate the consideration of our comments and look forward to improved operations that deliver ecological benefits to the Everglades ecosystem.

Sincerely,

*Signatures waived to expedite delivery*

Julie Hill-Gabriel
Director of Everglades Policy
Audubon of Florida
444 Brickell Ave., Suite 850
Miami, FL 33131

Tom Van Lent
Senior Scientist
Everglades Foundation
18001 Old Cutler Rd., Suite 625
Palmetto Bay, FL 33157

Dawn Shirreffs
Everglades Restoration Program Manager
National Parks Conservation Association
450 N. Park Rd., Suite 301
Hollywood, FL 33021

Bradford Sewell
Senior Attorney
Natural Resources Defense Council
40 West 20th Street
New York, NY 10011

**Audubon Florida • Clean Water Action • Everglades Foundation**
**National Parks Conservation Association • Sierra Club • Tropical Audubon Society**

Col. Alan M. Dodd, District Commander
United States Army Corps of Engineers
4070 Boulevard Center, Suite 201
Jacksonville, FL 32207

Blake Guillory, Executive Director
South Florida Water Management District
3301 Gun Club Road
West Palm Beach, FL 33406

November 17, 2014

RE: Operational Testing for Modified Water Deliveries and C-111 South Dade Projects

Dear Col. Dodd and Mr. Guillory:

On behalf of the undersigned organizations, we write to comment on the incremental testing of elements of the Modified Water Deliveries (MWD) and C-111 South Dade Projects provides an important opportunity to ensure that these valuable restoration initiatives will deliver robust ecological benefits to Everglades National Park and Florida Bay. We support ongoing efforts to plan for incremental operations testing of these projects that do not reverse recently-achieved restoration benefits.

We object, however, to operational elements that would reverse the phased implementation of the C-111 Spreader Canal Western Project. Proposals that lower water levels in the C-111 canal and divert water to Biscayne Bay not only decrease the benefits of an important restoration project that was fast-tracked by the South Florida Water Management District (SFWMD) and recently authorized by Congress, but potentially do environmental damage. Moreover, the rationale for these proposed operations, that these operations would ease flooding, is an uncertain response to an unsubstantiated concern. **We urge you proceed with testing of the MWD and C-111 structures without modifying the C-111 Spreader Canal Western Project operations. Rather, the Corps and SFWMD should proceed with the phased implementation of the C-111 Spreader Canal Western Project while undertaking the requisite investigations to determine its effects.**

The goal of this initiative – to restore the Everglades – will be jeopardized if elements of flood control are interjected into the operational testing plan, particularly without just cause. We would support efforts by the Corps and District to investigate the claim that increased flooding is linked to C-111 operations, and look forward to rigorous discussion on the issue. In the meantime, proposing to lower levels in the S-18C, instead of raising them as previously approved, and operate the S-197 for flood relief under the auspices of operational testing is counterproductive to restoration efforts and not in the public interest.

Now is not the time to backtrack on progress that is already underway. The first two years of the C-111 Spreader Canal Western Project have shown promising increases in the amount of water being delivered to Taylor Slough and Northeast Florida Bay. Salinity levels have improved and lead to increased growth of submerged aquatic vegetation. We can capitalize on these benefits by moving forward with efforts to raise water levels at the S-18C by one-tenth of a foot per year as initially planned. Postponing this effort, while simultaneously allowing harmful releases of 200cfs from the S-197, will be detrimental to ongoing restoration efforts.

We urge you to ensure that both the incremental testing and final operational plan be designed in a way that maximizes the ecological benefits these projects were constructed to achieve. This includes not lowering water levels at the S-18C or allowing releases from the S-197.

Thank you for considering this input. We look forward to continuing to participate in the Project Delivery Team process and working toward an operational testing plan to restore America's Everglades.

Sincerely,

Dr. Tabitha Cale
Everglades Policy Associate
**Audubon Florida**

Sarah de Flesco
Florida Program Coordinator
**Clean Water Action**

Dr. Tom Van Lent
Director of Science and Policy
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Laura Reynolds
Executive Director
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Everglades Law Center
National Parks Conservation Association
Everglades Foundation
Audubon Florida

January 17, 2018

Melissa Nasuti
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Re: Environmental Assessment and Proposed Finding of No Significant Impact 2018: L-29 Canal and G-3273 Constraint Relaxation Including the Northern Detention Area (Revised Operational Strategy Increment 2)

*Via electronic mail*

Dear Ms. Nasuti:

We write in response to the November 2017 Environmental Assessment and Proposed Finding of No Significant Impact 2018: L-29 Canal and G-3272 Constraint Relaxation Including the Northern Detention Area (Revised Operational Strategy Increment 2) ("November 2017 Draft EA/FONSI"). In short, we continue to strongly support the United States Army Corps of Engineers ("Corps") proposal to move ahead with actions, consistent with the original Modified Water Deliveries plan ("ModWaters"), to implement operational changes needed to realize our shared plan for Everglades restoration, the Comprehensive Everglades Restoration Plan ("CERP").

We again oppose operations which would lower S-18C canal stages and/or increase S-197 discharges,[1] which are counter to restoration goals and operating plans for the C-111 Western Spreader Canal Project, are not reflected in the original ModWaters plan, and set a dangerous precedent. As we have in our prior comments, we emphasize that these operations – contrary to CERP – should not be allowed to continue as part of the Combined Operations Plan (to be implemented in 2020) absent clear data and analysis demonstrating that they are needed to address increases in flooding risk as a result of increased flows in Northeast Shark River Slough ("NESRS").

[1] We have long opposed these operations. *See* Attachment A (our comments on Increment 1 Plus of these operational strategy revisions, with attached comments on an earlier increment of ModWaters implementation in 2015, as well as comments in March and May, 2016 regarding the temporary, expedited implementation of additional aspects of ModWaters).

We have long supported implementation of ModWaters, with its operations that move more water south through the historic Everglades flowway – through NESRS, Shark River Slough, Taylor Slough and into Florida Bay. ***We want to reiterate that a central element of this project is to reestablish the historic connection that occurred when water in NESRS would pond high enough during the wet season that a direct flow connection from NESRS to Taylor Slough was established annually across the Rocky Glades and that this flow persisted well into the dry seaso***n. The proposal now under consideration – the third stage in the incremental implementation of operational changes, known as Increment 2 – would allow water levels in the L-29 canal to rise as high as 8.5 feet NGVD and adjusts operations at many structures in the southern portion of the Central and Southern Florida System ("C&SF System"). This ensures protection for the Cape Sable Seaside Sparrow ("Sparrow") populations with habitat both east and west of Shark River Slough as well as to allow flexibility to maintain levels of flood protection in a residential area west of the L-31N canal and in agricultural lands in the southern portion of the system, east of the C-111 canal. *See, generally*, November 2017 Draft EA/FONSI. The November 2017 Draft EA/FONSI suggests that Increment 2 could increase water deliveries into NESRS by almost 400,000 acre-feet. *Id.* at 4-19.

We strongly support moving ahead with operations that allow for Everglades restoration without delay. However, there are some issues of concern that remain within the Preferred Alternative (Alternative B).

**Increasing flows through S-197**

We have repeatedly raised concerns about plans to increase discharges from the S-197 structure, purportedly to mitigate increased flood risks being taken on by agricultural landowners in South Dade County as a result of increased flows in the historic Everglades flowway. The need for andadverse effects of increased S-197 discharges have not been evaluated in a data-based analysis.[2] To the contrary, as we have stated in past comments, the NEPA documentation for these operations has generally been loaded with conditional terms such as "potential flood risks," "may be affected," and "may result in," although the best available data suggest that any increased flood risks are unrelated to ModWaters/Combined Operations Plan operations. *See*

[2] For example, in the November 2017 Draft EA/FONSI, the Corps dismisses potential adverse effects to nearshore areas:

> Alternative B may result in minor to moderate increases in the frequency and duration of low-volume (less than 500 cfs) S-197 discharges to Manatee Bay and Barnes Sound consistent with the No Action Alternative. Potential minor adverse impacts associated with salinity fluctuations under Alternative B, would be temporary and spatially limited to nearshore areas within the southern estuaries. 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 (Marshall 2014).

November 2017 Draft EA at 4-47.

November 2017 Draft EA/FONSI at 4-33 ("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 the No Action Alternative.")[3] As we noted in prior comments, data show that the amount of water discharged through S-197 in 2015-16 was much more than necessary to keep agricultural lands dry. To similar effect, data presented in the November 2017 Draft EA/FONSI suggest that daily outflows from the S-197 structure exceeded daily inflows into the lower portion of the C-111 canal (through the S-18C structure) during portions of emergency operations in the Fall of 2017. *See* November 2017 Draft EA/FONSI at 4-27.

The November 2017 Draft EA/FONSI suggests the potential for increased discharges from the S-197 structure under both "normal" operations and emergency high water operations under the Preferred Alternative. First, in "normal" operations, increased stages in the L-29 canal "will result in increased seepage to the L-31N canal as increased flow into NESRS will likely increase stages along the west side of L-31N." *Id.* at 4-47. Although the November 2017 Draft EA/FONSI anticipates that completion of the C-111 South Dade Project will allow that additional water to be effectively used to help create and maintain a hydraulic ridge separating the wetlands of Everglades National Park from the L-31N canal to their east, "this will be the initial opportunity to gain operational experience with the [project], and thus Alternative B continues to allow water managers flexibility to make discharges out of the S-197 structure even when there is not an emergency high water situation*."*[4] *Id.; see also id.* at 4-35 ("The normal management of water will be to fully maintain the hydraulic ridge and deliver water to eastern ENP using the full available capacity of [various structures]. If the capacity [of those structures] is unable to maintain the operational range then S-194/S-196/S-197 may be additionally used (low flow discharges through S 197 available . . .)."); and at 4-47("Alternative B has expanded the use of low volume S-197 operations to include drier periods).[5]

[3] Even with almost six years of monitoring, the effects of increased water levels and flows have not been clearly documented. *See* November 2017 Draft EA/FONSI ("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.")

[4] It is worth noting that regulatory releases into the SDCS – what historically provided the justification for discharges from S-197 – are predicted to be greatly reduced as a result of these operational changes. *Id.* at 4-28 (noting 81% reduction in number of days with regulatory discharges from WCA 3A into the SDCS, and accumulated volume of discharges into the SDCS by 85%).

[5] These additional opportunities for low-flow discharges out of the S-197 structure were inserted into earlier increments of Combined Operations Plan implementation for different reasons -- most recently, to allow water managers flexibility to keep dry the areas where construction of critical restoration projects is being expedited. *See* December 2016 Supplemental Environmental Assessment and Proposed Finding of No Significant Impact -- G-3273 Constraint Relaxation/S-356 Field Test and S-357N Revised Operational Strategy: Increment 1 Plus (Increment 1.1/ 1.2) ("December 2016 Draft Supplemental EA") at 4-35 ("The Increment 1.1/1.2 operational strategy proposes to generally lower the target operational ranges for the . . . L-31N Canal . . . in order to facilitate the construction of C-111 South

Second, Alternative B adds an "Extreme High Water Action Line" that enables water managers to reduce water levels in WCA-3A more rapidly than they could under prior operations. *Id.* at 4-28. Although the November 2017 Draft EA/FONSI predicts small effects as a result of the Extreme High Water Action Line – it highlights that the line would have been exceeded only five times in the past 15 years, with an average duration of 51 days – the document fails to model the effects of this change, implicitly recognizing the uncertainty about how this change may undermine the project restoration goals. And it does acknowledge that "operational actions taken as a response to extreme high water conditions resulted in high flow rates through the S-197 structure" and that without the additional criteria, there would be fewer discharges from S-197. *Id.* at 4-26.

The 1994 General Reevaluation Report determined that the use of the S-197 structure was harmful to Barnes Sound and Manatee Bay and its use ***should be eliminated***. Discharges through S-197 directly reduce the amount of water that is able to enter Florida Bay through Taylor Slough. To prevent repeated hyper-salinity in Florida Bay, flows through S-197 must be reduced as part of Increment 2 operations and eliminated as part of the Combined Operations Plan. We continue to oppose operations that run counter to CERP, and which are purportedly designed to protect against unsubstantiated claims of increased flooding risks.

**Increasing Stages at S-18C**

We reiterate that the Final Project Implementation Report and Environmental Impact Statement ("FPIR/FEIS") for the C-111 Spreader Canal Western Project indicates that the Western Project is intended to implement incremental changes to raise water levels at S-18C. While the project has been operational for five years, no increase at S-18C has occurred. The FPIR/FEIS Executive Summary lists "incremental operational changes at S-18C" as one of the project components, up to four 0.1 foot incremental adjustments. *See* Final C-111 PIR/EIS at es-xi, xii. The detailed discussion of the selected plan (starting on page 6-1) again emphasizes that "incremental changes at existing structure S-18C" are part of this project.

Failure to raise the canal stage at S-18C results in seepage from Taylor Slough into the entire length of the C-111 canal from S-200 south to S-18C. Water budgets of C-111 flow indicate that much of this seepage is the same water that is later discharged at S-197. Therefore, raising the canal stage at S-18C will have the dual benefits of moving more water into Taylor Slough where it is needed and preventing the need to discharge extreme amount of water through S-197. We strongly urge you to push forward on implementing stepwise increases in the allowable stage at the S-18C structure as contemplated in the FPIR/FEIS, as part of the COP.

**Flood Control for the 8.5 Square Mile Area**

We look forward to the opportunity to assess correlations between increased canal stages in the L-29 canal and water levels in NESRS and the 8.5 Square Mile Area to the east, now that flood control measures have been (or are about to be) fully constructed and implemented. The

Dade Contract 8 and Contract 8A"). Now that construction of these critical projects is essentially complete, we believe operational strategies should reduce both the number and volume of releases from the S-197 structure.

November 2017 Draft EA/FONSI makes clear that the relationship between increasing flows in NESRS and flooding impacts on the 8.5 Square Mile Area remains unclear. It suggests that data compiled this past fall during and around Hurricane Irma show ***combined*** effects of local rainfall and elevated L-29 canal stages, but does not untangle the two causes of flooding. *Id.* at 4-39. Nonetheless, the November 2017 Draft EA/FONSI acknowledges significant changes have been made to operations to provide flood mitigation purportedly due to increased seepage as a result of the high canal stages. *See id.* at 4-38. Moreover, going forward, the November 2017 Draft EA/FONSI states that if agencies determine that ground water levels in the 8.5 Square Mile Area do not subside enough and quickly enough, they may need to restrict the L-29 operating limited below its authorized level of 8.5 feet NGVD.

Given that altering proposed operations to address the 8.5 Square Mile Area water levels can have significant adverse effects on restoration progress, we emphasize the need to be careful in attributing flooding within this residential community to implementation of Increment 2 operations. We remain confident that once construction is finalized in the 8.5 Square Mile Area we will be able to raise canal stages in the L-29 canal to allow water to flow under Tamiami Trail as it was envisioned without impacting that community. Moving forward, the Corps must ensure it accurately represents conditions in the 8.5 Square Mile Area and the extent to which flooding there is caused by increases in the L-29 canal stage so that it does not unnecessarily undermine restoration progress.

**Protecting the Cape Sable seaside sparrow**

*Subpopulation A*

The Preferred Alternative would continue to implement the Reasonable and Prudent Alternative ("RPA") set forth in the July 2016 Biological Opinion for the Everglades Restoration Transition Plan ("July 2016 ERTP BiOp"). However, modeling has still not been done to assess what the Corps refers to as the "high water strategy" – an exception to the extended closure period for the S-12A and S-12B structures, allowing those structures to open in October and November under specified conditions to mitigate the need for later openings to avoid "overtopping" the structures (which can threaten their structural integrity).

We continue to request that monitoring be implemented to assess the need for and effect of violating the extended closure periods for S-12A/B, and support the U.S. Fish and Wildlife Service's ("Service's") request that the Corps evaluate other operational strategies to avoid overtopping the S-12 gates in high water.[6]

[6] The Service asked:

> . . . that the Corps provide a strategy for pre-emptively operating structures in order to avoid the need for the exit strategy openings of the S-12A/B. The Service requests that discharges prior to October 1 be aggressive enough to allow as much water to be moved towards the east as possible. Pre-emptive operations should strive to avoid S-12A/B openings in October and November, when practicable.

December 2016 Draft Supplemental EA at Appendix E-7/8.

*Eastern Subpopulations*

Although modeling of the Preferred Alternative shows benefits to Subpopulation A, it shows "variable effects" on the eastern subpopulations. *See* July 2016 ERTP BiOp at 205. Of particular concern are potential effects on Subpopulation E. *Id*. As the Service has emphasized, the effects on eastern Sparrow subpopulations must be closely monitored, and adaptive management is critical to ensure their protection and conservation. *Id*. at 205-06. The July 2016 ERTP BiOp sets targets for all subpopulations, reconsultation triggers, and monitoring of habitat conditions and breeding success. We urge the agencies to work expeditiously to advance Everglades restoration while continuing to ensure an adequate nesting window for all Sparrow subpopulations and hydrologic regimes that support the bird's habitat – short-hydroperiod freshwater marl prairies in the southern Everglades.

**S-328 and S-332D Operations and Water Quality**

The Preferred Alternative includes increased discharges out of the S-328 and S-332D structures. Data have not yet been compiled showing whether discharges from the S-328 structure cause water quality problems in Taylor Slough. *See* November 2017 Draft EA/FONSI at 4-13. We look forward to reviewing the results of monitoring as operational changes are implemented and evaluated.

In addition, the November 2017 Draft EA/FONSI Preferred Alternative again[7] allows for additional flows out of S-332D (and potentially other neighboring structures). The November 2017 Draft EA/FONSI does not discuss the potential for water quality problems as a result of these operations.[8] We again note that point flows will result in localized disruptions to flora and fauna, as they are entirely inconsistent with natural Everglades flow patterns. <u>We emphasize the need to gather and evaluate data along the eastern boundary of Everglades National Park about the specific operations included in the Preferred Alternative to ensure they are not harmful from a water quality perspective</u>.

* * * * *

[7] In prior increments, additional discharges into Taylor Slough from S-332D were justified by other operational changes that were designed to move water away from Everglades restoration project construction areas along the South Dade canals. *See* December 2016 Draft Supplemental EA at 4-21; *see also id.* at 4-40.

[8] The December 2016 Draft Supplemental EA explained at page 4-40:

> Experimentation with surface water flow to Taylor Slough and its effect on the vegetation within and adjacent to the slough has been well studied (Armentano et al. 2000, 2006, Nott et al. 1998, Olmstead et al. 1980, Van Lent et al. 1993, 1999). From 1980-1999, as part of the C&SF Project, various amounts of overland flow were discharged through the now decommissioned S-332 pump station which was located in the south western corner of L-31W. Rapid vegetation changes were observed where habitats dominated by short hydroperiod species such as Muhlenbergia were replaced by sawgrass and where sawgrass dominated habitats were replaced by more aquatic species such as Eleocharis. Cattail also became established near the pumping station potentially due to increased phosphorous loading.

We appreciate the efforts of the Corps to expedite Combined Operations Plan and CERP implementation with a view to Everglades restoration and protecting and conserving the endangered species that depend on Everglades habitat. We look forward to continuing to work with you to expedite construction and implementation of CERP features to facilitate true multi-species, ecosystem-based management and allow for more appropriate, sustainable water levels and flows across south Florida ecosystems.

Sincerely,

Ansley Samson
Of Counsel
Everglades Law Center

Dr. Thomas Van Lent
Direct of Science and Policy
Everglades Foundation

Cara Capp
Everglades Restoration
Program Manager
National Parks Conservation Association

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# APPENDIX D.1 NATIONAL ENVIRONMENTAL POLICY ACT CORREPONDENCE

# ADDITIONAL CORRESPONDENCE

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**Audubon Florida * Everglades Foundation * National Parks Conservation Association**

February 28, 2018

Donna S. George, P.E.
Senior Project Manager
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Programs & Project Management Division (PPMD)
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Re: Combined Operational Plan (COP) Alternative to Maximize Ecological Benefits

Dear Ms. George:

Audubon Florida, The Everglades Foundation, and the National Parks Conservation Association have long supported efforts to restore Everglades National Park (ENP) and Florida Bay. We have remained actively involved in the planning processes for Modified Water Deliveries (MWD) to ENP, C-111 Spreader Canal, and the C-111 South Dade Project. After decades of work, it is finally time to use this taxpayer-funded infrastructure to deliver ecosystem benefits that are desperately needed. We appreciate that the work being undertaken to develop the Combined Operations Plan (COP) will bring restoration planning into on-the-ground reality.

At the Project Delivery Team (PDT) meeting on February 15, 2018, the team discussed three alternatives (Alternative K, Alternative L, and Alternative N) for the model runs that will provide additional information to shape the final COP. **We have significant concerns that none of these alternatives under consideration reflect the best project to maximize ecosystem benefits.**

We understand that real-world constraints and the input of conflicting stakeholders are limiting factors; however, we urge the PDT to start with a model showing full hydrological ecosystem restoration to show what is achievable. **It is imperative to explore what is possible with restoration before deciding what is feasible.** Indeed, the National Environmental Policy Act (NEPA) requires agencies to explore a full realm of alternatives to ensure the final selected plan can be fairly weighed against all options.

**To that end, we submit the following request for a fourth COP alternative.** Out of the three alternatives the PDT developed, we believe Alternative L is the closest to achieving restoration goals. We request the PDT model a fourth alternative that is based on Alternative L with the following improvements:

- **Raise L-29 canal stages up to 8.5 feet without FDOT constraint NGVD.**

  Modeling is the best place to test the system and explore what a restored ecosystem would look like, but so far none of the alternatives show complete restoration. The FDOT constraint is ambiguous. The COP is scheduled to be in place by 2020. The one-mile Tamiami Trail

bridge has been in operation since 2013. Construction of the 2.6-mile bridge is coming along under budget and ahead of scheduled with completion expected by the end of 2018. We have every indication that work to modify the unbridged portions of Tamiami Trail to account for road safety and integrity concerns associated with higher L-29 canal water levels is next in the cue and will be completed before implementation of COP. We strongly urge the PDT to add a modeling alternative that removes the FDOT constraint and allows us to see what a completely restored Everglades would look like.

- **S-197: Eliminate flow out of S-197.**

  Modeling is the time to look at this type of request and play out a scenario that the environmental stakeholders have been repeatedly requesting the PDT to include as part of COP planning at every juncture in the decision-making process. Repeatedly in written and verbal comments, our organizations and others have stated that we understood continued use of the S-197 as infrastructure is coming online and during extreme weather conditions, with the ongoing expectation the structure would no longer be considered part of operations under COP. We remain confident that with the infrastructure in place the use of S-197 will not be needed once restoration benefits are fully realized. We continue to oppose operations that run counter to CERP and we strongly urge the PDT run at least one model that shows the ultimate facilitation of a restoration plan funded by the American public for decades.

- **S-18C: Same as Alternative L – 2012 WCP Operating range of 2.3 to 2.6 feet, NGVD.**

  We reiterate that the Final Project Implementation Report and Environmental Impact Statement ("FPIR/FEIS") for the C-111 Spreader Canal Western Project indicates that the Western Project is intended to implement incremental changes to raise water levels at S-18C. While the project has been operational for five years, no increase at S-18C has occurred. Failure to raise the canal stage at S-18C results in seepage from Taylor Slough into the entire length of the C-111 canal from S-200 south to S-18C. **It is the responsibility of the PDT to push forward on implementing stepwise increases in the allowable stage at the S-18C structure as contemplated in the FPIR/FEIS, as part of the COP.** "The purposes of S-18C are to maintain a desirable freshwater head to prevent saltwater intrusion through C-111, pass flood flows up to 40 percent SPF without exceeding design stages upstream, and act as a control point for water deliveries to the eastern panhandle of ENP (2012 WCP, page 7-11)."

- **Incremental Testing of Extreme High Water Line (EHW): Emphasize the importance of no EHW Line and not opening the Miami Canal gates during high water events.**

  We remain confident that with the infrastructure in place, there will no longer be a bottleneck effect in the Water Conservation Areas and therefore no need to have an EHW Line. We also want to see the modeling results of not opening the Miami Canal gates during high water events to avoid sending water out of the system instead of keeping the water in the system and distribute it as needed. Information about the opening vs. closure of those gates will provide insight helpful to the selection of the final COP.

- **S-331DX1: Strongly concur with Alternative L request for no CCCS constraints.**

  An understanding of how the system would react without the Cape Sable Seaside Sparrow constraint would provide a more thorough idea of what a natural system state looks like.

- **S-331/S-173: Operational range of 4.5 to 5.0 feet without Column 2 operations.**

  Once again, to facilitate a fuller understanding of what is achievable in the ecosystem to bring the most ecological relief to ENP and Florida Bay, we ask that the operational range be considered without limitations related to Column 2 operations.

The theme of this alternative is to understand how we create the wettest system possible for rehydration of the Southern Everglades and Florida Bay. Hundreds of millions of taxpayer dollars from the American public have been invested in the Modified Deliveries Water, Tamiami Trail Next Steps, and C-111 South Dade and Spreader Canal Western projects for the direct benefits to ENP and Florida Bay that must now be achieved. The PDT is tasked with modeling alternatives that will allow decision-makers to enact the best COP, and that analysis must include one alternative that maximizes ecological benefits every step of the way. We strongly urge you to consider adding a fourth project alternative to the suite of modeling options as you undertake the important work to implement this long-awaited project.

As always, we remain available to provide input or assist the PDT in any way possible and look forward to continued work with state and federal agencies to achieve our shared goals for the restoration of America's Everglades.

Sincerely,

Celeste De Palma
Director of Everglades Policy
**Audubon Florida**

Thomas Van Lent, Ph.D.
Vice President for Programs
**Everglades Foundation**

Cara Capp
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**Audubon Florida * The Everglades Foundation**

**Everglades Law Center * National Parks Conservation Association**

April 5, 2018

Donna S. George, P.E.
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Re: Combined Operational Plan (COP) Alternative to Maximize Ecological Benefits

Dear Ms. George and PDT Members:

On March 22, 2018, the U.S. Army Corps of Engineers, National Park Service, and South Florida Water Management District convened a meeting with Audubon Florida, the Everglades Foundation, and the National Parks Conservation Association to discuss the Combined Operational Plan (COP) proposed modeling alternative our organizations submitted on February 28, 2018 at the request of the PDT. Our organizations have been involved in COP planning that will define operations for the constructed features of the Modified Water Deliveries (MWD) to Everglades National Park (ENP), C-111 Spreader Canal, and C-111 South Dade Projects. This communication serves as a follow-up to that meeting.

**Once again, we assert our significant concern that none of the three alternatives presented by the PDT reflect the best project to maximize ecosystem benefits for Everglades National Park and Florida Bay.** After decades of construction funded by hundreds of millions of taxpayer dollars, we must model an operational plan that puts ecosystem health first. This COP is for the implementation 1989 Congressionally-approved MWD to Everglades National Park Project and the 1994 Congressionally-approved C-111 South Dade Project. As such, our organizations requested that the PDT consider a fourth alternative – or at a minimum make changes to one of the existing alternatives – to model one option that creates the wettest system possible for the rehydration of the Southern Everglades and Florida Bay.

During our meeting the PDT provided clear feedback that none of the alternative components we submitted will be considered in this round of COP modeling, despite it having strong attributes that would better inform what level of restoration is achievable in the ecosystem. The conclusion was that a fourth alternative and/or changes to the three existing alternatives to reflect some of our proposed changes will not be included in the model runs, because of lack of time.

It is important to emphasize that the proposed alternative provided by our organizations is consistent with COP planning priorities we have raised repeatedly at PDT meetings and in written comments beginning well over a decade ago, and as recently as the PDT meeting last month in West Palm Beach. A small sample of such requests include:

- **Raise water stages at S-18C to improve hydrology of ENP and Florida Bay:**

  "The full benefits of the C-111 spreader canal western project are not expected to accrue until stages at S-18C are raised, which will facilitate raising groundwater in the lower stretches of the C-111, effectively creating a hydraulic ridge that will reduce seepage out of ENP. In order for the COP to benefit Florida Bay by increasing flows to Taylor Slough and improving the ecological productivity of the region, proceeding with raising stages at S-18C is absolutely critical. Therefore, a commitment to raise stages at S-18C to a point where ecological benefits are achieved in Florida Bay is an essential component of the COP." ***Comment letter submitted to USACE, July 7, 2011***

- **Eliminate harmful discharges from the S-197 and raising S-18C stages:**

  "The goal of this initiative – to restore the Everglades – will be jeopardized if elements of flood control are interjected into the operational testing plan, particularly without just cause. We would support efforts by the Corps and District to investigate the claim that increased flooding is linked to C-111 operations, and look forward to rigorous discussion on the issue. In the meantime, proposing to lower levels in the S-18C, instead of raising them as previously approved, and operate the S-197 for flood relief under the auspices of operational testing is counterproductive to restoration efforts and not in the public interest… We urge you to ensure that both the incremental testing and final operational plan be designed in a way that maximizes the ecological benefits these projects were constructed to achieve. This includes not lowering water levels at the S-18C or allowing releases from the S-197." ***Comment letter to SFWMD and USACE, November 17, 2014***

- **Raise canal stage in the L-29:**

  "We have long supported implementation of ModWaters, with its operations that move more water south through the historic Everglades flowway – through NESRS, Shark River Slough, Taylor Slough and into Florida Bay. We want to reiterate that a central element of this project is to reestablish the historic connection that occurred when water in NESRS would pond high enough during the wet season that a direct flow connection from NESRS to Taylor Slough was established annually across the Rocky Glades and that this flow persisted well into the dry season. The proposal now under consideration – the third stage in the incremental implementation of operational changes, known as Increment 2 – would allow water levels in the L-29 canal to rise as high as 8.5 feet NGVD and adjusts operations at many structures in the southern portion of the Central and Southern Florida System ("C&SF System")... We strongly support moving ahead with operations that allow for Everglades restoration without delay." ***Comment letter submitted to USACE, January 17, 2018***

It is disappointing to hear that our longstanding restoration priorities – which serve our shared goal of maximizing ecosystem restoration of Everglades National Park and improving the health of waters of Florida Bay and the Keys – may not be evaluated as part of the National Environmental Policy Act (NEPA) process, as we have been on the record with these specific, reasonable alternatives for many years.

We emphasize that consideration of a robust array of alternatives is the central, foundational requirement of NEPA: NEPA regulations identify the alternatives analysis as "the heart of the environmental impact statement" and require agencies to "[r]igorously explore and objectively evaluate ***all reasonable alternatives***, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated." 40 C.F.R. § 1502.14 (emphasis added). As set forth (at page 105) in the most recent (2016) Sixth Biennial Review of Everglades restoration progress, operational objectives for the COP "are to increase flows from WCA-3A into Northeast Shark River Slough (NESRS), maintain higher water levels in Everglades National Park without exacerbating flooding in suburban and agricultural lands to the developed east, increase flows to Taylor Slough and Florida Bay, and reduce regulatory discharges from WCA-3A through the S-12 structures or south through the South Dade Conveyance Canals." If the Corps fails to consider alternatives that would raise water levels at S-18C, eliminate discharges from S-197, and allow for higher water levels in the L-29 Canal, it would ignore reasonable alternatives that would minimize the project's adverse effects and would enhance the quality of the environment, as required by NEPA and its implementing regulations. 40 C.F.R. § 1500.2(f).

We know the Corps shares our goals both of maximizing Everglades restoration and ensuring informed environmental decision-making about these critical and long-awaited Everglades restoration projects. We respectfully request that you reconsider evaluating a fourth alternative that embodies these ***reasonable, long-requested alternatives*** to operations of these project components. Running a model to maximize ecosystem restoration must happen ***before*** the operating plan is chosen to allow informed decision-making – the crux of the NEPA process.

We again reiterate our strong commitment to seeing the COP implemented in a way that delivers ecological benefits that are desperately needed for Everglades National Park and Florida Bay – which are clear objectives outlined in these federally-approved and funded projects. As always, our organizations remain ready to assist in the planning process and will remain engaged as the alternatives are modeled and the final plan is selected.

Sincerely,

Celeste De Palma
Director of Everglades Policy
**Audubon Florida**

Thomas Van Lent, Ph.D.
Vice President for Programs
**The Everglades Foundation**

Ansley Samson
Of Counsel
**Everglades Law Center**

Cara Capp
Everglades Restoration Program Manager
**National Parks Conservation Association**

CC: Ernie Marks, Executive Director
South Florida Water Management District

Bob Johnson, SFNRC Director
National Park Service

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-8175

REPLY TO
ATTENTION OF

MAY 10 2018

Programs and Project Management Division
Ecosystem Branch

Ms. Cara Capp
National Parks Conservation Association
450 N Park Road Suite 301
Hollywood, FL 33021

Dear Ms. Capp:

Thank you for your letter dated April 5, 2018 regarding current planning efforts for the Combined Operational Plan (COP). Implementation of COP is expected to increase the availability of water deliveries from Water Conservation Area 3A to Everglades National Park (ENP) through Northeast Shark River Slough and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP. The purpose of the COP is to define operations for the constructed features of the Modified Water Deliveries to ENP and Canal 111 South Dade Projects, while maintaining the congressionally authorized purposes of the Central and Southern Project to include flood control; water supply for agricultural irrigation, municipalities and industry; regional groundwater control and prevention of saltwater intrusion; enhancement of fish and wildlife; and recreation.

The Jacksonville District, U.S. Army Corps of Engineers (Corps), is currently formulating alternatives for consideration and appreciates the comments received from stakeholders. Alternatives developed for Round 1 modeling were formulated based on achievement of project objectives and compliance with project constraints in enclosure 1. The range of alternatives considered in COP represent feasible alternatives that maximize ecosystem benefits for ENP and Florida Bay during the anticipated timeframe for COP implementation. Additional benefits will be realized as components of the Comprehensive Everglades Restoration Plan become part of the Federal project that will allow us to re-visit system operations. The alternative you proposed does not meet the system constraints for COP implementation and would not be the best use of limited Federal resources at this time. Additional information regarding development of Round 1 model alternatives specific to your concerns are included in enclosure 2. The Corps shares your priorities for Everglades' restoration along with the other project objectives. We value your continued participation in the process as we implement projects and maximize restoration benefits to the maximum extent possible.

If you have any questions regarding the information in this letter, please feel free to contact me or you may contact Ms. Donna George, Senior Project Manager at 904-232-1766 or by email donna.s.george@usace.army.mil.

Sincerely,

Timika N. Wilson
Lieutenant Colonel, U.S. Army
District Commander

Enclosures

cc:
Mr. Ernie Marks, Executive Director, South Florida Water Management District, P.O Box 24680, West Palm Beach, FL 33416
Mr. Bob Johnson, SFNRC Director, National Park Service, 40001 State Road 9336, Homestead, FL 33034

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-8175

REPLY TO
ATTENTION OF

MAY 10 2018

Programs and Project Management Division
Ecosystem Branch

Dr. Thomas Van Lent
Director of Science & Policy, Everglades Foundation
18001 Old Cutler Road
Palmetto Bay, FL 33157

Dear Dr. Van Lent:

Thank you for your letter dated April 5, 2018 regarding current planning efforts for the Combined Operational Plan (COP). Implementation of COP is expected to increase the availability of water deliveries from Water Conservation Area 3A to Everglades National Park (ENP) through Northeast Shark River Slough and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP. The purpose of the COP is to define operations for the constructed features of the Modified Water Deliveries to ENP and Canal 111 South Dade Projects, while maintaining the congressionally authorized purposes of the Central and Southern Project to include flood control; water supply for agricultural irrigation, municipalities and industry; regional groundwater control and prevention of saltwater intrusion; enhancement of fish and wildlife; and recreation.

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Sincerely,

Timika N. Wilson
Lieutenant Colonel, U.S. Army
District Commander

Enclosures

cc:
Mr. Ernie Marks, Executive Director, South Florida Water Management District, P.O Box 24680, West Palm Beach, FL 33416
Mr. Bob Johnson, SFNRC Director, National Park Service, 40001 State Road 9336, Homestead, FL 33034

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JACKSONVILLE DISTRICT CORPS OF ENGINEERS
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-8175

REPLY TO
ATTENTION OF

MAY 10 2018

Programs and Project Management Division
Ecosystem Branch

Ms. Ansley Samson
Everglades Law Center
331 W Central Avenue Ste. 213
Winter Haven, FL 33880

Dear Ms. Samson:

Thank you for your letter dated April 5, 2018 regarding current planning efforts for the Combined Operational Plan (COP). Implementation of COP is expected to increase the availability of water deliveries from Water Conservation Area 3A to Everglades National Park (ENP) through Northeast Shark River Slough and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP. The purpose of the COP is to define operations for the constructed features of the Modified Water Deliveries to ENP and Canal 111 South Dade Projects, while maintaining the congressionally authorized purposes of the Central and Southern Project to include flood control; water supply for agricultural irrigation, municipalities and industry; regional groundwater control and prevention of saltwater intrusion; enhancement of fish and wildlife; and recreation.

The Jacksonville District, U.S. Army Corps of Engineers (Corps), is currently formulating alternatives for consideration and appreciates the comments received from stakeholders. Alternatives developed for Round 1 modeling were formulated based on achievement of project objectives and compliance with project constraints in enclosure 1. The range of alternatives considered in COP represent feasible alternatives that maximize ecosystem benefits for ENP and Florida Bay during the anticipated timeframe for COP implementation. Additional benefits will be realized as components of the Comprehensive Everglades Restoration Plan become part of the Federal project that will allow us to re-visit system operations. The alternative you proposed does not meet the system constraints for COP implementation and would not be the best use of limited Federal resources at this time. Additional information regarding development of Round 1 model alternatives specific to your concerns are included in enclosure 2. The Corps shares your priorities for Everglades' restoration along with the other project objectives. We value your continued participation in the process as we implement projects and maximize restoration benefits to the maximum extent possible.

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Sincerely,

Timika N. Wilson
Lieutenant Colonel, U.S. Army
District Commander

Enclosures

cc:
Mr. Ernie Marks, Executive Director, South Florida Water Management District, P.O Box 24680, West Palm Beach, FL 33416
Mr. Bob Johnson, SFNRC Director, National Park Service, 40001 State Road 9336, Homestead, FL 33034

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-8175

REPLY TO
ATTENTION OF

MAY 10 2018

Programs and Project Management Division
Ecosystem Branch

Ms. Celeste De Palma
Audubon of Florida
4500 Biscayne Blvd., Suite 205
Miami, FL 33137

Dear Ms. De Palma:

Thank you for your letter dated April 5, 2018 regarding current planning efforts for the Combined Operational Plan (COP). Implementation of COP is expected to increase the availability of water deliveries from Water Conservation Area 3A to Everglades National Park (ENP) through Northeast Shark River Slough and improve hydrologic conditions in Taylor Slough, the Rocky Glades, and the eastern panhandle of ENP. The purpose of the COP is to define operations for the constructed features of the Modified Water Deliveries to ENP and Canal 111 South Dade Projects, while maintaining the congressionally authorized purposes of the Central and Southern Project to include flood control; water supply for agricultural irrigation, municipalities and industry; regional groundwater control and prevention of saltwater intrusion; enhancement of fish and wildlife; and recreation.

The Jacksonville District, U.S. Army Corps of Engineers (Corps), is currently formulating alternatives for consideration and appreciates the comments received from stakeholders. Alternatives developed for Round 1 modeling were formulated based on achievement of project objectives and compliance with project constraints in enclosure 1. The range of alternatives considered in COP represent feasible alternatives that maximize ecosystem benefits for ENP and Florida Bay during the anticipated timeframe for COP implementation. Additional benefits will be realized as components of the Comprehensive Everglades Restoration Plan become part of the Federal project that will allow us to re-visit system operations. The alternative you proposed does not meet the system constraints for COP implementation and would not be the best use of limited Federal resources at this time. Additional information regarding development of Round 1 model alternatives specific to your concerns are included in enclosure 2. The Corps shares your priorities for Everglades' restoration along with the other project objectives. We value your continued participation in the process as we implement projects and maximize restoration benefits to the maximum extent possible.

If you have any questions regarding the information in this letter, please feel free to contact me or you may contact Ms. Donna George, Senior Project Manager at 904-232-1766 or by email donna.s.george@usace.army.mil.

Sincerely,

Timika N. Wilson
Lieutenant Colonel, U.S. Army
District Commander

Enclosures

cc:
Mr. Ernie Marks, Executive Director, South Florida Water Management District, P.O Box 24680, West Palm Beach, FL 33416
Mr. Bob Johnson, SFNRC Director, National Park Service, 40001 State Road 9336, Homestead, FL 33034

Enclosure 1: Combined Operational Plan Objectives, Constraints and Planning Considerations

## Combined Operational Plan (COP)

Purpose:
Define water management operations for the WCA-3A and WCA-3B outlets, structures in the L-31N and C-111 basins constructed as part of the Central and Southern (C&SF) Project and the recently constructed components of the MWD and C-111 SD projects.

Documents Produced:
Water Control Plan and EIS with adaptive management appendix

Objectives:
1. Improve water deliveries (timing, location, volume) into Everglades National Park (ENP) and take steps to restore natural hydrologic conditions in ENP given current C&SF infrastructure and features expected to be completed by the time of implementation, to the extent practicable by

a. Changing schedule of water deliveries so that it fluctuates in consonance with local meteorological conditions, including providing for long term and annual variation in ecosystem conditions in the Everglades (Timing) (P.L. 101-229, Section 101b)

b. Restoring NESRS as a functioning component of the Everglades hydrologic system (Location) (P.L. 101-229, Section 101b)

c. Adjusting the magnitude of water discharged to ENP to minimize effects of too much or too little water (Volume) (1992 MWD GDM, Section 44)

2. Maximize progress toward restoring historic hydrologic conditions in the Taylor Slough, Rocky Glades, & eastern Panhandle of ENP.

3. Protect the intrinsic ecological values associated with WCA-3A and ENP.

4. Minimize the damaging freshwater flows to Manatee Bay/Barnes Sound through the S197 structure and increase flows through Taylor Slough and coastal creeks (1994 C-111 GRR, Section 5.2)

5. Include consideration of cultural values and tribal interests & concerns within WCA-3A and ENP.

Constraints:
1. C&SF project purposes

2. 1962 Flood Control Act (P.L. 87-874) Authorizing Project Works in South Dade County

3. 1968 Flood Control Act (P.L. 9-483) Authorizing the SDCS

4. 1989 ENP Expansion Act (Everglades National Park Protection and Expansion Act of 1989, P.L. 101-229)

5. 1992 MWD GDM (1992 General Design Memorandum): mitigation for project induced flood damages

6. 1994 C-111 GRR: flood damage reduction

7. ERTP WCA-3A Regulation Schedule (pending results of the Baseline and Modification Modeling [BAMM])

8. L-29 Canal maximum stage (8.5 ft NGVD) (2008 Tamiami Trail LRR)

9. 2008 Tamiami Trail Modifications Relocation Agreement (FDOT/USA)

10. 2000 General Re-evaluation Report for the 8.5 SMA

11. 2016 Canal 111 South Dade Final Limited Reevaluation Report

12. 2016 MWD Completion Technical Analysis

Planning Considerations:
1. Burial Resources Agreement

2. Avoid or minimize adverse effects to cultural resources. Explore opportunities to develop monitoring protocols for "at risk" cultural resources

3. Water Quality Standards (CEPP language - Section 6.3.2 Paragraphs 1-4)

4. Maintain multi-species objectives (2012 WCP) and comply with requirements of the applicable BO from USFWS to include the July 2016 ERTP BO and the CERP C-111SC Western Project

5. Consider compatibility with future restoration actions including CEPP. Reasonably connect the planning under this project authority to other near-term changes that are likely to be implemented in the system in the next few years using an Adaptive Management framework.

6. Explore opportunities for enhancing the recovery of federally and state listed species under the Endangered Species Act, the USACE's authorities for MWD and C-111 projects and operational considerations.

7. Explore opportunities to enhance flood control and mitigation.

Enclosure 2: Overview of Combined Operational Plan Formulation for Round 1 Modeling Efforts

The project team is currently formulating alternatives for consideration and appreciates the comments received from environmental stakeholders. Alternatives referenced in the April 5, 2018 letter were formulated based on achievement of project objectives and compliance with project constraints. Implementation of the Modified Water Deliveries (MWD) operational field tests (Increment 1, 1.1, 1.2 and 2) included operational criteria that increased the potential for additional low volume releases at S-197 relative to the 2012 Water Control Plan. This additional operational flexibility was included within the field tests due to uncertainty resulting from increased stages in North Shark River Slough and the potential for increased seepage to the L-31N Canal south of S-331 prior to completion of the C-111 South Dade project construction. It is the intent of the Corps to re-evaluate operational criteria previously defined for this structure during Combined Operational Plan (COP). Alternatives currently included within the first round of COP modeling (Round 1) represent a potential decrease in releases at S-197 relative to the 2012 Water Control Plan.

Many of the MWD and C-111 South Dade Project features have been built and/or are nearing completion, including the required infrastructure identified within prior National Environmental Policy Act (NEPA) documentation related to the operational field tests to raise the maximum operating limit of the L-29 Canal beyond the constraint of 7.5 feet, National Geodetic Vertical Datum (NGVD) defined in the 2012 Water Control Plan. Although the Jacksonville District, U.S. Army Corps of Engineers (Corps) will have completed NEPA requirements to allow raising the maximum operating limit in the L-29 Canal up to 8.5 feet NGVD, actual raising of the L-29 Canal constraint above 7.8 feet NGVD (Increment 1.2 field test constraint) is dependent upon completion of critical features necessary to operate the C-111 South Dade Project North Detention Area (NDA). Due to impacts associated with Hurricane Irma, construction of these critical features has been delayed. Based upon the latest construction schedule estimate, the critical features will likely be completed by June 2018. Once the NDA critical features have been constructed and accepted by the Corps, the Corps will have the ability to raise the L-29 Canal maximum operating limit up to 8.5 feet NGVD subject to downstream constraints including adherence to both the Florida Department of Transportation (FDOT) constraints for protection of the Tamiami Trail roadway (2008 Relocation Agreement) and the 8.5 square mile area flood mitigation constraints. Alternatives currently included within Round 1 for COP raise the L-29 Canal maximum operating limit up to 8.5 feet NGVD with adherence to the FDOT constraint as defined for the Increment 2 Operational Strategy.

In order to develop implementable alternatives for the Round 1 modeling evaluations, the Corps in coordination with the South Florida Water Management District (SFWMD) and Everglades National Park, first identified water control structures associated with the MWD and C-111 South Dade Projects. Operational bookends for each structure were developed along a continuum that maximized environmental restoration and maximized flood risk management. Combinations of the operational bookends were developed into alternatives and screened by evaluating the alternatives against project objectives, constraints and planning considerations. A range of alternatives was considered, consistent with the NEPA. A second round of modeling (Round 2) is scheduled to be performed following the evaluation of alternatives in Round 1. The

formulation for Round 2 modeling will provide another opportunity to modify alternatives currently being considered following an assessment of environmental effects and flood risk assessment to the project area. In addition, sensitivity runs may be considered to aid with the COP plan selection and adaptive management.

Evaluations of the Round 1 and Round 2 alternatives will include comparison to the 2019 Existing Condition Baseline (2019 ECB, or "No Action" Alternative), which represents the anticipated 2019-2020 water management criteria for the MWD and C-111 South Dade components in the event that a COP was not completed. Increment 1.2 of the field test is assumed for the 2019 ECB since the associated operational criteria are compliant with the Reasonable and Prudent Alternative (RPA) from the 2016 U.S. Fish and Wildlife Service Biological Opinion (Increment 2 is also compliant with the RPA however, the 2012 Water Control Plan is not), and since the L-29 maximum operating limit of 7.8 feet NGVD is consistent with both the 2008 FDOT Relocation Agreement and requirements to maintain the federally-authorized flood mitigation flood the 8.5 Square Mile Area. The L-29 Canal stage limit of up to 8.5 feet NGVD for Increment 2 will be further evaluated during the Increment 2 field test.

The flood risk assessments to the project area are limited in scope but will include an economic analysis with estimates of dollar damages to agriculture and residential structures in the C-111 South Dade agricultural basin. This analysis is a targeted approach to ensure that none of the constraints pertaining to the C-111 South Dade basin or 8.5 Square Mile Area are violated and is consistent with the methodology completed in the 1994 C-111 South Dade General Re-Evaluation Report (GRR) and the 8.5 Square Mile Area GRR. Though the Corps acknowledges there may be economic benefits or damages due to modifications to discharges to Manatee Bay, it is not within the current scope or purpose of COP to study, quantitatively estimate, and report these potential economic effects.

The SFWMD has implemented features of the C-111 Spreader Canal Western Project under the State Expedited Construction program (i.e. Accelerate Everglades Restoration Project [Acceler8]) for the purpose of expediting design and construction of a number of critical restoration projects consistent with the Comprehensive Everglades Restoration Plan. A Department of Army permit (SAJ-2005-9856 [IP-AAZ]) was issued to the SFWMD on October 14, 2009 for the construction and operation of the project. The SFWMD initiated operation of the C-111 Spreader Canal Western Project constructed components in June 2012, in accordance with the Project Operating Manual (POM). At the request of the SFWMD, a revised POM was approved in June 2016. Incremental increases in the open/close stage triggers at S-18C have not yet been implemented. Steps will be taken in the future to incorporate the C-111 Spreader Canal Spreader Canal Western Project into the federally authorized C&SF Project once a Project Partnership Agreement (PPA) between the Corps and SFWMD has been executed. Pending execution of the PPA, operation of the C-111 Spreader Canal Western Project is not included as part of the 2012 Water Control Plan or within the scope of COP.

Donna S. George
Jacksonville District Corps of Engineers
701 San Marco Blvd
Jacksonville, FL 322207-8175
Email: donna.s.george@usace.army.mil

August 14, 2018

Re: Combined Operations Plan

Dear Ms. George:

In our comments of April 5, 2018, The Everglades Foundation along with several other organizations expressed our collective view that the Combined Operational Plan (COP) was not investigating alternatives that maximized ecosystem benefits for Everglades National Park and Florida Bay. We offered input on where operations could be improved. Those suggestions were dismissed.

Events of the past four months have merely increased our concern that the COP alternatives being investigated to date make only modest improvements at best. One alternative, Alternative K, is demonstrably worse for Florida Bay. We once again offer input on where operations can be improved. To reduce misunderstandings, we have put them in an operation table (see Table 1.) We also have the RSM modeling inputs and outputs, if needed.

These proposed operations show that significantly more can be done to improve conditions in Everglades National Park and Florida Bay. We ask the Project Delivery Teams to focus their efforts on finding operations that maximize benefits with this as a starting point. Operational changes in Water Conservation Area 3A and 3B, implementing C-111 N Spreader, and others will improve benefits. At minimum, spending the same effort and resources on maximizing benefits to the Bay as is spent on evaluating potential flood risk will dramatically improve this plan.

Sincerely,

Thomas Van Lent, Ph.D.
The Everglades Foundation

Table 1: Proposed operations for Combined Operational Plan (COP)

| Operational Component | WCA-3A releases to SRS or SDCS |
|---|---|
| WCA-3A Interim Regulation Schedule | ***WCA-3A Interim Regulation Schedule shown on below Figure 1 (used from 2012 Water Control Plan).***<br><br>**When in Zone A**<br>S-12s, S-333, S-343A&B, and S-344 subject to conditions below, otherwise, S-12s open full, S-151 make discharges to the East Coast and ENP-SDCS as needed and make maximum allowable discharge when WCA-3B stage (Site 71) is below 8.5 feet, NGVD. S-343A&B and S-344, if non-nesting season (15 July through 30 September), make maximum allowable discharge if downstream conditions permit.<br><br>**When in Zone D**<br>S-12s, S-333, S-343A&B, and S-344 subject to conditions below, otherwise, S-12s discharge Rainfall Plan target flow for S-12s. S-333 make water supply discharges to the East Coast and ENP-SDCS as needed, discharge Rainfall Plan target flow for S-333 when permitted by downstream conditions. S-151 makes water supply discharges to the East Coast and ENP-SDCS as needed. S-343A&B and S-344 normally closed in this Zone unless water is needed for environmental reasons. Operations maximize the discharge capacity from S-333 prior to utilization of the S-12s, subject to conditions below.<br><br>**When in Zone E**<br>S-12s, S-333, S-151, S-343A&B, and S-344 subject to conditions below, otherwise, S-12s discharge Rainfall Plan target flow for S-12s. S-333 make water supply discharges to the East Coast and ENP-SDCS as needed, discharge Rainfall Plan target flow for S-333 when permitted by downstream conditions. S-151 makes water supply discharges to the East Coast and ENP-SDCS as needed. S-343A&B and S-344 normally closed in this Zone unless water is needed for environmental reasons. The L-67A Borrow Canal stage (S-333 headwater) should not be drawn down below 7.5 feet, NGVD unless water is supplied from another source. Operations maximize the discharge capacity from S-333 prior to utilization of the S-12s, subject to conditions below.<br><br>**When in Zone E1**<br>Make up to maximum practicable releases at S-12C, S-12D, S-142, S-151, S-31, S-337, S-335, S-333, S-355 A/B, and S-334 when permitted by downstream conditions. S-12s, S-333, S-151, S-343A&B, and S-344 subject to conditions below, otherwise, S-12s discharge Rainfall Plan target flow for S-12s. Revert to Zone E rules if the FWS has determined that nesting for the CSSS-A has ended, or if the headwater at S-333 falls below 8.25 feet, NGVD. |
| Rainfall Plan | 2006 New Rainfall-Flow Formula (NEFF) for water deliveries from WCA-3A to Shark River Slough with a scale factor of 0.45 |
| S-343A, S-343B, and S-344 | Closed from 1 October through 14 July independent of WCA-3A levels |

| Operational Component | WCA-3A releases to SRS or SDCS |
|---|---|
| S-12 A/B/C/D | S-12A closed from 01 October through 14 July with the following limited conditional opening;<br>S-12B closed from 01 October through 14 July with the following limited conditional opening;<br><br>**S-12A and/or S-12B will be conditionally opened during October under the following conditions.**<br>1. WCA-3A stage on 30 September is greater than 10.5 feet, NGVD; or<br>2. WCA-3A stage is projected to rise above 10.75 feet, NGVD (IOP Zone A) during October, based on consideration of projected inflows and direct rainfall.<br>3. S-12A and/or S-12B will be conditionally closed when the WCA-3A stage falls below 10.25 feet NGVD, OR on 01 November, whichever comes first.<br><br>**S-12B will be conditionally opened during November under the following conditions.**<br>1. WCA-3A stage on 31 October is greater than 11.0 feet, NGVD; or<br>2. WCA-3A stage is projected to rise above 11.25 feet, NGVD during November, based on consideration of projected inflows and direct rainfall.<br>3. S-12B will be closed when the WCA-3A stage falls below 10.75 feet NGVD, OR on 01 December, whichever comes first.<br><br>S-12C no closure period.<br>S-12D no closure period.<br><br>S-12A Year-round: To provide access to cultural areas, when Rainfall Plan results in S-12 target flows, S-12A up to 100 cfs release.<br><br>S-12A Cultural Access Release: S-12A up to 100 cfs release available when Rainfall Plan results in S-12 target flows. From 01 October through 14 July, the duration of this release will not exceed five consecutive days. S-12A up to 100 cfs release may only occur when WCA-3A 3-gage average (WCA-3AVG - Sites 63, 64, 65) is greater than 8.4 feet, NGVD.<br><br>S-12C/D Year-round: S-12C and/or S-12D release up to WCA-3A Regulation Schedule (Zone A maximum) or Rainfall Plan (target flow).<br><br><u>S-12s Flow Distribution</u>:<br>S-12 opening sequence to meet Target Flows is from east (S-12D) to west (S-12A); S-12s flow distributions would not be limited to the historical percentage distribution of flow from the S-12s (10 percent at S-12A, 20 percent at S-12B, 30 percent at S-12C, 40 percent at S-12D).<br><br>If S-12A/B/C/D headwater levels are greater than 11.0 feet, NGVD, then open gates for an amount only enough to stop overtopping of gates. |
| S-333 | Closed when L-29 Canal stage is above its maximum limits. Refer to L-29 Borrow Canal criteria below.<br><br>Rainfall Plan target flow for S-333 (to NESRS). Rainfall Plan target distribution through S-333 may exceed 55% of the Rainfall Plan target. |

| Operational Component | WCA-3A releases to SRS or SDCS |
|---|---|
| | When WCA-3A is in Zone E1 or Zone A, up to maximum practicable through S-333 to NESRS.<br>The priority is given to use S-333 for WCA-3A Rainfall Plan deliveries. The capacity is 2,500 cfs (as per CEP)<br><br>No G-3273 constraint for S-333 flow. |
| L-29 Borrow Canal | L-29 canal will be operated below 8.5 feet, NGVD stage.<br><br>If the stage at S-333 TW exceeds 8.5 feet, NGVD inflows into the L-29 canal (S-333, S-355A/B, and S-356) will be reduced until S-333 TW recedes below 8.5 feet, NGVD |
| S-355A & S-355B | Follow the same constraints as S-333.<br><br>Open whenever hydraulic gradient allows flow from WCA-3B to L-29.<br><br>A. Constraints on the Operation of S-355A and S-355B. The S-355A and S-355B water control structures will be operated to comply with the following constraints:<br>1. The S-355A or S-355B or both shall be opened only when there is sufficient stage difference between the water levels in Water Conservation Area (WCA)-3B at S-355A/S-355B and the L-29 Borrow Canal and whenever the gradient allows for southerly flow from WCA-3B at S-355A/S- 355B to L-29 Borrow Canal;<br>2. Discharges from S-355A or S-355B or a combination of both shall be limited as required to prevent the L-29 Canal stage from exceeding the L-29 Borrow Canal stage constraint 8.5 feet, NGVD;<br>3. Discharges from S-355A or S-355B or a combination of both shall be limited as required to prevent impacts to the existing project purposes of the Central & Southern Florida (C&SF) Project including but not limited to flood damage reduction and water supply; and<br>4. Operations are consistent with, and follow, the existing regulation schedule and water control plan for WCA 3A/3B.<br><br>B. The S-355A and S-355B water control structures shall be closed if any of the four conditions above are not met, and when there is a potential for reverse flow (from L-29 Borrow Canal to WCA-3B) through the structures. The actual open and close levels of the structures will depend on the water conditions, forecasts, and other system constraints. |
| S-334 | Water Supply |
| S-356 | Operating Range from 5.5 to 5.8 NGVD. S-356 flows subject to L-29 Canal stage constraint of 8.5 feet.<br><br>No G-3273 constraint for S-356 flow.<br><br>Under normal conditions S-356 maximizes the flow to NESRS and reduce the use of S-338/G-211 (with exception of water supply and supplemental water deliveries) |

| Operational Component | WCA-3A releases to SRS or SDCS |
|---|---|
| | Operated in accordance with Condition 1 (Refer to the conditions language in the Operational Strategy).<br><br>During S12A closure period, limit S-356 pumping to 125 cfs flow if full discharge at S-333 cannot be made.<br><br>S-336 will be closed when S-356 is operated.<br><br>When supplemental water deliveries are being delivered through S-334 and they by themselves or in combination with local rainfall result in S-356 pumping to maintain the canal range below the top of the range, the supplement delivery will be stopped by closing S-334 by the next business day or sooner. Supplemental water can be delivered to Taylor Slough through S-151, S337, S-335 while S-356 is operating. |
| S-152 | New structure at L-67A/C Levee to deliver water from WCA-3A to WCA-3B, used for flood control purpose.<br><br>Operating range from 9.6 to 9.7 feet, NGVD<br><br>When water level at WCA-3B Site 71exceeds 8.5 feet, NGVD, then S-152 is closed. S-152 will be operated with maximum capacity (subject to G-3B71 constraint) of 750 cfs from 1 September through 31 May<br><br>No flows from 1 June to 31 August |
| S-151 | Used for both water supply and flood control |
| S-337 | Used for both water supply and flood control |
| S-335 | Operating Range from 6.5 to 7.0 NGVD.<br><br>When the tailwater level exceeds 6.0 feet, NGVD, then S-335 is closed for flood control release.<br><br>S-335 is used for both flood control and water supply |
| S-338 | Operating Range from 5.5 to 5.8 feet NGVD. The S-338 structure is used for both flood control and water supply. |
| G-211 | Operating Range from 5.5 to 6.0 feet NGVD<br><br>If S-331 pumping is limited and the G-211 tailwater rises above 5.3 feet, NGVD then close G-211. |
| S-357 | S-357 will be operated to maintain S-357 headwater level between 4.0 to 5.5 feet, NGVD. When drier conditions allow reduced pumping at S-357, canal range of 5.5 to 6.0 feet, NGVD may be utilized.<br><br>The S-357 headwater level will be maintained based on the stages at LPG2<br>1. When LPG2 > 6.5 feet then S-357 HW will be maintained between 3.5 feet and 4.0 feet until the stage at LPG2 falls below 6.5 feet NGVD. |

| Operational Component | WCA-3A releases to SRS or SDCS |
|---|---|
| | 2. When 6.0 feet < LPG2 < 6.5 feet then S-357 HW will be maintained between 5.0 feet and 4.0 feet.<br>3. When 5.5 feet < LPG2 < 6.0 feet then S-357 HW will be maintained between 5.5 feet and 5.0 feet.<br>4. When LPG2 < 5.5 feet then the bottom of the range is at or above 5.5 feet, NGVD (e.g. 5.5 to 6.0 feet). |
| S-331 | S-331 operations are based on S-331 headwater level.<br><br>S-331 HW operational range will lower as the stage at LPG2 rises as long as there is downstream capacity. Providing capacity for the operational ranges prescribed below will be a higher priority than regulatory releases from WCA-3A to S-331.<br><br>1. When LPG2 > 6.5 feet then S331 HW will be maintained between 3.5 feet and 4.0 feet until the stage at LPG2 falls below 6.5 feet NGVD.<br>2. When 6.0 feet < LPG2 < 6.5 feet then S331 HW will be maintained between 4.5 feet and 4.0 feet.<br>3. When 5.5 feet < LPG2 < 6.0 feet then S331 HW will be maintained between 5.0 feet and 4.5 feet.<br>4. When LPG2 < 5.5 feet then the bottom of the range is at or above 5.0 feet, NGVD (e.g. 5.0 to 5.5 feet). |
| S-332B and S-332C, and S-332D | S-332B, S-332C, and S-3332D operations are independent of whether other SDCS operations are under Column 1 or Column 2 mode of operations.<br><br><u>S-332B</u><br>• S-32BN1 and S-332B1 pumps will be operated in a range of 4.4 to 4.2 feet, NGVD with maximum capacity of 125 cfs of each pump<br>• S-332BN2 and S-332B2 pumps will be operated in a range of 4.7 to 4.3 feet, NGVD with maximum capacity of 125 cfs of each pump<br>• If the tailwater stages rise above 8.5 feet, NGVD, then close G-332B pumps<br><u>S-332C</u><br>• S-332C1 pump will be operated in a range of 4.4 to 4.2 feet, NGVD with maximum design capacity of 250 cfs<br>• S-332C2 pump will be operated in a range of 4.7 to 4.3 feet, NGVD with maximum capacity of 250 cfs<br>• If the tailwater stages rise above 8.5 feet, NGVD, then close G-332C pumps<br><br><u>S-332D</u><br>• The operating range of S-332D1 and S-332D2 are from 4.85 to 4.65 feet, NGVD<br>• Limit pumping is limited to 75 cfs flow from 01 February to 14 July for consideration of CCSS nesting period<br>• Use all pumps for maximum flow (i.e., 250 cfs) during 15 July to 30 November<br>• Limit pumping to 125 cfs flow from 01 December to 31 January<br>• If the tailwater stages rise above 7.5 feet, NGVD, then close G-332D pumps |

| Operational Component | WCA-3A releases to SRS or SDCS |
|---|---|
| | |
| D-332DX1 | S-332DX1 is used to divert a portion of S-332D discharge when the CSSS calendar based flow restrictions limit the flow into the S-332D detention area.<br><br>The design capacity of S-332DX1 is 250 cfs |
| S-328 | The S-328 may be used to increase deliveries to Taylor Slough and provided that an average water depth of at least six inches is maintained in Cell 1; the six-inch depth criteria is based upon a modeled operational range of 5.8 to 5.7 feet. |
| S-194 and S-196 | 15 February through 31 July (early CSSS nesting window)<br>Operating Range from 4.2 to 4.85 feet, NGVD<br>01 August through 14 February<br>Operating Range from 4.2 to 4.9 feet, NGVD |
| S-176 | Operating Range from 4.5 to 5.0 feet, NGVD |
| S-177 | Operating Range from 3.2 to 3.9 feet, NGVD<br><br>If the rainfall over the last 14 days exceeds 5.5 inches, then S-177 may be opened to lower S-177 HW down to 3.4 feet, NGVD. |
| S-18C | Operating Range from 2.3 to 2.6 feet, NGVD |
| S-197 | The design capacity of the S-197 is limited to 400 cfs<br><br>If S-177 headwater is greater than 4.1 feet, NGVD or S-18C headwater is greater than 2.8 feet, NGVD, open 3 culverts.<br><br>If S-177 headwater is greater than 4.2 feet, NGVD for 24 hours or S-18C headwater is greater than 3.1 feet, NGVD; open 4 more culverts for a total of 7 culverts open.<br><br>If S-177 headwater is greater than 4.3 feet, NGVD or S-18C headwater is greater than 3.3 feet, NGVD, then open 6 more culverts for a total of 13 culverts open. |

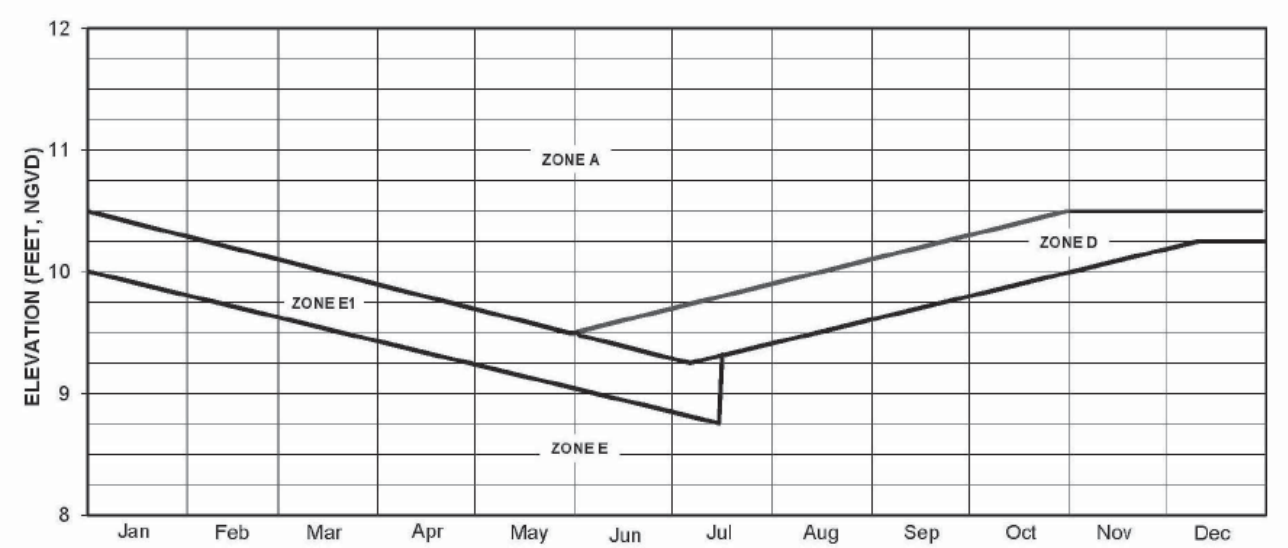


Figure 1: WCA-3A Regulation Schedule (adopted from 2012 Water Control Plan)

# SOUTH FLORIDA WATER MANAGEMENT DISTRICT

September 5, 2018

Lieutenant General Todd T. Semonite
Commanding General and Chief of Engineers
Department of the Army
108 Army Pentagon
Washington, DC 20310-0108

**Subject: Combined Operational Plan (COP)**

Dear Lieutenant General Semonite:

As the non-Federal sponsor of Everglades restoration projects, I write to express our continued support for development of the Combined Operational Plan (COP). Implementation of the COP is important for the residents of South Florida because it will increase flows into Everglades National Park (ENP) and portions of Florida Bay without increasing flooding to urban and agricultural interests in the South Dade region. As your partner in Everglades restoration, we appreciate the time and financial resources that the US Army Corps of Engineers (USACE) has committed to date in the development of this plan. We sincerely hope that recent budgetary constraints will not cause unanticipated delays and respectfully request that the USACE continue to move forward with development of the COP.

The COP is an integral part of Everglades restoration. By defining operations for constructed components of the Modified Water Deliveries (MWD) to ENP and the Canal 111 South Dade projects, the COP will improve water deliveries into ENP, aid in restoration of the historic hydrologic conditions in Taylor Slough and the southern glades, protect the ecologic conditions of WCA-3A and minimize damaging freshwater flows to Manatee Bay. In addition, it will help the USACE and the South Florida Water Management District (District) maintain the Congressionally-authorized multiple purposes of the Central and Southern (C&SF) Project including flood control and water supply.

As we move forward with the COP, it is critical to recognize how the USACE operational changes will affect water quality associated with Everglades restoration. While the District is resolute in its efforts to protect all of the Everglades, including ENP, we remain concerned that the actions being proposed by the USACE under the COP would result in violations of water quality requirements through no fault of the District. Our previous agreements outline the importance of addressing these concerns by revisiting the Appendix A compliance methodology.

The District values its partnership with the USACE in protecting and restoring America's Everglades, of which the COP is a vital part. I respectfully request the continued support

of the USACE, both technically and financially, for this effort. You may continue to count on the dedication of our team to work with you as we push this plan forward toward completion. If you have any questions, please do not hesitate to contact me.

Sincerely,

Federico E. Fernandez, Esq.
Governing Board Chairman
South Florida Water Management District

FF/tb

c: Colonel Andrew Kelly, USACE Jacksonville District
Lieutenant Colonel Jennifer Reynolds, USACE Jacksonville District

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
441 G STREET, NW
WASHINGTON, DC 20314-1000

OCT 04 2018

Mr. Federico E. Fernandez, Esq.
Governing Board Chairman
South Florida Water Management District
3301 Gun Club Road
West Palm Beach, Florida 33406

Dear Mr. Fernandez:

Thank you for your letter, dated September 5, 2018, regarding our mutual continued support of the Combined Operational Plan (COP). We appreciate the continued cooperation of the South Florida Water Management District (SFWMD) in the development and implementation of the COP. The COP is the final effort within the Modified Water Deliveries to Everglades National Park and C-111 South Dade projects designed to optimize water deliveries to meet the multiple Central and Southern Florida project purposes.

The U.S. Army Corps of Engineers (Corps) remains commited to completion of the COP to optimize water management in the southern part of the Everglades ecosystem benefitted by these projects and will continue to seek funding necessary to support these efforts. Together, the Corps and SFWMD technical experts are formulating alternatives to meet project purposes and objectives. Although water quality is not an authorized purpose for selection of the recommended COP alternative, it is a consideration in the development of the final array of COP alternatives and associated adaptive management plan. The water quality evaluation methodology and preliminary analysis of Round 1 Alternatives for COP were presented publically at the August 29, 2018 Project Delivery Team meeting. Water quality analysis will be performed on the final array of COP alternatives. That analysis will be documented in the Draft and Final Environmental Impact Statements for COP.

The Corps understands SFWMD has concerns about compliance with Appendix A of the Consent Decree as restoration flows are delivered to Everglades National Park. Consideration of Appendix A is beyond the scope of COP, but it is ongoing in the context of the Technical Oversight Committeee (TOC) and the associated TOC Appendix A Subteam. We look forward to working with you in that forum. As requested by SFWMD at the August COP Project Delivery Team meeting, the Corps is planning to provide a briefing on the current status of the COP and the COP water quality evaluation methodology at the next scheduled TOC quarterly meeting on October 30, 2018.

If you have additional questions or concerns, please contact me or your staff may contact Mr. Bradd Schwichtenberg, Deputy Chief, South Atlantic Division Regional Integration Team, at (202) 761-1367.

Sincerely,

James C. Dalton, P.E.
Director of Civil Works

COPY

# SOUTH FLORIDA WATER MANAGEMENT DISTRICT

September 7, 2018

Colonel Andrew D. Kelly, P.E.
District Commander, Jacksonville District
U.S. Army Corps of Engineers
701 San Marco Boulevard
Jacksonville, Florida 32207-8175

**Subject: Combined Operational Plan - Water Quality Concerns**

Dear Colonel Kelly:

The South Florida Water Management District (District) is committed to completing Everglades restoration projects and transitioning them into operations in order to realize their benefits to the environment. With construction of the Modified Water Deliveries to Everglades National Park and C-111 South Dade Project almost complete, the Combined Operational Plan (COP) is the next critical step to fully integrate and operate these projects as intended. However, the District has concerns that future impacts on water quality compliance with the 1995 Settlement Agreement/Consent Decree[1] have not been completely assessed or considered. The proposed COP operations could place the District in jeopardy of frequent exceedances of the total phosphorus (TP) limits in Appendix A of the Consent Decree.[2]

During the formulation of the current authorized water control plan, 2012 Everglades Restoration Transition Plan, the State of Florida submitted analyses that highlighted the potential for increased exceedances. These additional exceedances were due in part to the larger flow volume shifting between the S-12s and S-333 structures resulting in a lower annual TP limit. Additionally, the anticipated lower stages in Water Conservation Area 3A (WCA 3A) would result in a higher TP concentration.[3] With COP in place there will be a 20% increase in flows to Northeast Shark River Slough and a reduction in WCA 3A stages.

Currently, the United States Army Corps of Engineers' (USACE) water quality evaluation for COP has not been presented publicly. The District believes the National Environmental Policy Act requires a consideration of compliance with the Long-Term Limits outlined in Appendix A of the Consent Decree and requests the water quality

[1] United States v. South Florida Management District, et al., Case No. 88-188G-CIV-Moreno (S.D. Fla).
[2] The District also believes the compliance methodology adopted in the Consent Decree is obsolete and, at a minimum, should be revised.
[3] Copies of letters and presentations provided by the District, FDEP, and the Governor of the State of Florida during the ERTP process are enclosed.

evaluation be presented to the Technical Oversight Committee on October 30, 2018 and at the December 18, 2018 COP Project Delivery Team meeting given that the United States Department of Justice and the USACE agreed to cooperate in the modification of the Central and Southern Flood Control Project to support the objectives set forth in the consent Decree.[4]

We thank you for your review and consideration of our requests and look forward to working with you on the COP alternatives.

Sincerely,

Ernie Marks
Executive Director

EM/bm

Enclosures

c: Drew Bartlett, FDEP
Federico Fernandez, Chairman, SFWMD Governing Board
Lt. Col. Jennifer Reynolds, USACE

[4] See Consent Decree at Ex. B, p. 25.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-8915

OCT 17 2018

Programs and Project Management Division
Ecosystem Branch

Mr. Ernie Marks
Executive Director
South Florida Water Management District
P.O. Box 24680
West Palm Beach, FL 33416

Dear Mr. Marks: Ernie.

Thank you for your letter, dated September 7, 2018, regarding our mutual commitment to complete Everglades restoration projects and develop operations to realize project environmental benefits. We appreciate the continued cooperation of the South Florida Water Management District (SFWMD) in the development and implementation of the Combined Operational Plan (COP). The COP is the final effort within the Modified Water Deliveries to Everglades National Park and C-111 South Dade projects designed to optimize water deliveries to meet the multiple Central and Southern Florida project purposes.

Alternatives are formulated to meet project purposes and objectives. Water quality is not an authorized purpose for selection of the recommended COP alternative; however, it is a consideration in the development of the final array of COP alternatives and associated adaptive management plan. The water quality evaluation methodology and preliminary analysis of Round 1 Alternatives for COP were presented publically at the August 29, 2018 Project Delivery Team meeting. Water quality analysis will be performed on the final array of COP alternatives. The Jacksonville District, U.S. Army Corps of Engineers (Corps) plans to brief the preliminary analysis of the final array at the Project Delivery Team meeting on December 12, 2018. A comprehensive analysis of the final array of COP alternatives and the COP Recommended Plan, including consideration of potential water quality effects, will be documented in the Draft and Final Environmental Impact Statements for COP.

The Corps understands SFWMD has concerns about compliance with Appendix A of the Consent Decree as restoration flows are delivered to Everglades National Park. As you are aware, consideration of Appendix A is beyond the scope of COP, but it is ongoing in the context of the Technical Oversight Committee (TOC) and the

associated TOC Appendix A Subteam. We look forward to working with you in that forum. The Corps is planning to provide a briefing on the current status of the COP and the COP water quality evaluation methodology at the next scheduled TOC quarterly meeting on October 30, 2018.

If you have any questions, regarding the information in this letter, please contact me or you may contact Ms. Donna George, Project Manager at (904) 232-1766.

Sincerely,

for Andrew D. Kelly, Jr.
Colonel, U.S. Army
District Commander

**Audubon Florida * Bonefish & Tarpon Trust * Captains for Clean Water**
**Everglades Law Center * Everglades Foundation * Florida Bay Forever**
**National Parks Conservation Association**

December 13, 2018

Dr. Gina Paduano Ralph
U.S. Army Corps of Engineers
Jacksonville District
P.O. Box 4970
Jacksonville, FL 32232-0019
Email: gina.p.ralph@usace.army.mil

RE: Combined Operations Plan PDT feedback exercise on Alternatives O and N2

Dear Dr. Ralph,

On behalf of the undersigned organizations, we appreciate the opportunity to provide further feedback on the proposed Round Two set of alternatives Alt. O and Alt. N2, as requested by the Combined Operations Plan (COP) Project Delivery Team (PDT) during the December 12 meeting held at the Village of Islamorada. We want to thank the PDT for listening to environmental stakeholders' concerns and for coming up with better alternatives that seek to increase ecological benefits for Florida Bay and Everglades National Park (ENP). We are encouraged by Alternative O and we believe this alternative returns the focus to the ENP and Florida Bay as intended by the taxpayer investment in ecosystem restoration infrastructure. There is room for improvement, but Alt. O is on the right path. To that end, we would like the PDT to pursue the following environmental goals as you refine the alternatives:

**Wet period considerations – Reduce the damaging high water line**

- The PDT should take a look at inflows into and outflows from Water Conservation Area-3A (WCA-3A) to provide a more holistic approach to reducing damaging high water events during wet periods.

**Dry period considerations – Spread water across the ecosystem to maintain ecological function throughout the system**

- The PDT should anticipate the effects dry conditions have on the ecosystem and provide a fair allocation of water across the entire system to avert disasters like seagrass die-offs in Florida Bay. The PDT should analyze where water goes during droughts and ensure a fair allocation of water that helps the Southern Everglades and Florida Bay fare better under drought conditions. We need a balanced approach that accounts for ENP's and Florida Bay's dry season needs.
- Florida Bay suffers from repeated droughts, falling into hypersalinity in the absence of rainfall. The PDT states that COP does not create new water and it is only able to

redistribute existing water through the ecosystem, however in the absence of more infrastructure COP must strive to keep ***more*** water in the system and increase freshwater flows to ENP and Florida Bay during the dry season and droughts.

**General considerations**

- The PDT should improve water distribution into Central Florida Bay, especially via Taylor Slough (e.g., Taylor River and McCormick Creek). The current alternatives distribute water into the panhandle area of ENP and eastern Florida Bay, and do nothing for the Central and Western basins of Florida Bay. In the absence of rain, hypersalinity spikes have been observed in these areas and in 2014 the Central part of the bay experienced a 40,000 acre seagrass die-off. In the absence of new infrastructure that will bring new water, this plan needs to ensure redistribution of existing water reaches the Central and Western basins of Florida Bay, the more vulnerable areas of Florida Bay.
- The PDT should find ways to rehydrate and integrate WCA-3B into the Everglades. This area that has been kept dry, so widespread peat soil oxidation has resulted in elevation loss and the loss of ridge-and-slough habitat. The current alternatives seem to make this area even drier.
- We appreciate Alt. O's reduced use of the S-197 structure at the end of the system, however we are concerned about lower stages at S-18C. Audubon's Everglades Science Center data shows that whenever the use of S-197 exceeds canal stages at S18-C the overall effect is that of draining the east Everglades and Taylor Slough, counter to the goals of the Modified Water Deliveries Project. We believe that the S-197 structure should be closed – as was originally planned; at a minimum, the use of this structure to never exceed canal stages at S-18C.
- The PDT is folding the use of S-199 and S-200 structures that are part of the Comprehensive Everglades Restoration Plan (CERP) C-111 Spreader Canal Western Project into the COP, so there is no bar to addressing CERP structures as part of COP. As noted multiple times over the years in our correspondence, the Final Project Implementation Report and Environmental Impact Statement ("FPIR/FEIS") for the C-111 Spreader Canal Western Project includes planned incremental changes to raise water levels at S-18C. While the project has been operational for five years, no increase at S-18C has occurred. Increasing canal stages at S-18C critical to preventing seepage out of ENP and sending more freshwater to Central and Western Taylor Slough, the more vulnerable areas of Florida Bay. Higher stages at S-18C would also protect water supply. As with proposed use of the S-199 and S-200 CERP structures, raising water levels at S-18C – at the least – can and should be considered for implementation as part of COP.
    - *"The purposes of S-18C are to maintain a desirable freshwater head to prevent saltwater intrusion through C-111, pass flood flows up to 40 percent SPF without exceeding design stages upstream, and act as a control point for water deliveries to the eastern panhandle of ENP* (2012 WCP, page 7-11)."

The PDT has taken steps in the right direction in developing the second round of alternatives for the COP. Hundreds of millions of taxpayer dollars from the American public have been invested in the Modified Deliveries Water, Tamiami Trail Next Steps, and C-111 South Dade and Spreader Canal Western projects to provide direct benefits to ENP and Florida Bay, and the

commitment to use those funds to achieve significant direct benefits to these American treasures must be honored. We look forward to the refined set of operations that reflect the provided input by the undersigned organizations.

As always, our organizations remain ready to assist in the planning process and will remain engaged as the alternatives are modeled and the final plan is selected. We welcome the opportunity to continue to work alongside state and federal agencies to achieve our shared goals for the restoration of America's Everglades.

Sincerely,

Celeste De Palma
Director of Everglades Policy
**Audubon Florida**

Ross Boucek PhD
Florida Keys Initiative Manager
**Bonefish & Tarpon Trust**

Captain Daniel Andrews
Executive Director
**Captains for Clean Water**

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Cara Capp
Everglades Restoration Project Manager
**National Park Conservation Association**

**Audubon Florida * Bonefish & Tarpon Trust * Captains for Clean Water**
**Everglades Law Center * Everglades Foundation**
**National Parks Conservation Association**

March 25, 2019

Donna George
U.S. Army Corps of Engineers
Jacksonville District
P.O. Box 4970
Jacksonville, FL 32232-0019
Email: donna.s.george@usace.army.mil

RE: Combined Operations Plan feedback on *Alternative Q* and request for sensitivity run

Dear Ms. George,

On behalf of the undersigned organizations, we appreciate the opportunity to provide further feedback on the *draft* Alternative Q for the Combined Operations Plan (COP) before the Project Delivery Team (PDT) proceeds to the modeling phase. We would like to reiterate our appreciation of the PDT for continuing to push for improved environmental performance and deliver alternatives that maximize ecological benefits for Florida Bay and Everglades National Park (ENP) that honor the taxpayer investment in ecosystem restoration infrastructure.

We were encouraged by the results from Round 2 modeling and we agree with the PDT's assessment that Alternative O is the best performer from an ecological perspective. It was reassuring to hear that the PDT is confident that Alternative O provides sufficient flood mitigation to match (or exceed) the 1983 and 1994 base conditions, as required for the COP process. We were equally pleased to see that the PDT incorporated some of the changes proposed by scientists at the Everglades Foundation into the *draft* Alternative Q that is currently under evaluation. Although Alternative Q appears to be on the right path in most respects, the addition of an Extreme High Water Action Line (EHWAL) merits further evaluation.

Particularly problematic in the Alternative Q EHWAL is that only one operational strategy to lower Water Conservation Area 3A (WCA3A) is proposed: routing excess flows into the South Dade Conveyance System via S-334. We find this concerning for the following reasons:

(1) it makes permanent an operational policy that was proposed as a stop-gap measure until more capacity existed into NE Shark River Slough. That capacity now exists, but instead of the strategy being retired, it is codified into permanent operations.

(2) the operational strategy of moving flood water into South Dade has been long opposed by most of the stakeholders in the region, and a source of controversy and contention

since it was first proposed as mitigation for the S-12 seasonal closures. Proposing this as the only option for high water in WCA3A will ignite unnecessary controversy by suggesting that objectionable and undesirable operations will become permanent, despite the expenditure of large sums of public funds and nearly universal agreement the practice should be discontinued.

(3) proposing a single emergency high water action without investigating alternatives is not consistent with the objectives of this analysis, which should be to illuminate the consequences of a range of possible actions to help identify the actions that the public can support. If the only alternative is one that has met with long-standing public opposition, it does not offer the public any way to constructively and affirmatively express support for the selected alternative.

(4) because the COP assumption is that no additional flow enters WCA3A, and because the Corps and South Florida Water Management District are currently making real-time operational decisions to increases flows from Lake Okeechobee southward into WCA3A, any EHWAL evaluation in COP will necessarily underestimate the true consequences. Thus, including emergency actions likely exceed what is possible to evaluate accurately in COP.

The environmental community understands the need to have flexibility to manage water during emergency situations, and we appreciate the PDT's efforts to find a way to better predict and plan for high water emergencies under COP, in that way increasing transparency about how emergencies will be addressed. However, the objective of restoration generally, and COP specifically, is to send as much water into NE Shark River Slough as possible even during high water events. We would recommend that either the Corps analyze a suite of emergency alternatives, including those that avoid decreasing the ecological benefits ENP and Florida Bay so desperately need or the Corps drop emergency actions from the analysis.

Dry period freshwater flow continues to be the highest priority, given that conditions in Florida Bay continue to demonstrate that rainfall alone cannot support this ecological gem. To that end, we would like to request that the PDT perform an additional sensitivity run without the L-29 FDOT constraint at 8.5 ft. The idea behind this sensitivity run is not to ignore the constraint, but to allow the results to inform the PDT what types of benefits COP could deliver down the line once other projects come online, such as further Tamiami Trail modifications and increased flood mitigation currently not authorized under COP. We respectfully ask that the PDT conduct this additional sensitivity run to demonstrate what is possible to achieve for Everglades National Park and Florida Bay.

The PDT continues taking steps in the right direction in developing the final round of alternatives for the COP. Hundreds of millions of taxpayer dollars have been invested in the Modified Water Deliveries, Tamiami Trail Next Steps, and C-111 South Dade and Spreader Canal Western projects to provide direct benefits to ENP and Florida Bay, and the commitment to use those funds to achieve significant direct benefits to these American treasures must be honored. We look forward to the refined set of operations that reflect the input provided by the undersigned organizations.

As always, our organizations remain ready to assist in the planning process and will remain engaged as the alternatives are modeled and the final plan is selected. We welcome the

opportunity to continue to work alongside state and federal agencies to achieve our shared goals for the restoration of America's Everglades.

Sincerely,

Celeste De Palma
Director of Everglades Policy
**Audubon Florida**

Ross Boucek PhD
Florida Keys Initiative Manager
**Bonefish & Tarpon Trust**

Captain Daniel Andrews
Executive Director
**Captains for Clean Water**

Ansley Samson
Of Counsel
**Everglades Law Center**

Thomas Van Lent, Ph.D.
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March 25, 2019

Donna George
U.S. Army Corps of Engineers
Jacksonville District
P.O. Box 4970
Jacksonville, FL 32232-0019
Email: donna.s.george@usace.army.mil

**RE: Comments on proposed Alternative Q and sensitivity runs of Combined Operations Plan**

Dear Ms. George,

On behalf of the Everglades Foundation, we submit the following comments on the proposed Round 3 Alternative Q and sensitivity runs for the Combined Operation Plan. These comments are based on the proposed changes in operations for the Alternative Q.

1. The proposed new Round 3 Alternative Q (i.e., Alt Q) includes the Extreme High Water Action Line (EHWAL) in WCA-3A regulation schedule. The only operation proposed when the WCA-3A stage is above the EHWAL line is to use S-334 to route water to the South Dade Conveyance System and use S-332B, S-332C and S-332D structures and push water to detention areas west of the C-111 Canal. However, downstream constraints at these structures will likely limit the flow during the high water conditions, and ultimately will increase the risk of sending water to south S-197 structure. We ask that the Corps either drop the EHWAL from consideration or investigate other alternatives, such as use of WCA3B, or C-4, C-6 and C-1. Limiting the analysis to one alternative for EHWAL will not allow the public to determine the consequences of that action or to determine if better alternatives are available.

2. We would like to know more specific information about how the Everglades Rainfall Driven operations informed by iModel that was used in Alternative O and proposed in Alternative 3, are translated into operational rules to determine surface water deliveries to Everglades National Park. This cannot be over-emphasized. Transparency on how water deliveries to Everglades National Park are calculated is of primary importance, as modifications to ENP flows are the main purpose of the Modified Water Deliveries Project and the nearly $500 million in expenditures.

3. It may be possible to maximize benefits to the Everglades National park by raising the operating range at C-111 Canal. At the Foundation, we developed a Glade-LECSA model run using the 1994 GRR operating ranges of some of the key structures of L-31N and C-111 Canals. These modifications were carried out in the run (i.e., OPTF1) we provided to USACE during the Round 2 Alternatives. We found that the water levels in areas east of

C-111 Canal were uniformly lower higher relative to the earlier run (Figure 1). This preliminary analysis indicates that there may be potential improvement in benefits to the ENP with raising the operating range in C-111 Canal. We suggest USACE to explore these modifications in the Round 3.

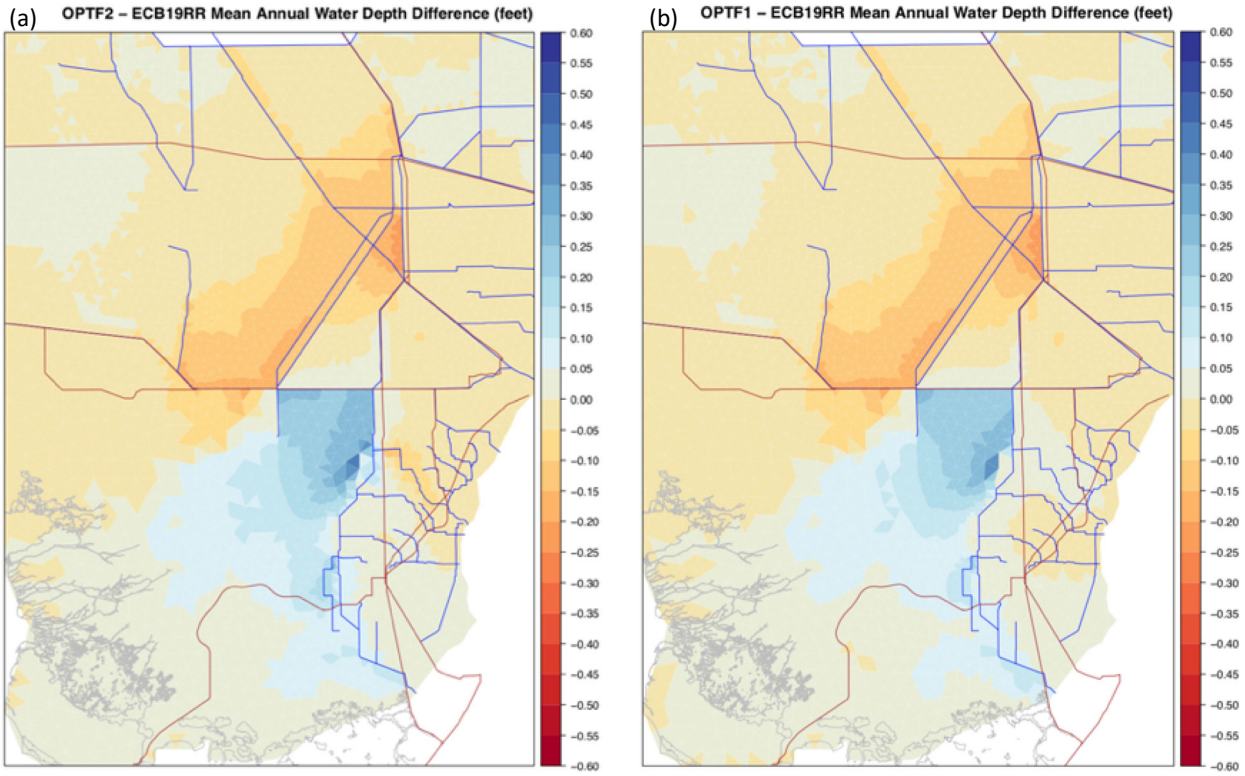


Figure 1: Mean annual water depth difference map relative to the Existing Conditions (ECB19RR). OPTF1 represents the COP run developed at the Everglades Foundation and provided to the USACE during the round 2 alternatives. OPTF2 represents the run that used 1994 GRR operating range of some of the key structures (S-331, S-176, and S-177) of C-111 Canal.

Thank you for the opportunity to provide these comments.

Sincerely,

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DATE: March 25, 2019

TO: Donna George, US Army Corps of Engineers (USACE)

FROM: Rebecca Elliott, Florida Dept. of Agriculture and Consumer Services FDACS)

RE: COP Increment 3 - Round 3 / Alt Q and Sensitivity Runs Comments

The opportunity to provide comments on the Round 3 Alternative Q and Sensitivity Runs is appreciated. However, the time allowed for submittal of comments just one week after the March 18 Project Delivery Team meeting is exceedingly short. Please consider these comments as placeholders for follow-up once a more detailed evaluation of results and what is being proposed can be completed. My placeholder comments by item are below.

Alternative O and the FDACS alternative/sensitivity run recommendation.

> Alternative O is not a complete representation of the alternative and sensitivity run FDACS proposed. We recommend the FDACS alternative be added to the sensitivity runs that will occur after Round 3 modeling. It may be possible to include these operations without impacting the environmental benefits.

Operations at S-331 for 8.5 SMA Flood Mitigation

> There are concerns about the operations proposed to use S-331 for 8.5 SMA flood mitigation. If the evaluation of Round 3 results indicates a degradation in South Dade performance, the operations should revert back to Alt O for the TSP.

Raising 18-C one tenth of a foot before S-197 is open in comparison to Alt O

> There is some concern about raising the 18C one tenth of a foot before S-197 is opened. If the evaluation of Round 3 results indicates a degradation in South Dade performance, the operations should revert back to Alt O for the TSP.

Extreme High Water Action Line & Operating Criteria

> Use of the S-334 to address WCA 3A high water is of concern. Even though there are a number of criteria to be met before this would happen, it still stops the use of S-356 and could bring additional water into the high seepage areas of South Miami Dade east of ENP during high water levels in SRS.

Increased Drying Risks for WCA-3A

Round 3 should include operations to address increased drying risk in WCA-3A. At the March 18 COP PDT meeting, SFWMD offered that the water supply triggers will be revisited and revised to address this risk. The revisions being proposed should be made available for review.

| | |
|---|---|
| **From:** | George, Donna S CIV USARMY CESAJ (US) |
| **To:** | Berger, Brittany M CIV USARMY CESAJ (US); Hall, Brooke A CIV USARMY CESAJ (USA); Moore, Brooks W CIV USARMY CESAJ (US); Polatel, Ceyda CIV USARMY CESAJ (US); Crawford, Daniel E (Dan) CIV USARMY CESAJ (US); Adamiec, Erik T CIV USARMY CESAJ (US); Riley, James M (jim) CIV USARMY CESAJ (US); Taplin, Kimberley A CIV USARMY CESAJ (US); Do, Lan V CIV USARMY CESAJ (US); Nasuti, Melissa A CIV USARMY CESAJ (USA); Moreno, Meredith A CIV USARMY CESAJ (US); Hensch, Michael T CIV USARMY CESAJ (US); Williams, Olice E CIV USARMY CESAJ (US) |
| **Subject:** | FW: RCOP RND 3 modeling input |
| **Date:** | Wednesday, March 27, 2019 8:54:08 AM |
| **Attachments:** | image001.png<br>image002.png<br>image003.png<br>image004.png<br>image005.png<br>image006.png<br>image007.png |

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Comments from FWC on Round 3.

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-----Original Message-----
From: Erskine, James [mailto:James.Erskine@MyFWC.com]
Sent: Tuesday, March 26, 2019 6:09 PM
To: Do, Lan V CIV USARMY CESAJ (US) <Lan.V.Do@usace.army.mil>; George, Donna S CIV USARMY CESAJ (US) <Donna.S.George@usace.army.mil>; Crawford, Daniel E (Dan) CIV USARMY CESAJ (US) <Daniel.E.Crawford@usace.army.mil>
Cc: Garcia, Vicki <Vicki.Garcia@MyFWC.com>
Subject: [Non-DoD Source] RCOP RND 3 modeling input

RE: Request to incorporate an emergency high water action line (EHWAL) into Alternative Q, Round 3 modeling

USACE Project team,

The Florida Fish and Wildlife Conservation Commission (FWC) has fish and wildlife and land management responsibilities for Water Conservation Areas 2 and 3 (WCAs), which are managed as the Everglades and Francis S. Taylor Wildlife Management Area (EWMA). WCA-3A and WCA-3B are within the COP project area, contain significant ecological resources within the Florida Everglades system, and are characterized by a vast landscape of sawgrass marsh, freshwater slough, wet prairie, and upland tree island habitats. The management and maintenance of water at levels compatible with the natural ecology of the EWMA is essential for the maintenance and restoration of healthy wildlife populations, wildlife habitats, and recreational activities.

Water levels that exceed 11.60, measured as the mean of water gages 62 and 63, creates stress on Everglades

wildlife and their habitats, including state and federally listed species within the EWMA. Deer and other terrestrial wildlife respond to high water levels by moving to elevated locations such as tree islands, spoil islands, and levees. When restricted to higher ground, preferred food sources are limited, and wildlife are restricted to less nutritious foods, which increases stress levels. Over time, fat reserves become exhausted and malnutrition and death occur. During high water events, FWC studies have documented the loss of Everglades wildlife and long-lasting impacts to Everglades plant communities such as tree islands, particularly when the duration of highwater levels exceeds 60 days.

FWC staff recommend that the USACE continue to develop every tool possible to alleviate emergency high-water conditions, provide relief for wildlife, and minimize recreational impacts. COP provides an opportunity to model the operations of an emergency high-water action line to trigger operations that may provide relief from the most extreme high water conditions. Including the EHWAL in each round of modeling, including Alternative Q Round 3, will provide the best way to analyze these alternatives and determine the best course of action for managing the most extreme high water conditions.

Respectfully,

James M. Erskine

Everglades Coordinator

Florida Fish and Wildlife Conservation Commission

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MyFWC.com <Blockedhttp://www.myfwc.com/>

To report any wildlife issues or violations, please call our Wildlife Alert Hotline: 888-404-3922

Support Wildlife: Buy a manatee, turtle, panther, or bear specialty license plate <Blockedhttp://www.flhsmv.gov/specialtytags/SLP.html> !

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**Table D.1-2. COP Round 3 Alternative Comment Response Matrix.** The following matrix has been prepared to address comments on the COP Round 3 alternatives submitted by members of the PDT during the plan formulation process.

| | | |
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| **AGENCY COMMENT** | | |
| **EVERGLADES NATIONAL PARK** | | |
| **ENP-1** | We are in favor of simulating the effects of the EHWAL for round 3 in COP. We support this, not because we like the operations that the EHWAL triggers, but rather, because we are aware from previous simulations in round 1 and 2 of the COP process that when the EHWAL is triggered, all available capacity to move water in the system is being used, and the additional 1250 cfs sent to south Dade and through the S197 represents the only additional available capacity to reduce flooding risks across the system. | Thank you for the support to evaluate the EHWL in round 3. EHWL supplemental documentation provides details on the restrictions and limitations of these operations. |
| **ENP-2** | Even though we support including the EHWAL for simulation purposes, we think it is even more important for the COP team to explicitly describe what options are available to us that would permanently prevent the need for sending water through S334 and out S197. We recognize that if the sparrow is able to return to a healthy population size and the conditional closure periods for the S12's are relaxed or removed, that this would solve the levee failure risks that trigger the emergency use of the S334-S197 route. Also, simply adding an extra day of 1200 cfs flows through the S333 on the L29 canal for each day that S334-S197 use is contemplated represents a replacement of the quantity of water that is sent through the S197 (although 8.5 SMA effects might preclude this option). And clearly, any future alteration to Tamiami Trail which allows us to significantly increase the volume per day that can flow across the L29 should provide us a mechanism for permanently solving the safety challenges associated with the EHWAL without resorting to evacuation through the S197. | Additional infrastructure modifications are outside of the scope of COP to evaluate. Based on the evaluations conducted during the COP Round 1 and Round 2 modeling, including presentation of the EHWM criteria at several recent PDT meetings, inclusion of the EHWL is necessary to provide a capacity for regional water managers to respond to extreme high water levels in the WCA-3A. |
| **ENP-3** | So while we are not happy that the EHWAL is needed, we recognize that there are specific challenges that need to be resolved before we can | Noted. Concur that after implementation an adaptive management team consisting of |

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| | permanently retire this operational strategy. As a result of this fact, we accept inclusion of EHWAL in round 3 for COP. As always, when we accept inclusion of operations that we don't like in the system, we ask in return that USACE and SFWMD reiterate their commitment to standing up teams to support the adaptive management process. In this particular case, an operations team and a rare/threatened species team will need to be assembled in order to focus/refine our understanding of how to improve the system-level properties of the regional water management infrastructure. SFNRC's position is that the Adaptive Management process is our most promising policy framework for recognizing and permanently retiring the types of operations that we are discussing today - operations that are necessary to protect the existing infrastructure system, but which can be environmentally damaging and can also limit our ability to achieve the volume of flow that was characteristic of the natural system - our goal for CERP. | operations, ecosystems and other personnel should continue to assess how we can refine operations to accomplish the goal of restoration. The SAJs commitment to participate in this process is dependent on funding received for this effort. |
| **U.S. FISH AND WILDLIFE SERVICE** | | |
| **FWS-1 - General** | One of our concerns is the potential effect of raising water levels within WCA-3A under the proposed EHWAL. The increase up to 12.7' could lead to high water effects on snail kites, apple snails and the vegetation they rely on. Future round 3 model runs are expected to provide information on the frequency and duration of these events so that we can make a more informed assessment of the potential impacts. However, the increased EHWAL could also be beneficial to other species such as CSSS, due to reducing the need to have emergency releases going through the S-12s in the area of CSSS-A during high water events. We look forward to reviewing the next iteration of model runs to more fully evaluate this. | The EHWL reduces the duration of extreme high water events. The purpose of this flexibility is to provide a capacity for regional water managers to respond to extreme high water levels in the WCA-3A. This operational flexibility is not expected to be triggered frequently and is intended to be available as the last resort if needed to help reduce risks to the WCA-3A perimeter levee system, a population at risk of 70,600 people, hurricane evacuation routes, and wildlife and tree islands from extreme high water conditions. |

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| **FWS-2 - General** | Our second concern is the inclusion of the 10% probability trigger in the SFWMD position analysis. We are not sure how the position analysis will be used in conjunction with the other forecast information to make operational decisions. Additionally, we feel that the 10% probability is too low. This would mean that nearly all of the projections would have to be below the 12.7' threshold in order to avoid reaching the EHWAL. | Thank you for your comment. The SFWMD positional analysis will only be used to transition from condition 1 to condition 2 when WCA-3A is above the EHWL. The EHWL supplemental documentation provides more information on the restrictions and limitations of the EHWL that will be modeled in round 3. |
| **FWS-3** | Par 1) "the Extreme High Water Action Line (11.0-12.0 feet NGVD)"<br>How does this revised Extreme High Water Action Line impact WCA-3A? Is this too high for kites and veg? | The EHWL reduces the peak stage and duration of high water events in WCA3A. . The purpose of this flexibility is to provide a capacity for regional water managers to respond to extreme high water levels in the WCA-3A. This operational flexibility is not expected to be triggered frequently and is intended to be available as the last resort if needed to help reduce risks to the WCA-3A perimeter levee system, a population at risk of 70,600 people, hurricane evacuation routes. An evaluation of potential impacts will be fully performed for Round 3/ALTQ; prior modeling of alternatives with inclusion of an EHWL; did not indicate significant effects to kites based on requested metrics to be analyzed per USFWS. |
| **FWS-4** | Par 1 #2) "shows at least 10% probability of WCA-3A, 3-station average exceeding 12.7 feet NGVD"<br>Seems to be a bit low for a threshold. | The SFWMD positional analysis will only be used to transition from condition 1 to condition 2 when WCA-3A is above the EHWL. The EHWL supplemental documentation provides more information on the restrictions and limitations of the EHWL that will be modeled in round 3. |

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| **FWS-5** | Par 1 #2) “along with other forecast information 30 to 60 days out”<br>What is this other forecast information? Does it have to meet both the 10% threshold and the other forecast information? | A complete and thorough evaluation of the C&SF system conditions from Lake Okeechobee to the water conservation areas, East Coast Canals (ECC), ENP, and South Dade Conveyance System, including consideration of weather forecast information will be analyzed and actions will be determined jointly by the Corps of Engineers and SFWMD with input from ENP consistent with the criteria detailed in the EHWL supplemental documentation. |
| **FWS-6** | Par 1 #2) “is within 0.1 feet of the maximum observed historical stage for WCA-3A”<br>So, this would not go into effect unless there is at least a 10% probability of the stage exceeding 0.1' of the maximum observed historical stage for WCA-3A? We have run emergency ops in previous years with the water being quite a bit less than this. | The SFWMD positional analysis will only be used to transition from condition 1 to condition 2 when WCA-3A is above the EHWL. There are many other actions implemented to reduce the stages in WCA-3A prior to this level. |
| **FWS-7** | Condition 1) “When WCA-3A stage is above the EHWAL and is not projected to rise above Elevation 12.7 feet”<br>This is <10% probability that it will rise above 12.7'. | The EHWL supplemental documentation provides more information on the restrictions and limitations of the EHWL that will be modeled in round 3. |
| **FWS-8** | Condition 2) “When WCA-3A stage is above the EHWAL and is projected to rise above Elevation 12.7 feet”<br>This is 10% probability or more of going above 12.7'. | The EHWL supplemental documentation provides more information on the restrictions and limitations of the EHWL that will be modeled in round 3. |
| **FWS-9** | Condition 2) “a forecast to exceed either or both of the extreme high water level criteria is expected, S-197 may be increased up to 2400 cfs until WCA 3A water levels recede below the extreme high water level criteria.” | The EHWL supplemental documentation provides more information on the restrictions and limitations of the EHWL that will be modeled in round 3. The words “up to” allow for |

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| | Not sure this makes sense. Basically it states that if we are below the extreme high water level criteria, S-197 may be increased up to 2400 cfs until levels recede below the extreme high water level. The problem is that the levels are already under EHWL when the action is initiated. Does this actually mean that the increased flow will continue until the WCA-3A levels recede below the EHWL AND the forecast to exceed is less than the P10? | operational flexibility to operate the structure under a wide range of extreme weather conditions. The EHWL supplemental documentation lays out the procedure for making releases through S-334 and through SDCS only when SDCS has the conveyance capacity. The EHWL goal is to only send through S-334 what can be sent out the coastal structures upstream of S-176 and through S-332B/C/D first. As the water levels in WCA-3A continue to increase and are projected to reach the 12.7 feet, NGVD levee safety threshold, then a series of system wide evaluation and a decision on how much can be sent through SDCS will be made. Under extreme high water condition 2, S-197 discharges may be increased to a daily average maximum of 1,200 cfs to accommodate additional flow through S-334 (design capacity 1,200 cfs) which exceeds the South Dade Conveyance System Flow Constraints for S-332B, S332C, and S-332D. Extreme high water condition 3 was added in response to input provided by the COP PDT, with this condition requiring WCA-3A observed stage to exceed 12.3 feet NGVD prior to allowing gate opening of S-197 in excess of the discharges from WCA-3A through S-334. Because S-197 is the last coastal structure to be used under the EHWL, it will be the first one to close when the water levels in WCA-3A stay or |

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| | | are projected to stay below 12.7 feet, NGVD, or when other upstream outlet structures have the capacities. |
| **FWS-10** | 3.a.i.)"When the daily average stage in L-31N using the HW of S-332B, SA-332C and S-332D can be maintained below 4.2 feet"<br>What happens between 4.2' (3.ii.1) and 4.4; (3.ii.2)? | Reduce S-334 discharges to maintain the low canal range of 4.2 feet, NGVD. |
| **FWS-11** | 3.a.ii.)"When the average stage in L-31N at the HW of S-332B, S-332C and S-332D cannot be maintained below 4.4 feet"<br>What happens between 4.2' (3.ii.1) and 4.4; (3.ii.2)? | Reduce S-334 discharges to maintain the low canal range of 4.2 feet, NGVD. |
| **FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION (FWC)** | | |
| **FWC-1** | The Florida Fish and Wildlife Conservation Commission (FWC) has fish and wildlife and land management responsibilities for Water Conservation Areas 2 and 3 (WCAs), which are managed as the Everglades and Francis S. Taylor Wildlife Management Area (EWMA). WCA-3A and WCA-3B are within the COP project area, contain significant ecological resources within the Florida Everglades system, and are characterized by a vast landscape of sawgrass marsh, freshwater slough, wet prairie, and upland tree island habitats. The management and maintenance of water at levels compatible with the natural ecology of the EWMA is essential for the maintenance and restoration of healthy wildlife populations, wildlife habitats, and recreational activities. | Concur. |
| **FWC-2** | Water levels that exceed 11.60, measured as the mean of water gages 62 and 63, creates stress on Everglades wildlife and their habitats, including state and federally listed species within the EWMA. Deer and other terrestrial wildlife respond to high water levels by moving to elevated locations such as tree islands, spoil islands, and levees. When restricted to higher ground, preferred food sources are limited, and wildlife are restricted to less nutritious foods, which increases stress levels. Over time, fat reserves become exhausted and malnutrition and | The addition of the EHWL to Alt Q reduces the peak stages and durations of high water events in WCA3A. |

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| | death occur. During high water events, FWC studies have documented the loss of Everglades wildlife and long-lasting impacts to Everglades plant communities such as tree islands, particularly when the duration of highwater levels exceeds 60 days. | |
| **FWC-3** | FWC staff recommend that the USACE continue to develop every tool possible to alleviate emergency high-water conditions, provide relief for wildlife, and minimize recreational impacts. COP provides an opportunity to model the operations of an emergency high-water action line to trigger operations that may provide relief from the most extreme high water conditions. Including the EHWAL in each round of modeling, including Alternative Q Round 3, will provide the best way to analyze these alternatives and determine the best course of action for managing the most extreme high water conditions. | USACE has coordinated development of the EHWL with the COP PDT agencies, including consideration of public input. USACE concurs with the FWC recommendation to include the EHWL with the Round 3 modeling of Alternative Q. |
| **FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES (FDACS)** | | |
| **FDACS-1** | The opportunity to provide comments on the Round 3 Alternative Q and Sensitivity Runs is appreciated. However, the time allowed for submittal of comments just one week after the March 18 Project Delivery Team meeting is exceedingly short. Please consider these comments as placeholders for follow-up once a more detailed evaluation of results and what is being proposed can be completed. My placeholder comments by item are below. | Thank you for providing FDACS comments within the timeframe requested by the Corps, allowing the opportunity for Corps to review and consider these recommendations in advance of the Round 3 modeling. |
| **FDACS-2** | Alternative O and the FDACS alternative/sensitivity run recommendation.<br><br>Alternative O is not a complete representation of the alternative and sensitivity run FDACS proposed. We recommend the FDACS alternative be added to the sensitivity runs that will occur after Round 3 modeling. It may be possible to include these operations without impacting the environmental benefits. | Alternative formulation for COP considered all agency and public input provided during development of Round 1, Round 2, and Round 3 alternatives. Round 2 Alternative O, which serves as the starting point for the Round 3 alternative refinements, includes lower seasonal operations at the S-332 pump stations consistent with the recommendations identified during the 2015-2016 SFWMD South Dade Investigation Study. |

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| | | These operations balance the objectives of the C-111 South Dade project for Eastern ENP, Taylor Slough, ENP Panhandle, and Manatee Bay/Barnes Sound, while improving flood risk management compared to the COP-established 1994 GRR constraint and considering opportunities to enhance flood risk management. Rainfall event-based criteria remain included in the Round 3 alternative to allow low-volume discharges (200 cfs) at S-177 in advance of the normal gate opening stage levels, but lowering of the operational range for S-177 is not currently included in the COP Round 3 alternative; these assumptions are consistent with Round 2 Alternative O and the recommendations from the SFWMD South Dade Investigation. Modified operations for S-199 and S-200 may be pursued by SFWMD, since these structures are not currently included in the COP Project Operating Manual. Operations of S-197, as originally proposed by FDACS, have also been extensively discussed during the COP development, and the Round 3 alternative includes operations which best balance the goals, objectives, constraints, and planning considerations for the COP.<br><br>Further investigation is ongoing with the COP Flood Risk sub-team to check whether the initial screening-level changes to estimated flood |

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| | | damages compared to the No Action Alternative will require further modifications to the Round 3 Alternative assumptions during development of the COP Project Operating Manual. The Flood Risk sub-team will continue to refine the analysis of the Round 2 analysis in parallel with the Round 3 modeling, including: attempting to quantify the 2012 Water Control Plan for use with the economic model, performing a sensitivity evaluation of MD-RSM maximum stage (15-minute) versus maximum stage within 24-hours of events, and a sensitivity analysis of the damage curves applied during Round 2 screening-level evaluations. |
| **FDACS-3** | Operations at S-331 for 8.5 SMA Flood Mitigation.<br><br>There are concerns about the operations proposed to use S-331 for 8.5 SMA flood mitigation. If the evaluation of Round 3 results indicates a degradation in South Dade performance, the operations should revert back to Alt O for the TSP. | Refer to response to FDACS-10. |
| **FDACS-4** | Raising S18-C one tenth of a foot before S-197 is open in comparison to Alt O.<br><br>There is some concern about raising the 18C one tenth of a foot before S-197 is opened. If the evaluation of Round 3 results indicates a degradation in South Dade performance, the operations should revert back to Alt O for the TSP. | This operation was tested during the 2018 wet season and was determined to provide environmental benefits while maintaining South Dade performance. Round 3 modeling will be evaluated to determine the effects. |
| **FDACS-5** | Extreme High Water Action Line & Operating Criteria | The EHWL supplemental documentation provides more information on the restrictions and limitations of the EHWL. The goal of |

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| | Use of the S-334 to address WCA 3A high water is of concern. Even though there are a number of criteria to be met before this would happen, it still stops the use of S-356 and could bring additional water into the high seepage areas of South Miami Dade east of ENP during high water levels in SRS. | maximizing WCA-3A releases is to bring down water levels below the EHWL as soon as possible and in turn, return the priority back to S-356 for seepage control in the upper reach of L-31N. |
| **FDACS-6** | Increased Drying Risks for WCA-3A<br><br>Round 3 should include operations to address increased drying risk in WCA-3A. At the March 18 COP PDT meeting, SFWMD offered that the water supply triggers will be revisited and revised to address this risk. The revisions being proposed should be made available for review. | Concur. A Water Supply briefing was provided at the 2 April PDT meeting by the SFWMD. The Water Supply Sub-team will meet Friday 12 April to receive input on the original proposal and to develop an additional proposal if determined necessary. This will not be included in the modeling for Alternative Q but will be addressed in a sensitivity run(s). Invitations to the PDT and Stakeholders will be forthcoming. |
| **FDACS-7 – Additional Comments – Alt Q Spreadsheet** | 1) Rows labeled S-356 and EHWAL (rows 3 and 6) - S-333 should not have priority over S-356, especially during wet periods. S-334 should be used to bring water into L-31N during dry period not for WCA-3A high water releases during the wettest of times when SRS is full. If the authorized provisions of C-111 are followed, high water releases will not be included in COP. | The EHWL supplemental documentation provides more information on the restrictions and limitations of the EHWL that will be modeled in round 3. The goal of maximizing WCA-3A releases is to bring down water levels below the EHWL as soon as possible and in turn, return the priority back to S-356 for seepage control in the upper reach of L-31N.<br><br>USACE Office of Counsel will provide a leagal opinion on the Corps authority to operate the S-331, S-334, and S-356. |
| **FDACS-8** | 2) Row labeled S-333. – See 2 above. | Refer to response to FDACS-7. |

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| **FDACS-9** | 3) Row labeled S-332C - The increase of 0.2 ft to the operating range boundaries is not appropriate. Giving S-332B priority over S-332C can and should work without raising the top operating level of S-332C. | Alt O modeling showed an increase environmental benefit to Taylor Slough when S-332BW had priority over S-332C. The operating criteria for S-332B/C/D will be handled by specifying a ramp up and ramp down sequence for S332B/C/D pumps based on water conditions and time of year with the overall priority sequence defined in the operating criteria structure table. |
| **FDACS-10** | 4) Rows labeled S-331 / S-173 – If there are deficiencies in 8.5 SMA flood protection requiring the use of S-331 in COP, it should be acknowledge in COP and described as an interim operation until the 8.5 SMA system is fixed. It has been a concern throughout all the Increments that the acceptance of using S-331 for 8.5 SMA flood protection during the increments would become a unauthorized project purpose for this structure in COP. As written for Round 3/Alt Q, it will lead to sustained pumping of S-331 during high water events. As an interim operation, whenever S-331 is pumped for flood protection the downstream structures should be operated to make sure water is passed through C-111 and S-18C and also S-197 as necessary. | The operational criteria for S-197 has been modified to address this concern. S-197 will be able to pass up to 200cfs when S-331 is operating at lower ranges to assist in 8.5 SMA flood mitigation. Priority would be to use available capacity at S-332B/C/D, S-199, and S-200 prior to sending water out S-197. |
| **FDACS-11** | 5) Row labeled S-197 – Why does raising the level at 18-C require raising it at S-197? | The likewise increase in S-197 operations reduces water sent directly to tide thru S-197 and increases spreader canal/overland flow to benefit Florida Bay. Close criteria for S-197 have also been added to the Alternative Q table. |
| **FDACS-12** | 6) Row labeled S-177 – The operating range should be 3.2 to 3.8 if capacity at S-199 and S-200 is limited. | S-177 operating criteria for the COP Round 3 alternative remain unchanged from the 2012 Water Control Plan normal operating range of 3.6-4.2 feet NGVD. S-199 and S-200 operating criteria are evaluated consistent with the current |

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| | | SFWMD operating permit issued by the FDEP. Alternative formulation for COP considered all agency and public input provided during development of Round 1, Round 2, and Round 3 alternatives. Rainfall event-based criteria remain included in the Round 3 alternative to allow low-volume discharges (200 cfs) at S-177 in advance of the normal gate opening stage levels, but lowering of the operational range for S-177 is not currently included in the COP Round 3 alternative; these assumptions are consistent with Round 2 Alternative O and the recommendations from the SFWMD South Dade Investigation. Modified operations for S-199 and S-200 may be pursued by SFWMD, since these structures are not currently included in the COP Project Operating Manual.<br><br>Refer to response to FDACS-7 for additional information regarding ongoing technical analysis through the COP Flood Risk sub-team. |
| **FDACS-13** | 7) Row labeled S-334 – This structure should be limited, as authorized, to supplemental water supply. | USACE Office of Counsel will provide a leagal opinion on the Corps authority to operate the S-331, S-334, and S-356. |
| **FDACS-14** | 8) Taylor Slough and supplemental water supply – In increment 1, this was described as a transition flow as the system moved from the wet season to the dry season. A written description on what the COP TS supplemental flow is and the basis for it should be provided. | Additional description information has been added to the Alternative Q table to detail the limitations and purposes for the Taylor Slough Supplemental Deliveries. Up to 300 cfs delivered to S-332B/C/D to slow recession in eastern ENP along the west side of the northern detention |

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| | | area and southern detention area and provide flow to Taylor Slough. SFWMD water supply authority would determine this amount while WCA3A is 0.5 ft above the floor. |
| **PUBLIC COMMENT** | | |
| **EVERGLADES FOUNDATION** | | |
| **Foundation-1** | 1. The proposed new Round 3 Alternative Q (i.e., Alt Q) includes the Extreme High Water Action Line (EHWAL) in WCA-3A regulation schedule. The only operation proposed when the WCA-3A stage is above the EHWAL line is to use S-334 to route water to the South Dade Conveyance System and use S-332B, S-332C and S-332D structures and push water to detention areas west of the C-111 Canal. However, downstream constraints at these structures will likely limit the flow during the high water conditions, and ultimately will increase the risk of sending water to south S-197 structure. We ask that the Corps either drop the EHWAL from consideration or investigate other alternatives, such as use of WCA3B, or C-4, C-6 and C-1. Limiting the analysis to one alternative for EHWAL will not allow the public to determine the consequences of that action or to determine if better alternatives are available. | The EHWL supplemental documentation specifies restrictions and limitations prior to sending water to south Dade and using S-197. All available WCA-3A outlet structures are operated at the maximum available capacity (subject to constraints for seasonal closures, L-29 stage limits, and 8.5 SMA flood mitigation constraints) when WCA-3A stages exceed the top of Zone A, including maximum discharges to tide. These operations are used in advance of WCA-3A stages increasing above the EHWL. Other alternatives like holding more water in WCA-3B or WCA-2A are outside the scope of COP but could be pursued as Emergency Deviations. |
| **Foundation-2** | 2. We would like to know more specific information about how the Everglades Rainfall Driven operations informed by iModel that was used in Alternative O and proposed in Alternative 3, are translated into operational rules to determine surface water deliveries to Everglades National Park. This cannot be over-emphasized. Transparency on how water deliveries to Everglades National Park are calculated is of primary importance, as modifications to ENP flows are the main purpose of the Modified Water Deliveries Project and the nearly $500 million in expenditures. | The Corps is coordinating with the SFWMD and ENP to schedule a technical meeting to discuss further details of the Tamiami Trail Flow Formula with the Foundation. The Corps also offered at the PDT meeting on 02 April 2018 to host an additional technical meeting on the Tamiami Trail Flow Formula for interested agencies on the COP PDT. |

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| **Foundation-3** | 3. It may be possible to maximize benefits to the Everglades National park by raising the operating range at C-111 Canal. At the Foundation, we developed a Glade-LECSA model run using the 1994 GRR operating ranges of some of the key structures of L-31N and C-111 Canals. These modifications were carried out in the run (i.e., OPTF1) we provided to USACE during the Round 2 Alternatives. We found that the water levels in areas east of C-111 Canal were uniformly lower higher relative to the earlier run (Figure 1). This preliminary analysis indicates that there may be potential improvement in benefits to the ENP with raising the operating range in C-111 Canal. We suggest USACE to explore these modifications in the Round 3. | Alternative formulation for COP considered all agency and public input provided during development of Round 1, Round 2, and Round 3 alternatives. Based on the environmental effects observed with Alternative O, including consideration of the higher SDCS canal levels included in Alternative N2, no significant changes to the SDCS canal levels are included for Alternative Q.<br><br>Based on the preliminary flood risk evaluations conducted during Round 2, further investigation is ongoing with the COP Flood Risk sub-team to check whether the initial screening-level changes to estimated flood damages compared to the No Action Alternative will require further modifications to the Round 3 Alternative assumptions during development of the COP Project Operating Manual. Refer to response to comment FDACS-2 for additional discussion. |

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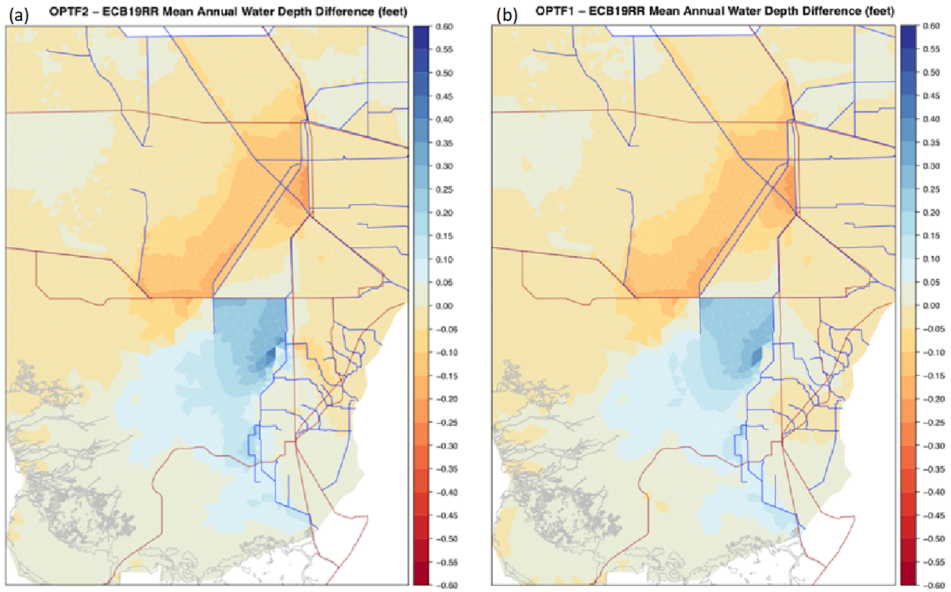
| **Foundation-4** |  <br>Figure 1: Mean annual water depth difference map relative to the Existing Conditions (ECB19RR). OPTF1 represents the COP run developed at the Everglades Foundation and provided to the USACE during the round 2 alternatives. OPTF2 represents the run that used 1994 GRR operating range of some of the key structures (S-331, S-176, and S-177) of C-111 Canal. | Team |
| **Audubon Florida; Bonefish & Tarpon Trust; Captains for Clean Water; Everglades Law Center; Everglades Foundation; NPCA** | | |
| **NGO-1** | We would like to reiterate our appreciation of the PDT for continuing to push for improved environmental performance and deliver alternatives that maximize ecological benefits for Florida Bay and Everglades National Park (ENP) that honor the taxpayer investment in ecosystem restoration infrastructure. | Thank you for your comment. |
| **NGO-2** | We were encouraged by the results from Round 2 modeling and we agree with the PDT's assessment that Alternative O is the best performer from an ecological perspective. It was reassuring to hear that the PDT is | Thank you for your comment. The EHWL supplemental documentation provides more |

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| | confident that Alternative O provides sufficient flood mitigation to match (or exceed) the 1983 and 1994 base conditions, as required for the COP process. We were equally pleased to see that the PDT incorporated some of the changes proposed by scientists at the Everglades Foundation into the draft Alternative Q that is currently under evaluation. Although Alternative Q appears to be on the right path in most respects, the addition of an Extreme High Water Action Line (EHWAL) merits further evaluation. | information on the restrictions and limitations of the EHWL that will be modeled in round 3. |
| **NGO-3** | Particularly problematic in the Alternative Q EHWAL is that only one operational strategy to lower Water Conservation Area 3A (WCA3A) is proposed: routing excess flows into the South Dade Conveyance System via S-334. We find this concerning for the following reasons:<br>(1) it makes permanent an operational policy that was proposed as a stop-gap measure until more capacity existed into NE Shark River Slough. That capacity now exists, but instead of the strategy being retired, it is codified into permanent operations.<br>(2) the operational strategy of moving flood water into South Dade has been long opposed by most of the stakeholders in the region, and a source of controversy and contention since it was first proposed as mitigation for the S-12 seasonal closures. Proposing this as the only option for high water in WCA3A will ignite unnecessary controversy by suggesting that objectionable and undesirable operations will become permanent, despite the expenditure of large sums of public funds and nearly universal agreement the practice should be discontinued.<br>(3) proposing a single emergency high water action without investigating alternatives is not consistent with the objectives of this analysis, which should be to illuminate the consequences of a range of possible actions to help identify the actions that the public can support. If the only alternative is one that has met with long-standing public opposition, it does not offer | The EHWL supplemental documentation specifies restrictions and limitations prior to sending water to south Dade and using S-197. All available WCA-3A outlet structures are operated at the maximum available capacity (subject to constraints for seasonal closures, L-29 stage limits, and 8.5 SMA flood mitigation constraints) when WCA-3A stages exceed the top of Zone A, including maximum discharges to tide. These operations are used in advance of WCA-3A stages increasing above the EHWL. Other alternatives like holding more water in WCA3B or WCA2A are outside the scope of COP but could be pursued as Emergency Deviations.<br><br>The increased inflows to WCA-3A from future implementation of the Central Everglades Planning Project were previously developed and evaluated to ensure no significant change to the peak stage, frequency, and durations of high water conditions within WCA-3A. |

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| | the public any way to constructively and affirmatively express support for the selected alternative.<br>(4) because the COP assumption is that no additional flow enters WCA3A, and because the Corps and South Florida Water Management District are currently making real-time operational decisions to increases flows from Lake Okeechobee southward into WCA3A, any EHWAL evaluation in COP will necessarily underestimate the true consequences. Thus, including emergency actions likely exceed what is possible to evaluate accurately in COP. | |
| **NGO-4** | The environmental community understands the need to have flexibility to manage water during emergency situations, and we appreciate the PDT's efforts to find a way to better predict and plan for high water emergencies under COP, in that way increasing transparency about how emergencies will be addressed. However, the objective of restoration generally, and COP specifically, is to send as much water into NE Shark River Slough as possible even during high water events. We would recommend that either the Corps analyze a suite of emergency alternatives, including those that avoid decreasing the ecological benefits ENP and Florida Bay so desperately need or the Corps drop emergency actions from the analysis. | Thank you for your comment. The EHWL supplemental documentation provides more information on the restrictions and limitations of the EHWL that will be modeled in round 3. Refer to response to comment NGO-3. |
| **NGO-5** | Dry period freshwater flow continues to be the highest priority, given that conditions in Florida Bay continue to demonstrate that rainfall alone cannot support this ecological gem. To that end, we would like to request that the PDT perform an additional sensitivity run without the L-29 FDOT constraint at 8.5 ft. The idea behind this sensitivity run is not to ignore the constraint, but to allow the results to inform the PDT what types of benefits COP could deliver down the line once other projects come online, such as further Tamiami Trail modifications and increased flood mitigation currently not authorized under COP. We respectfully ask that the PDT conduct this additional sensitivity run to demonstrate what is possible to achieve for Everglades National Park and Florida Bay. | The COP is constrained to a maximum operating limit of 8.5 feet NGVD for the L-29 Canal. Within this constraint, the COP will be conducting a sensitivity run during Round 3 that removes the FDOT duration constraint while maintaining the maximum operating limit of 8.5 feet NGVD for the L-29 stage. |

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| **NGO-6** | The PDT continues taking steps in the right direction in developing the final round of alternatives for the COP. Hundreds of millions of taxpayer dollars have been invested in the Modified Water Deliveries, Tamiami Trail Next Steps, and C-111 South Dade and Spreader Canal Western projects to provide direct benefits to ENP and Florida Bay, and the commitment to use those funds to achieve significant direct benefits to these American treasures must be honored. We look forward to the refined set of operations that reflect the input provided by the undersigned organizations. | Thank you for your comment and support of this project. The final Alternative Q has been provided to the PDT and Stakeholders. |
| **NGO-7** | Define "damaging" in Objective #4 "Minimize the damaging freshwater flows to Manatee Bay/Barnes Sound through the S197 structure and increase flows through Taylor Slough and coastal creeks (1994 C-111 GRR, Section 5.2)" | A white paper defining damaging is being drafted by the SFWMD and ENP and will be provided to the PDT as soon as it is available. |

June 12, 2019

Donna S. George, P.E.
Senior Project Manager
Ecosystem Projects Section, Ecosystem Branch
Programs & Project Management Division (PPMD)
U.S. Army Corps of Engineers, Jacksonville District
Email: donna.s.george@usace.army.mil

Re: Combined Operational Plan (COP) Alternative to Maximize Ecological Benefits

Dear Ms. George and Project Delivery Team Members:

Our community has been closely involved in Combined Operations Plan (COP) planning since scoping was initiated in October 2017, and before that, spent decades working to support the planning and construction of restoration infrastructure to restore Everglades National Park (ENP) and Florida Bay. Through a series of public workshops, meetings with agency staff, verbal and written comments we have provided feedback on COP alternatives with the goal of delivering more clean water to ENP and Florida Bay – **especially during the dry season and drought, when it is most desperately needed.**

At our urging, the U.S. Army Corps of Engineers – along with partner agencies like the South Florida Water Management District, Florida Department of Environmental Protection, National Park Service, and others – hosted two public workshops in accessible locations where Florida Bay stakeholders could contribute to the planning dialogue. These meetings were in Homestead (Aug. 2018) and Islamorada (Dec. 2018). Dozens of members of the public, including elected leaders representing impacted communities, urged the agencies to prioritize freshwater flow to Florida Bay in the dry season as an essential need for the health, economy, and quality of life of residents especially in Monroe County, and for the health of ENP and Florida Bay.

Earlier this year, we wrote with our support for Alternative O, which focused on maximizing freshwater flows to the Everglades year-round. Our organizations saw that this operational alternative could send significant, beneficial new flow to Florida Bay in both the location and season when it is needed most, including during droughts. Our letter dated March 25, 2019 expresses our support for many aspects of the proposed alternative – with a few suggested improvements – and our support for the agencies continuing to seek the alternative that maximizes ecosystem benefits.

Since then, the latest alternative has been released; Alternative Q is on track to be finalized and become the preferred alternative later this summer. Unfortunately, Alternative Q shows significantly reduced environmental benefits for Florida Bay during times of low water availability over the previous alternative.

**We are concerned that Alternative Q does not perform well for Florida Bay during drought conditions, jeopardizing the health of the Bay and the investment made in restoration infrastructure that has led us to this operations plan.** Our organizations expressed these concerns during public comment on the webinar PDT meeting on June 7, 2019. We feel this is a step backward in achieving the optimal COP, especially when Alternative O demonstrated that providing better freshwater flows to Florida Bay and ENP for the entirety of the dry season and during droughts is achievable.

Florida Bay experienced widespread seagrass die-offs in 2015 and 2016 following an extended drought. Those detrimental impacts were felt deeply within the Bay ecosystem and stakeholders in the Florida Keys. The final COP must ensure that ENP and Florida Bay are better safeguarded against drought impacts. At this time, Alternative Q fails to do so; and instead, it guarantees that another seagrass die-off will affect Florida Bay should drought conditions ensue.

**The final COP must ensure that – if and when another drought occurs – Florida Bay will be more resilient because of these restoration projects.** American taxpayers have spent nearly $1 billion constructing restoration infrastructure to protect and restore our national park. Preventing another ecological catastrophe in Florida Bay must be the top consideration for the COP final alternative, to show stakeholders and decision-makers how the investment we are making in America's Everglades is paying off.

We know that every agency on this team has the strong desire to improve the health of ENP and Florida Bay, and appreciate the tremendous effort that has led the COP to this point. During the PDT on June 7, 2019, several team members discussed ongoing opportunities to further refine Alternative Q and work to recover some of the ecosystem benefits that were seen in previous iterations. We would like to strongly encourage the agencies to work to ensure that the final alternative shows improved drought conditions for Florida Bay, and to do so before the PDT meeting scheduled for June 21, 2019.

We look forward to continued dialogue with the PDT to ensure the strongest COP alternative is brought to fruition so we can deliver on the benefits authorized by Congress and funded by the people to improve the health of the Everglades and Florida Bay.

Sincerely.

Celeste De Palma
Director of Everglades Policy
**Audubon Florida**

Thomas Van Lent, Ph.D.
Vice President for Programs
**Everglades Foundation**

Cara Capp
Everglades Restoration Program Manager
**National Parks Conservation Association**

June 12, 2019

Donna George
U.S. Army Corps of Engineers
Jacksonville District
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RE: Technical comments on Alternative Q performance

Dear Ms. George,

On behalf of the Everglades Foundation, we submit the following comments on the proposed Round 3 Alternative Q for the Combined Operation Plan. These comments are more technical in nature and focused on the drought performance of ALTQ on Everglades National Park (ENP) and drawdown in Water Conservation Area 3A (WCA3A).

Earlier this year, COP Project Delivery Team (PDT) released two alternatives during the Round 2 modeling: ALTO and ALTN2. Both alternatives used iModel optimized flow targets to deliver the water from WCA-3A to ENP. ALTO was broadly accepted by stakeholders because it was focused on sending more water to ENP during dry seasons and the droughts. PDT also assessed that the ALTO was the best performer from an ecological perspective. Recently, the latest alternative, ALTQ was released, which was primarily derived from ALTO.

We evaluated the ALTQ performance and found that it reduced the drought flows to ENP through S-12C, S-12D and S-333 structures across Tamiami Trail relative to the ALTO (Figure 1). For example, the ALTQ decreased average annual flow by 54,000 acre-feet during the 5 worst dry years through S-333 structure. The effect of this reduction on water depths is particularly visible in ENP and in the mangrove ecotone during droughts (Figure 2).

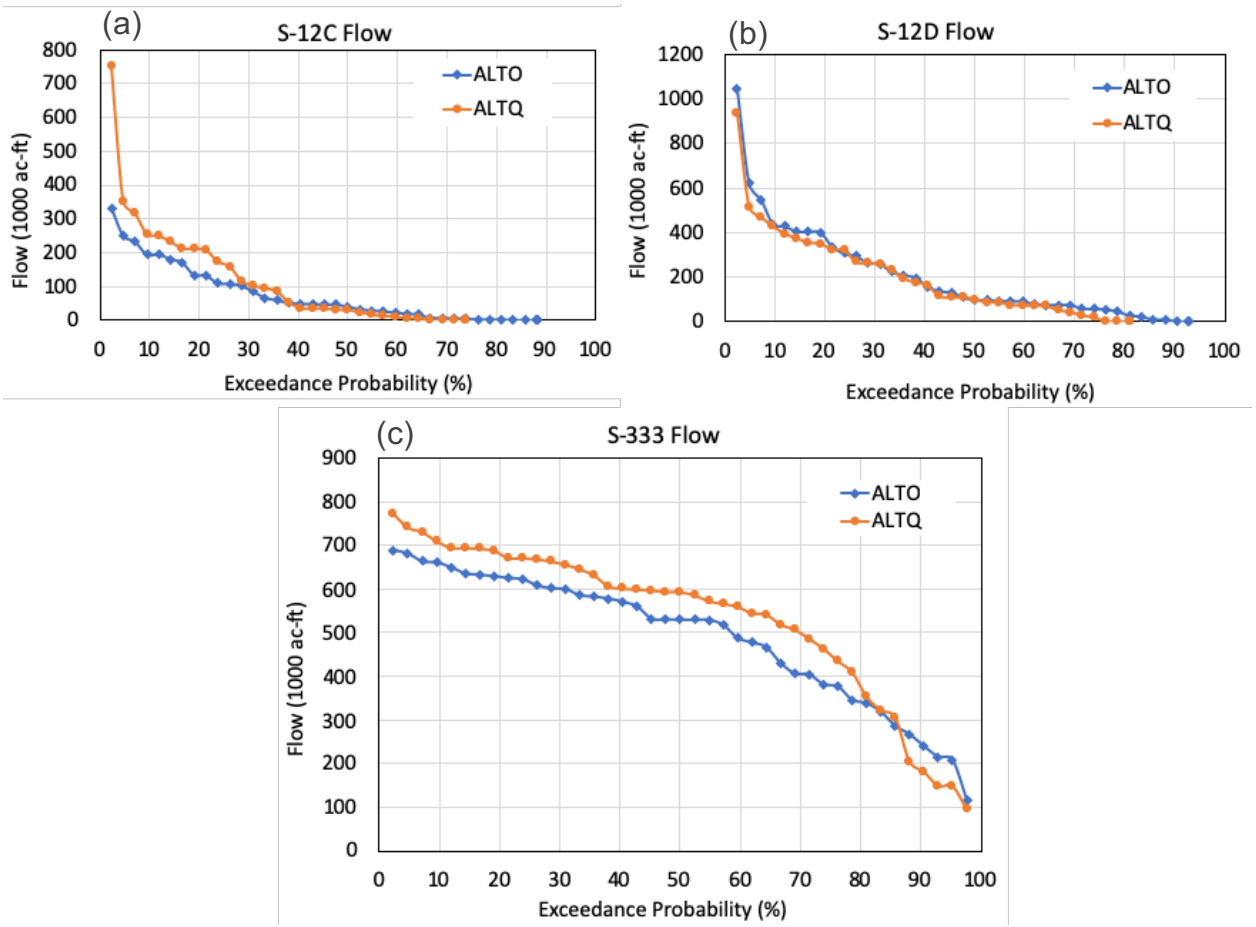


Figure 1. Average annual flow duration curves through S-12C, S-12D and S-333 structures.

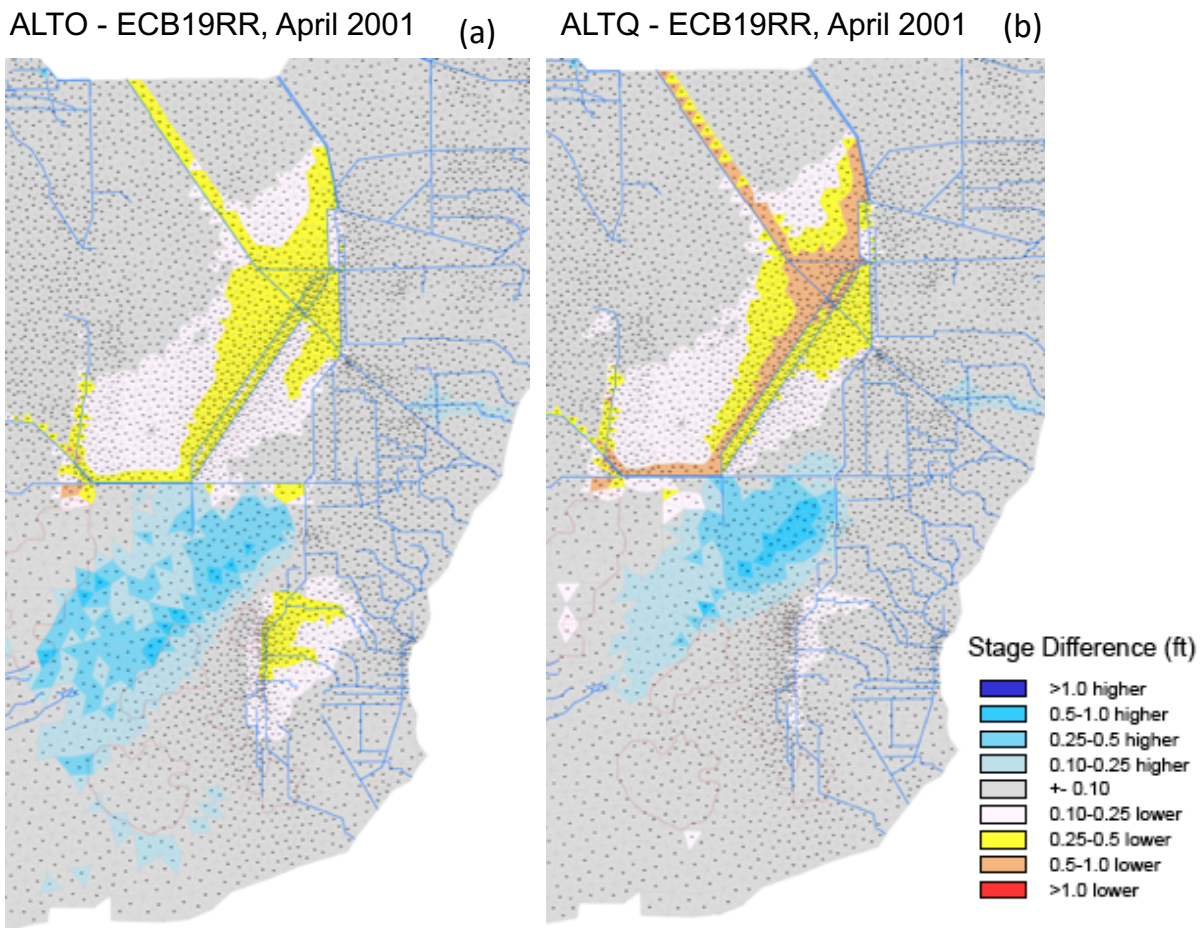


Figure 2: Stage difference map in April of one of the dry years: (a) between ALTO and ECB19RR and (b) between ALTQ and ECB19RR

The key problem of the ALTQ is the selection of a linear regression model for the Tamiami Trail Flow Formula (TTFF). We understand this was a somewhat arbitrary choice, and a linear regression was chosen for its relative simplicity and common usage. The TTFF was fitted to ALTO predicted weekly flows using six predictors that include stages, flows, rain, PET and Zone A levels.

One well-known problem with a regression model is that, while getting the average conditions reasonably close, it does not perform as well during the wettest and driest periods. The high flows during the wet periods were addressed by employing the Zone A level as a predictor; however, nothing was done to address the underprediction during droughts. The TTFF was not able to capture the flows above 1-in-5 year drought (Figure 1c). To be clear: the low flow problem is a direct consequence of the choice of a linear regression model. It is therefore imperative that the model be modified to result in the desired dry year performance.

Additionally, we have observed several problems with the model itself. First, most of the terms are very strongly correlated, causing a "multi-collinearity" effect. One consequence of this is to

introduce something like a feedback effect, which dampens flows during droughts. We found that by simply reducing the number of terms, the model performance better during dry periods. We understand that it may not be possible to have completely independent variables in real conditions. However, we believe that it can be minimized by selecting appropriate predictors. Here, all these complicated factors involved in underpredicting the flows during the droughts as shown Figure 1c. The large number of terms, including terms like the Zone A, add little to the predictive power and can cause untended consequences.

Additionally, lack of a constant term could lead to anomalous and unintended behaviors outside the range of data used to fit the models. Experts generally urged caution in forcing regressions through the origin and recommended not to do it[1]. If you force the function to pass through the origin and the true shape of the function is non-linear near the origin (which is far outside of normal values of most of the terms), it may lead to unintended behaviors. The non-linear relations may occur near the origin, and it is important to examine the lack of fit near zero before regression passes through the origin[2]Consider this example for this specific application. Flows across Tamiami Trail are strongly related to WCA3A water levels. There is some level above which the operational strategy would be to "push" water out of WCA3A, so the sign of the term would be positive. On the other hand, below that level, the goal would be "hold" water in WCA3A, and a negative sign would be needed. One could do that with ENP demand, rainfall, etc. While it would be desirable to make that level a function of month, a constant would be the simplest implementation. By omitting this, the model is forced to behave in counter-productive and even counter-intuitive ways. For example, by including a linear term, the Potential Evapotranspiration (PET) term changes sign, indicating the behavior of this term in the model changes for one that allows adds to flow to one where its influence depends on PET is high or low.

We suggest few solutions to refine the TTFF so that it addresses the issues of underprediction during the droughts.

1) A quick but not robust solution could be using a modifying factor as used in the QP33_Sens run presented in the PDT meeting on June 7, 2019.
2) Reducing the number of terms in the TTFF,
3) Implementing a piecewise formula, thereby having three parts to the TTFF, high water, low water, and "normal" conditions.

Another drought issue is the lowering the WCA3A floor to 7 feet (in ALTQ) from 7.5 feet (in ALTO). The water supply analysis performed by the PDT looked only at the benefits to the South Dade Conveyance System (SDCS), but did not look at the impacts to the source area,

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[1] See for example, Cade, B.S. & Terrell, J.W. (1997) Comment: cautions on forcing regression equations through the origin. North American Journal of Fisheries Management, 17, 225–227. Eisenhauer, J.G. (2003) Regression through the origin. Teaching Statistics 25, 76–80. Kozak, A. & Kozak, R.A. (1995) Notes on regression through the origin. The Forestry chronicle, 71, 326–330.

[2] Hahn, G. J. Fitting regression models with no intercept term. Journal of Quality Technology 9:56-61.

WCA3A. First, the most likely cause of the lower water levels in the SDCS was the general lowering of water levels well below the 1994 GRR levels. The lowering of the floor in WCA3A brought in water to address that problem. If the effects in WCA3A are not *de minimis*, the Corps should (a) look at the cause of the problem: SDCS stages, and/or (b) implement SDCS restrictions at the 7.5 ft level.

We would also like re-iterate our previous comments on Extreme High Water Action Line (EHWAL) and our opposition to its implementation. Particularly problematic in the Alternative Q EHWAL is that only one operational strategy to lower Water Conservation Area 3A (WCA3A) is proposed: routing excess flows into the South Dade Conveyance System via S-334. We find this concerning for the following reasons:

(1) it makes permanent an operational policy that was proposed as a stop-gap measure until more capacity existed into NE Shark River Slough. That capacity now exists, but instead of the strategy being retired, it is codified into permanent operations.

(2) the operational strategy of moving flood water into South Dade has been long opposed by most of the stakeholders in the region, and a source of controversy and contention since it was first proposed as mitigation for the S-12 seasonal closures. Proposing this as the only option for high water in WCA3A will ignite unnecessary controversy by suggesting that objectionable and undesirable operations will become permanent, despite the expenditure of large sums of public funds and nearly universal agreement the practice should be discontinued.

(3) proposing a single emergency high water action without investigating alternatives is not consistent with the objectives this analysis, which should be to illuminate the consequences of a range of possible actions to help identify the actions that the public can support. If the only alternative is one that has met with long-standing public opposition, it does not offer the public any way to constructively and affirmatively express support for the selected alternative.

(4) because the COP assumption is that no additional flow enters WCA3A, and because the Corps and South Florida Water Management District are currently making real-time operational decisions to increases flows from Lake Okeechobee southward into WCA3A, any EHWAL evaluation in COP will necessarily underestimate the true consequences. Thus, including emergency actions likely exceed what is possible to evaluate accurately in COP.

Sincerely,

/signature by email

Thomas Van Lent
The Everglades Foundation

Date: June 12, 2019

To: Donna S. George P.E.
Senior Project Manager
Ecosystem Projects Section,
Ecosystem Branch Programs & Project Management Division (PPMD)
US Army Corps of Engineers Jacksonville District

From: Rebecca Elliott
Environmental Manager
Office of Agricultural Water Policy (OAWP)
Florida Department of Agriculture and Consumer Services (FDACS)

RE: Combined Operational Plan (COP)
Project Delivery Team (PDT) Alternative Q and Round 3 Sensitivity Runs Comments

FDACS supports the Combined Operational Plan (COP) effort to provide a Water Control Plan (WCP) that will complete the Modified Water Deliveries Project (WMD) and combine operations with the completion of the C-111 South Dade Project ( C-111 SD) and the CERP C-111 Spreader Canal Project (C-111 SC). The goal of releasing water into the east side of Shark River Slough is largely met through the COP and the COP also utilizes the C-111 buffer system to convey more water towards the headwaters of Taylor Slough. Both ENP and the agricultural areas adjacent to ENP benefit from operations to move water away from the private lands where it is not needed and into the restoration project areas.

The following comments are provided, as requested, to assist in the selection of a COP Preferred Project Alternative (PPA) based on the evaluation of modeling results obtained during Round 3 for Alternative Q and a series of sensitivity runs. Our comments focus on aspects of the modeled operations which impact private agricultural lands and agricultural operations. Please do not hesitate to contact us if you would like additional discussion or information.

**Operational Details**

The currently available operations table for Alternative Q does not provide sufficient detail or clarity to determine how the modeling results are supported by operational protocols that will be needed to achieve the modeled performance. A separate exchange of questions and information with Lan Do, who is working on the Corps operation table, was offered during the June 7, 2019 PDT web meeting. From our perspective, this separate exchange without explanations and

discussion available to the full PDT is inadequate to address the concern that there is not a clear, consistent understanding among the PDT members about the operations being proposed in

Round 3. We understand the timeline for completion of this phase of COP development is very compressed but without additional information it is difficult to fully understand the operations modeled in Round 3 and provide input for modifications to support a recommended alternative.

**Flood Risk to Private Lands**

While increasing environmental benefits, the COP must maintain flood protection for private lands adjacent to ENP and within the vicinity of the C-111 Projects. Overall, the modeling results obtained for Alternative Q are encouraging regarding maintaining existing flood protection throughout most of the COP area. However, there are a few areas and operations where the models indicate that concerns remain.

Increased flood risk has been consistently indicated by model results for private agricultural lands east of the L-31N. It is not clear whether this reach of the L-31N lacks the capacity to accommodate the much higher stages in Northeast Shark River Slough, or there are operational adjustments that can be made to resolve the issue. Modifications to operational protocol are needed to address increased flood risk and increased flood damages in the L31N area.

Operational stages protective of private agricultural land south of S-331 do not require a reduction in environmental benefits. The Increment 1 Field Test, the 2016 Temporary Emergency Operations and Deviations, and the 2017 Planned and Emergency Deviations demonstrate that along the L-31N Canal reach, operation of the C-111 SD Detention Area System has been able to maintain the hydraulic ridge and hold stages higher in eastern ENP while simultaneously maintaining lower L-31N levels to protect farmland. Given this success, lower canal levels adjacent to agricultural lands could be used to avoid increasing the risk of root zone flooding.

**S- 334 and S-356**

Alternate Q does not include the routine diversion of water from Water Conservation Area 3A (WCA-3A) through S-334 to the C-111 Basin in keeping with the goal of not using Column 2 type operations in COP. This is a positive outcome for COP operational protocols. However, we are not supportive of the proposed COP WCA-3A High Water Action Line since it ceases operation of the S-356 for seepage return in order to bring water through S-334 during what will clearly be high water conditions for the areas east of ENP as well. While the use of the WCA-3A High Water Action Line operations is minimal in the model, there is a risk to downstream areas. Since regulatory releases from WCA-3A through S-334 and into the C-111 Canal basin were never anticipated, or authorized, in any of the project authorizations for these facilities, this operation should not be included in the COP. High water releases from the Central Everglades should remain in the Central Everglades and not be diverted into other areas.

Distribution of water during wet periods should concentrate on maximizing deliveries of water to Northeast Shark River Slough (NESRS). Data collected during the previous emergency

operations deviation indicates pumping at S-356 does not increase the stage in the L-29 Canal when the canal is above 8.2 feet. This means that with an L-29 constraint of 8.5 and above, the use of S-356 will not necessarily reduce the flow from WCA-3A into NESRS and adding the flow from S-356 may provide a significant benefit to the Park.

**S-331**

The COP should not institutionalize the use S-331 to convey flood waters from the 8.5 Square Mile Area (8.5 SMA) into the C-111 Basin during periods when the stage in NESRS is too high for the current 8.5 SMA flood mitigation project to provide an adequate level of service for the area. If additional work is needed to meet 8.5 SMA performance standards, use of the S- 331 for 8.5 SMA flood relief should be identified by COP as an interim operation so the use of S-331 during high water periods to alleviate flooding in the 8.5 SMA is not incorporated into COP as a routine operational protocol.

Agricultural lands in Miami-Dade County rely on the appropriate operation of the SDCS, the C-111 SD Project and the C-111 SC Project for flood protection and water supply. The COP should maintain storm event flood protection capacity for private lands in local basins adjacent to Everglades National Park (ENP) and maintain the level of service for consumptive water uses.

Thank you for the opportunity to provide comments on Alternative Q modeling results. We look forward to continued progress in the development of COP and working with our state and federal partners to improve system-wide capabilities and restoration success. If you have any questions regarding FDACS' comments, please contact Rebecca Elliott at (561) 682-6040.

## Nasuti, Melissa A CIV USARMY CESAJ (USA)

**From:** Erskine, James <James.Erskine@MyFWC.com>
**Sent:** Thursday, June 13, 2019 5:15 PM
**To:** Hall, Brooke A CIV USARMY CESAJ (USA); George, Donna S CIV USARMY CESAJ (US); Do, Lan V CIV USARMY CESAJ (USA)
**Cc:** Garcia, Vicki
**Subject:** [Non-DoD Source] COP Round 3 PDT member comments

Brooke,
Please accept the following comments on COP Round 3 modeling results and operations from FWC participants on the PDT and sub-teams.

- FWC biologists value the opportunity to provide biological, ecological, and habitat assessment information to USACE managers for consideration in water management decisions. The regularly scheduled Periodic Scientist Calls (PSC's) for WCA-3A are an appropriate means to convey this information in a timely manner and USACE should consider continuing the process of PSC's under COP.

- Hydroperiod reductions in north-eastern WCA-3A, in the Everglades and Francis Taylor Wildlife Management Area (EWMA), near the Alley North wading bird colony are a concern in all model alternatives. The Alley North wading bird colony is a highly significant and diverse wading bird colony in the EWMA. Additionally, other colonies, foraging areas, or habitat features may be important in other years and benefit from additional water during dry periods. Consider including additional language or adaptive management guidance to facilitate and support opportunities for water managers to actively address localized low-water challenges and better manage conditions to support the ecological goals of WCA-3A and the EWMA.

- Consider incorporating the EHWL into the TSP and develop additional language applicable under condition 3, either in the TSP or in the adaptive management guidance, to ensure that all possible opportunities to manage water levels compatible with the biology, ecology, and wildlife habitats of WCA-3A and the EWMA are available during high-water conditions that threaten wildlife and wildlife habitats.

- FWC biologists support relaxing the use of the S-344 structure, if amenable by USFWS, as an outlet from WCA-3A to Big Cypress National Preserve.

FWC team members and subject matter experts appreciate the opportunity to provide comments through the PDT process. We will continue to work cooperatively with USACE and the PDT members through the development and implementation of COP.

Respectfully,

James

James M. Erskine
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Florida Fish and Wildlife Conservation Commission

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**Table D.1-3. COP Alternative Q Comment Response Matrix.** The following matrix has been prepared to address comments on the COP Alternative Q submitted by members of the PDT during the plan formulation process.

| LETTER | AGENCY/PUBLIC COMMENT | USACE RESPONSE |
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| **AGENCY COMMENT** | | |
| **FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION (FWC): June 13, 2019** | | |
| **FWC-1** | FWC biologists value the opportunity to provide biological, ecological, and habitat assessment information to USACE managers for consideration in water management decisions. The regularly scheduled Periodic Scientist Calls (PSC's) for WCA-3A are an appropriate means to convey this information in a timely manner and USACE should consider continuing the process of PSC's under COP.<br><br>Hydroperiod reductions in north-eastern WCA-3A, in the Everglades and Francis Taylor Wildlife Management Area (EWMA), near the Alley North wading bird colony are a concern in all model alternatives. The Alley North wading bird colony is a highly significant and diverse wading bird colony in the EWMA. Additionally, other colonies, foraging areas, or habitat features may be important in other years and benefit from additional water during dry periods. Consider including additional language or adaptive management guidance to facilitate and support opportunities for water managers to actively address localized low-water challenges and better manage conditions to support the ecological goals of WCA-3A and the EWMA. | Concur. Hydroperiod reductions near the Alley North wading bird colony is identified as an uncertainty and a potential concern. An Adaptive Management (AM) strategy is under consideration. Specifically, a temporary plug is anticipated to be placed some 3.5 miles downstream of the S-150 in the L-31W canal in NE WCA-3A in Nov. 2019 to facilitate an assessment of operational flexibility in this localized habitat. Surface and GW flow and stage dynamics will be measured at the Alley North Colony to parameterize a localized hydrologic model that will provide the potential AM strategies such as, S-7 movement of water to S-150 and the need for additional plugs in the L-31W, to mitigate for excessive dry downs during droughts. Also, the current WCA-3A PSC as required by the 2016 ERTP B.O. will continue to provide a forum for discussion of operational flexibility to address localized low-water challenges. The adaptive management and monitoring plan will contain the monitoring and associated costs required under the USFWS Biological Opinion and other agency permits that |

| LETTER | AGENCY/PUBLIC COMMENT | USACE RESPONSE |
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| | | are needed to protect and conserve natural resources. |
| **FWC-2** | Consider incorporating the EHWL into the TSP and develop additional language applicable under condition 3, either in the TSP or in the adaptive management guidance, to ensure that all possible opportunities to manage water levels compatible with the biology, ecology, and wildlife habitats of WCA-3A and the EWMA are available during high-water conditions that threaten wildlife and wildlife habitats.<br>FWC team members and subject matter experts appreciate the opportunity to provide comments through the PDT process. We will continue to work cooperatively with USACE and the PDT members through the development and implementation of COP. | Concur. The EHWL supplemental documentation, previously provided to the PDT along with the Alternative Q operational criteria, specifies restrictions and limitations prior to sending water to south Dade and using S-197. First, all available WCA-3A outlet structures are operated at the maximum available capacity (subject to constraints for seasonal closures, L-29 stage limits, and 8.5 SMA flood mitigation constraints) when WCA-3A stages exceed the top of Zone A, including maximum discharges to tide. These operations are used in advance of WCA-3A stages increasing above the EHWL. Other alternatives like holding more water in the WCA-3B or WCA-2A are outside the scope of COP but could be pursued as Emergency Deviations.<br><br>The Corps cannot list the other structural emergency measures or actions that SFWMD employed in the last 3 high water events such as installing temporary pumps along L-28 north of S-343A (WCA-3A), at S-355B (WCA-3B), S-336 (L-29), S-338 (C-1W), L-39 (WCA-2 to WCA-1), and S-176 (L-31N). Each of these were SFWMD actions and may be listed in Adaptive |

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| | | Management Section as potential actions. The work in the Adaptive Management teams will provide a clear opportunity to develop additional language for condition 3. |
| **FWC-3** | FWC biologists support relaxing the use of the S-344 structure, if amenable by USFWS, as an outlet from WCA-3A to Big Cypress National Preserve. | Concur with your comment. At this time, USACE has coordinated with USFWS and is proposing to relax seasonal constraints at S-344 (Alternative Q seasonal closure dates 01 October through 14 July) under the COP preliminary preferred plan. S-344 would be operated when WCA-3A is above the Zone A regulation schedule. |
| **FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES (FDACS): JUNE 12, 019** | | |
| **FDACS-1** | The currently available operations table for Alternative Q does not provide sufficient detail or clarity to determine how the modeling results are supported by operational protocols that will be needed to achieve the modeled performance. A separate exchange of questions and information with Lan Do, who is working on the Corps operation table, was offered during the June 7, 2019 PDT web meeting. From our perspective, this separate exchange without explanations and discussion available to the full PDT is inadequate to address the concern that there is not a clear, consistent understanding among the PDT members about the operations being proposed in Round 3. We understand the timeline for completion of this phase of COP development is very compressed but without additional information it is difficult to fully understand the operations modeled in Round 3 and provide input for modifications to support a recommended alternative. | USACE water managers are currently working on a draft operational table that will translate the modeling assumptions into the COP Preliminary Preferred Alternative. The operational criteria will then be used to support development of the more comprehensive narrative in the Project Operating Manual, or POM (e.g. Water Control Plan). Development of the operational table and associated POM will be conducted with additional technical input from the COP modeling sub-team team and the COP water management sub-team, prior to presenting it to the PDT. The draft operational table supporting the POM to be distributed to the water management sub-team is July 2019. This will be followed by a series of water manager sub-team meetings during July and August to develop the POM. |

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| **FDACS-2** | Flood Risk to Private Lands<br><br>While increasing environmental benefits, the COP must maintain flood protection for private lands adjacent to ENP and within the vicinity of the C-111 Projects. Overall, the modeling results obtained for Alternative Q are encouraging regarding maintaining existing flood protection throughout most of the COP area. However, there are a few areas and operations where the models indicate that concerns remain.<br><br>Increased flood risk has been consistently indicated by model results for private agricultural lands east of the L-31N. It is not clear whether this reach of the L-31N lacks the capacity to accommodate the much higher stages in Northeast Shark River Slough, or there are operational adjustments that can be made to resolve the issue. Modifications to operational protocol are needed to address increased flood risk and increased flood damages in the L31N area.<br><br>Operational stages protective of private agricultural land south of S-331 do not require a reduction in environmental benefits. The Increment 1 Field Test, the 2016 Temporary Emergency Operations and Deviations, and the 2017 Planned and Emergency Deviations demonstrate that along the L-31N Canal reach, operation of the C-111 SD Detention Area System has been able to maintain the hydraulic ridge and hold stages higher in eastern ENP while simultaneously maintaining lower L-31N levels to protect farmland. Given this success, lower canal levels adjacent to agricultural lands could be used to avoid increasing the risk of root zone flooding. | Consistent with the established COP project constraints, the COP must maintain flood protection as established under conditions described in the C-111 General Reevaluation Report (1994 GRR). The COP H&H and Economic modeling results indicate substantial increased flood protection for the entire system under ALT Q operations when using this baseline. When comparing ALT Q to the Existing Condition Baseline (ECB19) approximately 70% of the reaches modeled are showing increased flood protection as well. With the preliminary preferred alternative COP has determined the appropriate canal operational ranges to achieve the objectives.<br><br>The COP alternative formulation has considered operational modifications which enhance flood protection, while achieving the COP project objectives and adhering to the established project constraints. With the Preliminary Preferred Alternative , operational ranges for the L-31N and C-111 Canals between S-331 and S-177, as compared to the ECB19 (Increment 1.2 field test levels), are lowered during the planting season (August through December) and not significantly changed within the CSSS nesting period (February through July). Notably, the normal target operational ranges within both of these canal reaches are also significantly lowered |

| LETTER | AGENCY/PUBLIC COMMENT | USACE RESPONSE |
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| | | compared the ranges specified in the 2012 Water Control Plan, which represents operational ranges representative of 2002 through 2015.<br><br>Further upstream, operational ranges within the L-31N Canal upstream of S-331 are generally reduced compared to the ECB19 during normal operating conditions, but wet season peak stages are increased slightly for short durations due to the significantly diminished reliance on the S-331 pump station under COP Alternative Q to provide flood mitigation for the 8.5 SMA (S-357 is used as first priority). The basin serviced by the L-31N Canal reach upstream of S-331 has received an incidental flood protection benefit through use of the S-331 flood mitigation operations for the 8.5 SMA, which were included for the 2012 WCP operations and the ECB19. |
| **FDACS-3** | S- 334 and S-356<br><br>Alternate Q does not include the routine diversion of water from Water Conservation Area 3A (WCA-3A) through S-334 to the C-111 Basin in keeping with the goal of not using Column 2 type operations in COP. This is a positive outcome for COP operational protocols. However, we are not supportive of the proposed COP WCA-3A High Water Action Line since it ceases operation of the S-356 for seepage return in order to bring water through S-334 during what will clearly be high water conditions for the areas east of ENP as well. While the use of the WCA-3A High Water Action Line operations is minimal in the model, there is a risk to downstream areas. Since regulatory releases from WCA-3A through S-334 and into the | Please refer to the accompanying Corps' legal opinion for further details describing the Corps' authority to operate S-334 to provide flood risk management for WCA-3A, if necessitated by conditions. This legal opinion was previously distributed to the COP PDT on 05 June 2019.<br><br>The EHWL Conditions 2 and 3 were used in the three times over the last three years under emergency and planned deviations from the MWD Incremental Field Tests (Feb 2016, Jun and Sep 2017). During those extremely high water |

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| | C-111 Canal basin were never anticipated, or authorized, in any of the project authorizations for these facilities, this operation should not be included in the COP. High water releases from the Central Everglades should remain in the Central Everglades and not be diverted into other areas.<br><br>Distribution of water during wet periods should concentrate on maximizing deliveries of water to Northeast Shark River Slough (NESRS). Data collected during the previous emergency operations deviation indicates pumping at S-356 does not increase the stage in the L-29 Canal when the canal is above 8.2 feet. This means that with an L-29 constraint of 8.5 and above, the use of S-356 will not necessarily reduce the flow from WCA-3A into NESRS and adding the flow from S-356 may provide a significant benefit to the Park. | conditions in WCA-3A, water deliveries through SDCS were used as the last resort only after all downstream constraints were met and that there were conveyance capacities in the SDCS to safely pass flows through coastal structures. In addition, WCA-3A stages were above the Increment 2 EHWAL during June 2018 and no WCA-3A releases through S-334 were made from 01 June through 31 October 2018 because of the available conveyance capacities in both NESRS and WSRS to meet the weekly Rainfall-based Management Plan targets; therefore, the EHWL operations during the period when WCA-3A 3-station average is above EHWAL are dependent on conditions in WCA-3A, ENP, and SDCS and each event will be evaluated on a case by case basis while balancing all C&SF project objectives.<br><br>In the RSM-GL ALT Q model run, during four events out of 41 years the EHWL was triggered. In COP, it is anticipated that when WCA-3A stages rise above the EHWL, a series of system wide evaluations of real-time C&SF hydrologic conditions including, stage and flow data, past and forecast rainfall, and SFWMD Dynamic Position Analysis (DPA) with appropriate analog years will be conducted by SFWMD, Corps, and ENP. The information from this evaluation along with input provided from ENP will be used by the Corps and the SFWMD to decide on whether or |

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| | | not to use the capacity authorized by the EHWL criteria and how much of this capacity to use.<br><br>During the MWD Incremental field test, limited data has been collected with S-356 operating when the L-29 Canal stages were above 8.2 feet NGVD. Prior analyses of these data and the system-wide operational deviations in-place during these periods have proven inconclusive. Further analysis of the potential effects of S-356 operations on WCA-3A discharges from S-333 will continue during the Increment 2 field test, and continue following COP implementation planned for 2020. |
| **FDACS-4** | **S-331**<br>The COP should not institutionalize the use S-331 to convey flood waters from the 8.5 Square Mile Area (8.5 SMA) into the C-111 Basin during periods when the stage in NESRS is too high for the current 8.5 SMA flood mitigation project to provide an adequate level of service for the area. If additional work is needed to meet 8.5 SMA performance standards, use of the S- 331 for 8.5 SMA flood relief should be identified by COP as an interim operation so the use of S-331 during high water periods to alleviate flooding in the 8.5 SMA is not incorporated into COP as a routine operational protocol | Please refer to the accompanying Corps' legal opinion for further details describing the Corps' authority to operate S-331 to provide flood mitigation for the 8.5 SMA, if necessitated by conditions.<br><br>The operational criteria for S-176 and S-197 were modified for Round 3 Alternative Q to allow S-197 to pass up to 200 cfs when S-331 is operating at lower ranges to assist in 8.5 SMA flood mitigation. Priority would be to use available capacity at S-332B/C/D pumps based on water conditions and time of year with the overall priority sequence defined in the operating criteria structure table. |

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| | | Based on the COP evaluation of 8.5 SMA flood mitigation requirements (discussed at the PDT meeting on 07 June), periodic operation of both S-357 and S-331 below the respective normal operating ranges will be necessary to ensure 8.5 SMA flood mitigation during conditions when G-3273 stage exceeds 7.5 feet NGVD, which the COP modeling predicts to occur on average every other year during the wet season. The duration and frequency of these operations are both increased for conditions when the L-29 Canal is operated consistently at up to 8.5 feet NGVD. Further empirical evaluations will be conducted following COP implementation to verify the predictions from the COP hydrologic modeling. Additional infrastructure modifications within the L-29 Canal, as identified for the Central Everglades Planning Project, will be evaluated by the Corps during 2019-2020 to determine whether additional infrastructure modifications are needed to maintain 8.5 SMA authorized flood mitigation with planned future increases in water deliveries to NESRS. If S-331 is reserved for water supply function only or to maintain the existing level of flood protection for SDCS only, then S-333 and S-356 operations will be restricted frequently for periods when 8.5 SMA flood mitigation requirements are not met. |
| **PUBLIC COMMENT** | | |
| **EVERGLADES FOUNDATION: JUNE 12, 2019** | | |

| LETTER | AGENCY/PUBLIC COMMENT | USACE RESPONSE |
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| **Foundation-1** | Earlier this year, COP Project Delivery Team (PDT) released two alternatives during the Round 2 modeling: ALTO and ALTN2. Both alternatives used iModel optimized flow targets to deliver the water from WCA-3A to ENP. ALTO was broadly accepted by stakeholders because it was focused on sending more water to ENP during dry seasons and the droughts. PDT also assessed that the ALTO was the best performer from an ecological perspective. Recently, the latest alternative, ALTQ was released, which was primarily derived from ALTO.<br><br>We evaluated the ALTQ performance and found that it reduced the drought flows to ENP through S-12C, S-12D and S-333 structures across Tamiami Trail relative to the ALTO (Figure 1). For example, the ALTQ decreased average annual flow by 54,000 acre-feet during the 5 worst dry years through S-333 structure. The effect of this reduction on water depths is particularly visible in ENP and in the mangrove ecotone during droughts (Figure 2).<br><br>The key problem of the ALTQ is the selection of a linear regression model for the Tamiami Trail Flow Formula (TTFF). We understand this was a somewhat arbitrary choice, and a linear regression was chosen for its relative simplicity and common usage. The TTFF was fitted to ALTO predicted weekly flows using six predictors that include stages, flows, rain, PET and Zone A levels.<br><br>One well-known problem with a regression model is that, while getting the average conditions reasonably close, it does not perform as well during the wettest and driest periods. The high flows during the wet periods were addressed by employing the Zone A level as a predictor; however, nothing was done to address the underprediction during droughts. The TTFF was not able to capture the flows above 1-in-5 year | The TTFF developed for Alternative Q is a generalized form of the ALT O optimal signal, and the generalized form is subject to limitations of missing extremes. However, the recommended TTFF is a valid statistical representation that the COP Cooperating agencies (USACE, ENP, and SFWMD) have jointly determined does not exhibit any "fatal flaws" with limited effects of multicollinearity (Variance Inflation Factor, or VIF<5) and no erroneous behavior across a range of independent checks. The choice of a linear form of the TTFF with limitations was conscious and not arbitrary, with considerations beyond solely best technical data matching. The TTFF development approach was openly discussed in several interagency PDT meetings, as well as multiple technical working meetings with the Everglades Foundation coordinated by SFWMD.<br><br>There is room for improvement in some drier years as discussed at the 07 June 2019 PDT meeting, but the benefits realized in the TTFF and COP ALT Q are significant over the Existing Condition baseline and in the same range of performance of ALT O based on the evaluations of the COP technical sub-teams. The COP Cooperating agencies have jointly determined that the best way to realize any possible improvements considering multiple factors (precedent setting, schedule, etc.) is to carry the |

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| | drought (Figure 1c). To be clear: the low flow problem is a direct consequence of the choice of a linear regression model. It is therefore imperative that the model be modified to result in the desired dry year performance. | conversation into the COP adaptive management framework and/or subsequent CEPP efforts.<br><br>As monitoring information continues to be collected and evaluated through the COP Adaptive Management process (post-implementation), it is expected that the TTFF will continue to evolve as conditions change in the future through the combination of new information and new CERP infrastructure, including features which will enable increased flow deliveries into the WCAs, ENP, and Florida Bay. The COP Adaptive Management process will be fully transparent and open to the PDT agencies and the public. At the end of the wet season the COP adaptive management process will focus on determining whether we can emulate the operations identified in Alternative O to deliver depth benefits that were present in this alternative due to the subtly different operations between Alternatives O and Q. When considering extreme conditions the focus will be on achieving COP objectives for environmental benefits broadly shared across the ecosystem while adhering to the constraints. |
| **Foundation-2** | Additionally, we have observed several problems with the model itself. First, most of the terms are very strongly correlated, causing a "multi-collinearity" effect. One consequence of this is to ALTO - ECB19RR, April 2001 (a) ALTQ _ ECB19RR, April 2001 (b) introduce something like a feedback effect, which dampens flows during droughts. We found that by | Please refer to response provided for Foundation-1. |

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| | simply reducing the number of terms, the model performance better during dry periods. We understand that it may not be possible to have completely independent variables in real conditions. However, we believe that it can be minimized by selecting appropriate predictors. Here, all these complicated factors involved in underpredicting the flows during the droughts as shown Figure 1c. The large number of terms, including terms like the Zone A, add little to the predictive power and can cause untended consequences. | |
| **Foundation-3** | Additionally, lack of a constant term could lead to anomalous and unintended behaviors outside the range of data used to fit the models. Experts generally urged caution in forcing regressions through the origin and recommended not to do it If you force the function to pass through the origin and the true shape of the function is non-linear near the origin (which is far outside of normal values of most of the terms), it may lead to unintended behaviors. The non-linear relations may occur near the origin, and it is important to examine the lack of fit near zero before regression passes through the origin. Consider this example for this specific application. Flows across Tamiami Trail are strongly related to WCA3A water levels. There is some level above which the operational strategy would be to "push" water out of WCA3A, so the sign of the term would be positive. On the other hand, below that level, the goal would be "hold" water in WCA3A, and a negative sign would be needed. One could do that with ENP demand, rainfall, etc. While it would be desirable to make that level a function of month, a constant would be the simplest implementation. By omitting this, the model is forced to behave in counter-productive and even counter-intuitive ways. For example, by including a linear term, the Potential Evapotranspiration (PET) term changes sign, indicating the behavior of this term in the model changes for one that allows adds to flow to one where its influence depends on PET is high or low. | Please refer to response provided for Foundation-1. |

| LETTER | AGENCY/PUBLIC COMMENT | USACE RESPONSE |
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| | We suggest few solutions to refine the TTFF so that it addresses the issues of underprediction during the droughts.<br>1) A quick but not robust solution could be using a modifying factor as used in the QP33_Sens run presented in the PDT meeting on June 7, 2019.<br>2) Reducing the number of terms in the TTFF,<br>3) Implementing a piecewise formula, thereby having three parts to the TTFF, high water, low water, and "normal" conditions. | |
| **Foundation-4** | Another drought issue is the lowering the WCA3A floor to 7 feet (in ALTQ) from 7.5 feet (in ALTO). The water supply analysis performed by the PDT looked only at the benefits to the South Dade Conveyance System (SDCS), but did not look at the impacts to the source area WCA3A. First, the most likely cause of the lower water levels in the SDCS was the general lowering of water levels well below the 1994 GRR levels. The lowering of the floor in WCA3A brought in water to address that problem. If the effects in WCA3A are not de minimis, the Corps should (a) look at the cause of the problem: SDCS stages, and/or (b) implement SDCS restrictions at the 7.5 ft level. | Evaluation of the water supply performance of the COP Round 2 and Round 3 alternatives were conducted by the water supply sub-team, which included consideration of potential impacts within WCA-3A. Alt Q, which included the new WCA 3A floor location and criteria, was evaluated by the ecological sub-team and performance of Alt Q was in the same range as Alt O. Modification of the WCA-3A water floor to alleviate localized drawdown associated with increased S-333 deliveries into NESRS was also independently identified during the CEPP formulation process and these operations were included in the authorized POM for the CEPP. The 1994 GRR optimum canal levels are not indicative of SDCS stages that have been maintained through Federal Water Control Plan actions prior to or subsequent to the MWD and C-111 South Dade Projects in 1992 and 1994, respectively. |
| **Foundation-5** | We would also like re-iterate our previous comments on Extreme High Water Action Line (EHWAL) and our opposition to its implementation. | The EHWL Conditions 2 and 3 were triggered three times in the last three years under |

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| | Particularly problematic in the Alternative Q EHWAL is that only one operational strategy to lower Water Conservation Area 3A (WCA3A) is proposed: routing excess flows into the South Dade Conveyance System via S- 334. We find this concerning for the following reasons:<br>(1) it makes permanent an operational policy that was proposed as a stop-gap measure until more capacity existed into NE Shark River Slough. That capacity now exists, but instead of the strategy being retired, it is codified into permanent operations.<br>(2) the operational strategy of moving flood water into South Dade has been long opposed by most of the stakeholders in the region, and a source of controversy and contention since it was first proposed as mitigation for the S-12 seasonal closures. Proposing this as the only option for high water in WCA3A will ignite unnecessary controversy by suggesting that objectionable and undesirable operations will become permanent, despite the expenditure of large sums of public funds and nearly universal agreement the practice should be discontinued.<br>(3) proposing a single emergency high water action without investigating alternatives is not consistent with the objectives this analysis, which should be to illuminate the consequences of a range of possible actions to help identify the actions that the public can support. If the only alternative is one that has met with long-standing public opposition, it does not offer the public any way to constructively and affirmatively express support for the selected alternative.<br>(4) because the COP assumption is that no additional flow enters WCA3A, and because the Corps and South Florida Water Management District are currently making real-time operational decisions to increases flows from Lake Okeechobee southward into WCA3A, any EHWAL evaluation in COP will necessarily underestimate the true consequences. Thus, including emergency actions likely exceed what is possible to evaluate accurately in COP. | emergency and planned deviations from the MWD Incremental Field Tests (Feb 2016, Jun 2017, and Sep 2017). During those extremely high water conditions in WCA-3A, water deliveries through SDCS were used as the last resort only after all downstream constraints were met and that there were conveyance capacities in the SDCS to safely pass flows through coastal structures.<br><br>In the RSM-GL ALT Q model run, the EHWL was triggered infrequently (four events out of 41 years). In COP, it is anticipated that when WCA-3A stages rise above the EHWL, a series of system wide evaluation of real-time C&SF hydrologic conditions including, stage and flow data, past and forecast rainfall, and SFWMD DPA with appropriate analog years will be conducted by SFWMD, Corps, and ENP. The information from this evaluation along with input provided from ENP will be used by the Corps and the SFWMD to decide on whether or not to use the capacity authorized by the EHWL criteria and how much of this capacity to use.<br><br>Below are point by point responses to the Foundation-5 comment.<br><br>1. Current inflow capacity to NESRS have to meet all downstream constraints such as the L-29 |

| LETTER | AGENCY/PUBLIC COMMENT | USACE RESPONSE |
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| | | maximum canal operating limit of 8.5 ft, NGVD and FDOT constraints and 8.5 SMA flood mitigation requirements.<br>2. It was used to make up releases due to S-12A&B, S-344, and S-343A&B closures during ISOP, IOP, ERTP, MWD Incremental Field Tests because of the 1999 and 2016 USFWS B.O. RPAs.<br>3. Above the EHWL, stages in WCA's are considered extremely high, which poses increased risks to the WCA-3A perimeter levee system, the population of 70,600 people who would be put at risk if the levee system failed, hurricane evacuation routes, and wildlife and tree islands. Sending up to 1,000 cfs for a short duration (only when WCA-3A is above the EHWL) through SDCS when SDCS has the conveyance capacity is a temporary measure.<br>4. The increased inflows to WCA-3A from Lake Okeechobee during this dry season do not appear to cause high water levels in WCA-3A. The response of the Stormwater Treatment Area vegetation in response to these operations will continue for at least the remainder of the 2019 wet season, and this assessment may influence future operational considerations prior to new CEPP storage infrastructure being constructed. SDCS must have available conveyance capacities prior to making a water management decision to send WCA-3A EHWL water through the canal system. In addition, since the TTFF includes |

| LETTER | AGENCY/PUBLIC COMMENT | USACE RESPONSE |
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| | | stages in WCA 3A, it will accommodate additional flows to WCA 3A not explicitly captured in the RSM_GL 41 year POR. |
| **Audubon Florida, Everglades Foundation, and NPCA: June 12, 2019** | | |
| **NGO-1** | We are concerned that Alternative Q does not perform well for Florida Bay during drought conditions, jeopardizing the health of the Bay and the investment made in restoration infrastructure that has led us to this operations plan. Our organizations expressed these concerns during public comment on the webinar PDT meeting on June 7, 2019. We feel this is a step backward in achieving the optimal COP, especially when Alternative O demonstrated that providing better freshwater flows to Florida Bay and ENP for the entirety of the dry season and during droughts is achievable.<br><br>Florida Bay experienced widespread seagrass die-offs in 2015 and 2016 following an extended drought. Those detrimental impacts were felt deeply within the Bay ecosystem and stakeholders in the Florida Keys. The final COP must ensure that ENP and Florida Bay are better safeguarded against drought impacts. At this time, Alternative Q fails to do so; and instead, it guarantees that another seagrass die-off will affect Florida Bay should drought conditions ensue.<br><br>The final COP must ensure that – if and when another drought occurs – Florida Bay will be more resilient because of these restoration projects. American taxpayers have spent nearly $1 billion constructing restoration infrastructure to protect and restore our national park. Preventing another ecological catastrophe in Florida Bay must be the top consideration for the COP final alternative, to show stakeholders and decision-makers how the investment we are making in America's Everglades is paying off. | Alternative Q has been identified as the alternative which best meets the identified project objectives and identified project constraints. Alternative Q would increase average annual overland flow to Taylor Slough relative to ECB19RR by 36,000 acre feet per year on average. This is a significant improvement to Florida Bay given that COP was formulated and evaluated to utilize the existing water budget. COP is forward compatible with future efforts to increase deliveries to WCA 3.<br><br>It is recognized that this is the first time the Rainfall Plan has been modified to convey water from WCA-3A to ENP and that uncertainties still exist with respect to the implementation of the Tamiami Trail Flow Formula. The next step in the COP planning process is to develop an adaptive management and monitoring plan. The primary objective of the COP adaptive management and monitoring plan will be to identify the monitoring necessary to inform decision-makers, COP partner agencies, and the public on progress towards achieving restoration success, as well as address uncertainties related to project performance that can be addressed with |

| LETTER | AGENCY/PUBLIC COMMENT | USACE RESPONSE |
|---|---|---|
| | | efficiently structured approaches. Implementation of the Tamiami Trail Flow Formula has been identified as a potential concern. Adaptive management strategies are anticipated to be developed to address this uncertainty, which will include a structured approach as to how monitoring data may be collected to inform potential revisions to the Tamiami Trail Flow Formula as COP is implemented.<br><br>ALT O does not have S-12C operated normally between Oct 1 and Jul 14 and may affect the subsequent dry season conditions in WCA-3A and ENP. Also refer to response to Foundation comment #1. |

## Nasuti, Melissa A CIV USARMY CESAJ (USA)

**From:** Moreno, Meredith A CIV USARMY CESAJ (US)
**Sent:** Tuesday, July 2, 2019 9:47 AM
**To:** Nasuti, Melissa A CIV USARMY CESAJ (USA)
**Subject:** FW: Modified Waters Deliveries – Combined Operational Plan Increment 3 Comments

-----Original Message-----
From: Bradley Mueller [mailto:bradleymueller@semtribe.com]
Sent: Thursday, June 27, 2019 1:10 PM
To: George, Donna S CIV USARMY CESAJ (US) <Donna.S.George@usace.army.mil>
Cc: Moreno, Meredith A CIV USARMY CESAJ (US) <Meredith.A.Moreno@usace.army.mil>; Jed Redwine (jed_redwine@nps.gov) <jed_redwine@nps.gov>; Hall, Brooke A CIV USARMY CESAJ (USA) <Brooke.A.Hall@usace.army.mil>; Anne Mullins <AnneMullins@semtribe.com>; Juan Cancel <JuanCancel@semtribe.com>; Paul Backhouse <PaulBackhouse@semtribe.com>
Subject: [Non-DoD Source] Modified Waters Deliveries – Combined Operational Plan Increment 3 Comments

June 27, 2019

Ms. Donna S. George, P.E.

Senior Project Manager

Planning and Policy Division

Department of the Army

Jacksonville District Corps of Engineers

Email: Donna.S.George@usace.army.mil <mailto:Donna.S.George@usace.army.mil>

Subject: Modified Waters Deliveries – Combined Operational Plan Increment 3 Comments

THPO Compliance Tracking Number: 0028534

Dear Ms. George,

The STOF greatly appreciates all of the efforts made by the USACE to consult with us regarding the Modified Water Deliveries (MWD) – Combined Operational Plan (COP) project, especially the most recent consultations concerning Increment 3. We also value the inclusion of Mr. Jed Redwine of the National Park Service in these discussions to assist us in understanding the projects potential impacts to tree islands within the area of potential effect. As you know, the Everglade's tree islands were and still are important places to the Native American populations of Florida. It is generally agreed that most of the tree islands of any reasonable size contain archaeological sites and many contain burial components. It is these cultural and burial resources that the STOF THPO is concerned about protecting from inundation that is anthropogenic in origin and not the result of naturally occurring weather events. The information provided most recently by the USACE and ENP concerning the hydrological impacts within the water conservation areas (WCA 3A, WCA 3B) and Everglade's National Park (Shark River Slough, etc.), suggest to us that anticipated water levels resulting from the project will not exceed those that likely occurred historically during the pre-drainage conditions of south Florida. This is encouraging. However, the STOF THPO and ERMD staffs are continuing to consult internally about this assessment and will be bringing in additional expertise to assist us in completing our analysis and providing the USACE with additional comments. We will also reach out to the USACE and the NPS for additional information and clarification of the modeling results as needed. We look forward to continuing the consultation with you on MWD - COP. Thank you and feel free to contact us with any questions or concerns.

Respectfully,

Bradley M. Mueller, MA, Compliance Specialist

STOF-THPO, Compliance Review Section

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Clewiston, FL 33440

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OFFICE OF AGRICULTURAL WATER POLICY
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THE MAYO BUILDING
407 SOUTH CALHOUN STREET
TALLAHASSEE, FLORIDA 32399-0800

# FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES
## COMMISSIONER NICOLE "NIKKI" FRIED

July 1, 2019

Donna S. George P.E.
Senior Project Manager
Ecosystem Projects Section,
Ecosystems Branch Programs & Project Management Division (PPMD)
US Army Corps of Engineers Jacksonville District

RE: Combined Operational Plan (COP) Preliminary Preferred Alternative (PPA)

The Florida Department of Agriculture and Consumer Services (FDACS) Office of Agricultural Water Policy(OAWP) appreciates the opportunity to participate in and provide comments on the Combined Operational Plan (COP) effort that will complete the Modified Water Deliveries Project (MWD) and combine operations with the completion of the C-111 South Dade Project (C-111 SD) and the CERP C-111 Spreader Canal Project (C-111 SC). The OAWP has participated extensively in the complicated MWD Increments process that has led to the COP and eventually to a Preliminary Preferred Alternative (PPA) for the Draft Regional Operations Manual (DROM). Our understanding is that the COP will be the first new Water Control Plan (WCP) incorporated into the System Operating Manual (SOM) as a Regional Operations Manual (ROM). The OAWP offers the following comments in support of a successful COP. Additional technical comments on the information currently available for Alternative Q+ are provided in the attached addendum.

The COP purports to incorporate a new approach to managing water flow into Everglades National Park (ENP). If properly implemented, the COP may result in significant ecological benefits through improved water deliveries to ENP Shark River Slough (SRS) while protecting

the ecological values associated with WCA 3A and ENP. Both ENP and the agricultural areas adjacent to ENP can benefit from operations that move water away from the private lands where it is not needed and into the restoration project areas.

Any final product should reflect the best and most inclusive available data that is reflective of the hard work and time dedicated to this effort. The OAWP has concerns that the deliberative process has become rushed to meet a procedural deadline, which has prevented the development of a clearly delineated operating plan for agency and stakeholder review. The OAWP values the collaborative effort that has brought COP development this far and recognizes the need for some flexibility in operations within reasonable boundaries. However, the current PPA proposed, Alt Q+ and Adaptive Management Plan (A.M. Plan), is an ambiguous and confusing operations matrix that defers many critical operations to an undefined process to be established later, as well as leaving considerable discretion to the federal agency that could result in significant uncertainty for affected stakeholders in the project area.

The model output files currently available for review reflect scenarios that contain parts of Alt Q+ but none is a representation of the entire Alt Q+ operations scenario components performing together. Sufficient detail and clarity for key operational protocols is not provided as needed to determine how the modeling results are supported by operations to achieve the modeled performance.

The OAWP feels that reliance on the COP A.M. Plan to complete the PPA creates problematic scenarios that could be better addressed with additional time and stakeholder input. The COP A.M. Plan is still under development and no draft version has been made available, resulting in an inability of stakeholders to provide substantive comment. The OAWP is concerned that inclusion of an incomplete A.M. Plan in the PPA is due to time constraints that do not allow time for the Project Deliver Team (PDT) and stakeholders to evaluate and address uncertainties as appropriate during COP PPA development. Some issues may be appropriate for an adaptive management approach but which issues, and how they will be addressed, must be carefully documented within the context of a WCP that clearly protects all the project purposes for which the Central and South Florida Project (C&SF Project) was authorized. This step is necessary for the PPA to move forward with the A.M. Plan included.

An unambiguous final plan must be presented, its impacts documented, and the operations matrix that produced them clearly described before it moves forward as the PPA. The provision of extensive discretion to address the myriad of uncertainties identified is inadequate to address the need for regulatory certainty required by law and desired by interested stakeholders.

The OAWP requests that the Corps take additional time and engage additional comment from interested stakeholders to complete and document the proposed PPA in order to allow for the increased certainty and in-depth review this effort deserves.

The OAWP appreciates the opportunity to provide comments on the proposed COP PPA. We look forward to continued progress for all efforts to restore the Everglades, protect private property and work with our state and federal partners to improve system-wide capabilities. If you have any questions regarding the OAWP comments, please contact Rebecca Elliott at (561) 682-6040.

Sincerely,

Rebecca Elliott
Environmental Manager
On behalf of, Christopher Pettit, Director
Office of Agricultural Water Policy (OAWP)

July 1, 2019

Technical Comments Addendum
Combined Operational Plan (COP) Preliminary Preferred Alternative (PPA)
Florida Department of Agriculture and Consumer Services (FDCAS)
Office of Agricultural Water Policy (OAWP)

The following comments are provided to assist in the development of a COP PPA and eventually a Draft Regional Operating Manual (DROM). It is based on the review of the pdf file: "COP_DRAFT_Round3_Alternative_Q_Plus_With_Modeler_Notes_6_21_2019_clean"

Please do not hesitate to contact Rebecca Elliott at (561) 682-6040 if you would like additional discussion or information.

General Comments

The currently available operations table for Alternative Q+ does not provide sufficient detail and clarity to determine how the modeling results are supported by operational protocols that will be needed to achieve the modeled performance. The completion of operational details and operational strategies are deferred to the Operational Subteam and the Adaptive Management Plan. It appears the Operational Subteam deliberations and recommendations may not be available to the Project Delivery Team (PDT) and interested parties before July 24, 2019 when comments will be due on the COP July 10, 2019 presentation. The Adaptive Management Plan is not scheduled for completion until late September 2019. The OAWP technical evaluations and comments regarding the PPA and DROM cannot be completed without additional information on the operations that will be proposed.

Below are descriptions of concerns which are the basis of the Alt. Q+ Operations Table detailed OAWP technical comments that follow.

Flood Risk to Private Lands

While increasing environmental benefits, the COP must maintain flood protection for private lands adjacent to ENP and within the vicinity of the C-111 Projects. Overall, the modeling results obtained for Alternative Q were encouraging regarding maintaining existing flood protection throughout most of the COP area. However, there are a few areas and operations where the models indicate that concerns remain and it is uncertain how Alt Q+ will perform in these areas.

Increased flood risk has been consistently indicated by model results for private agricultural lands east of the L-31N. It is not clear what operational adjustments can be made to resolve the issue. Modifications to operational protocol are needed to address increased flood risk and increased flood damages in the L31N area and to at least provide the baseline level of service to this area.

Operational stages protective of private agricultural land south of S-331 do not require a reduction in environmental benefits. The Increment 1 Field Test, the 2016 Temporary Emergency Operations and Deviations, and the 2017 Planned and Emergency Deviations demonstrate that along the L-31N Canal reach, operation of the C-111 SD Detention Area System has been able to maintain the hydraulic ridge and hold stages higher in eastern ENP while simultaneously maintaining lower L-31N levels to protect farmland. Given this success, lower canal levels adjacent to agricultural lands should be used to avoid increasing the risk of root zone flooding.

S- 334 and S-356

Alternate Q+ does not include the routine diversion of water from Water Conservation Area 3A (WCA-3A) through S-334 to the C-111 Basin in keeping with the goal of not using Column 2 type operations in COP. This is a positive outcome for COP operational protocols. However, we are not supportive of the proposed COP WCA-3A High Water Action Line since it ceases operation of the S-356 for seepage return in order to bring water through S-334 during what will clearly be high water conditions for the areas east of ENP as well. Since regulatory releases from WCA-3A through S-334 and into the C-111 Canal basin were never anticipated, or authorized, in any of the project authorizations for these facilities, this operation should not be included in the COP. High water releases from the Central Everglades should remain in the Central Everglades and not be diverted into other areas.

Distribution of water during wet periods should concentrate on maximizing deliveries of water to Northeast Shark River Slough (NESRS). Data collected during the previous emergency operations deviation indicates pumping at S-356 does not increase the stage in the L-29 Canal when the canal is above 8.2 feet. This means that with an L-29 constraint of 8.5 and above, the use of S-356 will not reduce the flow from WCA-3A into NESRS and adding the flow from S-356 may provide an additional benefit to the Park.

S-331

The COP should not institutionalize the use S-331 to convey flood waters from the 8.5 Square Mile Area (8.5 SMA) into the C-111 Basin during periods when the stage in NESRS is too high for the current 8.5 SMA flood mitigation project to provide an adequate level of service for the area. If additional work is needed to meet 8.5 SMA performance standards, use of the S- 331 for 8.5 SMA flood relief should be identified by COP as an interim operation so the use of S-331 during high water periods to alleviate flooding in the 8.5 SMA is not incorporated into COP as a routine operational protocol.

OAWP Comments and Questions by Region and Management Measure in Operations Table: COP_DRAFT_Round3_Alternative_Q_Plus_With_Modeler_Notes_6_21_2019_clean

**WCA – 3A**

S-356

The EHWL and the actions it triggers are contrary to the goals of Mod Waters and the C-111 GRR. Eliminating the EHWL will eliminate this conflict. With the new bridging and road improvements on US 41 there is no basis for restricting the use of S356 other than to accommodate the use of S-334, which was supposed to end with the completion of Mod Waters.

S-12A/S-12B

How will the Corp project WCA-3A stage as indicated in the footnote?

Footnote 1 Below – Excerpt from Matrix:

1S-12A and/or S-12B will be conditionally opened during October under the following conditions.

1. WCA-3A stage on 30 Sep is greater than 10.5 feet, NGVD; or
2. WCA-3A stage is projected to rise above 10.75 feet, NGVD (IOP Zone A) during October, based on consideration of projected inflows and direct rainfall.
3.S-12A and/or S-12B will be conditionally closed when the WCA-3A stage falls below 10.25 feet, NGVD, OR on 01 November, whichever comes first.

S-12B will be conditionally opened during November under the following conditions.

1. WCA-3A stage on 31 Oct is greater than 11.0 feet, NGVD; or
2. WCA-3A stage is projected to rise above 11.25 feet, NGVD during November, based on consideration of projected inflows and direct rainfall.

3. S-12B will be closed when the WCA-3A stage falls below 10.75 feet, NGVD, OR on 01 December, whichever comes first.
Year-Round Operational Criteria:
S-12A Year-round: To provide access to cultural areas, when Rainfall Plan results in S-12 target flows, S-12A up to 100 cfs release.
S-12A Cultural Access Release: S-12A up to 100 cfs release available when Rainfall Plan results in S-12 target flows. From 01 October through 14 July, the Tribe and USACE must request informal consultation with FWS to avoid
impacts on CSSS-A. During this time, the duration of this release will not exceed five consecutive days. S-12A up to 100 cfs release may only occur when WCA-3A 3-gage average (WCA-3AVG - Sites 63, 64, 65) is greater than 8.4
feet, NGVD. During S-12A up to 100 cfs release, data such as but not limited to NP-205 and area rainfall will be monitored with NP-205 increase or anticipated increase above 5.7 feet, NGVD resulting in closing of S-12A.
S-12A/B/C/D Headwater greater than 11.0 feet, NGVD: May be opened an amount only enough to stop overtopping of gates. The USACE will assess the feasibility of leaving the gates closed and allowing overtopping.

Incremental Testing Extreme High Water (EHW) Action Line
There should be no EHWL and the actions it triggers. The point of Mod Waters is to keep central everglades water where it is needed,
in the central everglades. Sending it down L31N is a step backward.

WCA-3A Regulation Schedule (Below Zone A)
The Corps needs to pick a final recommended plan, model it and present the results in the EIS.

**WCA-3A/3B**

S-335
Impacts to Pennsuco wetlands shown in Alt Q modeling must be addressed so there are no negative impacts.

**NESRS**

L-29
May need to go to 8.5 from October through March to accommodate el nino events

S-333
Remove the EHWL from COP .

S-333N
Remove the EHWL from COP and follow the existing state permit for S-333N.

Rainfall Plan
Not clear what the first paragraph in the Modeling Notes means.? Has the new TTFF been documented somewhere? What are the specific operations included in the final Plan?

**SDCS – South Dade Conveyance System**

C-111 SD North Detention Area
The model should reflect what the current constraints are for the Detention Areas. If they are allowed to receive pumped inflow up to the overflow elevation then this description is fine. However, that does not seem realistic

C-111 SD South Detention Area
See comment for NDA

S-332B West
This description does not explain what decides which range is used. Having the ranges the same for all structures, and giving the operators discretion is a good policy.
However, the top of any range should be no higher than 4.6 and S-176 should also be operated within the same ranges at the discretion of the water managers. The final plan must be specified and analyzed in the EIS.

S-332B North
Same as S-332B West

S-332C
Same as S-332B West

S-332D
No comment

L-31N Structure Priority
This doesn't differentiate between flood protection and water supply as the text indicates. The earlier sections indicate the Water Managers would decide which structure to open. Range limits should be a djusted as in our comments on S-332B West

S-331/S-173
S331HW should not be pumped down to these low levels to try to affect the stage at LPG2. This will send too much
flow into the C111 basin during what is clearly a wet period and it is doubtful LPG2 stage can be meaningfully affected from this far away.

G-737*
No comment.

S-197
No comment

S-176
This operating range is too high. It should have the same operating range as S32B and whether it is last in the line of opening priorities, or opened at the water managers discretion, having the same operating range should not create a conflict.

S-177
This range is too high, especially since S199 and S200 can be stopped because of the CSSS. 3.2 to 3.8 is a better range and reflects what has been done in recent years.

S-18C
No comment

S-199
All references to 4.0 should be changed to 3.8 to reflect experience in Increments 1 and 2.

S-200
All references to 4.0 should be changed to 3.8 to reflect experience in Increments 1 and 2.

**Taylor Slough**

S-328
No comment

**Biscayne Bay**

S-338
What is the final plan? These descriptions seem to be in conflict. A better narrative is needed.

S-194/S-196
See Comments under S-338

**Taylor Slough**

SUPPLEMENTAL FLOWS TO TAYLOR SLOUGH
This set of operations overdrained the Pennsuco and must be revised in a final plan. Under what conditions would TS supplemental deliveries be stopped? It is written as a year round practice limited only by WCA-3A stage. This does not seem realistic.

**WCA – 3A/ NESRS**

S-334
EHWL should be removed from COP and S-334 should be used as authorized, for water supply only.

**Add-On Structures for Modeling**
**(these structures were not considered during the development of alternatives)**

S-357
No comment

S-357N
No Comment

G-211
Other than for water supply, G-211 should not be opened unless S-356 is pumping at capacity.

S-148
The final plan must be modeled and it must include the final operating protocols. Operating this structure as described in the modeling notes column may have reduced the need for supplemental releases at S-338.

S-179 (C-103)
Why aren't these modeled. Could this have improved performance for Biscayne Bay?

S-165 (C-102)
Why aren't these modeled. Could this have improved performance for Biscayne Bay?

S-167 (C-103)
Farms upstream of S-167 have experienced problems with high water levels. The top end of this range seems high.

S-12C/D
No comments

S-151
How was 300 cfs derived? What, other than the WCA-3A stage, constrains the delivery of this 300 cfs?

S-337
How was the 250 cfs derived? What, other than the WCA-3A stage, constrains the delivery of this 250 cfs? We need a final plan that can be simulated and presented as was done for the other alternatives .

S-152
No comment

WCA-3A Floor for Water Supply
No comment

July 1, 2019

Donna George
US Army Corps of Engineers
Jacksonville District
PO Box 4970
Jacksonville, FL 32232-0019
Email: donna.s.george@usace.army.mil

RE: Technical Comments on Operations Table for Alternative Q2

These comments are specifically related to the operations table presented at the Project Delivery Team Meeting on June 21, 2019 and sent by email on that date. The Everglades Foundation sent technical comments on June 12 conveying our concern that the proposed Tamiami Trail Flow Formula (TTFF) did not perform well during drought conditions, among other concerns. In reviewing the proposed operations table, we find that the Corps' proposed operations table inadequately addresses the outstanding issues in Alternative Q.

One of the primary modifications in this iteration of the operational table is the "Rainfall Plan" in the South Dade Conveyance System component. The operational plan remains using the regression formula that clearly underpredicts Alternative O performance during droughts. The proposed operations table merely says "SRS low water" without any explanation or guidance as to what the operational concern is or guidance on how to operate. Verbal comments by Corps staff suggest that "Adaptive Management" would address the whatever concerns arise and after the operational plan that contains the TTFF is approved, though this is not expressed in the table.

Adaptive Management is a valuable endeavor and should be undertaken as a routine procedure to gain insight into project function and improve operations. However, Adaptive Management is not a solution to the problem of the TTFF functioning poorly during droughts. First, any solution arrived at during Adaptive Management is not self-implementing. This EIS locks in the TTFF until the next update, as undertaking Adaptive Management is not an exempt from NEPA. Second, droughts are not amenable to Adaptive Management. Typically, by the time water managers are certain there is a drought, it is too late to take actions that would mitigate conditions. In contrast, wet conditions are very amenable to Adaptive Management, but instead the Corps is proposing to put high water response directly into the operations table. Clearly, the Corp is not relying on Adaptive Management even when well suited to the issue. Third, while Adaptive Management is a proven methodology for reducing uncertainties, it is not suited for addressing clear flaws. The TTFF underpredictions during droughts are inherent in the regression and its development; no amount of Adaptive Management will fix the underlying flaws.

For these reasons, the proposed modifications to the operational table are entirely inadequate for addressing concerns about drought performance. The solution is to fix the TTFF. The Everglades Foundation undertook investigations on possible corrections, and with less than 20 total man-hours of time, found ways to significantly improve the performance. For example, by setting stage thresholds in Water Conservation Area 3A and Everglades National Park, a piecewise regression improves drought performance. (We have attached regression analysis in R, modifications to the RSM model to implement the improved regression and a spreadsheet analyzing the results.) In our analysis, we found that the RSM contains operations and feedbacks not included in the regression, and which must be taken into account. We therefore conclude that the Corps' proposed operations table is inadequate to fix the drought performance, but fixing the drought performance need not be time-consuming and onerous, leading to a slipped schedule. The Corps can and should move expeditiously to fix this issue; no change in the schedule is needed.

We offer these comments as constructive criticism to improve one of the most critical objectives in Modified Water Deliveries: improve C&SF Project performance during droughts. The events of 2015-2016 in Florida Bay highlight the need for this, and the Corps should make addressing the performance of Alternative Q during droughts an immediate priority.

Sincerely,

/signed for email

Thomas Van Lent, Ph.D.
The Everglades Foundation

**Table D.1-4. COP Alternative Q+ Comment Response Matrix.** The following matrix has been prepared to address comments on the COP Alternative Q+ submitted by members of the PDT during the plan formulation process.

| LETTER | AGENCY/PUBLIC COMMENT | USACE RESPONSE |
|---|---|---|
| **AGENCY COMMENT** | | |
| **SEMINOLE TRIBE OF FLORIDA** | | |
| **STOF-1** | The STOF greatly appreciates all of the efforts made by the USACE to consult with us regarding the Modified Water Deliveries (MWD) – Combined Operational Plan (COP) project, especially the most recent consultations concerning Increment 3. We also value the inclusion of Mr. Jed Redwine of the National Park Service in these discussions to assist us in understanding the projects potential impacts to tree islands within the area of potential effect. As you know, the Everglade's tree islands were and still are important places to the Native American populations of Florida. It is generally agreed that most of the tree islands of any reasonable size contain archaeological sites and many contain burial components. It is these cultural and burial resources that the STOF THPO is concerned about protecting from inundation that is anthropogenic in origin and not the result of naturally occurring weather events. The information provided most recently by the USACE and ENP concerning the hydrological impacts within the water conservation areas (WCA 3A, WCA3B) and Everglade's National Park (Shark River Slough, etc.), suggest to us that anticipated water levels resulting from the project will not exceed those that likely occurred historically during the pre-drainage conditions of south Florida.<br>This is encouraging. However, the STOF THPO and ERMD staffs are continuing to consult internally about this assessment and will be bringing in additional expertise to assist us in completing our analysis and providing the USACE with additional comments. We will also reach out to the USACE and the NPS for additional information and clarification of the modeling results as needed. We look forward to continuing the consultation with | Thank you for your comment. |

| LETTER | AGENCY/PUBLIC COMMENT | USACE RESPONSE |
|---|---|---|
| | you on MWD - COP. Thank you and feel free to contact us with any questions or concerns. | |
| **FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES (FDACS)** | | |
| **FDACS-1** | The Florida Department of Agriculture and Consumer Services (FDACS) Office of Agricultural Water Policy (OAWP) appreciates the opportunity to participate in and provide comments on the Combined Operational Plan (COP) effort that will complete the Modified Water Deliveries Project (MWD) and combine operations with the completion of the C-111 South Dade Project (C-111 SD) and the CERP C-111 Spreader Canal Project (C-111 SC). The OA WP has participated extensively in the complicated MWD Increments process that has led to the COP and eventually to a Preliminary Preferred Alternative (PP A) for the Draft Regional Operations Manual (DROM). Our understanding is that the COP will be the first new Water Control Plan<br>(WCP) incorporated into the System Operating Manual (SOM) as a Regional Operations Manual (ROM). The OAWP offers the following comments in support of a successful COP. Additional technical comments on the information currently available for Alternative Q+ are provided in the attached addendum.<br><br>The COP purpose is to incorporate a new approach to managing water flow into Everglades National Park (ENP). If properly implemented, the COP may result in significant ecological benefits through improved water deliveries to ENP Shark River Slough (SRS) while protecting the ecological values associated with WCA 3A and ENP. Both ENP and the agricultural areas adjacent to ENP can benefit from operations that move water away from the private lands where it is not needed and into the restoration project areas. | Throughout the interagency COP alternative formulation process and hydrologic modeling efforts, the Corps has recognized and communicated to the PDT the need to translate operational criteria appropriate for distinguishing between modeled alternatives into more refined operational criteria suitable for inclusion in the COP Water Control Plan. Due to the wide breadth of alternatives that were evaluated during COP, the prerequisite for further development of the COP Water Control Plan is the formal identification of the Preliminary Preferred Alternative based on consideration of evaluation results and interagency PDT review comments.<br><br>During the COP interagency PDT meeting on 21 June 2019, the Corps provided a flow-chart which detailed the sequential process and proposed schedule to further develop the COP Water Control Plan following identification of the Preliminary Preferred Alternative. This process was also detailed in the previous Corps' response to FDACS on 20 June 2019.<br><br>Development of the operational table and associated Water Control Plan will be conducted |

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| | Any final product should reflect the best and most inclusive available data that is reflective of the hard work and time dedicated to this effort. The OAWP has concerns that the deliberative process has become rushed to meet a procedural deadline, which has prevented the development of a clearly delineated operating plan for agency and stakeholder review. The OAWP values the collaborative effort that has brought COP development this far and recognizes the need for some flexibility in operations within reasonable boundaries. However, the current PPA proposed, Alt Q+ and Adaptive Management Plan (A.M. Plan), is an ambiguous and confusing operations matrix that defers many critical operations to an undefined process to be established later, as well as leaving considerable discretion to the federal agency that could result in significant uncertainty for affected stakeholders in the project area. | with additional technical input from the COP modeling sub-team team and the COP water management sub-team, prior to presenting it to the PDT. The draft operational table supporting the Water Control Plan is planned to be distributed to the interagency water management sub-team by 15 July 2019. This will be followed by a series of water manager sub-team meetings during July and August to review and revise the draft Water Control Plan. Similar to previous efforts to develop the Operational Strategy for the MWD Incremental field tests, and as communicated during the PDT on 21 June 2019, the Corps will provide the opportunity for FDACS participation in the water management sub-team meetings. |
| **FDACS-2** | The model output files currently available for review reflect scenarios that contain parts of Alt Q+ but none is a representation of the entire Alt Q+ operations scenario components performing together. Sufficient detail and clarity for key operational protocols is not provided as needed to determine how the modeling results are supported by operations to achieve the modeled performance. | Given consideration of the purpose and limitations of the hydrologic modeling tools applied for the COP, it is not feasible nor practical to conduct hydrologic modeling of all variations and combinations of the COP operational criteria. Water managers additionally require some degree of latitude to evaluate real-time hydrologic conditions and forecast information to effectively operate the complex C&SF System, based on adherence to the established objectives and constraints which govern the COP implementation. The level of detail included in the operational criteria table for ALT Q was appropriate for distinguishing between |

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| | | alternatives evaluated during the hydrologic modeling phase of COP development. In addition to ALT Q, Round 3 sensitivity runs were conducted with both RSM-GL and MD-RSM to investigate other potential operational components for considerations within the Preliminary Preferred Alternative; information gained from these sensitivity runs supported reducing S-344 closures and water quality considerations within the proposed ALT Q+. Three rounds of hydrologic modeling were conducted during COP development, consistent with the COP hydrologic modeling strategy that was vetted through the COP interagency PDT.<br><br>Following consideration of review comments on the Preliminary Proposed Alternative (ALT Q+), the Corps has determined that the appropriate forum for further development of the COP Water Control Plan is through reliance on the technical expertise of the COP water management sub-team. Refer to the response for FDACS-1 for additional information regarding development of the COP Water Control Plan. No additional hydrologic modeling will be conducted for the COP, aside from the MD-RSM design storm analysis to support the socio-economic evaluation of the South Dade Basin; this analysis will be conducted using the ALT Q and ALT Qm MD-RSM simulations, previously presented to |

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| | | the COP flood risk sub-team and the COP interagency PDT. |
| **FDACS-3** | The OAWP feels that reliance on the COP A.M. Plan to complete the PPA creates problematic scenarios that could be better addressed with additional time and stakeholder input. The COP A.M. Plan is still under development and no draft version has been made available, resulting in an inability of stakeholders to provide substantive comment. The OAWP is concerned that inclusion of an incomplete A.M. Plan in the PPA is due to time constraints that do not allow time for the Project Deliver Team (PDT) and stakeholders to evaluate and address uncertainties as appropriate during COP PPA development. Some issues may be appropriate for an adaptive management approach but which issues, and how they will be addressed, must be carefully documented within the context of a WCP that clearly protects all the project purposes for which the Central and South Florida Project (C&SF Project) was authorized. This step is necessary for the PPA to move forward with the A.M. Plan included. | Thank you for this comment. The COP AM plan is developed by stakeholders, in cooperation with the implementing agencies, and it is focused on addressing the set of challenges that we've encountered in COP, but which cannot be addressed through additional modeling efforts. We encourage the members of the OAWP to participate in the workshop on July 17 in Davie, FL, and to provide expertise to assist in defining the relevant monitoring, action triggers, and operational/policy options that will be used to define Adaptive Management for COP.<br><br>We appreciate your contribution to a reasoned, interagency and stakeholder discussion about the extent to which COP can resolve perceived challenges to the system without significant changes to ecological benefits or violating operational constraints. The goal is to have the Adaptive Management Appendix assembled by late August with sufficient time to review prior to the September 27 deadline for compiling the initial Draft COP EIS. |
| **FDACS-4** | An unambiguous final plan must be presented, its impacts documented, and the operations matrix that produced them clearly described before it moves forward as the PPA. The provision of extensive discretion to address the myriad of uncertainties identified is inadequate to address the | Following consideration of review comments on the preliminary preferred alternative (ALT Q+), the Corps has determined that the appropriate forum for further development of the COP Water |

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| | need for regulatory certainty required by law and desired by interested stakeholders. | Control Plan is through reliance on the technical expertise of the COP water management sub-team. Refer to the response for FDACS-1. The COP EIS will consider the environmental effects of the final array of alternatives to include Alternative N2, Alternative O, Alternative Q, and Alternative Q+ or the Preliminary Preferred Plan. |
| **FDACS-5** | The OAWP requests that the Corps take additional time and engage additional comment from interested stakeholders to complete and document the proposed PPA in order to allow for the increased certainty and in-depth review this effort deserves. | We will engage in additional discussions on the Operations Plan and Adaptive Management Plan. Please see response to FDACS-1. |
| **FDACS-6** | The following comments are provided to assist in the development of a COP PPA and eventually a Draft Regional Operating Manual (DROM). It is based on the review of the pdf file:<br>"COP DRAFT Round3 Alternative Q Plus With Modeler Notes 6 21 2019 - clean"<br><br>General Comments<br>The currently available operations table for Alternative Q+ does not provide sufficient detail and clarity to determine how the modeling results are supported by operational protocols that will be needed to achieve the modeled performance. The completion of operational details and operational strategies are deferred to the Operational Subteam and the Adaptive Management Plan. It appears the Operational Subteam deliberations and recommendations may not be available to the Project Delivery Team (PDT) and interested parties before July 24, 2019 when comments will be due on the COP July 10, 2019 presentation. The Adaptive Management Plan is not scheduled for completion until late September 2019. The OA WP technical evaluations and comments | Thank you for your comment. Please see response to FDACS-1. |

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| | regarding the PPA and DROM cannot be completed without additional information on the operations that will be proposed. | |
| **FDACS-7** | Flood Risk to Private Lands<br><br>While increasing environmental benefits, the COP must maintain flood protection for private lands adjacent to ENP and within the vicinity of the C-111 Projects. Overall, the modeling results obtained for Alternative Q were encouraging regarding maintaining existing flood protection throughout most of the COP area. However, there are a few areas and operations where the models indicate that concerns remain and it is uncertain how Alt Q+ will perform in these areas.<br><br>Increased flood risk has been consistently indicated by model results for private agricultural lands east of the L-31N. It is not clear what operational adjustments can be made to resolve the issue. Modifications to operational protocol are needed to address increased flood risk and increased flood damages in the L31N area and to at least provide the baseline level of service to this area.<br><br>Operational stages protective of private agricultural land south of S-331 do not require a reduction in environmental benefits. The Increment 1 Field Test, the 2016 Temporary Emergency Operations and Deviations, and the 2017 Planned and Emergency Deviations demonstrate that along the L-31 N Canal reach, operation of the C-111 SD Detention Area System has been able to maintain the hydraulic ridge and hold stages higher in eastern ENP while simultaneously maintaining lower L-31N levels to protect farmland. Given this success, lower canal levels adjacent to agricultural lands should be used to avoid increasing the risk of root zone flooding. | Consistent with the established COP project constraints, the COP must maintain flood protection as established under conditions described in the C-111 General Reevaluation Report (1994 GRR). The COP H&H and Economic modeling results indicate substantial increased flood protection for the entire system under ALT Q operations when using this baseline.<br><br>When comparing ALT Q to the Existing Condition Baseline (ECB19) approximately 70% of the reaches modeled show increased flood protection as well. With the preliminary preferred alternative COP has determined the appropriate canal operational ranges to achieve the objectives.<br><br>The COP alternative formulation has considered operational modifications which enhance flood protection, while achieving the COP project objectives and adhering to the established project constraints. With the Preliminary Preferred Alternative , operational ranges for the L-31N and C-111 Canals between S-331 and S-177, as compared to the ECB19 (Increment 1.2 field test levels), are lowered during the planting season (August through December) and not significantly changed within the CSSS nesting |

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| | | period (February through July). Notably, the normal target operational ranges within both of these canal reaches are also significantly lowered compared the ranges specified in the 2012 Water Control Plan, which represents operational ranges representative of 2002 through 2015.<br><br>Further upstream, operational ranges within the L-31N Canal upstream of S-331 are generally reduced compared to the ECB19 during normal operating conditions, but wet season peak stages are increased slightly for short durations due to the significantly diminished reliance on the S-331 pump station under COP Alternative Q to provide flood mitigation for the 8.5 SMA (S-357 is used as first priority). The basin serviced by the L-31N Canal reach upstream of S-331 has received an incidental flood protection benefit through use of the S-331 flood mitigation operations for the 8.5 SMA, which were included for the 2012 WCP operations and the ECB19.<br><br>Additional socio-economic evaluations conducted using the MD-RSM ALT Qm (includes capability to utilize S-331 to assist with 8.5 SMA flood mitigation during extreme wet conditions) indicate slightly improved flood risk management performance compared to ALT Q results detailed above. The ALT Q+ proposed Preliminary Proposed Alternative includes the |

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| | | ability for limited use of S-197 during periods when S-331 is operating below the normal operating range to aid with 8.5 SMA flood mitigation requirements. |
| **FDACS-8** | S- 334 and S-356: Alternate Q+ does not include the routine diversion of water from Water Conservation Area 3A (WCA-3A) through S-334 to the C-111 Basin in keeping with the goal of not using Column 2 type operations in COP. This is a positive outcome for COP operational protocols. However, we are not supportive of the proposed COP WCA-3A High Water Action Line since it ceases operation of the S-356 for seepage return in order to bring water through S-334 during what will clearly be high water conditions for the areas east of ENP as well. Since regulatory releases from WCA-3A through S-334 and into the C-111 Canal basin were never anticipated, or authorized, in any of the project authorizations for these facilities, this operation should not be included in the COP. High water releases from the Central Everglades should remain in the Central Everglades and not be diverted into other areas.<br><br>Distribution of water during wet periods should concentrate on maximizing deliveries of water to Northeast Shark River Slough (NESRS). Data collected during the previous emergency operations deviation indicates pumping at S-356 does not increase the stage in the L-29 Canal when the canal is above 8.2 feet. This means that with an L-29 constraint of 8.5 and above, the use of S-356 will not reduce the flow from WCA-3A into NESRS and adding the flow from S-356 may provide an additional benefit to the Park. | Please refer to the Corps' legal opinion for further details describing the Corps' authority to operate S-334 to provide flood risk management for WCA-3A, if necessitated by conditions. This legal opinion was previously distributed to the COP PDT on 05 June 2019, and again with prior Corps' comment responses on 20 June 2019.<br><br>The EHWL Conditions 2 and 3 were applied three times over the last three years under emergency and planned deviations from the MWD Incremental Field Tests (Feb 2016, Jun and Sep 2017). During those extremely high water conditions in WCA-3A, water deliveries through SDCS were used as the last resort only after all downstream constraints were met and that there were conveyance capacities in the SDCS to safely pass flows through coastal structures. In addition, WCA-3A stages were above the Increment 2 EHWAL during June 2018 and no WCA-3A releases through S-334 were made from 01 June through 31 October 2018 because of the available conveyance capacities in both NESRS and WSRS to meet the weekly Rainfall-based Management Plan targets; therefore, the EHWL operations during the period when WCA-3A 3- |

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| | | station average is above EHWAL are dependent on conditions in WCA- 3A, ENP, and SDCS and each event will be evaluated on a case by case basis while balancing all C&SF project objectives.<br><br>In the RSM-GL ALT Q model run, during four events out of 41 years the EHWL was triggered. In COP, it is anticipated that when WCA-3A stages rise above the EHWL, a series of system wide evaluations of real-time C&SF hydrologic conditions including, stage and flow data, past and forecast rainfall, and SFWMD Dynamic Position Analysis (DPA) with appropriate analog years will be conducted by SFWMD, Corps, and ENP. The information from this evaluation along with input provided from ENP will be used by the Corps and the SFWMD to decide on whether or not to use the capacity authorized by the EHWL criteria and how much of this capacity to use.<br><br>During the MWD Incremental field test, limited data has been collected with S-356 operating when the L-29 Canal stages were above 8.2 feet NGVD. Prior analyses of these data and the system-wide operational deviations in-place during these periods have proven inconclusive. Further analysis of the potential effects of S-356 operations on WCA-3A discharges from S-333 will continue during the Increment 2 field test and continue during COP implementation. |

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| **FDACS-9** | S-331: The COP should not institutionalize the use S-331 to convey flood waters from the 8.5 Square Mile Area (8.5 SMA) into the C-111 Basin during periods when the stage in NESRS is too high for the current 8.5 SMA flood mitigation project to provide an adequate level of service for the area. If additional work is needed to meet 8.5 SMA performance standards, use of the S- 331 for 8.5 SMA flood relief should be identified by COP as an interim operation so the use of S-331 during high water periods to alleviate flooding in the 8.5 SMA is not incorporated into COP as a routine operational protocol. | Please refer to the accompanying Corps' legal opinion for further details describing the Corps' authority to operate S-331 to provide flood mitigation for the 8.5 SMA, if necessitated by conditions. This legal opinion was previously distributed to the COP PDT with the prior Corps' comment responses on 20 June 2019.<br><br>The operational criteria for S-176 and S-197 were modified for Round 3 Alternative Q to allow S-197 to pass up to 200 cfs when S-331 is operating at lower ranges to assist in 8.5 SMA flood mitigation. Priority would be to use available capacity at S-332B/C/D pumps based on water conditions and time of year with the overall priority sequence defined in the operating criteria structure table.<br><br>Based on the COP evaluation of 8.5 SMA flood mitigation requirements (discussed at the PDT meeting on 07 June), periodic operation of both S-357 and S-331 below the respective normal operating ranges will be necessary to ensure 8.5 SMA flood mitigation during conditions when G-3273 stage exceeds 7.5 feet NGVD, which the COP modeling predicts to occur on average every other year during the wet season. The duration and frequency of these operations are both increased for conditions when the L-29 Canal is operated consistently at up to 8.5 feet NGVD. |

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| | | Further empirical evaluations will be conducted following COP implementation to verify the predictions from the COP hydrologic modeling. Additional infrastructure modifications within the L-29 Canal, as identified for the Central Everglades Planning Project, will be evaluated by the Corps during 2019-2020 to determine whether additional infrastructure modifications are needed to maintain 8.5 SMA authorized flood mitigation with planned future increases in water deliveries to NESRS. If S-331 is reserved for water supply function only or to maintain the existing level of flood protection for SDCS only, then S-333 and S-356 operations will be restricted frequently for periods when 8.5 SMA flood mitigation requirements are not met. |
| **FDACS-10** | WCA-3A S-356: The EHWL and the actions it triggers are contrary to the goals of Mod Waters and the C-111 GRR. Eliminating the EHWL will eliminate this conflict. With the new bridging and road improvements on US 41 there is no basis for restricting the use of S356 other than to accommodate the use of 5-334, which was supposed to end with the completion of Mod Waters. | Please refer to the response to FDACS-8. |
| **FDACS-11** | S-12A/S-12B: How will the Corps project WCA 3A stage as indicated in the footnote?<br><br>Footnote 1 Below - Excerpt from Matrix:<br><br>S-12A and/or S-12B will be conditionally opened during October under the following conditions. | The Corps will project WCA 3A stage for the upcoming week based on projected weekly inflows, rainfall, ET, seepage, TTFF and other outflows. |

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| | 1. WCA-3A stage on 30 Sep is greater than 10.5 feet, NGVD; or<br>2. WCA-3A stage is projected to rise above 10.75 feet, NGVD (IOP Zone A) during October, based on consideration of projected inflows and direct rainfall.<br>3. S-12A and/or S-12B will be conditionally closed when the WCA-3A stage falls below 10.25 feet, NGVD, OR on 01 November, whichever comes first.<br><br>S-12B will be conditionally opened during November under the following conditions.<br><br>1. WCA-3A stage on 31 Oct is greater than 11.0 feet, NGVD; or<br>2. WCA-3A stage is projected to rise above 11.25 feet, NGVD during November, based on consideration of projected inflows and direct rainfall.<br>3. S-12B will be closed when the WCA-3A stage falls below 10.75 feet, NGVD, OR on 01 December, whichever comes first.<br><br>Year-Round Operational Criteria:<br>S-12A Year-round: To provide access to cultural areas, when Rainfall Plan results in 5-12 target flows, S- 12A up to 100 cfs release.<br><br>S-12A Cultural Access Release: S-12A up to 100 cfs release available when Rainfall Plan results in S-12 target flows. From 01 October through 14 July, the Tribe and USACE must request informal consultation with FWS to avoid impacts on CSSS-A.<br><br>During this time, the duration of this release will not exceed five consecutive days. S- 12A up to 100 cfs release may only occur when WCA-3A 3-gage average (WCA-3AVG - Sites 63, 64, 65) is greater than 8.4 feet, NGVD. | |

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| | During S-12A up to 100 cfs release, data such as but not limited to NP-205 and area rainfall will be monitored with NP-205 increase or anticipated increase above 5.7 feet, NGVD resulting in closing of S-12A.<br><br>S-12A/B/C/D Headwater greater than 11.0 feet, NGVD: May be opened an amount only enough to stop overtopping of gates. The USACE will assess the feasibility of leaving the gates closed and allowing overtopping. | |
| **FDACS-12** | Incremental Testing Extreme High Water (EHW) Action Line: There should be no EHWL and the actions it triggers. The point of Mod Waters is to keep central everglades water where it is needed, in the central everglades. Sending it down L31N is a step backward. | Please refer to the response to FDACS-8. |
| **FDACS-13** | WCA-3A Regulation Schedule (Below Zone A): The Corps needs to pick a final recommended plan, model it and present the results in the EIS. | The WCA-3A Regulation Schedule proposed for the COP Preliminary Preferred Plan was previously modeled for ALT Q during the Round 3 hydrologic modeling. |
| **FDACS-14** | WCA-3A/3B: S-335 Impacts to Pennsuco wetlands shown in Alt Q modeling must be addressed so there are no negative impacts. | Water management subteam will work with the Eco subteam to determine a floor or criteria for both the Pennsuco wetlands and WCA 3B to minimize impacts during dry periods. |
| **FDACS-15** | NESRS: L-29 May need to go to 8.5 from October through March to accommodate El Nino events | Concur. However, extending elevated canal levels between 8.3 and 8.5 for more than 90 days will depend on real-time monitoring of the US 41 roadway subbase (interim FDOT constraint until Tamiami Trail Next Step construction) and 8.5 SMA flood mitigation criteria. |
| **FDACS-16** | NESRS: S-333 Remove the EHWL from COP. | Please refer to the response to FDACS-8. |
| **FDACS-17** | S-333N: Remove the EHWL from COP and follow the existing state permit for S-333N. | Please refer to the response to FDACS-8 with respect to the EHWL. S-333N operations, as detailed in the Preliminary Preferred Alternative ALT Q+, will adhere to the existing FDEP permit |

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| | | issued to SFWMD for S-333N and any subsequent approved modifications. |
| **FDACS-18** | Rainfall Plan: Not clear what the first paragraph in the Modeling Notes means? Has the new TTFF been documented somewhere? What are the specific operations included in the final Plan? | The proposed version of the TTFF for inclusion with the Preliminary Preferred Plan ALT Q+ has been detailed during the presentation of the ALT Q modeling results at the 21 May 2019 COP interagency PDT meeting. Additional, more detailed documentation of the TTFF is being compiled by the COP modeling sub-team, and this information will be distributed in advance of the next water management sub-team meeting. |
| **FDACS-19** | SDCS - South Dade Conveyance System: C-111 SD North Detention Area. The model should reflect what the current constraints are for the Detention Areas. If they are allowed to receive pumped inflow up to the overflow elevation then this description is fine. However, that does not seem realistic | No constraint was defined for the COP alternative modeling to ensure the simulated stages fluctuated in response to the L-31N Canal criteria and to provide data to inform setting normal and maximum stages in the WCP. The maximum simulated stages (ALT Q) were 8.3 ft NGVD (depth 1.8 feet) for the NDA and 8.0 ft NGVD (depth 2.0 feet) for the SDA. The WM subteam will work toward setting a normal and a maximum depth in both NDA and SDA. The maximum depth will be reserved for a state declared emergency. |
| **FDACS-20** | C-111 SD South Detention Area: See comment for NDA | Please refer to the response to FDACS-19 |
| **FDACS-21** | S-332B West: This description does not explain what decides which range is used. Having the ranges the same for all structures, and giving the operators discretion is a good policy. However, the top of any range should be no higher than 4.6 and S-176 should also be operated within the same ranges at the discretion of the water managers. The final plan must be specified and analyzed in the EIS. | Alt Q+ operating criteria for S-332B, S-332C, and S-176 will be refined by the WM subteam. |

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| **FDACS-22** | S-332B North: Same as S-332B West | Noted |
| **FDACS-23** | S-332C: Same as S-332B West | Noted |
| **FDACS-24** | S-332D: No comment | Noted |
| **FDACS-25** | L-31N Structure Priority: This doesn't differentiate between flood protection and water supply as the text indicates. The earlier sections indicate the water managers would decide which structure to open. Range limits should be adjusted as in our comments on S-332B West | Alt Q+ operating criteria for S-332B, S-332C, and S-176 will be refined by the WM subteam. There will be a separate section of the WCP that documents operations for water supply. |
| **FDACS-26** | S-331/S-173: S331HW should not be pumped down to these low levels to try to affect the stage at LPG2. This will send too much flow into the C111 basin during what is clearly a wet period and it is doubtful LPG2 stage can be meaningfully affected from this far away. | At elevated water levels in NESRS (G-3273 > 7.5 feet, NGVD, lowering S-331HW to the lowest setting helps minimize L-31 Canal seepage from overloading 8.5 SMA ground water from the east while S-357 is managing much higher rates of seepage from ENP to the north and west of 8.5 SMA. MWD Increment 2 field test during September-October 2018 informed that this operation and a temporary suspension of WCA 3A inflow into NESRS were needed to meet the 8.5 SMA flood mitigation criteria. |
| **FDACS-27** | G-737*: No comment. | Noted |
| **FDACS-28** | S-197: No comment | Noted |
| **FDACS-29** | S-176: This operating range is too high. It should have the same operating range as S332B and whether it is last in the line of opening priorities, or opened at the water managers discretion, having the same operating range should not create a conflict. | Alt Q+ operating criteria for S-332B, S-332C, and S-176 will be refined by the WM subteam to ensure internal consistency across the structures. |
| **FDACS-30** | S-177: This range is too high, especially since S-199 and S-200 can be stopped because of the CSSS. 3.2 to 3.8 is a better range and reflects what has been done in recent years. | S-177 range is 3.6 to 4.2 ft NGVD has not changed. The same range is in ECB19 and Alt Q+. This range is also consistent with Increment 2 and the 2012 WCP. |
| **FDACS-31** | S-18C: No comment | Noted |

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| **FDACS-32** | S-199: All references to 4.0 should be changed to 3.8 to reflect experience in Increments 1 and 2 | This is consistent with the SFWMD permit to operate S-199. The WCP will accommodate any updates to the permit. |
| **FDACS-33** | S-200: All references to 4.0 should be changed to 3.8 to reflect experience in Increments 1 and 2 | This is consistent with the SFWMD permit to operate S-200. The WCP will accommodate any updates to the permit. |
| **FDACS-34** | Taylor Slough: S-328 No Comment | Noted |
| **FDACS-35** | Biscayne Bay: S-338 What is the final plan? These descriptions seem to be in conflict. A better narrative is needed | Concur. WM subteam will reconcile any conflicts in the prioritization of water deliveries during the dry season and CSSS nesting period. |
| **FDACS-36** | S-194/S-196: See comments under S-338 | Noted |
| **FDACS-37** | Supplemental Flows to Taylor Slough: This set of operations over drained the Pennsuco and must be revised in a final plan. Under what conditions would Taylor Slough supplemental deliveries be stopped? It is written as a year round practice limited only by WCA-3A stage. This does not seem realistic. | Any water deliveries should have an absolute floor elevation in WCA 3A (already defined for Alt Q+), WCA 3B, and Pennsuco wetlands, in addition to other constraints, needed to minimize negative impacts in those areas. WM subteam will work with the Eco subteam to identify the criteria to reduce or cease supplemental flows. |
| **FDACS-38** | WCA-3A/ NESRS S-334: EHWL should be removed from COP and S-334 should be used as authorized, for water supply only. | Please refer to the response to FDACS-8. |
| **FDACS-39** | S-357: No comment | Noted |
| **FDACS-40** | S-357N: No Comment | Noted |
| **FDACS-41** | G-211: Other than for water supply, G-211 should not be opened unless S-356 is pumping at capacity. | G-211 is an integral part of COP operational plan to meet the project objectives. It will be used for water supply, flood control, supplemental water deliveries to Taylor Slough, environmental water supply to Biscayne Bay, and routing flows to S-18C to meet the minimum delivery schedule for |

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| | | the ENP 's eastern panhandle and WCA 3A EHWL releases through SDCS. |
| **FDACS-42** | S-148: The final plan must be modeled and it must include the final operating protocols. Operating this structure as described in the modeling notes column may have reduced the need for supplemental releases at S-338. | No additional hydrological modeling will be conducted. The operating criteria will be verified with the WCP for the East Coast Canals (ECC) and any related SFWMD guidance. The priority of supplemental water deliveries will be defined by the WM subteam. |
| **FDACS-43** | S-179 (C-103) Why aren't these modeled. Could this have improved performance for Biscayne Bay? | The note referred only to the original COP Round 1 and Round 2 alternatives, and it will be removed for the final version of the modeling assumptions table. Operations to opportunistically direct L-31N releases to Biscayne Bay were included in ALT Q, consistent with the recommendation of the COP Ecological sub-team derived from review of the COP Round 2 sensitivity runs. The operational criteria will be updated and distributed in advance of the next meeting of the water management sub-team for development of the Water Control Plan. |
| **FDACS-44** | S-165 (C-102): Why aren't these modeled. Could this have improved performance for Biscayne Bay? | The note referred only to the original COP Round 1 and Round 2 alternatives, and it will be removed for the final version of the modeling assumptions table. Operations to opportunistically direct L-31N releases to Biscayne Bay were included in ALT Q, consistent with the recommendation of the COP Ecological sub-team derived from review of the COP Round 2 sensitivity runs. The operational criteria will be updated and distributed in advance of the next |

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| | | meeting of the water management sub-team for development of the Water Control Plan. |
| **FDACS-45** | S-167 (C-103): Farms upstream of S-167 have experienced problems with high water levels. The top end of this range seems high. | Please share the documentation of these concerns. The WM sub team will evaluate these operations, if needed. |
| **FDACS-46** | S-12C/D : No comments | Noted |
| **FDACS-47** | S-151: How was 300 cfs derived? What, other than the WCA-3A stage, constrains the delivery of this 300 cfs? | The recommendation to up the flow rate from 250 to 300 cfs came from the PDT. The WM subteam will refine the operational criteria of this environmental delivery requirement. |
| **FDACS-48** | S-337: How was the 250 cfs derived? What, other than the WCA-3A stage, constrains the delivery of this 250 cfs? We need a final plan that can be simulated and presented as was done for the other alternatives. | This was an oversight. S-337 should be consistent with S-151, up to 300 cfs. The WM subteam will refine the operational criteria of this environmental delivery requirement and maintain a consistency of up to the maximum flow rate. |
| **FDACS-49** | S-152: No comment | Noted |
| **FDACS-50** | WCA-3A Floor for Water Supply: No comment | Noted |
| **PUBLIC COMMENT** | | |
| **EVERGLADES FOUNDATION** | | |
| **EF-1** | These comments are specifically related to the operations table presented at the Project Delivery Team Meeting on June 21, 2019 and sent by email on that date. The Everglades Foundation sent technical comments on June 12 conveying our concern that the proposed Tamiami Trail Flow Formula (TTFF) did not perform well during drought conditions, among other concerns. In reviewing the proposed operations table, we find that the Corps' proposed operations table inadequately addresses the outstanding issues in Alternative Q. | It is recognized that this is the first time the Rainfall Plan has been modified to convey water from WCA-3A to ENP and that uncertainties still exist with respect to the implementation of the Tamiami Trail Flow Formula. The next step in the COP planning process is to develop an adaptive management and monitoring plan. The primary objective of the COP adaptive management and monitoring plan will be to identify the monitoring |

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| | One of the primary modifications in this iteration of the operational table is the "Rainfall Plan" in the South Dade Conveyance System component. The operational plan remains using the regression formula that clearly underpredicts Alternative O performance during droughts. The proposed operations table merely says "SRS low water" without any explanation or guidance as to what the operational concern is or guidance on how to operate. Verbal comments by Corps staff suggest that "Adaptive Management" would address whatever concerns arise and after the operational plan that contains the TTFF is approved, though this is not expressed in the table. | necessary to inform decision-makers, COP partner agencies, and the public on progress towards achieving restoration success, as well as address uncertainties related to project performance. Given, that this is the first time the Tamiami Trail Flow Formula will be implemented, there is inherit uncertainty. Adaptive management strategies will be developed to address this uncertainty, which will include a structured approach as to how monitoring data may inform implementation of the WCP and/or potential future revisions to the Tamiami Trail Flow Formula.<br><br>During the COP interagency PDT meeting on 21 June 2019, the Corps provided a flow-chart which detailed the sequential process and proposed schedule to further develop the COP Water Control Plan following identification of the Preliminary Preferred Alternative. The COP Adaptive Management (AM) Plan will be developed through a parallel process. Specific operational triggers and operational criteria to address SRS low water conditions will be developed through the AM Plan process, with technical support from water managers. Some of the outcomes will be included in the COP Water Control Plan, while others may be included in future deviations and/or future WCP updates. |

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| | | Development of the operational table and associated Water Control Plan will be supported by the COP modeling sub-team team and the COP water management sub-team, prior to presenting it to the PDT. The draft operational table, which will be part of the Water Control Plan will be distributed to the interagency water management sub-team by 15 July 2019. This will be followed by a series of water manager sub-team meetings during July and August to review and revise the draft Water Control Plan. Progress updates of the COP Water Control Plan will continue to be provided at the interagency PDTs during this time. |
| **EF-2** | Adaptive Management is a valuable endeavor and should be undertaken as a routine procedure to gain insight into project function and improve operations. However, Adaptive Management is not a solution to the problem of the TTFF functioning poorly during droughts. First, any solution arrived at during Adaptive Management is not self implementing. This EIS locks in the TTFF until the next update, as undertaking Adaptive Management is not an exempt from NEPA. Second, droughts are not amenable to Adaptive Management. Typically, by the time water managers are certain there is a drought, it is too late to take actions that would mitigate conditions. In contrast, wet conditions are very amenable to Adaptive Management, but instead the Corps is proposing to put high water response directly into the operations table. Clearly, the Corp is not relying on Adaptive Management even when well suited to the issue. Third, while Adaptive Management is a proven methodology for reducing uncertainties, it is not suited for addressing clear flaws. The TTFF under predictions during droughts are inherent in the regression and its | The NPS has reviewed the code and regression analysis provided by the Everglades Foundation and provided a summary of this information to the Cooperating Agencies. Based on our review, there is no clear evidence to suggest that the proposed alterations to the TTFF enhances the performance of the preliminary preferred alternative consistently across the period of record. Instead, the comparison indicates a similar pattern of information that was observed when comparing many variations of the TTFF formulas within the COP modeling sub-team; the Foundations' proposed altered formula increases flows to ENP in some dry year cases, and reduces flows to ENP other dry year cases. |

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| | development; no amount of Adaptive Management will fix the underlying flaws.<br><br>For these reasons, the proposed modifications to the operational table are entirely inadequate for addressing concerns about drought performance. The solution is to fix the TTFF. The Everglades Foundation undertook investigations on possible corrections, and with less than 20 total man-hours of time, found ways to significantly improve the performance. For example, by setting stage thresholds in Water Conservation Area 3A and Everglades National Park, a piecewise regression improves drought performance. (We have attached regression analysis in R, modifications to the RSM model to implement the improved regression and a spreadsheet analyzing the results.) In our analysis, we found that the RSM contains operations and feedbacks not included in the regression, and which must be taken into account. We therefore conclude that the Corps' proposed operations table is inadequate to fix the drought performance, but fixing the drought performance need not be time-consuming and onerous, leading to a slipped schedule. The Corps can and should move expeditiously to fix this issue; no change in the schedule is needed. | There is room for improvement in some drier years as discussed at the 07 June 2019 PDT meeting, but the benefits realized in the TTFF and COP ALT Q are significant over ECB19RR and in the same range of performance of ALT O based on the evaluations of the COP technical sub-teams. Moving forward, the best way to realize any possible improvements considering multiple factors (precedent setting, schedule, etc.) is to carry the conversation into the COP adaptive management framework and/or subsequent CERP efforts.<br><br>As monitoring information continues to be collected and evaluated through the COP Adaptive Management process (post implementation), it is expected that the TTFF will continue to evolve as conditions change in the future through the combination of new information and new CERP infrastructure, including features which will enable increased flow deliveries into the WCAs, ENP, and Florida Bay. The COP adaptive management process will focus on determining whether, under certain prescribed conditions, we can move towards emulating the performance identified in Alternative O to deliver depth benefits that were present in this alternative due to the subtly different operations between Alternatives O and Q. As stated previously, the COP WCP will |

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| | | capture management measures identified in the AM plan that can be implemented. As correctly stated by the Foundation, other aspects of the AM Plan which are unable to be addressed within the COP EIS and WCP are not self-executing and will need additional NEPA to implement a deviation or revise the WCP. |

Everglades
Law Center, Inc.
*Defending Florida's Ecosystems and Communities*

July 23, 2019

Col. Andrew Kelly, District Commander
U.S. Army Corps of Engineers, Jacksonville District
Email: Andrew.D.Kelly@usace.army.mil

Drew Bartlett, Executive Director
South Florida Water Management District
Email: DBartlett@sfwmd.gov

Re: Combined Operations Plan Must Safeguard Everglades National Park and Florida Bay from Drought Impacts

Dear Col. Kelly and Mr. Bartlett:

I write on behalf of Audubon Florida, the Everglades Foundation, the National Parks Conservation Association, and the Everglades Law Center to provide comments on the alternatives under consideration as part of the Combined Operations Plan (COP) planning process. The COP is the long-awaited operations guide for restoration infrastructure that has been constructed over decades to deliver clean freshwater to Everglades National Park (ENP) and Florida Bay. This infrastructure includes the Modified Water Deliveries, C-111 South Dade, and C-111 Spreader Canal Projects, and bridged portions of Tamiami Trail.

Congress funded these projects with nearly $1 billion in American taxpayer investment. With the planning process drawing to a close, **the final COP alternative fails to deliver ecosystem benefits funded by the American public and will leave ENP at significant risk of detrimental drought impacts, including seagrass die-offs and fishery declines in Florida Bay.** The shortcomings of the final alternative relative to ENP and Florida Bay are the product of a technical issue that we are certain can be corrected by the Project Delivery Team without jeopardizing the COP implementation timetable. As made clear in prior technical comments (attached), **Adaptive Management will not suffice to remedy these shortcomings, and instead we urge the U.S. Army Corps of Engineers to work with its partner agencies to remedy these shortcomings now while the planning process is still ongoing to advance a final alternative that delivers environmental benefits commensurate with the public investment in restoration infrastructure.**

We offer this urgent request in an effort to improve the performance of COP and further the restoration of America's Everglades and the waters of the Florida Keys. The catastrophic Florida Bay seagrass die-offs of 2015/2016 highlight the urgent need to ensure that COP delivers adequate benefits to the bay during droughts. The U.S. Army Corps of Engineers and South Florida Water Management District should address drought performance of Alternative Q+ as an immediate priority.

Sincerely,

S. Ansley Samson
General Counsel

# COP Planning Process & Background

Audubon Florida, Everglades Foundation, National Parks Conservation Association, and the Everglades Law Center have been closely involved in COP planning since scoping was initiated in October 2017. Prior to that, our organizations spent decades working to support the planning and construction of the above mentioned projects. Through a series of public workshops, meetings with agency staff, and verbal and written comments, we have provided abundant feedback on COP alternatives with one overarching goal: **COP must deliver more clean water to ENP and Florida Bay especially during drought, when it is most desperately needed.**

At our urging, the U.S. Army Corps of Engineers – along with partner agencies like the South Florida Water Management District, Florida Department of Environmental Protection, National Park Service, and others – hosted two public workshops in accessible locations where Florida Bay stakeholders could contribute to the planning dialogue. These meetings were in Homestead (Aug. 2018) and Islamorada (Dec. 2018). Dozens of members of the public, including elected leaders representing impacted communities, urged the agencies to prioritize freshwater flow to Florida Bay in the dry season as an essential need for the health, economy, and quality of life of local residents and for the health of ENP and Florida Bay.

Earlier this year, we wrote to you expressing our support for Alternative O, which focused on maximizing freshwater flows to the Everglades year-round. Our organizations saw that this operational alternative could send significant, beneficial new flow to Florida Bay in both the location and season when it is needed most, including during droughts. Our letter dated March 25, 2019 expresses our support for many aspects of the proposed alternative – with a few suggested improvements – and our support for the agencies continuing to seek the alternative that maximizes ecosystem benefits.

Unfortunately, the next round of alternatives included Alternative Q, which showed significantly fewer environmental benefits for Florida Bay than Alternative O during droughts. Our organizations expressed specific concerns regarding Alternative Q during public comment at the Project Delivery Team (PDT) webinar meeting on June 7, 2019.

Now the refined Alternative Q+ is on track to be the final alternative. This alternative does not perform well for Florida Bay during drought conditions, jeopardizing not only the health of the Bay but also the investment made in restoration infrastructure that has led us to this operations plan. Alternative Q+ is a step backward in achieving an effective COP, especially when previous alternatives demonstrated that providing better freshwater flows to ENP and Florida Bay for the entirety of the dry season and during droughts is achievable.

# Drought Performance for Florida Bay is Critical

In the 1980s, a widespread seagrass die-off in Florida Bay was the catalyst catastrophe that set the wheels of Everglades restoration in motion. Detrimental impacts from that event spanned decades, as the health of the ecosystem and the closely-tied Florida Keys economy struggled to rebound after fish populations plummeted. Restoring freshwater flow to Florida Bay has always been at the heart of efforts to restore the Everglades.

In 2015 and 2016, Florida Bay again experienced widespread seagrass die-offs following an extended drought. Those detrimental impacts reverberated through the Bay ecosystem and stakeholders in the Florida Keys. The COP must ensure that ENP and Florida Bay are better safeguarded against drought impacts. Alternative Q+ fails to protect these ecosystems during drought; instead, it guarantees that another seagrass die-off will befall Florida Bay when inevitable drought conditions occur again.

**The final COP must ensure that – if and when another drought occurs – Florida Bay will be more resilient because of these restoration projects.** Since the devastating seagrass die-offs and subsequent algal blooms in Florida Bay in the 1980s, American taxpayers have spent nearly $1 billion constructing restoration infrastructure to protect and restore Everglades National Park. Preventing another ecological catastrophe in Florida Bay must be the top consideration for the COP final alternative, to ensure accountability to the taxpayers making significant investments in America's Everglades.

# Flow Formula and Adaptive Management

We know that every agency on the COP PDT has the strong desire to improve the health of ENP and Florida Bay, and we appreciate the tremendous effort that has gone into the project thus far. The U.S. Army Corps of Engineers and South Florida Water Management District are valued partners in achieving our shared goals for the Everglades. **We want to be clear that our concerns with Alternative Q+ are technical in nature, and do not indicate any difference in policy or priority from those outlined in the project guidelines.** All parties involved want to deliver more freshwater to Florida Bay and restore ENP.

Over the past several months, expert science staff from the Everglades Foundation have extensively modeled all iterations of the plan, including the latest alternative. The results of that analysis are clear: Alternative Q+ fails to send adequate water to ENP and Florida Bay in times of drought. The issue lies within the Tamiami Trail Flow Formula, which under-predicts the

need for water in Florida Bay during drought conditions. We cannot move forward with a final operating plan that ensures the Bay will remain in a water deficit when flow is most desperately needed.

In response to this specific concern, the agencies have offered that adaptive management will be used to address ecosystem needs on a year-by-year basis. Adaptive management is a valuable tool and should be undertaken as a routine procedure to gain insight into project function, assess uncertainties in predictions, and improve operations within bounds set by the operations plan. However, adaptive management is not the solution to an already identified, underlying error in the flow formula. Nor does adaptive management offer a timely opportunity to fix an inherently flawed operations plan; failing to address this fundamental problem with the flow formula now would mean additional delay in implementing any solution, which would require a new National Environmental Policy Act process.

Additionally, droughts are not amenable to adaptive management. Typically, by the time water managers are certain there is a drought, it is too late to take actions that would mitigate those detrimental conditions.

## Next Steps and Achieving Success

Now is the time to fix the flow formula and ensure the final COP alternative delivers desperately needed restoration benefits for ENP and Florida Bay. Rather than advancing an alternative that has underlying technical issues, the agencies should take the time to get the operations rule right and not rely on adaptive management to fix a known error in the proposed plan. We understand the urgency of getting COP online quickly and share the agencies' desire to flow more water into the southern end of the ecosystem as soon as possible. **However, we urge you to direct staff to invest the additional time necessary to fix errors in the flow formula and get this plan right now. Rushing to finalize a critically flawed operations plan after literally spending decades planning and constructing these projects shortchanges the American public out of improved conditions for Everglades National Park and Florida Bay.**

During the PDT webinar on July 9, 2019, one agency staff member said the timeline for project completion meant "pencils down" by September 27, 2019. Please do not push ahead with a flawed final alternative simply to adhere to a stringent timeline set by bureaucratic process. We believe that taking an extra month to revisit the flow formula would be well worth the investment of agency time and would still allow for the project to come online by 2021 as currently planned.

# Attachment: Prior Technical Comments

June 12, 2019

Donna George
U.S. Army Corps of Engineers
Jacksonville District
P.O. Box 4970
Jacksonville, FL 32232-0019
Email: donna.s.george@usace.army.mil

RE: Technical comments on Alternative Q performance

Dear Ms. George,

On behalf of the Everglades Foundation, we submit the following comments on the proposed Round 3 Alternative Q for the Combined Operation Plan. These comments are more technical in nature and focused on the drought performance of ALTQ on Everglades National Park (ENP) and drawdown in Water Conservation Area 3A (WCA3A).

Earlier this year, COP Project Delivery Team (PDT) released two alternatives during the Round 2 modeling: ALTO and ALTN2. Both alternatives used iModel optimized flow targets to deliver the water from WCA-3A to ENP. ALTO was broadly accepted by stakeholders because it was focused on sending more water to ENP during dry seasons and the droughts. PDT also assessed that the ALTO was the best performer from an ecological perspective. Recently, the latest alternative, ALTQ was released, which was primarily derived from ALTO.

We evaluated the ALTQ performance and found that it reduced the drought flows to ENP through S-12C, S-12D and S-333 structures across Tamiami Trail relative to the ALTO (Figure 1). For example, the ALTQ decreased average annual flow by 54,000 acre-feet during the 5 worst dry years through S-333 structure. The effect of this reduction on water depths is particularly visible in ENP and in the mangrove ecotone during droughts (Figure 2).

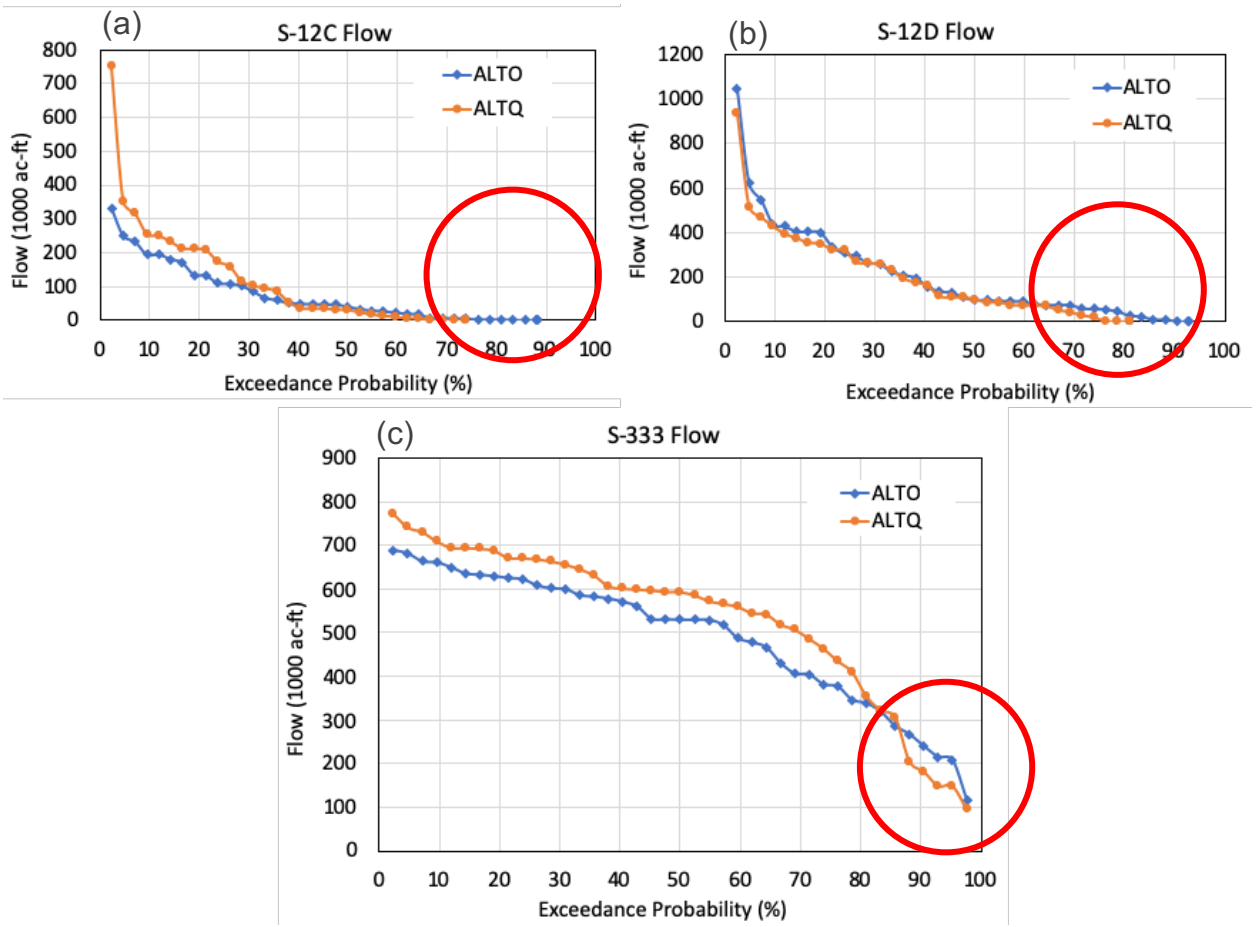


Figure 1. Average annual flow duration curves through S-12C, S-12D and S-333 structures.

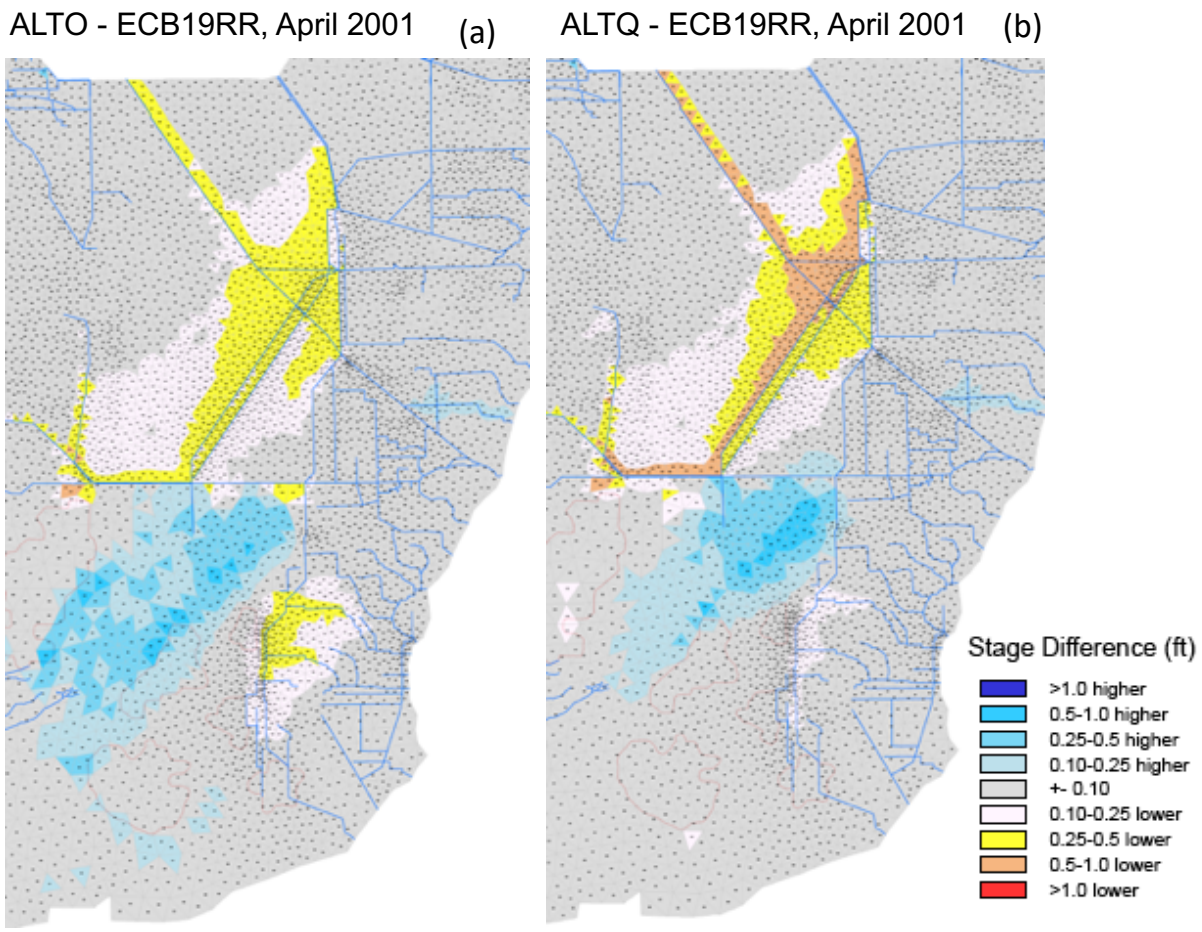


Figure 2: Stage difference map in April of one of the dry years: (a) between ALTO and ECB19RR and (b) between ALTQ and ECB19RR

The key problem of the ALTQ is the selection of a linear regression model for the Tamiami Trail Flow Formula (TTFF). We understand this was a somewhat arbitrary choice, and a linear regression was chosen for its relative simplicity and common usage. The TTFF was fitted to ALTO predicted weekly flows using six predictors that include stages, flows, rain, PET and Zone A levels.

One well-known problem with a regression model is that, while getting the average conditions reasonably close, it does not perform as well during the wettest and driest periods. The high flows during the wet periods were addressed by employing the Zone A level as a predictor; however, nothing was done to address the underprediction during droughts. The TTFF was not able to capture the flows above 1-in-5 year drought (Figure 1c). To be clear: the low flow problem is a direct consequence of the choice of a linear regression model. It is therefore imperative that the model be modified to result in the desired dry year performance.

Additionally, we have observed several problems with the model itself. First, most of the terms are very strongly correlated, causing a "multi-collinearity" effect. One consequence of this is to

introduce something like a feedback effect, which dampens flows during droughts. We found that by simply reducing the number of terms, the model performance better during dry periods. We understand that it may not be possible to have completely independent variables in real conditions. However, we believe that it can be minimized by selecting appropriate predictors. Here, all these complicated factors involved in underpredicting the flows during the droughts as shown Figure 1c. The large number of terms, including terms like the Zone A, add little to the predictive power and can cause untended consequences.

Additionally, lack of a constant term could lead to anomalous and unintended behaviors outside the range of data used to fit the models. Experts generally urged caution in forcing regressions through the origin and recommended not to do it[1]. If you force the function to pass through the origin and the true shape of the function is non-linear near the origin (which is far outside of normal values of most of the terms), it may lead to unintended behaviors. The non-linear relations may occur near the origin, and it is important to examine the lack of fit near zero before regression passes through the origin[2]Consider this example for this specific application. Flows across Tamiami Trail are strongly related to WCA3A water levels. There is some level above which the operational strategy would be to "push" water out of WCA3A, so the sign of the term would be positive. On the other hand, below that level, the goal would be "hold" water in WCA3A, and a negative sign would be needed. One could do that with ENP demand, rainfall, etc. While it would be desirable to make that level a function of month, a constant would be the simplest implementation. By omitting this, the model is forced to behave in counter-productive and even counter-intuitive ways. For example, by including a linear term, the Potential Evapotranspiration (PET) term changes sign, indicating the behavior of this term in the model changes for one that allows adds to flow to one where its influence depends on PET is high or low.

We suggest few solutions to refine the TTFF so that it addresses the issues of underprediction during the droughts.

1) A quick but not robust solution could be using a modifying factor as used in the QP33_Sens run presented in the PDT meeting on June 7, 2019.
2) Reducing the number of terms in the TTFF,
3) Implementing a piecewise formula, thereby having three parts to the TTFF, high water, low water, and "normal" conditions.

Another drought issue is the lowering the WCA3A floor to 7 feet (in ALTQ) from 7.5 feet (in ALTO). The water supply analysis performed by the PDT looked only at the benefits to the South Dade Conveyance System (SDCS), but did not look at the impacts to the source area,

[1] See for example, Cade, B.S. & Terrell, J.W. (1997) Comment: cautions on forcing regression equations through the origin. North American Journal of Fisheries Management, 17, 225–227. Eisenhauer, J.G. (2003) Regression through the origin. Teaching Statistics 25, 76–80. Kozak, A. & Kozak, R.A. (1995) Notes on regression through the origin. The Forestry chronicle, 71, 326–330.

[2] Hahn, G. J. Fitting regression models with no intercept term. Journal of Quality Technology 9:56-61.

WCA3A. First, the most likely cause of the lower water levels in the SDCS was the general lowering of water levels well below the 1994 GRR levels. The lowering of the floor in WCA3A brought in water to address that problem. If the effects in WCA3A are not *de minimis*, the Corps should (a) look at the cause of the problem: SDCS stages, and/or (b) implement SDCS restrictions at the 7.5 ft level.

We would also like re-iterate our previous comments on Extreme High Water Action Line (EHWAL) and our opposition to its implementation. Particularly problematic in the Alternative Q EHWAL is that only one operational strategy to lower Water Conservation Area 3A (WCA3A) is proposed: routing excess flows into the South Dade Conveyance System via S-334. We find this concerning for the following reasons:

(1) it makes permanent an operational policy that was proposed as a stop-gap measure until more capacity existed into NE Shark River Slough. That capacity now exists, but instead of the strategy being retired, it is codified into permanent operations.

(2) the operational strategy of moving flood water into South Dade has been long opposed by most of the stakeholders in the region, and a source of controversy and contention since it was first proposed as mitigation for the S-12 seasonal closures. Proposing this as the only option for high water in WCA3A will ignite unnecessary controversy by suggesting that objectionable and undesirable operations will become permanent, despite the expenditure of large sums of public funds and nearly universal agreement the practice should be discontinued.

(3) proposing a single emergency high water action without investigating alternatives is not consistent with the objectives this analysis, which should be to illuminate the consequences of a range of possible actions to help identify the actions that the public can support. If the only alternative is one that has met with long-standing public opposition, it does not offer the public any way to constructively and affirmatively express support for the selected alternative.

(4) because the COP assumption is that no additional flow enters WCA3A, and because the Corps and South Florida Water Management District are currently making real-time operational decisions to increases flows from Lake Okeechobee southward into WCA3A, any EHWAL evaluation in COP will necessarily underestimate the true consequences. Thus, including emergency actions likely exceed what is possible to evaluate accurately in COP.

Sincerely,

/signature by email

Thomas Van Lent
The Everglades Foundation

July 1, 2019

Donna George
US Army Corps of Engineers
Jacksonville District
PO Box 4970
Jacksonville, FL 32232-0019
Email: donna.s.george@usace.army.mil

RE: Technical Comments on Operations Table for Alternative Q2

These comments are specifically related to the operations table presented at the Project Delivery Team Meeting on June 21, 2019 and sent by email on that date. The Everglades Foundation sent technical comments on June 12 conveying our concern that the proposed Tamiami Trail Flow Formula (TTFF) did not perform well during drought conditions, among other concerns. In reviewing the proposed operations table, we find that the Corps' proposed operations table inadequately addresses the outstanding issues in Alternative Q.

One of the primary modifications in this iteration of the operational table is the "Rainfall Plan" in the South Dade Conveyance System component. The operational plan remains using the regression formula that clearly underpredicts Alternative O performance during droughts. The proposed operations table merely says "SRS low water" without any explanation or guidance as to what the operational concern is or guidance on how to operate. Verbal comments by Corps staff suggest that "Adaptive Management" would address the whatever concerns arise and after the operational plan that contains the TTFF is approved, though this is not expressed in the table.

Adaptive Management is a valuable endeavor and should be undertaken as a routine procedure to gain insight into project function and improve operations. However, Adaptive Management is not a solution to the problem of the TTFF functioning poorly during droughts. First, any solution arrived at during Adaptive Management is not self-implementing. This EIS locks in the TTFF until the next update, as undertaking Adaptive Management is not an exempt from NEPA. Second, droughts are not amenable to Adaptive Management. Typically, by the time water managers are certain there is a drought, it is too late to take actions that would mitigate conditions. In contrast, wet conditions are very amenable to Adaptive Management, but instead the Corps is proposing to put high water response directly into the operations table. Clearly, the Corp is not relying on Adaptive Management even when well suited to the issue. Third, while Adaptive Management is a proven methodology for reducing uncertainties, it is not suited for addressing clear flaws. The TTFF underpredictions during droughts are inherent in the regression and its development; no amount of Adaptive Management will fix the underlying flaws.

For these reasons, the proposed modifications to the operational table are entirely inadequate for addressing concerns about drought performance. The solution is to fix the TTFF. The Everglades Foundation undertook investigations on possible corrections, and with less than 20 total man-hours of time, found ways to significantly improve the performance. For example, by setting stage thresholds in Water Conservation Area 3A and Everglades National Park, a piecewise regression improves drought performance. (We have attached regression analysis in R, modifications to the RSM model to implement the improved regression and a spreadsheet analyzing the results.) In our analysis, we found that the RSM contains operations and feedbacks not included in the regression, and which must be taken into account. We therefore conclude that the Corps' proposed operations table is inadequate to fix the drought performance, but fixing the drought performance need not be time-consuming and onerous, leading to a slipped schedule. The Corps can and should move expeditiously to fix this issue; no change in the schedule is needed.

We offer these comments as constructive criticism to improve one of the most critical objectives in Modified Water Deliveries: improve C&SF Project performance during droughts. The events of 2015-2016 in Florida Bay highlight the need for this, and the Corps should make addressing the performance of Alternative Q during droughts an immediate priority.

Sincerely,

/signed for email

Thomas Van Lent, Ph.D.
The Everglades Foundation