APPENDIX A – JULY 17, 2015 TECHNICAL ANALYSIS

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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

JUL 17 2015

Programs and Project Management

Mr. Pedro Ramos
U.S. Department of the Interior, National Park Service
Everglades and Dry Tortugas National Parks, Superintendent
40001 State Road 9336
Homestead, Florida 33034-6733

Dear Superintendent Ramos:

The purpose of this letter is to respond to a request made by former Superintendent Dan Kimball in a letter dated March 14, 2012 to transfer constructed features of the Modified Water Deliveries Project (MWD) to South Florida Water Management District (SFWMD) for operations and his recommendation not to construct or complete Conveyance and Seepage features and take other actions that were recommended in the 1992 General Design Memorandum (GDM), which was incorporated by reference in the authorizing statute. In Mr. Kimball's letter, he recommended that the remaining unconstructed features and the final operating plan be deleted from the MWD project and that the MWD project be deemed complete upon finishing the ongoing construction, testing for the relaxation of the G-3273 constraint and S-356 operations, and transfer of the features to the non-federal sponsor, SFWMD, for operations.

The MWD project was authorized in the Everglades National Park Protection and Expansion Act of 1989. The Act authorized and directed the U.S. Army Corps of Engineers (Corps) "to construct modifications to the Central and Southern Florida Project to improve water deliveries into the park and shall, to the extent practicable, takes steps to restore the natural hydrological conditions within the park." The statute expressly directed that the modifications be constructed in general accordance with the recommended plan as set forth in a GDM to be prepared by the Jacksonville District. The Department of Interior (DoI) is 100% responsible for construction costs, and any MWD costs associated with operational testing, until the features are deemed complete, the construction contracts closed out, and the features officially transferred to SFWMD for operations. Upon transfer of the project to the SFWMD for operations, SFWMD will generally be responsible for 25% of the cost of operations and maintenance (O&M) and the Corps will be responsible for 75% of the cost of O&M.

In response to Mr. Kimball's proposal the Corps undertook a technical analysis to evaluate whether the completed project features and those under construction improve

flows into Everglades National Park (ENP) and to the extent practicable restore the hydrologic connection within the park. The enclosed technical analysis: (1) describes the constructed features and their benefits, (2) describes the anticipated benefits of the features currently under construction, (3) describes the unconstructed features and explains the limitations restricting completion of any unconstructed features, and (4) explains how water deliveries into the park have been improved and natural hydrological conditions within the park have been restored to the extent practicable. The technical analysis has been coordinated with the SFWMD. SFWMD concurs in the findings of the analysis and understands the measures necessary to closeout MWD and the cost-share implications of closing out the MWD project. Highlights of that analysis are outlined below.

In his letter, Mr. Kimball proposed that upon completion of the project features currently under construction, physical construction of the project should be complete and the Corps should not initiate construction on any other unconstructed feature recommended in the 1992 GDM. As he suggested, there has been a robust discussion of closing the MWD project without completion of all the features described in the 1992 GDM. The attached Corps' technical analysis supports the determination that the unconstructed features recommended in the original 1992 GDM are not necessary and that the previously constructed features, the features currently under construction, along with the acquisition of remaining real estate interests and completion of a project Water Control Plan will achieve the statutory charge to improve water deliveries into the park and, to the extent practicable, to restore the natural hydrological conditions within the park.

The two spillway structures (S-355A and B), two pump stations (S-356 and S-357), double levee and canal system, and S-334 modifications have been constructed and approximately 4 of 9.5 miles of the L-67 levee extension have been degraded. Features have been constructed for the 8.5 SMA to mitigate for impacts of increased water levels in the Park and to ensure that flooding impacts are not made worse by the project. The operation of these features will increase flows into ENP up to 3% under the existing water control plan. An increase in flow volume to NESRS up to 15% can be realized if the G-3273 constraint is relaxed, while maintaining the current 7.5 feet NGVD maximum operating limit in the L-29 Borrow Canal. Further improvements to water delivery volumes into NESRS by up to 92% and improved hydrologic conditions within the Park can be expected upon completion of the comprehensive Operations Water Control Plan for the completed features of the MWD and the adjacent C-111 SD projects.

Since the 1992 GDM was prepared, we now know that moving increased water volumes under the Tamiami Trail road bed while protecting and maintaining that vital transportation highway from erosion is more involved than the 1992 GDM originally anticipated. When the Corps and DoI prepared the 2008 Tamiami Trail Limited Reevaluation Report and Environmental Assessment revisions made to Tamiami Trail

were no longer dependent upon features originally proposed to deliver water through WCA-3B. Since 1992 we have also learned that potentially undesirable conditions in WCA-3B and the adjacent agricultural areas would result if remaining features from the GDM were constructed and substantial design refinements to the 1992 GDM were not made. As a result, the three gated culvert structures (S-345A, B, and C) and the three gated concrete headwall structures (S-349A, B, and C) have not been constructed, nor have approximately 5.5 miles of the L-67 levee extension been degraded. While these design changes were necessary, they collectively reduce the water inflow capacity and the downstream improvements anticipated within the Northeast Shark River Slough portion of the Park. However, future improvements that will allow more water to pass under the Tamiami Trail into the Park are currently anticipated by the DoI Tamiami Trail Next Steps bridging project and in the recently completed Central Everglades Project Implementation Report.

While the technical analysis determined that no new construction is necessary to satisfy the intent of the MWD authorization, the project construction phase cannot be closed out and the features transferred to the SFWMD for operations until several tasks are completed. First, the Project Cooperation Agreement defines the term "project" by referring to the 1992 GDM. Because not all the features contained in the GDM will be completed, the Project Cooperation Agreement (PCA) between the Corps and the SFWMD must be amended to revise the term "project" to only include constructed features and those features currently under construction. Additionally, the PCA requires an operational test for the constructed features to ensure proper construction and operation prior to closing the construction phase and contract. The operational test is estimated to run approximately 4 years, but our intention is to move toward full project implementation as soon as the ongoing construction, real estate interests, and water control plan development can be completed. In order to begin operational testing, the State's water quality concerns must be resolved and the State must approve the proposed operational test per the terms and conditions of the State water quality certification for MWD features. As a result of recent coordination between DoI, the State, and the Corps, the State has concurred with the operational testing criteria and protocols for the first phase of operational tests, and with the defined scope of work on the future Phase II operational testing, both of which are necessary in the development of the final comprehensive Water Control Plan. The deviation from the current Water Control Plan to conduct the Phase I test has been approved to begin in 2015, but is dependent on the start of the wet season and water availability. Additionally, necessary real estate interests must be acquired prior to transition to Operations, Maintenance, Repair, Replacement, and Rehabilitation (OMRR&R) phase activities in order to support the second phase of operational testing.

The PCA also requires the development of an OMRR&R Manual before the features can be transferred to SFWMD for operations. The OMRR&R Manual will be developed based on the results of the comprehensive Water Control Plan update for the completed

MWD project and C-111 South Dade, the development of which will be informed by the information gathered by the operational testing. In his letter, Mr. Kimball recommended that the proposed Combined Operating Plan be greatly reduced in scope to only address changes needed to the current Everglades Restoration Transition Plan (ERTP) because an operational plan will be developed for the Central Everglades Planning Project (CEPP). However, substituting the speculative and eventual CEPP operating plan is not an acceptable substitute to developing an operational plan for the MWD project pursuant to the PCA for several reasons. First, CEPP is not an authorized project; therefore, the Corps cannot dismiss its statutory and policy requirements under the MWD project in reliance on an unauthorized project. Even if CEPP was authorized, project implementation is expected to continue for approximately 20 years and the CEPP features will not be fully functioning until they are operationally tested for a period of time after that. Finally, the CERP authorization expressly requires that the MWD project be complete before certain CERP components recommended for construction in the CEPP Project Implementation Report can be funded for construction. In order for the MWD project to be complete, a comprehensive operational plan must be developed for the project before it can be transitioned to the O&M phase.

Finally, the NEPA analyses that have been prepared on the MWD project evaluated the impacts associated with the features presented in the 1992 GDM, as well as those included as part of the 8.5 SMA and Tamiami Trail modifications to the project. Because the 1992 GDM includes features that will not be completed under the MWD project supplemental NEPA documentation is required prior to the Corps closing out the construction phase of the MWD project.

In conclusion, the previously constructed features, the features currently under construction, along with the acquisition of remaining real estate interests and completion of a project Water Control Plan will achieve the statutory charge to improve water deliveries into the park and, to the extent practicable, will restore the natural hydrological conditions within the park.

The enclosed technical analysis, along with express written concurrence from the SFWMD, will be shared with the appropriate Congressional committees and the Office of Management and Budget to inform them of the changes to the MWD plan.

The cooperation and coordination between the Corps, the Department of Interior, SFWMD, and other federal, state, and public stakeholders, in the planning and implementation of the MWD project has been essential to the restoration progress so far. In addition, recent achievements in the overall south Florida ecosystem restoration effort, including the completion of the Chief's Report for Central Everglades Planning Project and the operational testing criteria and protocols developed cooperatively between the Corps, DoI and the State; reflect significant advancements in our collective efforts to improve water deliveries to the historic Everglades ecosystem, including

Everglades National Park. We appreciate your continued support of the Corps' efforts to improve water deliveries into the park, and restoring the natural hydrological conditions within the park and to the greater Everglades ecosystem.

Sincerely,

Alan M. Dodd
Colonel, U.S. Army
District Commander

Enclosures

PURPOSE

The purpose of this report is to:

a) Provide an evaluation of whether the existing completed features and those currently under construction improve water deliveries into the Everglades National Park and whether steps have been taken, to the extent practicable, to restore the natural hydrological conditions within the park as required by the Modified Water Deliveries to Everglades National Park (MWD) Project authorization; and

b) Recommend any actions required to complete the project.

Legal Requirements:

AUTHORIZATION: The MWD Project was authorized in the Everglades National Park Protection and Expansion Act of 1989 (1989 Act):

> **SEC. 104.MODIFICATION OF CERTAIN WATER PROJECTS**
>
> *(a) IMPROVED WATER DELIVERIES* – (1) *Upon completion of a final report by the Chief of the Army Corps of Engineers, the Secretary of the Army, in consultation with the Secretary [of the Interior], is authorized and directed to construct modifications to the Central and Southern Florida Project to improve water deliveries into the park and shall, to the extent practicable, take steps to restore the natural hydrological conditions within the park. (2) Such modifications shall be based upon the findings of the Secretary's experimental program authorized in section 1302 of the 1984 Supplemental Appropriations Act (97 Stat. 1292) and generally as set forth in a General Design Memorandum to be prepared by the Jacksonville District entitled 'Modified Water Deliveries to Everglades National Park.*
>
> *(b) DETERMINATION OF ADVERSE EFFECT.--(1) Upon completion of the Final Memorandum referred to in subsection (a), the Secretary of the Army, in consultation with the South Florida Water Management District, shall make a determination as to whether the residential area within the East Everglades known as the "Eight and One-Half Square Mile Area" or adjacent agricultural areas, all as generally depicted on the map referred to in subsection 102(a), will be adversely affected by project modifications authorized in subsection (a).*
>
> *(2) In determining whether adjacent agricultural areas will be adversely affected, the Secretary of the Army shall consider the impact of any flood protection system proposed to be implemented pursuant to subsection (c) on such agricultural areas.*
>
> *(c) FLOOD PROTECTION; EIGHT AND ONE-HALF SQUARE MILE AREA.--If the Secretary of the Army makes a determination pursuant to subsection (b) that the "Eight and One-Half Square Mile Area" will be adversely affected, the Secretary of the Army is authorized and directed to construct a flood protection system for that portion of presently developed land within such area.*
>
> *(d) FLOOD PROTECTION; ADJACENT AGRICULTURAL AREA. -- (1) If the Secretary of the Army determines pursuant to subsection (b) that an adjacent agricultural area will be adversely affected, the Secretary of the Army is*

authorized and directed to construct a flood protection system for such area. Such determination shall be based on a finding by the Secretary of the Army that:

(A) the adverse effect will be attributable solely to a project modification authorized in subsection (a) or to a flood protection system implemented pursuant to subsection (c), or both; and

(B) such modification or flood protection system will result in a substantial reduction in the economic utility of such area based on its present agricultural use.

(2) No project modification authorized in subsection (a) which the Secretary of the Army determines will cause an adverse effect pursuant to subsection (b) shall be made operational until the Secretary of the Army has implemented measures to prevent such adverse effect on the adjacent agricultural area: Provided, That the Secretary of the Army or the South Florida Water Management District may operate the modification to the extent that the Secretary of the Army determines that such operation will not adversely affect the adjacent agricultural area: Provided further, That any preventive measure shall be implemented in a manner that presents the least prospect of harm to the natural resources of the park.

(3) Any flood protection system implemented by the Secretary of the Army pursuant to this subsection shall be required only to provide for flood protection for present agricultural uses within such adjacent agricultural area.

(4) The acquisition of land authorized in section 102 shall not be considered a project modification.

BACKGROUND

At the time the 1989 Act was signed into law the historic Everglades ecosystem had been heavily impacted by actions to drain the land and make it habitable. The Act expanded the eastern boundary of the Park, but by that time construction of the federal Central and Southern Florida (C&SF) Project had created a compartmentalized system that dramatically altered natural water flow patterns. The landscape upstream of the Park changed dramatically with the 1960s C&SF construction of huge water storage compartments, referred to as Water Conservations Areas (WCA), that were largely segregated from one another hydrologically. Water control structures moved water from one compartment into the next so that flood control, water supply and other objectives could be met. Construction of the C&SF L-29 Levee and US Highway 41 (a.k.a. the Tamiami Trail) at the southern end of the system had substantially reduced flows that once moved freely into Everglades National Park. In its pre-development era, 65 percent of water flowing south across the northern boundary of what became the Everglades National Park entered through the Northeast Shark River Slough (NESRS). The combined effects of the C&SF Project features, Tamiami Trail, and existing water management practices have redistributed those flows so that currently only 20 percent of the flow enters the Park through NESRS. Except for direct rainfall, Everglades National Park (ENP) is essentially dependent upon the C&SF system for its entire water supply.

The C&SF Project has been very effective at meeting its intended primary purposes of providing flood control and water supply for the region, but the environmental impacts have since proved to be substantial. The project and the subsequent urbanization of south Florida has effectively reduced the original ecosystem to half its original size and substantially altered the hydrologic characteristics that defined the pre-drainage system.

As directed by the 1989 Act, the Corps prepared a General Design Memorandum (GDM) to recommend modifications to the C&SF Project needed to accomplish the goals described in the Act and the GDM was approved in 1992.

What the GDM envisioned

The original constructed C&SF Project took the area that was in the historic central Everglades flow path and divided it into three large Water Conservation Areas (WCA-1, WCA-2, and WCA-3). The L-67 A and C levees and associated borrow canals constructed as part of the C&SF Project further divided WCA 3 into WCA-3A and WCA-3B. Water that historically flowed in a south/southwesterly direction through the WCA-3 area was redirected by these levees, therein providing flood protection for developing areas to the east. When this historic water flow pattern was interrupted, WCA-3B, which included the original headwaters of the Shark River Slough and was the original pathway of much of the water entering Everglades National Park (ENP), was hydrologically severed from the system.

Everglades National Park has received most of its water supply through C&SF Project features and, to a lesser extent, by direct rainfall. As a result of original Park boundary alignment and private land ownership on its eastern edge, most of the water delivered to the Park was provided through the C&SF Project S-12 A, B, C, and D water control structures located in southern WCA-3A in accordance with the 1963 WCA-3A Regulation Schedule. Water moved into what was then a historically drier area, well west of its original Northeast Shark River Slough (NESRS) flow path. The timing of water delivery also differed substantially from that in the historic rainfall driven system. The S-12 structures were not open year round, so water exiting these structures not only entered the Park in an area that was historically much drier, but the timing and duration of flows into the Park had substantially changed. These changes in water delivery patterns resulted in substantial changes to the ecosystem south of Tamiami Trail both in western areas that received the primary WCA-3A regulatory water releases and the NESRS areas where flow was significantly reduced. Note that starting in 1985, the Experimental Deliveries Program to ENP revised the WCA-3A Regulation Schedule and provided some additional flows to NESRS under the Rainfall Plan, but inflows to the Park continued to be constricted by Tamiami Trail roadway design limitations and flood protection requirements for the developed areas to the south and east of NESRS.

To achieve the objectives stated in the authorizing legislation the project originally recommended in the 1992 GDM hydrologically reconnected WCA-3A, WCA-3B, and NESRS (Figure 1). The Recommended Plan (Figure 2) included three gated concrete headwall structures (S-349A, B, and C), three gated culvert structures (S-345A, B, and C), associated

discharge channels and bounding levees, and two spillway structures (S-355A and B). Water was expected to move from WCA-3A into the southern end of WCA-3B by passing through the S-345 culvert structures (located in the L-67 A levee), while the S-349 structures functioned to prevent flows from short circuiting down the L-67A borrow canal (i.e., continuing down to the southern end of WCA-3A). Discharge canals and bounding levees running perpendicular to the L-67 A and C levees would move water southeasterly as it passed out of the S-345 culverts across the area between L-67 A and C (a.k.a. "the pocket") and extending through degraded sections of the L-67 C levee, where it was discharged into WCA 3B. With these features, WCA-3A and WCA-3B would be hydrologically reconnected.

Once in WCA-3B, the water was expected to flow southward as it had historically where the S-355 A&B structures in the southern end would pass that water across the L-29 levee into the L-29 borrow canal. Once in the L-29 borrow canal water was expected to pass through 19 sets of culverts under Tamiami Trail into the northern portions of Everglades National Park, therein rehydrating the historic NESRS flowway in the northeastern corner of the Park.

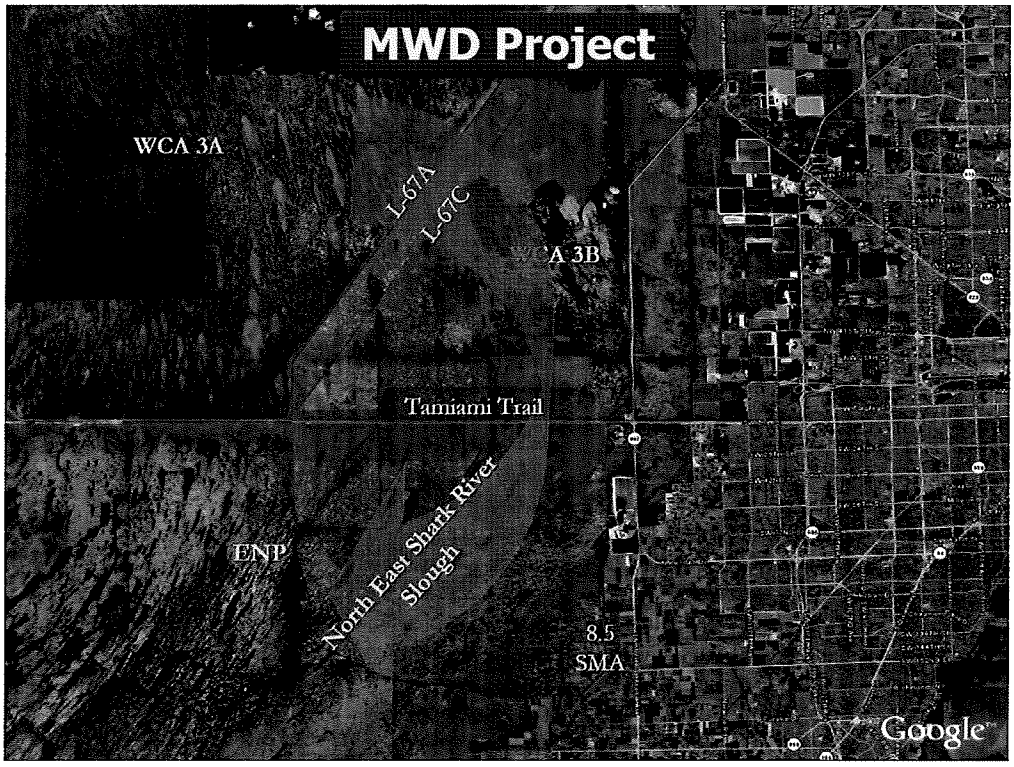

Figure 1

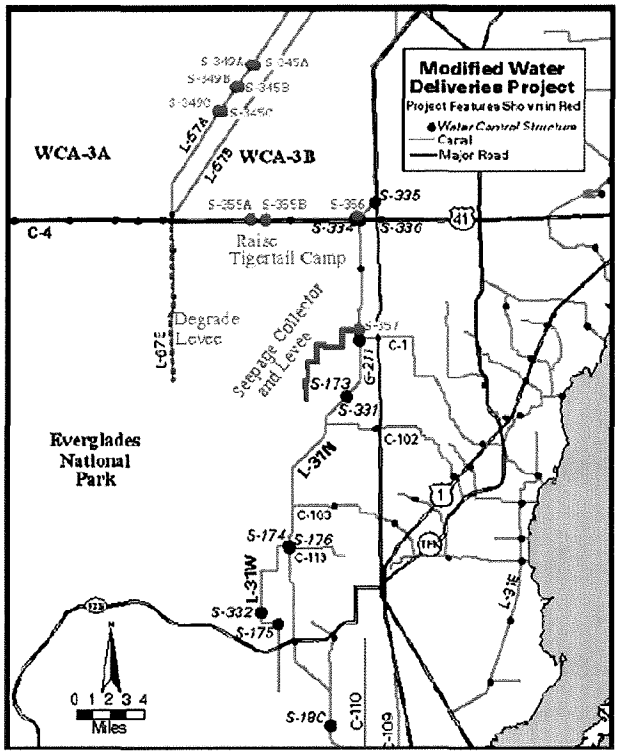

Figure 2

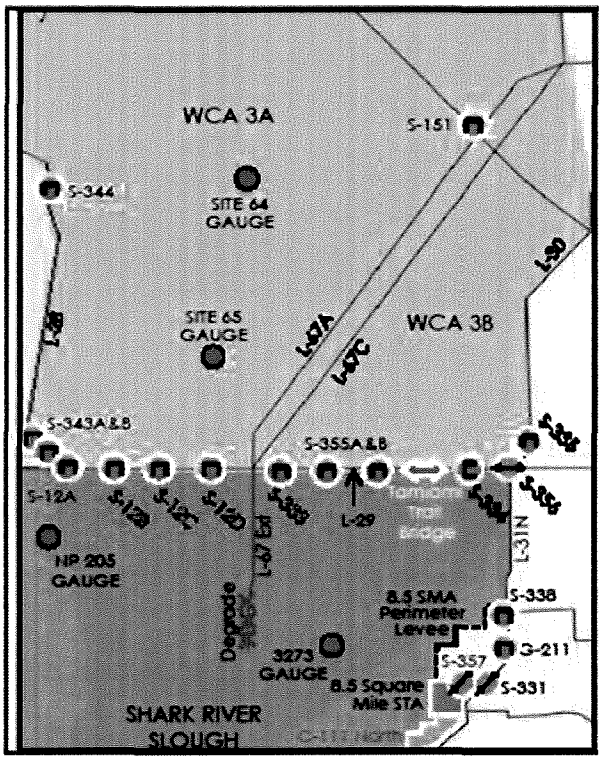

Figure 3

In recognition of potential impacts to the Eight and One-Half Square Mile Area and adjacent agricultural areas south of Tamiami Trail at the eastern edge of the new Park boundary, the Recommended Plan also provided features to mitigate for these impacts. Two pump stations (S-356 and S-357) were included to mitigate for seepage in adjacent agricultural areas, in conjunction with a double levee and canal system to be constructed around the residential area known as the Eight and One Half Square Mile Area (8.5 SMA). The S-356 pump station would also provide a means of controlling additional inflows to L-31N borrow canal caused by increased seepage into the canal due to increased water levels in NESRS. The existing S-334 structure was modified to prevent higher stages that were expected as a result of the MWD Project from overtopping the structure and potentially impacting the level of flood control downstream. These features were designed to ensure that as water levels were raised in the Park, the Eight and One-Half Square Mile Area and adjacent agricultural areas would not be adversely impacted.

Finally, the recommended plan also included the degradation of 9.5 miles of the L-67 Extension Levee within northern ENP to permit hydrologic reconnection of portions of the slough within the Park that had been isolated from one another.

Design Refinements and Technical Challenges

Since the initial implementation of the project, much more has been learned about the hydrology of the area and some of the assumptions made at the time the 1992 GDM was prepared have proven to be incorrect. In addition, alterations in the project design have been necessary and these design refinements and associated technical challenges have resulted in reductions to flow capacity as compared to what was believed to be possible at the time the 1992 GDM was prepared.

WCA-3. Reconnecting WCA-3B to the system hydraulically with WCA-3A has come with a number of unanticipated challenges. These include projected high water impacts to the WCA-3B tree islands and ecosystem, a reduced capability to move water out of WCA-3B via the S-355 structures, flow patterns in WCA-3B that were more eastward than southward, and the need to control seepage losses out of the area to prevent associated flood impact this would likely have on the adjoining developed areas of Miami-Dade County.

The S-355 A and B structures, located on the L-29 Levee along the southern boundary of WCA-3B, were constructed in 1996 for the purpose of moving water out of the southern end of WCA-3B into the L-29 borrow canal and through the 19 sets of culverts under the Tamiami Trail into northern Everglades National Park. However, since the S-355 A and B structures were constructed more has been learned about the hydrology of the area. The marsh resistance to flow makes these structures very ineffective at getting water out of WCA-3B. When the structures have been opened under previous limited duration testing, the headwater stage quickly equalizes with the downstream stage (the L-29 borrow canal) and southerly water flow essentially ceases. As a result, passing the flows envisioned in the GDM with increased MWD project water levels in the downstream L-29 borrow canal would require higher headwater stages in WCA-3B than were anticipated in the GDM. Within the existing system constraints these higher headwater stages in WCA-3B would be expected to have adverse impacts to the ecology of that area by damaging the tree islands and marsh vegetation.

In addition, we now know that flow patterns in the current WCA-3B area, which has been significantly impacted by soil subsidence resulting from reduced water inflows, are eastward rather than the north-to-south direction that had been expected in the GDM plan and was historically experienced in this area. The higher stages that would be needed to move water across Tamiami Trail are likely to redirect this flow southward, but we would now expect that the higher stages and increased eastward flow would result in increased seepage rates to the east through the L-30 Levee. While the MWD Project was formulated in the 1992 GDM to handle seepage from NESRS and the 8.5 Square Mile Area south of Tamiami Trail, it was not formulated to handle this seepage from WCA-3B north of Tamiami Trail. The result would be a reduction in the effectiveness of the C&SF Project features in maintaining existing levels of flood protection. Offsetting these impacts would require a large increase in the scope of the MWD Project to handle the seepage resulting from differing flow patterns and the increased water levels that would be needed in WCA-3B.

Tamiami Trail. The 1992 GDM noted maximum rainy season flow volumes into ENP could reach 4,000 cfs with peak stages in the L-29 Borrow Canal up to 9.7-feet National Geodetic Vertical Datum (NGVD), and recommended the structures (those discussed in the previous section on WCA-3) to deliver these flows into the L-29 Canal just north of Tamiami Trail (US Hwy 41). More recent information indicates that unless water levels in the canals were raised higher than planned, the existing culvert sets along Tamiami Trail would be inadequate to deliver this volume. Further, under conditions present prior to the MWD modification, if water in the canal was raised above elevation 7.5 feet NGVD, the Tamiami Trail road bed would be further degraded, damaging a major hurricane evacuation route. These conditions limited the allowable differential between water levels in the L-29 Borrow Canal and the Park and reduced the amount of water capable of being delivered to the Park.

In 2008 the Corps completed a Limited Reevaluation Report and Environmental Assessment (LRR/EA) focused on the needs of the Tamiami Trail features of the MWD Project. The recommended plan in the LRR/EA (see Figure 4) included two actions: 1) build a one-mile long bridge in the project area's eastern segment, and 2) raise the existing headwater stage constraint in the L-29 Borrow Canal by one foot to 8.5 feet NGVD, requiring roadway improvements along segments of Tamiami Trail between S-333 and S-334. The new plan at the Trail was no longer dependent upon features originally proposed to deliver water to the Park through WCA-3B.

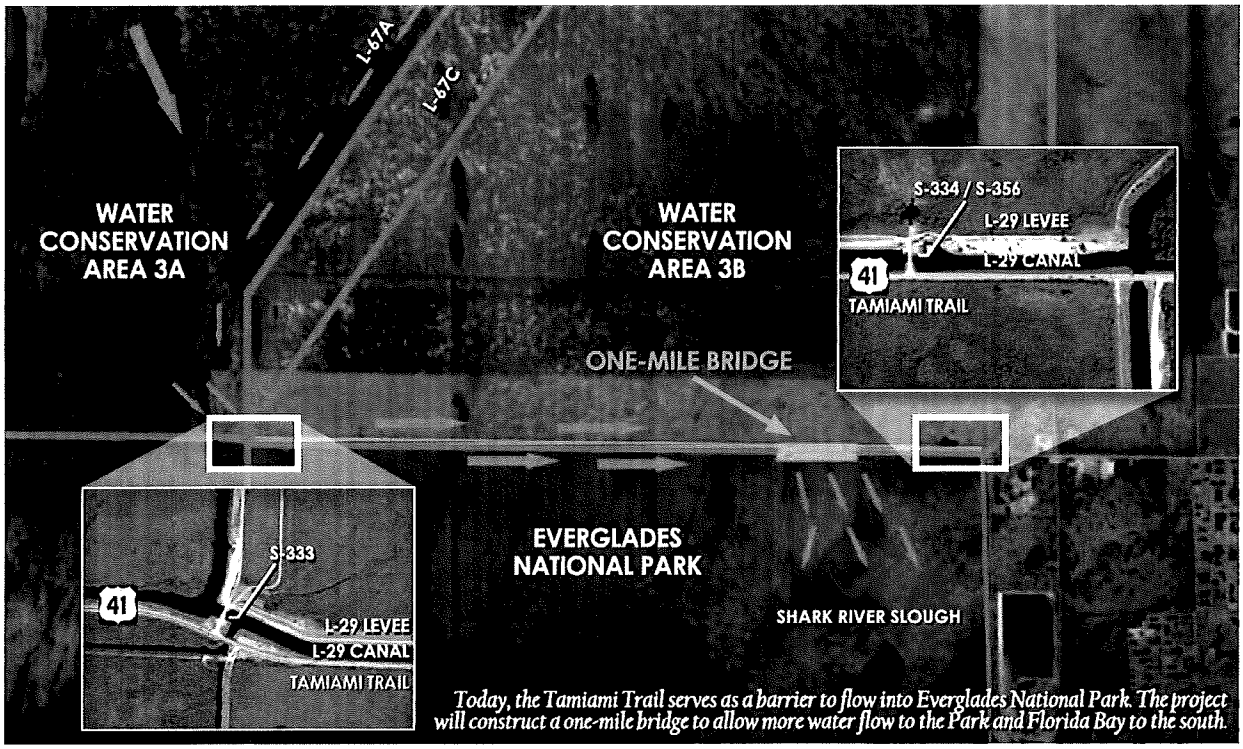

Figure 4

By reducing the maximum stage in the L-29 Borrow Canal compared to the 1992 MWD GDM, the 2008 LRR/EA substantiated that the amount of water that could be delivered by the MWD Project across Tamiami Trail into NESRS was reduced. As constructed, the Tamiami Trail Bridge and other modifications made to the roadway will allow for water levels in the L-29 canal to rise periodically to 8.5 feet NGVD, and will increase flow to NESRS through the bridge opening and the remaining sets of culverts. Operational testing and development of a final operating plan must still be conducted to optimize the flows that can be delivered to the Park.

Limitations South of Tamiami Trail

The other outstanding issue on the MWD is the removal of the L-67 Extension located inside the Park. As constructed, the L-67 Extension prevents water discharged from the S-12 structures from moving back onto private lands in the center of the historic NESRS flowway. The 1992 GDM proposed to remove the full 9.5 miles of this levee that extended southward below Tamiami Trail and into the Park. Approximately 4 miles of the levee have been degraded from the south end, but he remainder the extension levee remains. The 2008 LRR/EA indicated that degradation of the remaining 5.5 miles of the L-67 Extension Levee would not be allowed without adequate engineering justification to demonstrate that further removal would not cause L-29 canal stages to exceed the MWD maximum operating limit of 8.5 feet NGVD. The removal of the remainder of this feature was determined to be infeasible at the time the LRR was completed.

The concern with degradation of the remaining 5.5 miles of the L-67 Extension is twofold. First, with the reduced discharge capacity of the S-12's (due to C&SF Project design modifications and the effect of downstream vegetation) the L-67 Extension borrow canal continues to be a vital conveyance feature to move excess WCA-3A waters south. Second, until the Tamiami Trail was elevated to allow it to pass *unconstrained* flow (currently constructed for a maximum operating limit of 8.5 ft, NGVD 1929) then the complete degradation of the L-67Extension cannot be accomplished. Under current operations and during wet conditions, NESRS is basically a flow pool beginning at the south end of the L-67Ext. If L-67 Extension were fully degraded and the adjacent canal backfilled, water from S-12D would no longer be conveyed south along the L-67 Extension, but would flow east adding to the stage increase that S-333 influences over the area. This would cause stages to increase just below Tamiami Trail and exceed the 8.5 ft maximum operating limit in the L-29 Borrow Canal at Tamiami Trail by reducing discharge flow capacity and causing reverse flow through the Tamiami Trail culverts. When this happens we are required to close structures that are impacting the stages along the Tamiami Trail so that road is not damaged. This could also result in additional concerns for public health and safety in and around WCA-3A because the releases from WCA-3A would need to be reduced, therein affecting levee safety and adding to current concerns about the environmental conditions in this part of the ecosystem.

Optimizing hydrologic conditions in the Park

The MWD GDM identified the need for development of an operating plan for the completed project features. MWD Project features completed and currently under construction have already increased flows into ENP up to 3% under the existing 2012 Water Control Plan, including revisions identified under the Everglades Restoration Transition Plan (ERTP) Environmental Impact Statement. However, under ERTP when either the water elevation at a downstream monitoring well (G-3273) exceeds 6.8 feet, NGVD 29, OR when the L-29 borrow canal stage levels exceed 7.5 feet, NGVD 29, ***no*** additional structural inflows to NESRS may be provided. Effectively, increased flows and hydrologic benefits that can be provided to the Park by the MWD Project features would be capped at 3% without changes to the Water Control Plan. The 2008 LRR expected to provide a flow volume increase to NESRS of up to 92% by raising of the maximum operating limit of 8.5 feet on the L-29 Borrow Canal through a new Operations Water Control Plan to be developed following completion of MWD construction.

However, in order for a new Water Control Plan to be developed that will provide further hydrologic improvements to ENP, relaxation of the current G-3273 flow constraint is necessary. Further optimization of flows will require that operational tests be performed to confirm how much the flow trigger elevation at G-3273 can be relaxed. Because the S-356 pump station identified in the 1992 GDM was downsized when the protection features for the 8.5 SMA were reevaluated in 2000, those operational tests will also confirm the effectiveness of the constructed S-356 pump station in maintaining the necessary flood protection by providing mitigation for the incremental increase in seepage from NESRS to the L-31N Canal.

Recent coordination between Corps, SFWMD, and Park staff has identified two phases of incremental testing of project operations needed to optimize performance of constructed features. The first phase will test the performance of the S-356 in returning seepage to NESRS, while relaxing the G-3273 constraint on the use of S-333 to deliver water into NESRS, incrementally increasing flows into the slough. During this phase, L-29 canal levels will remain at a maximum operating stage level of 7.5 NGVD. Since not all flood mitigation and seepage management features envisioned in the MWD and C-111 South Dade projects have completed construction, the Phase I testing includes additional water management operating criteria for features of the South Dade Conveyance System, including S-197, to ensure that existing levels of flood protection are retained.

The second phase of testing will continue tests of S-356 and the G-3273 constraint, while raising L-29 canal maximum operating stages up to 8.5 NGVD. This phase also relies upon the use of completed features at C-111 South Dade project, particularly the North Detention Area features. The S-197 operating criteria will be reassessed when these features are complete and operational. To support the operational testing up to the maximum operating limits of 8.5 feet NGVD in the L-29 Borrow Canal, acquisition of remaining real estate interests may be required, but in any case must be completed prior to transition to OMRR&R phase activities. Of the seven parcels where land interests remain to be acquired, six of these are to be acquired by the DoI and the seventh is being acquired by the Corps.

Operational test results will be used to prepare a final comprehensive project Water Control Plan for the completed features of the MWD and the adjacent C-111 Canal South Dade (C-111SD) projects, therein restoring natural hydrological conditions to the extent practicable, as required by the law. The initial actions to develop the comprehensive Water Control Plan will begin as soon as ongoing construction, acquisition of remaining real estate interests, and operational testing is complete.

The Corps has now received approval from FDEP to initiate the first phase of operational testing and the associated temporary deviation in the existing Water Control Plan has been approved to begin in FY 2015, as soon as hydrologic conditions permit relaxation of the G-3273 constraint above 6.8 NGVD, and will continue for approximately two years. Thereafter, Phase II testing will be conducted for approximately two years. Each phase of testing is dependent upon weather conditions and other factors (e.g. real estate acquisition) and may be extended to assure that field test objectives are met and to permit transition to the next phase of testing (or final Water Control Plan development).

Conclusion

Constructed Features

Major features included in the 1992 GDM and in subsequent revisions (2008 Tamiami Trail LRR/EA, as well as the July 2000 GRR/FEIS and 2012 EA on the 8.5 SMA not discussed in the report) for which construction is completed or in progress are listed below. [1]

- One-mile Tamiami Trail Bridge
- Tamiami Trail road improvements
- 8.5 SMA levee and conveyance canal
- S-356 pump station
- S-355A and B gated structures in the L-29 Levee
- S-333 modifications
- Four miles of L-67 Extension Levee degraded
- Tigertail Camp raising
- S-331 Command and Control
- 8.5 SMA seepage collection canal and S-375N control structure

Improvements made to the existing C&SF S-333 and S-334 project features, as wells as construction of the S-356 have improved the ability to control water levels in the L-29 borrow canal and spread flows into the Park over a wider area. These features are also used to manage seepage losses, while ensuring flood protection adjacent to the northern-most section of the

[1] This is not intended to be an all-inclusive list, nor have all of the features listed been discussed in this report. Discussions in this report have been focused primarily on those features that pertain to decisions about remaining unconstructed features.

Park. Flow capacity under Tamiami Trail has been increased by the completion of the 1-mile bridge and other MWD roadway improvements which permit increased water levels in the L-29 borrow canal and ultimately increase flow volumes to the Park. Under ERTP, the current Water Control Plan in this region, the constructed features have provided some improved water deliveries into Everglades National Park and minor improvements to the hydrologic conditions within the Park. However, additional improvements to water deliveries and hydrologic conditions within the Park can be expected upon completion of a new comprehensive Water Control Plan for the completed features of the MWD and the adjacent C-111 South Dade projects. These are discussed further below. Upon completion of construction of the seepage canal and Structure 357N in the southwest corner, the canal and levee system constructed to protect the 8.5 SMA from impacts that might be caused by increased water levels in ENP is expected to provide effective mitigation to this area. These features are scheduled to be completed by the end of 2015.

Unconstructed features

The remaining unconstructed features originally planned in the 1992 GDM include three gated concrete headwall structures (S-349A, B, and C), three gated culvert structures (S-345A, B, and C), and associated discharge channels and bounding levees in WCA-3, and the degradation of the remaining 5.5 miles of the L-67 Ext. levee south of Tamiami Trail.

Although the additional conveyance structures in WCA-3 could still be constructed, it is now apparent that restoration of connectivity between WCA-3A and WCA-3B and flows north of Tamiami Trail could not result in additional benefits to these areas without substantially increased project scope and costs and/or resulting in undesirable conditions in WCA-3B. Water moved from WCA-3A into WCA-3B would flow easterly instead of south toward the Park. Due to previously unanticipated marsh resistance, higher stages than originally planned in WCA-3B would be required to facilitate gravity flow through the constructed S-355 spillways into the L-29 borrow canal at the increased MWD maximum operating limit. These higher stages would be likely to shift flow direction toward the south, but would also result in increased seepage eastward and necessitate implementation of additional, potentially costly, management measures north of Tamiami Trail to assure that existing levels of flood protection in developed areas to the east were maintained. In addition, flow rates from higher water levels in WCA-3B that would be necessary to effectively convey water south through the S-355s would still be constrained since water levels in the L-29 borrow canal would still be limited to 8.5 feet (NGVD) to avoid damage to the Tamiami Trail road base. Instead of benefitting WCA-3B, the resulting higher water levels and reduced flow rates in WCA-3B, compared to depths and flow rates originally anticipated, would be expected to have adverse ecologic affects, damaging tree islands and marsh vegetation.

Raising water levels in the L-29 borrow canal to stages anticipated in the 1992 GDM are not feasible without roadway modifications and would result in unacceptable damages to the Tamiami Trail, which is a major hurricane evacuation route. Roadway modifications, including up to the 9.7 level envisioned in the GDM, were evaluated in the 2008 LRR, however, the

Recommended Plan in the LRR only raised the maximum operating limit to 8.5 feet NGVD. Thus, the 2008 LRR established a new high water level in the L-29 Borrow Canal that was more than a foot lower than the Recommended Plan in the 1992 GDM, effectively capping the amount of water that could potentially be delivered into the Park. Under the existing ERTP Operating Plan with the L-29 Borrow Canal stage capped at 7.5 feet, if the G-3273 constraint is able to be removed improvements of not more than 15% above current flow volumes could be expected. However, if the L-29 Borrow Canal stage can be increased to 8.5 feet NGVD, the 2008 LRR predicted increased flows of up to 92% above current flow volumes.

Below Tamiami Trail the 2008 LRR also indicates degradation of the remainder of the L-67 Extension levee would not be allowed without adequate engineering justification to demonstrate that further removal would not cause L-29 Borrow Canal stages to exceed the MWD maximum operating limit of 8.5 feet NGVD. The LRR concluded that degradation of the remaining L-67 Ext. may cause stages to exceed the MWD L-29 borrow canal maximum operating limit and compromise the condition of the Tamiami Trail roadway. Additional improvements to Tamiami Trail are already authorized under the DoI Tamiami Trail Next Steps (TTNS) Project authority, which are expected to alleviate remaining concerns about the roadway elevation. However, removal of the remainder of the L-67 Extension remains impractical under MWD authority because of damage likely to occur as a result of increased downstream water levels.

How water deliveries into the park have been improved and natural hydrological conditions within the park have been restored to the extent practical

Given that the authority under which the MWD plan was developed was focused on delivery of water *to* the Park and improvement of the hydrology, to the extent practicable *within* the Park, the scope changes and additional costs to make the necessary changes in the Plan to provide the benefits envisioned in the GDM *outside the Park* would be difficult to justify under this authority. Under the current ERTP Operating Plan the improvements to water deliveries to the Park are only about 3 %. However, further improvements to water delivery volumes into NESRS by up to 92 % and improved hydrologic conditions within the Park can be expected upon completion of a comprehensive Water Control Plan for the completed features of the MWD and the adjacent C-111SD projects. Applicable real estate acquisitions must be completed to support operational tests needed and development of that Water Control Plan.

Hence, previously constructed project features and completion of an updated project Water Control Plan to optimize delivery of water to the Park will achieve project purposes and benefits by improving water deliveries into the Park and, to the extent practicable, restoring the natural hydrological conditions within the Park. Improvements to conditions in the Park, however, require: (1) that two phases of operational testing be approved by FDEP, the data from which will inform the development of a comprehensive Water Control Plan for the completed features of the MWD and the adjacent C-111SD projects, and (2) the development of a project OMRR&R Manual . These requirements must be completed before the current MWD project can be considered to be complete.

United States Department of the Interior
NATIONAL PARK SERVICE
Everglades and Dry Tortugas National Parks

40001 State Road 9336
Homestead, Florida 33034-6733

In Reply Refer to:

L54

MAR 14 2012

Colonel Alfred Pantano, Commander
United States Army Corps of Engineers
Jacksonville District
P.O. Box 4970
Jacksonville, Florida 32232-0019

Dear Colonel Pantano:

I am writing to you regarding the completion of the Modified Water Deliveries (Mod Waters) Project that you are constructing on behalf of the National Park Service.

As you know, the project as authorized in 1989 was further defined in the 1992 General Design Memorandum (GDM) that the Corps prepared. However, that project and plan were subsequently modified by Congress through various actions to revise the plan for the 8.5 SMA and include needed changes to the Tamiami Trail (i.e., a one mile long bridge and raising the balance of the roadway to accommodate water levels up to an elevation of 8.5 feet NGVD). Thanks to the efforts of you and your staff, this work is scheduled to be completed by December 2013. These and other previously constructed features should be transferred to an operational status under the Central and Southern Flood Control Project, or physically transferred either to the South Florida Water Management District or the State Department of Transportation during this period as well.

The remaining features of the project as envisioned in the 1992 GDM include the unconstructed features of the Conveyance and Seepage component, namely the S-345 and S-349 structures in the L67A & C levee and the removal of the remaining 5+ miles of the L-67 Extension levee south of the Tamiami Trail, as well as an operating plan for the Mod Waters and C-111 South Dade Projects. It is our belief that most of these features should not be constructed nor completed as a part of the Mod Waters Project for the following reasons.

First, when Congress authorized the Tamiami Trail modifications per the Limited Re-evaluation Report (LRR), they changed the amount of water that could be delivered by the project through the Trail as was specifically noted in the LRR and Congressional Report language. The 1992 GDM contained a high water stage in the L-29 canal of 9.7 feet whereas Congress established a

new high water elevation of 8.5 feet with the adoption of the LRR plan. This reduction had a corresponding impact on the amount of water that could be discharged through the Tamiami Trail greatly reducing the original 4000 cfs design peak flow. The 1992 GDM had called for the 4000 cfs to be achieved by passing 1000 cfs through each of the four structures discharging into L-29 based on their design capacity at the time, namely, the S-333, the S-355A, the S-355B, and the S-356. However, with the reduction in the design high water stage, much less flow can now be passed through the Tamiami Trail. We believe that the most efficient way to pass this reduced flow is through the S-333, which has an existing capacity of 1350 cfs without any additional work. Also, it is anticipated that additional flows would be discharged from the S-356 for seepage control along the L-31 North canal. That pump station was reduced in size and capacity as part of the 8.5 Square Mile Area (SMA) changes, but still provides a capacity of up to 500 cfs. When combined with flows through the S-333, the two structures can provide 1850 cfs into the L-29 canal and potentially raise water levels in the L-29 canal up to the 8.5 feet controlling elevation. Under these conditions, the potential flow through WCA 3B would be greatly reduced from the previous design flow of 1500-2000 cfs, which would have a likewise reduction in any expected benefits to WCA 3B. Also, while there could be some re-allocation of flows to try and put more water through WCA 3B with the MWD conveyance structures, recent engineering studies indicate that additional work may be needed in WCA 3B (such as constructing collection canals) in order to achieve the design flows to the S-355A and B structures at lower stages. Thus, this appears to be a costly and less effective way to achieve the revised lower volume of flow through the Trail. Also, the redesign of the S-345 and S-349 structures and any additional conveyance/collection features was to be included in a yet to be prepared Engineering Design Document.

Second, the reduced design high water stage in the L-29 canal prevents complete degradation of the L-67 Extension levee to the south of the Tamiami Trail as contained in the 1992 Plan. Removal of the remaining northern portion would allow discharges from the S-12 structures to flow eastward into the area immediately downstream of the roadway and thus may produce water levels higher than the allowed 8.5 feet design stage.

Next, the Comprehensive Everglades Restoration Plan included additional modifications to the L-67 A & C structures to increase the connections between WCA 3A with WCA 3B. It also included additional modifications to Tamiami Trail to provide for design flows up to 5000 cfs as well as new features to capture, store, and treat water in the EAA and provide that new clean water to the Everglades. The ongoing Central Everglades Planning Project (CEPP) will be focusing on delivering the first increment of new clean water from the Lake and Everglades Agricultural Area (EAA) down into the central Everglades and the features needed to do that. We fully support and endorse that effort as a holistic look at restoring more flow to the central Everglades system and the specific features and operational plans needed to accomplish that. We expect that the reconnection of WCA 3A with WCA 3B will be examined as a part of that plan as well as other features needed to move additional water through the Tamiami Trail and into the Northeast Shark River Slough area and on to Florida Bay to include consideration of the recently authorized additional bridging for Tamiami Trail. Thus, we believe that plans to

reconnect WCA 3A with WCA 3B would be more aptly considered under the CEPP effort to ensure compatibility with the overall CEPP plan and avoid the potential for constructing features under Mod Waters that may have to be removed under CEPP. I understand the potential cost share implications of removing these structures from Mod Waters and considering them under CEPP and suggest that we discuss this further with the SFWMD.

We also expect that a new operational plan will be developed and included in the CEPP Project Implementation Report for these features as is required for all PIR's. Such a new operational plan would eventually replace any current operational plans such as IOP, the new ERTP when that Record of Decision is signed, or any future plan such as the Combined Operating Plan (COP). Given the accelerated timeline to complete this new PIR, and the current protracted timeline to complete the development of a new COP, recent schedules for these two efforts prepared by your office indicate that it is highly likely that the draft operating plan for the PIR would be completed well before the new COP. While I recognize that this new operational schedule will be further refined, it should better inform future operational goals for this part of the system. Given this, we question the current scope and schedule for development of the COP as presently proposed and believe that the development of the COP be greatly reduced in scope and time to address only those changes needed to the current ERTP to allow higher water levels in L-29 and thus more water to flow eastward from WCA 3A consistent with the new bridge and elevated roadway and any adjustments needed to the 8.5 SMA operational plan. This would provide an interim operational plan consistent with the completed features of Mod Waters until the CEPP operating plan can be implemented.

Last, as we work to complete the Mod Waters project, we are well over the original budgeted cost of the project. We have also recently experienced significant cost increases with the construction of the Tamiami Trail modifications which have consumed all remaining funds previously budgeted for the project. In addition, your staff has informed us of the need for additional funds to complete the roadway modifications. Considering this, we have requested an additional $8 million in FY 13 to complete the project. We also anticipate the successful execution of an agreement between the Corps and the Florida Department of Transportation (FDOT), which we hope will provide at least an additional $3 million in cash from them for this work. Thus, our project budget would increase to a little over $417 million. Within that budget, we anticipate the following actions to complete the project: 1) completion of the Tamiami Trail contract and transfer to FDOT; 2) completion of the project required biological monitoring for endangered species; 3) completion of the corrective action in the 8.5 SMA to eliminate the residual flooding potential; and 4) the completion of the testing for relaxation of the G-3273 constraint and S-356 operations. We are also still working with your staff to develop a scope for future adjustments to the proposed ERTP operational plan that will allow raising the L-29 canal maximum water level to 8.5 per the LRR. Thus, there are no funds remaining within the approved budget to complete any other remaining features.

For the above reasons and to minimize potentially lost efforts that could easily result from trying to implement features that were planned nearly two decades ago while also developing new plans

on a parallel track, we believe that the remaining unconstructed features and the final operating plan should be deleted from the Mod Waters project and examined under the ongoing Central Everglades Planning Project and that the COP effort be reduced and streamlined as discussed above. The CEPP process will determine what further modifications may be needed to provide an integrated plan that supports restoring flow to the central Everglades. This will also provide a more comprehensive look at the overall problems and issues as well as the development of the most efficient and effective operating plan for moving additional water into and through the Everglades.

Hopefully, you will concur in this approach and determine that the Mod Waters project will be complete upon the completion of the ongoing construction, testing, and transfer as outlined above. Additionally, these remaining project activities must remain within the funds made available from the National Park Service for the project. If you have any questions regarding this information or approach, please do not hesitate to contact me.

Sincerely,

Dan B. Kimball
Superintendent

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

CECW-SAD

APR 27 2017

SUBJECT: Modified Water Deliveries to Everglades National Park Project (MWD)

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on the construction of modifications to the Central and Southern Florida (C&SF) Project under the Modified Water Deliveries (MWD) project to improve water deliveries into the Everglades National Park (ENP) and, to the extent practicable, to take steps to restore the natural hydrological conditions within ENP. It is accompanied by a Technical Analysis Report and supporting National Environmental Policy Act (NEPA) documentation prepared by the Jacksonville District and subsequent letters from the Department of Interior (DoI, the federal sponsor for construction) and the South Florida Water Management District (SFWMD, the non-federal sponsor for operations and maintenance) endorsing the report's evaluations and recommendations from the Jacksonville District Engineer. My report, and these accompanying materials, are in final response to a request made by the National Park Service on 14 March 2012 that the construction of the MWD project be considered complete upon finishing ongoing construction without constructing several conveyance and seepage features originally recommended in the 1992 MWD General Design Memorandum (GDM).

2. The MWD project was authorized by Section 104 of the Everglades National Park Protection and Expansion Act in 1989 (P.L. 101-229), which directed the Secretary of the Army to construct modifications to the C&SF project upon completion of a final report by the Chief of Engineers. Features of the project were originally identified in the 1992 MWD GDM.

3. In 2015, the Jacksonville District prepared a Technical Analysis Report which evaluated the DoI's 14 March 2012 request and recommended that the combination of previously constructed features, project features currently under construction, acquisition of remaining real estate interests, and completion of an updated project Water Control Plan to optimize delivery of water to ENP, would achieve the MWD project's authorized purposes and benefits by 1) improving water deliveries into ENP, and 2) taking steps to restore the natural hydrological conditions within ENP to the extent practicable. The report also recommended that improvements to conditions in ENP would require the completion of two phases of operational testing, the data from which would inform the development of a comprehensive Water Control Plan for the completed features of the MWD project and the adjacent C&SF Canal 111 South Dade project (C-111SD). Finally, the report recommended that such ENP improvements

would also require the development of an Operation, Maintenance, Repair, Replacement, and Rehabilitation (OMRR&R) Manual.

4. A Project Cooperation Agreement (PCA) with the SFWMD for the MWD project was executed in 1994. Construction was initiated in 1995, and amendments to the PCA were executed in 2001 and 2008 following reevaluations of the project during those respective timeframes. Under the agreement, the total MWD project construction cost are federally funded at an estimated cost of $417 million. The Fiscal Year 2009 Senate Energy and Water Appropriations bill directed the funding of the MWD project through the DoI budget, and remaining construction of MWD features occurs at 100% DoI cost. Upon transfer of the project to the SFWMD for operations, SFWMD will generally be responsible for 25% of the costs of operations and maintenance (O&M) and the Corps will be responsible for 75% of the cost of O&M, at an estimated average cost of $1.3 million per year.

5. The 1989 MWD project authorization directs the Secretary of the Army (in consultation with the Secretary of the Interior) to construct modifications to the C&SF project for the dual purposes of improving water deliveries to ENP, and taking steps to restore natural hydrologic conditions within ENP to the extent practicable. The three major construction components of the MWD project are: 1) the 8.5 Square Mile Area project (8.5 SMA), 2) Tamiami Trail Modifications (TTM), and 3) Conveyance and Seepage Control Features (CSCF). Since the initial authorization and approval of the 1992 GDM, several design changes were required to implement the project. In 2000, a General Reevaluation Report (GRR)/Supplemental Environmental Impact Statement (SEIS) was completed for the 8.5 SMA, modifying the original plan, and in 2001, the first amendment to the PCA was executed. Under P.L. 108-7, Congress directed the project to proceed immediately as modified. In 2005, a Revised GRR/SEIS was completed recommending modifications to Tamiami Trail (U.S. Highway 41) to address higher water levels under the authorized plan. Concerns about the costs of the 2005 plan led to development of a new Limited Re-evaluation Report (LRR) on the Tamiami Trail project features in 2007-2008, and to a second amendment to the PCA in 2008. Congress directed the project to proceed under these modifications in March 2009 pursuant to P.L. 111-8.

6. The following project features have been completed to date: gated spillway structures S-355A and S-355B in the L-29 Levee, modifications to structure S-333 and structure S-334 to accommodate higher water levels in the L-29 Canal, pump station S-356 between L-31N Canal and L-29 Canal (returning seepage to ENP), degradation of four of nine miles of the L-67 Extension Canal and Levee, raising of the Tigertail Camp, and a one mile bridge on the eastern side of the Tamiami Trail with the associated Tamiami Trail road improvements needed to permit flows under the roadway. The final project construction contract is currently underway for the 8.5 SMA, including the C-358

seepage collection canal and S-375N control structure, both of which are scheduled to be complete in May 2017. In addition, all remaining real estate interests required for the project have now been acquired.

7. Features originally included in the project, but not constructed to date, consist of the following: gated culvert structures S-345 A, B and C through the L-67A Levee (with associated modifications to the L-67C Levee), structures S-349 A, B and C in the L-67A Borrow Canal, and modifications to the remaining L-67 Extension Canal and Levee. Since 1992, as a result of changes needed to implement Tamiami Trail conveyance features and recent analysis of the ongoing operation of the system, the Jacksonville District's technical analysis recommended that if these remaining features from the GDM were constructed, additional design changes to the MWD project would be necessary to provide the benefits originally envisioned in the 1992 MWD GDM/EIS for WCA 3A and 3B. Given that the MWD project authorization specifically provided for taking steps to restore hydrological conditions within the ENP to the extent practicable, the Jacksonville District's 2015 technical analysis and evaluation found that taking these additional, unanticipated design change steps outside of the ENP would be difficult to justify under this authority, and thus would not be reasonably practicable to undertake as part of the MWD project. Moreover, the 2008 TTM LRR/EA concluded that degradation of the remaining L-67 Extension within the ENP may cause stages to exceed the MWD project L-29 Borrow Canal maximum operating limit and compromise the condition of the Tamiami Trail roadway. At the same time, the Jacksonville District's 2015 technical evaluation also found that water delivery volumes could still be improved by up to 92% (compared to pre-MWD conditions described in the LRR), and practicable hydrologic restoration within ENP could still be expected, upon the completion of the comprehensive Operations Water Control Plan for only the completed features of the MWD project and adjacent C-111 SD project.

8. A Draft Environmental Assessment (EA) and Proposed Finding of No Significant Impact (FONSI) document was circulated for public review on 28 February 2017 and the Jacksonville District is completing its assessment of the environmental effects of removing the unconstructed conveyance and seepage control features from the MWD project's planning definition, alongside other alternative actions, in accordance with the National Environmental Policy Act (NEPA) of 1969. While the Jacksonville District's recommended action will not on its own achieve the benefits to Water Conservation Area 3B as originally envisioned in the original 1992 GDM/MWD EIS, the draft EA documents that completed features are consistent with MWD project design changes documented within the 2000 8.5. SMA GRR/EIS, the 2008 TTM LRR and EA, the 2012 8.5 SMA EA, as well as with the implementation of Central Everglades Planning Project (CEPP) and the DoI's "Tamiami Trail Next Steps" effort.

9. I have reviewed the 2015 Technical Analysis Report and its associated draft NEPA assessment and concur with the Jacksonville District's recommendation that the completion of constructed MWD project features, as well as the completion of those MWD features currently under construction and scheduled to be complete in May 2017, and the completion of an updated project Water Control Plan to optimize delivery of water to ENP, would achieve MWD project purposes and benefits by improving water deliveries into ENP, and would consist of a reasonable set of steps to take to restore the natural hydrological conditions within ENP to the extent practicable under the MWD project authority. I also concur with the Jacksonville District's recommendation that improvements to conditions in ENP would require the completion of two phases of operational testing, the data from which would inform the development of a comprehensive Water Control Plan for the completed features of the MWD project and the adjacent C-111SD project, and the development of an OMRR&R Manual. Accordingly, because not all of the features originally contained in the MWD GDM would be built pursuant to these recommendations, I further recommend the execution of an amendment to the MWD PCA for the sole purpose of excepting from the definition of the term "project" in that agreement the unconstructed features described in paragraph 7 above.

10. The DoI's "Tamiami Trail Next Steps" bridging project, coupled with CEPP features authorized in Section 1401(4) of the Water Resources Development Act of 2016 (P.L. 114-322), are reasonably anticipated to deliver more water to this region and allow it to provide additional restoration to southern WCA 3B and pass under the Tamiami Trail into ENP. Such recent achievements in the overall south Florida ecosystem restoration effort reflect significant ongoing commitments in the collective state-federal effort to further improve water deliveries and hydrological conditions within the ENP watershed.

Encl

JAMES C. DALTON, P.E.
Director of Civil Works

APPENDIX B – PERTINENT CORRESPONDENCE

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TABLE B-1. COMMENTS RECEIVED DURING PUBLIC REVIEW OF THE MODIFIED WATER DELIVERIES TO EVERGLADES NATIONAL PARK PROJECT: REMOVAL OF UNCONSTRUCTED CONVEYANCE AND SEEPAGE FEATURES ENVIRONMENTAL ASSESSMENT AND PROPOSED FINDING OF NO SIGNIFICANT IMPACT.

Number	Commenter	Comment	Response
1	EPA, Region 4	On page 4-14, the US Army Corps of Engineers (USACE) discusses impacts to Native Americans and states, "As part of the consideration of effects, consultation with the appropriate federally recognized tribes was initiated on January 13, 3017 and is ongoing. Consultation will be finalized prior to implementation of the proposed action. Recommendation: The EPA recommends the USACE discuss any informal or formal consultation with the tribes within the Final Environmental Assessment (EA).	Concur, additional information regarding consultation has been added to Appendix B.
2	EPA, Region 4	Also in section 4.11, the USACE states, "The Miccosukee Tribe of Indians of Florida have continuously expressed concern with high water levels in Water Conservation Area (WCA) 3A where many tribal members live and utilize culturally sensitive areas. The EPA notes that in the subsequent discussions of Alternative A (the No Action Alternative) the USACE does discuss the impacts to Native American resources within WCA 3A regarding high water levels under this alternative; however, there is no similar high water level impact discussion in Alternative B (Removal of CSCF Components…). Recommendation: The EPA recommends the USACE expand their discussion regarding the impacts of potential high water levels in WCA 3A regarding Native American resources and	Concur, additional information added to Section 4.11.2.

		compare impacts between Alternative A and Alternative B.	
3	EPA, Region 4	In Tables 4-1 (page 4-19) and 4-2 (page 4-21), the USACE outlines past, present, and reasonably foreseeable actions and plans affecting the project area and summarizes these impacts related to each resource area. The EPA thinks this is a good way of outlining the CERP related cumulative impacts; however, there are other past, present and reasonable foreseeable non-CERP related actions and projects that could impact the project area. For example, there could be other Everglades National Park (ENP) or Florida Department of Transportation (FDOT) actions that could impact the project area. Also, the Miccosukee Tribe of Indians of Florida could have future activities that could impact the project area. Recommendation: The EPA recommends the USACE expand their Cumulative Impacts section beyond CERP activities.	Concur, Table 4.1 has been updated to denote reasonable foreseeable ENP, FDOT and Miccosukee Tribe actions as currently known by the Corps.
4	EPA, Region 4	In Table 4-1, the "CERP Projects" row and the "Past Actions/Authorized Plans" column has been left blank. Recommendation: Has there been no Past CERP Actions? If not, then the EPA recommends the USACE state so in this row/column.	Concur, Table 4.1 has been updated to denote Congressional Authorization for CERP in the Water Resources Development Act of 2000.
5	EPA, Region 4	In Table 4-1 and in the "CERP Projects" row of the table and in the "Reasonably Foreseeable Future Actions and Plans" column, the USACE has listed "Future Projects", but has not identified any future CERP projects. Recommendation: The EPA recommends the USACE list any reasonably foreseeable future projects.	Concur, Table 4.1 has been updated to denote reasonable foreseeable future CERP Projects.

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

RESOLUTION NO. 2014-0410

A Resolution of the Governing Board of the South Florida Water Management District authorizing the Executive Director to sign a letter to the U.S. Army Corps of Engineers expressing support for the Central Everglades Planning Project, and affirming South Florida Water Management District's financial capability to satisfy the obligations of the Non-Federal Sponsor described in the Central Everglades Planning Project, Final Integrated Project Implementation Report and Environmental Impact Statement, dated April 2014 and for which funding, is subject to approval of future fiscal year state budgets by the State Legislature and Governor, and District budgets for CEPP by the State Legislature, Governor and District Governing Board; providing an effective date.

WHEREAS, Congress, in Section 601 of the Water Resources Development Act of 2000, approved with modifications the Comprehensive Everglades Restoration Plan (CERP) contained in the Final Integrated Feasibility Report and Programmatic Environmental Impact Statement, dated April 1, 1999, as a framework for making modifications and changes to the Central and Southern Florida Project; and

WHEREAS, the Central Everglades Planning Project (CEPP) is composed of increments of major CERP components that will provide significant environmental benefits to the central Everglades ecosystem, the St. Lucie Estuary and the Caloosahatchee Estuary, and will help meet the other water-related needs of the region; and

WHEREAS, the CEPP Recommended Plan (Recommended Plan) as contained within the CEPP Integrated Project Implementation Report and Environmental Impact Statement, dated April 2014, (CEPP PIR/EIS) will improve the quantity, quality, timing, and distribution of water into Water Conservation Areas 3A and 3B, Everglades National Park, and Florida Bay by adding an average of approximately 210,000 acre-feet per year of additional freshwater flow in the central Everglades; and

WHEREAS, this additional water will help restore pre-drainage vegetative communities and habitat for fish and wildlife while providing incremental restoration of natural processes critical for the development of peat soils and tree islands, which are essential features of the Everglades ridge-and-slough landscape; and

WHEREAS, the Recommended Plan will reduce the number and severity of high-volume discharges from Lake Okeechobee into the St. Lucie and Caloosahatchee Estuaries and will improve salinity in these estuaries; and

WHEREAS, the Recommended Plan will improve the salinity in Florida Bay resulting in greater abundance and diversity of sea grasses and other estuarine plant and animal species; and

WHEREAS, the Recommended Plan will increase public water supply in Broward and Miami-Dade Counties by approximately 12 and 5 million gallons per day, respectively; and

WHEREAS, the Recommended Plan will also maintain water supply for agricultural users in the Lake Okeechobee Service Area and will also maintain current levels of service for flood protection in the CEPP study area; and

WHEREAS, the expedited planning process for the development of the CEPP Integrated Project Implementation Report and Environmental Impact Statement involved extensive coordination and input by the public and federal, state, and local resource management and regulatory agencies; and

WHEREAS, the Recommended Plan will utilize existing South Florida Water Management District owned lands; and

WHEREAS, the Recommended Plan implementation is dependent upon project interdependencies and phasing with other CERP and non-CERP Projects, and the need for multiple Project Partnership Agreements, and

WHEREAS, Stakeholders have expressed concern that the current version of the Draft Final PIR will not be available for public review prior to the adoption of this Resolution and request the Corps to revise its planning process in the future to allow the public to review the most current version of the Draft Final PIR prior to the local sponsor's letter of support;

NOW THEREFORE, BE IT RESOLVED BY THE GOVERNING BOARD OF THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT:

Section 1. The Governing Board acknowledges that water quality issues need to be resolved prior to implementing CEPP projects. Issues include the need to revise the compliance methodology of the Consent Decree (Appendix A) and also to reach agreement on joint measures which may be needed in the event of an exceedance of Appendix A resulting from a change in operation of a federal project. Failure to develop a mutually agreed upon revised compliance methodology of the Consent Decree (Appendix A) or mutually agreed upon joint measures which may be needed in the event of an exceedance of Appendix A resulting from change in operation of a federal project will preclude the SFWMD from implementing, approving, or operating CEPP Projects.

The Governing Board acknowledges that the following negotiated language in the District Engineer's Recommendation Section (Section 8) of the PIR/EIS with respect to concepts regarding water quality that were jointly developed by the United States Army and the State of Florida be used to govern the implementation and operation of CEPP project features:

> "Restoration of the Everglades requires projects that address hydrologic restoration as well as water quality improvement. This has been recognized by the National Academy of Sciences in its most recent biennial report where it noted that near-term progress to address both water quality and water quantity improvements in the central Everglades is needed to prevent further declines of the ecosystem. The significant amount of water resulting from CEPP is contemplated to significantly improve restoration of the Everglades. Both the Federal and State parties recognize that water quantity and quality restoration should be pursued concurrently and have collaborated to develop and concur on a suite of restoration strategies being implemented by the State to improve water quality ("State Restoration Strategies"), as well as other State and Federal restoration projects, both underway and planned, to best achieve Everglades hydrologic objectives. Specific examples of Federally authorized projects include the Everglades Restoration Transition Plan, Modified Water Deliveries to Everglades National Park Project, and the Tamiami Trail Next Steps Project.[1] One of the goals of these projects and their associated operating plans, as well as certain components of the CERP awaiting authorization or that are being planned as part of the CEPP is to improve water quantity and quality in the Everglades through more natural water flow within the remnant Everglades which includes the water conservation areas and ENP. Variations in flows of the C&SF system may result from a variety of reasons. These reasons include natural phenomena (e.g. weather) and updates to the operating manuals to achieve the purposes of the C&SF Project such as flood control and water supply.
>
> One goal of the Consent Decree[2] is to restore and maintain water quality within ENP. The Consent Decree established, among other things, long-term water quality limits for water entering ENP to achieve this goal. The existing limits for ENP are flow dependent and, generally, increased volume of water results in a lower allowable concentration of phosphorus to maintain the overall load of phosphorus entering the ENP. There will be redistribution of flows and increased water volume above existing flows associated with system restoration efforts beyond the current State Restoration Strategies projects. The USACE and its Federal and State partners recognize that to achieve long-term hydrologic improvement, water quality may be impacted, particularly as measured by the current Consent Decree Appendix A compliance methodology. The USACE and the State partners agree that the monitoring locations/stations for inflows to ENP

[1] The next phase of bridging for Tamiami Trail roadway as authorized by Congress.

[2] *United States v. South Florida Water Management District, et al.*, Case No. 88-1886-CIV-Moreno (U.S.D.C., S.D. Fla.).

will require revision. An evaluation of this and other aspects of the compliance methodology are currently being conducted by the Technical Oversight Committee (TOC).

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

The aforementioned State Restoration Strategies will be implemented under a Clean Water Act discharge permit that incorporates and requires implementation of corrective actions required under a State law Consent Order, as well as a Framework Agreement between the U.S. Environmental Protection Agency and the State discharge permitting agency, the Florida Department of Environmental Protection, to ensure compliance with Clean Water Act and State water quality requirements for existing flows into the Everglades. The Clean Water Act permit for the State facilities, the associated Consent Order (including a detailed schedule for the planning, design, construction, and operation of the new project features), and technical support documents were reviewed by, and addressed all of, the U.S. Environmental Protection Agency's previous objections related to the draft National Pollutant Discharge Elimination System ("NPDES") permits, prior to issuance.

All parties are committed to implementing the State Restoration Strategies, joint restoration projects, and associated operational plans, in an adaptive manner that is consistent with the objectives of the underlying C&SF Project. The USACE and the State will use all available relevant data and supporting information to inform operational planning and decision making, document decisions made, and evaluate the resulting information from those decisions to avoid adverse impacts to water quality where practicable and consistent with the purposes of the C&SF Project. Based upon current and best available technical information, the Federal parties believe at this time that the State Restoration Strategies, implemented in accordance with the State issued Consent Order and other joint restoration projects, are sufficient and anticipated to achieve water quality requirements for existing flows to the Everglades. If there is an exceedance of the Appendix A compliance limits, which results from a change in operation of a Federal project, and it has been determined that an exceedance cannot be remedied without additional water quality measures, the Federal and

State partners agree to meet to determine the most appropriate course of action, including what joint measures should be undertaken as a matter of shared responsibility. These discussions will include whether it is appropriate to exercise any applicable cost share authority. If additional measures are required and mutually agreed upon, then they shall be implemented in accordance with an approved process, such as a general reevaluation report or limited reevaluation report, and if necessary, supported through individual project partnership agreements. Failure to develop mutually agreed upon measures and cost share for these measures may impact the State's ability to operate the Federal project features."

Section 2. The Governing Board acknowledges that U.S. Army Corps of Engineers assurances in Section 2, Section 6 and the District Engineer's Recommendation Section (Section 8) of the PIR/EIS with respect to project interdependency and phasing with other CERP and non-CERP Projects, use of existing SFWMD owned lands, and project benefits and cost share, enables the Governing Board to endorse the Letter of Support. Such assurances include the following:

a. The CEPP PIR/EIS recognizes that all features of the state's Restoration Strategies must be completed and meet state water quality standards prior to initiating construction of most CEPP project features.

b. The CEPP PIR/EIS acknowledges that the operation of State facilities is required for achievement of CEPP project benefits. The CEPP PIR/EIS further recognizes that these state facilities are subject to legal requirements and will not be operated in such a manner that will cause exceedances of the State's water quality requirements and, as such, may limit the anticipated CEPP project benefits.

c. The CEPP Recommended Plan features in the PIR/EIS utilize existing SFWMD owned lands.

d. The CEPP PIR/EIS includes certain project dependencies and requirements including: completion and operations of Modified Water Deliveries prior to implementation of CEPP project features that provide additional water to Everglades National Park and modification of the 2008 Lake Okeechobee Regulation Schedule to achieve all CEPP project benefits and comply with Savings Clause.

e. The CEPP PIR/EIS includes the Corps' need to request Congressional authorization for specific statutory language allowing the Corps to cost share 9.5% of the yearly OMRR&R costs of State facilities and certain C&SF Project features used by CEPP from appropriations made available for CERP OMRR&R activities.

f. The CEPP PIR/EIS is composed of implementation phases with logical groupings of recommended plan features that maximize benefits to the extent practicable consistent with project dependencies and acknowledges the need to execute individual Project Partnership Agreements, or amendments to existing Project Partnership Agreements prior to initiating construction of each implementation phase.

Section 3. The Governing Board acknowledges that the Recommended Plan in the Draft PIR is subject to a Programmatic Biological Opinion and Select Concurrence on Effects to Threatened or Endangered Species and Critical Habitat **dated April 2014** from the U.S. Fish and Wildlife Service ("Service"). The Programmatic Biological Opinion requires future consultation with the Service to occur before CEPP project features are constructed. Any subsequent consultation document(s) must be finalized and satisfactory to the Governing Board before SFWMD will execute Project Partnership Agreement(s) for CEPP project features.

Section 4. The Governing Board authorizes the Director of Administrative Services Division to sign the Central Everglades Planning Project Non-Federal Sponsor's Self-Certification of Financial Capability, on behalf of the SFWMD, expressing financial capability to satisfy the Non-Federal Sponsor's obligations set forth in the CEPP PIR/EIS. The South Florida Water Management District's financial capability is subject to the following conditions:

a. Approval of future fiscal year state budgets by the State Legislature and Governor, and District budgets for CEPP by the State Legislature, Governor and District Governing Board.

b. The USACE and SFWMD have approximately equal programmatic expenditures on an average annual basis for implementation of CERP.

c. CEPP is implemented in accordance with a SFWMD and USACE jointly agreed upon CERP project prioritization and the Integrated Delivery Schedule.

Section 5. The Governing Board acknowledges that the CEPP PIR/EIS is subject to further review by the public, State and Federal agencies as well as Army Corps of Engineers headquarters and Department of Army. Any substantive or material changes to the CEPP PIR/EIS including the Record of Decision, will require further review and approval of the Governing Board.

Section 6. Based on the assurances and conditions documented in Section 1 though Section 5 of this resolution, the Governing Board of the South Florida Water Management District (SFWMD) hereby authorizes the Executive Director to sign a letter to the U.S. Army Corps of Engineers, on behalf of the SFWMD, expressing support for the Central Everglades Planning Project Final Integrated Project Implementation Report and Environmental Impact Statement, dated April 2014.

Section 7. This Resolution shall take effect immediately upon adoption.

PASSED and **ADOPTED** this 10th day of April, 2014.

SOUTH FLORIDA WATER MANAGEMENT DISTRICT, BY ITS GOVERNING BOARD

ATTEST:

District Clerk / Secretary

By: _____
Chairman

Approved as to form:

By: _____
Office of Counsel

ABNER COOPER
Print Name

BOARD OF SOUTH FLORIDA WATER MANAGEMENT DISTRICT • GOVERNING STATE OF FLORIDA SEAL Established 1949

CENTRAL EVERGLADES PLANNING PROJECT NON-FEDERAL SPONSOR'S
SELF-CERTIFICATION OF FINANCIAL CAPABILITY
FOR DECISION DOCUMENTS

I, Douglas Bergstrom, do hereby certify that I am the Director for the Administrative Services Division of the South Florida Water Management District (the "Non-Federal Sponsor"); that I am aware of the financial obligations of the Non-Federal Sponsor for the Central Everglades Planning Project if Project Partnership Agreements are approved by the Non-Federal Sponsor's Governing Board and signed by the Chair; and I certify that the Non-Federal Sponsor will have the financial capability to satisfy the non-Federal Sponsor's obligations, as set forth in the Central Everglades Planning Project, Final Project Implementation Report dated April 2014 subject to approval of future fiscal year state budgets by the State Legislature and Governor and District budgets for CEPP by the State Legislature, Governor, and Governing Board as set forth in the Local Sponsors Letter of Support and Governing Board Resolution No. 2014-0410. I understand that the Government's acceptance of this self-certification shall not be construed as obligating either the Government or Non-Federal Sponsor to implement a project or appropriate funds.

IN WITNESS WHEREOF, I have made and executed this certification this 10th day of April, 2014.

BY: Douglas D Bergstrom

TITLE: Director, Administrative Services Division

DATE: April 10, 2014

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

April 11, 2014

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

Subject: Letter of Support for the Central Everglades Planning Project Final Integrated Project Implementation Report and Environmental Impact Statement

Dear Colonel Dodd:

The purpose of this letter is to express the South Florida Water Management District's (SFWMD) support for the Central Everglades Planning Project Final Integrated Project Implementation Report and Environmental Impact Statement (PIR/EIS) dated April 2014. The SFWMD is authorized to act as local sponsor for Comprehensive Everglades Restoration Plan (CERP) projects and has played an integral role in the CEPP PIR/EIS development by providing technical support. The SFWMD commends the U.S. Army Corps of Engineers for extensive outreach and coordination which resulted in a Recommended Plan that has broad stakeholder support.

The CEPP will beneficially affect more than 1.5 million acres in the St. Lucie and Caloosahatchee Estuaries, WCA 3A, WCA 3B, Everglades National Park, and Florida Bay. In addition to redistributing existing treated water in a more natural sheetflow pattern, the recommended plan provides an average of approximately 210,000 acre-feet per year of additional clean freshwater flowing into the central portion of the Everglades. This increase in freshwater flow to the Everglades is approximately two-thirds of the additional flow estimated to be provided by the CERP. The recommended plan also reduces the number and severity of undesirable, high-volume discharges from Lake Okeechobee, improving salinity in the St. Lucie and Caloosahatchee Estuaries. The additional water flowing into northern WCA 3A and ENP will help to restore pre-drainage vegetative communities and habitat for fish and wildlife while providing incremental restoration of natural processes critical for the development of peat soils and tree islands, which are essential features of the Everglades ridge and slough landscape.

Increased flows to Florida Bay will improve salinities, resulting in greater abundance and diversity of sea grasses and other estuarine plant and animal species.

The federal authority for preparing the CEPP PIR/EIS is contained in Section 601(d) of the Water Resource Development Act of 2000. We look forward to Congressional authorization and appropriation of funds for this important CERP project so that the CEPP can move forward into the design and construction phase.

While not legally binding on the SFWMD, this letter voices the SFWMD's support, as set forth in and subject to the terms of Governing Board Resolution No. 2014-0410, for the CEPP PIR/EIS. This resolution is composed of six substantive sections covering the following issues: 1) water quality (Appendix A); 2) assurances contained in Sections 2, 6, and 8 of the Draft Final PIR; 3) completion and review of future Endangered Species Act consultation documents; 4) CEPP Self Certification of Financial Capability; 5) further review of the Draft Final CEPP PIR; and 6) Executive Director's authorization to sign a Letter of Support for the CEPP. Also enclosed is the Central Everglades Planning Project Non-Federal Sponsor's Self-Certification of Financial Capability.

On behalf of the State of Florida, the SFWMD is proud to serve as the local sponsor with the U.S. Army Corps of Engineers on this first CERP project to restore the heart of the Everglades. This project embodies the success of the ongoing partnership between the State and Federal governments to Everglades restoration.

Sincerely,

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

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

FEB 1 0 2017

Colonel Jason A. Kirk
District Commander – Jacksonville District
U.S. Army Corps of Engineers
701 San Marco Boulevard
Jacksonville, Florida 32207-8175

Dear Colonel Kirk:

I am writing to you in regards to the letter of July 17, 2015, from your predecessor, COL Alan Dodd, which addressed the requirements for the completion of construction and transfer of the Modified Water Deliveries to Everglades National Park Project. This letter is to confirm our support and agreement with the Corps' conclusions as contained in that letter.

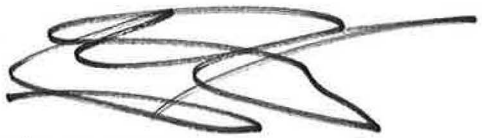
We concur with the Corps' technical analysis and conclusion that the constructed features and those remaining features currently under construction in combination with the completion of the real estate acquisition and development of a final Water Control Plan will meet the Congressional direction to improve water deliveries to Everglades National Park and to the extent practical, restore the natural hydrologic conditions within the Park.

We will continue to work closely with your staff through the completion of these actions. I am happy to note that the three remaining components (S-356 Pump Station, S-357N Divide Structure and C-358 Seepage Canal Extension) are under construction, and the completion of the real estate acquisition needed by the National Park Service is imminent. Also, we are all jointly proceeding with the incremental field tests that will lead to development of the final operating plan and revised water control manual. We stand ready to provide support and input to assist in the development of supplemental National Environmental Policy Act documentation, required prior to the Corps closing out the construction phase of the MWD project and to provide for the necessary real estate interests that will allow for the flow of project water into Everglades National Park.

As we have discussed many times, all funding from Department of the Interior for completion of this project was previously appropriated through fiscal year 2013, and we are prepared to work with the Corps to ensure that the funding we previously provided will enable completion of these pending actions as expeditiously as possible.

Thank you for your continued positive efforts, and we look forward to the ultimate successful completion of this project.

Sincerely,



Pedro M. Ramos
Superintendent

United States Department of the Interior
NATIONAL PARK SERVICE
Everglades and Dry Tortugas National Parks

40001 State Road 9336
Homestead, Florida 33034-6733

In Reply Refer to:

L54

MAR 14 2012

Colonel Alfred Pantano, Commander
United States Army Corps of Engineers
Jacksonville District
P.O. Box 4970
Jacksonville, Florida 32232-0019

Dear Colonel Pantano:

I am writing to you regarding the completion of the Modified Water Deliveries (Mod Waters) Project that you are constructing on behalf of the National Park Service.

As you know, the project as authorized in 1989 was further defined in the 1992 General Design Memorandum (GDM) that the Corps prepared. However, that project and plan were subsequently modified by Congress through various actions to revise the plan for the 8.5 SMA and include needed changes to the Tamiami Trail (i.e., a one mile long bridge and raising the balance of the roadway to accommodate water levels up to an elevation of 8.5 feet NGVD). Thanks to the efforts of you and your staff, this work is scheduled to be completed by December 2013. These and other previously constructed features should be transferred to an operational status under the Central and Southern Flood Control Project, or physically transferred either to the South Florida Water Management District or the State Department of Transportation during this period as well.

The remaining features of the project as envisioned in the 1992 GDM include the unconstructed features of the Conveyance and Seepage component, namely the S-345 and S-349 structures in the L67A & C levee and the removal of the remaining 5+ miles of the L-67 Extension levee south of the Tamiami Trail, as well as an operating plan for the Mod Waters and C-111 South Dade Projects. It is our belief that most of these features should not be constructed nor completed as a part of the Mod Waters Project for the following reasons.

First, when Congress authorized the Tamiami Trail modifications per the Limited Re-evaluation Report (LRR), they changed the amount of water that could be delivered by the project through the Trail as was specifically noted in the LRR and Congressional Report language. The 1992 GDM contained a high water stage in the L-29 canal of 9.7 feet whereas Congress established a

new high water elevation of 8.5 feet with the adoption of the LRR plan. This reduction had a corresponding impact on the amount of water that could be discharged through the Tamiami Trail greatly reducing the original 4000 cfs design peak flow. The 1992 GDM had called for the 4000 cfs to be achieved by passing 1000 cfs through each of the four structures discharging into L-29 based on their design capacity at the time, namely, the S-333, the S-355A, the S-355B, and the S-356. However, with the reduction in the design high water stage, much less flow can now be passed through the Tamiami Trail. We believe that the most efficient way to pass this reduced flow is through the S-333, which has an existing capacity of 1350 cfs without any additional work. Also, it is anticipated that additional flows would be discharged from the S-356 for seepage control along the L-31 North canal. That pump station was reduced in size and capacity as part of the 8.5 Square Mile Area (SMA) changes, but still provides a capacity of up to 500 cfs. When combined with flows through the S-333, the two structures can provide 1850 cfs into the L-29 canal and potentially raise water levels in the L-29 canal up to the 8.5 feet controlling elevation. Under these conditions, the potential flow through WCA 3B would be greatly reduced from the previous design flow of 1500-2000 cfs, which would have a likewise reduction in any expected benefits to WCA 3B. Also, while there could be some re-allocation of flows to try and put more water through WCA 3B with the MWD conveyance structures, recent engineering studies indicate that additional work may be needed in WCA 3B (such as constructing collection canals) in order to achieve the design flows to the S-355A and B structures at lower stages. Thus, this appears to be a costly and less effective way to achieve the revised lower volume of flow through the Trail. Also, the redesign of the S-345 and S-349 structures and any additional conveyance/collection features was to be included in a yet to be prepared Engineering Design Document.

Second, the reduced design high water stage in the L-29 canal prevents complete degradation of the L-67 Extension levee to the south of the Tamiami Trail as contained in the 1992 Plan. Removal of the remaining northern portion would allow discharges from the S-12 structures to flow eastward into the area immediately downstream of the roadway and thus may produce water levels higher than the allowed 8.5 feet design stage.

Next, the Comprehensive Everglades Restoration Plan included additional modifications to the L-67 A & C structures to increase the connections between WCA 3A with WCA 3B. It also included additional modifications to Tamiami Trail to provide for design flows up to 5000 cfs as well as new features to capture, store, and treat water in the EAA and provide that new clean water to the Everglades. The ongoing Central Everglades Planning Project (CEPP) will be focusing on delivering the first increment of new clean water from the Lake and Everglades Agricultural Area (EAA) down into the central Everglades and the features needed to do that. We fully support and endorse that effort as a holistic look at restoring more flow to the central Everglades system and the specific features and operational plans needed to accomplish that. We expect that the reconnection of WCA 3A with WCA 3B will be examined as a part of that plan as well as other features needed to move additional water through the Tamiami Trail and into the Northeast Shark River Slough area and on to Florida Bay to include consideration of the recently authorized additional bridging for Tamiami Trail. Thus, we believe that plans to

reconnect WCA 3A with WCA 3B would be more aptly considered under the CEPP effort to ensure compatibility with the overall CEPP plan and avoid the potential for constructing features under Mod Waters that may have to be removed under CEPP. I understand the potential cost share implications of removing these structures from Mod Waters and considering them under CEPP and suggest that we discuss this further with the SFWMD.

We also expect that a new operational plan will be developed and included in the CEPP Project Implementation Report for these features as is required for all PIR's. Such a new operational plan would eventually replace any current operational plans such as IOP, the new ERTP when that Record of Decision is signed, or any future plan such as the Combined Operating Plan (COP). Given the accelerated timeline to complete this new PIR, and the current protracted timeline to complete the development of a new COP, recent schedules for these two efforts prepared by your office indicate that it is highly likely that the draft operating plan for the PIR would be completed well before the new COP. While I recognize that this new operational schedule will be further refined, it should better inform future operational goals for this part of the system. Given this, we question the current scope and schedule for development of the COP as presently proposed and believe that the development of the COP be greatly reduced in scope and time to address only those changes needed to the current ERTP to allow higher water levels in L-29 and thus more water to flow eastward from WCA 3A consistent with the new bridge and elevated roadway and any adjustments needed to the 8.5 SMA operational plan. This would provide an interim operational plan consistent with the completed features of Mod Waters until the CEPP operating plan can be implemented.

Last, as we work to complete the Mod Waters project, we are well over the original budgeted cost of the project. We have also recently experienced significant cost increases with the construction of the Tamiami Trail modifications which have consumed all remaining funds previously budgeted for the project. In addition, your staff has informed us of the need for additional funds to complete the roadway modifications. Considering this, we have requested an additional $8 million in FY 13 to complete the project. We also anticipate the successful execution of an agreement between the Corps and the Florida Department of Transportation (FDOT), which we hope will provide at least an additional $3 million in cash from them for this work. Thus, our project budget would increase to a little over $417 million. Within that budget, we anticipate the following actions to complete the project: 1) completion of the Tamiami Trail contract and transfer to FDOT; 2) completion of the project required biological monitoring for endangered species; 3) completion of the corrective action in the 8.5 SMA to eliminate the residual flooding potential; and 4) the completion of the testing for relaxation of the G-3273 constraint and S-356 operations. We are also still working with your staff to develop a scope for future adjustments to the proposed ERTP operational plan that will allow raising the L-29 canal maximum water level to 8.5 per the LRR. Thus, there are no funds remaining within the approved budget to complete any other remaining features.

For the above reasons and to minimize potentially lost efforts that could easily result from trying to implement features that were planned nearly two decades ago while also developing new plans

on a parallel track, we believe that the remaining unconstructed features and the final operating plan should be deleted from the Mod Waters project and examined under the ongoing Central Everglades Planning Project and that the COP effort be reduced and streamlined as discussed above. The CEPP process will determine what further modifications may be needed to provide an integrated plan that supports restoring flow to the central Everglades. This will also provide a more comprehensive look at the overall problems and issues as well as the development of the most efficient and effective operating plan for moving additional water into and through the Everglades.

Hopefully, you will concur in this approach and determine that the Mod Waters project will be complete upon the completion of the ongoing construction, testing, and transfer as outlined above. Additionally, these remaining project activities must remain within the funds made available from the National Park Service for the project. If you have any questions regarding this information or approach, please do not hesitate to contact me.

Sincerely,

Dan B. Kimball
Superintendent

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-0019

REPLY TO
ATTENTION OF

Planning and Policy Division
Environmental Branch

JAN 13 2017

SUBJECT: Supplemental Environmental Assessment for the Modified Water Deliveries to Everglades National Park Project

Mr. Fred Dayhoff, Tribal Representative
NAGPRA, Section 106
Miccosukee Tribe of Indians of Florida
HC 61 SR 68
Ochopee, Florida 34141

Dear Mr. Dayhoff:

The U.S. Army Corps of Engineers, Jacksonville District (Corps) is studying the environmental effects of removing the unconstructed conveyance and seepage control features (CSCF) from the Modified Water Deliveries (MWD) Project at the request of Everglades National Park (ENP). The CSCF components were originally envisioned in the 1992 MWD General Design Memorandum and Final Environmental Impact Statement to hydrologically reconnect Water Conservation Area (WCA) 3A, WCA 3B, and Northeast Shark River Slough. Features originally included in this component but not constructed include: gated culvert structures S-345 A, B and C through the L-67A Levee, with associated modifications to the L-67C Levee; gated concrete headwall structures S-349 A, B and C in the L-67A Borrow Canal; and degradation of the remaining 5.5 miles of the L-67 Extension Canal and Levee.

At the request of ENP, the Corps undertook a technical analysis in 2015 to evaluate whether the completed MWD Project features and those planned for construction improve flows into ENP and, to the extent practicable, restore the hydrologic connection within the park. Based on this analysis, it was determined that it is not technically feasible to construct the remaining CSCF components at this time given the identified hydraulic and ecological constraints. Although the additional conveyance structures in WCA 3 were authorized to be constructed under MWD, it is now apparent that restoration of connectivity between WCA 3A and WCA 3B and flows north of Tamiami Trail would not result in additional benefits to these areas and/or result in undesirable conditions in WCA 3B, without substantially increased scope and costs to the MWD project. However, if the CSCF components are not constructed there would be a lack of connection between these areas causing negative environmental consequences on vegetation, soils, fish and wildlife within the project area. Therefore, the preferred

alternative would be to remove the unconstructed CSCF components from the MWD Project and utilize the CSCF components that are planned for construction under the Central Everglades Planning Project (CEPP) to provide the same ecological benefits to WCA 3A, WCA 3B, and Northeast Shark River Slough and address the hydraulic and ecological constraints identified during MWD.

CEPP consultation with the Seminole Tribe of Florida's Tribal Historic Preservation Office, the Miccosukee Tribe of Indians of Florida's NAGPRA Representative, the Florida State Historic Preservation Office, ENP's Chief of Cultural Resources, and the Florida Bureau of Archaeological Research determined that detailed designs are necessary to ensure that the appropriate cultural resources surveys have been complete to identify all cultural resources within the specific areas of potential effect and to guarantee avoidance, minimization, or mitigation of adverse effects to historic properties. Therefore, consultation and coordination with each of these agencies would continue and be concluded during the Pre-Construction Engineering Design (PED) phase of each of the remaining CSCF components with implementation of CEPP. During the PED phase, the Corps will develop the detailed designs using appropriate level of NEPA analysis. Further consultations will be conducted for compliance with Section 106 of the National Historic Preservation Act (NHPA). No construction will occur until all legal requirements have been met, including appropriate NEPA analysis and consultation under Section 106 of the NHPA.

In summary, the Corps has determined that removal of the unconstructed CSCF components from the MWD Project will have no effect on historic properties listed or eligible for listing in the National Register of Historic Places. However, consultation and coordination with your agency will continue during the PED phase of CEPP. Pursuant to Section 106 of the NHPA (16 USC 470) and it's implementing regulations (36 CFR 800), and in consideration of the Corps' Trust Responsibilities to the Miccosukee Tribe of Indians of Florida, the Corps kindly requests your comments on the determination of no effect. If there are any questions or comments, please contact Ms. Meredith Moreno at (904) 232-1577 or by e-mail at Meredith.A.Moreno@usace.army.mil.

Sincerely,

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

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-0019

REPLY TO
ATTENTION OF

Planning and Policy Division
Environmental Branch

JAN 13 2017

SUBJECT: Supplemental Environmental Assessment for the Modified Water Deliveries to Everglades National Park Project

Dr. Paul Backhouse, THPO
Seminole Tribe of Florida
Tribal Historic Preservation Office
30290 Josie Billie Highway
PMP 1004
Clewiston, Florida 33440

Dear Dr. Backhouse:

The U.S. Army Corps of Engineers, Jacksonville District (Corps) is studying the environmental effects of removing the unconstructed conveyance and seepage control features (CSCF) from the Modified Water Deliveries (MWD) Project at the request of Everglades National Park (ENP). The CSCF components were originally envisioned in the 1992 MWD General Design Memorandum and Final Environmental Impact Statement to hydrologically reconnect Water Conservation Area (WCA) 3A, WCA 3B, and Northeast Shark River Slough. Features originally included in this component but not constructed include: gated culvert structures S-345 A, B and C through the L-67A Levee, with associated modifications to the L-67C Levee; gated concrete headwall structures S-349 A, B and C in the L-67A Borrow Canal; and degradation of the remaining 5.5 miles of the L-67 Extension Canal and Levee.

At the request of ENP, the Corps undertook a technical analysis in 2015 to evaluate whether the completed MWD Project features and those planned for construction improve flows into ENP and, to the extent practicable, restore the hydrologic connection within the park. Based on this analysis, it was determined that it is not technically feasible to construct the remaining CSCF components at this time given the identified hydraulic and ecological constraints. Although the additional conveyance structures in WCA 3 were authorized to be constructed under MWD, it is now apparent that restoration of connectivity between WCA 3A and WCA 3B and flows north of Tamiami Trail would not result in additional benefits to these areas and/or result in undesirable conditions in WCA 3B, without substantially increased scope and costs to the MWD project. However, if the CSCF components are not constructed there would be a lack of connection between these areas causing negative environmental consequences on

vegetation, soils, fish and wildlife within the project area. Therefore, the preferred alternative would be to remove the unconstructed CSCF components from the MWD Project and utilize the CSCF components that are planned for construction under the Central Everglades Planning Project (CEPP) to provide the same ecological benefits to WCA 3A, WCA 3B, and Northeast Shark River Slough and address the hydraulic and ecological constraints identified during MWD.

CEPP consultation with the Seminole Tribe of Florida's Tribal Historic Preservation Office, the Miccosukee Tribe of Indians of Florida's NAGPRA Representative, the Florida State Historic Preservation Office, ENP's Chief of Cultural Resources, and the Florida Bureau of Archaeological Research determined that detailed designs are necessary to ensure that the appropriate cultural resources surveys have been complete to identify all cultural resources within the specific areas of potential effect and to guarantee avoidance, minimization, or mitigation of adverse effects to historic properties. Therefore, consultation and coordination with each of these agencies would continue and be concluded during the Pre-Construction Engineering Design (PED) phase of each of the remaining CSCF components with implementation of CEPP. During the PED phase, the Corps will develop the detailed designs using appropriate level of NEPA analysis. Further consultations will be conducted for compliance with Section 106 of the National Historic Preservation Act (NHPA). No construction will occur until all legal requirements have been met, including appropriate NEPA analysis and consultation under Section 106 of the NHPA.

In summary, the Corps has determined that removal of the unconstructed CSCF components from the MWD Project will have no effect on historic properties listed or eligible for listing in the National Register of Historic Places. However, consultation and coordination with your agency will continue during the PED phase of CEPP. Pursuant to Section 106 of the NHPA (16 USC 470) and it's implementing regulations (36 CFR 800), and in consideration of the Corps' Trust Responsibilities and the Burial Resources Agreement between the Corps and Seminole Tribe of Florida, the Corps kindly requests your comments on the determination of no effect. If there are any questions or comments, please contact Ms. Meredith Moreno at (904) 232-1577 or by e-mail at Meredith.A.Moreno@usace.army.mil.

Sincerely,

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

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-0019

REPLY TO
ATTENTION OF

Planning and Policy Division
Environmental Branch

JAN 1 1 2017

SUBJECT: Supplemental Environmental Assessment for the Modified Water Deliveries to Everglades National Park Project

Tim Parsons, Ph.D.
Division of Historical Resources
State Historic Preservation Officer
500 South Bronough Street
Tallahassee, Florida 32399-0250

Dear Dr. Parsons:

The U.S. Army Corps of Engineers, Jacksonville District (Corps) is studying the environmental effects of removing the unconstructed conveyance and seepage control features (CSCF) from the Modified Water Deliveries (MWD) Project at the request of Everglades National Park (ENP). The CSCF components were originally envisioned in the 1992 MWD General Design Memorandum and Final Environmental Impact Statement to hydrologically reconnect Water Conservation Area (WCA) 3A, WCA 3B, and Northeast Shark River Slough. Features originally included in this component but not constructed include: gated culvert structures S-345 A, B and C through the L-67A Levee, with associated modifications to the L-67C Levee; gated concrete headwall structures S-349 A, B and C in the L-67A Borrow Canal; and degradation of the remaining 5.5 miles of the L-67 Extension Canal and Levee.

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alternative would be to remove the unconstructed CSCF components from the MWD Project and utilize the CSCF components that are planned for construction under the Central Everglades Planning Project (CEPP) to provide the same ecological benefits to WCA 3A, WCA 3B, and Northeast Shark River Slough and address the hydraulic and ecological constraints identified during MWD.

CEPP consultation with the Seminole Tribe of Florida's Tribal Historic Preservation Office, the Miccosukee Tribe of Indians of Florida's NAGPRA Representative, the Florida State Historic Preservation Office, ENP's Chief of Cultural Resources, and the Florida Bureau of Archaeological Research determined that detailed designs are necessary to ensure that the appropriate cultural resources surveys have been complete to identify all cultural resources within the specific areas of potential effect and to guarantee avoidance, minimization, or mitigation of adverse effects to historic properties. Therefore, consultation and coordination with each of these agencies would continue and be concluded during the Pre-Construction Engineering Design (PED) phase of each of the remaining CSCF components with implementation of CEPP. During the PED phase, the Corps will develop the detailed designs using appropriate level of NEPA analysis. Further consultations will be conducted for compliance with Section 106 of the National Historic Preservation Act (NHPA). No construction will occur until all legal requirements have been met, including appropriate NEPA analysis and consultation under Section 106 of the NHPA.

In summary, the Corps has determined that removal of the unconstructed CSCF components from the MWD Project will have no effect on historic properties listed or eligible for listing in the National Register of Historic Places. However, consultation and coordination with your agency will continue during the PED phase of CEPP. Pursuant to Section 106 of the NHPA (16 USC 470) and it's implementing regulations (36 CFR 800), the Corps kindly requests your comments on the determination of no effect. If there are any questions or comments, please contact Ms. Meredith Moreno at (904) 232-1577 or by e-mail at Meredith.A.Moreno@usace.army.mil.

Sincerely,

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

From:	Bradley Mueller
To:	Moreno, Meredith A CIV USARMY CESAJ (US)
Cc:	Ralph, Gina P CIV USARMY CESAJ (US)
Subject:	[EXTERNAL] Supplemental EA for the Modified Water Deliveries to ENP
Date:	Thursday, March 02, 2017 10:23:21 AM

Ms. Meredith Moreno, MA, RPA, Archaeologist
Environmental Branch, Planning Division
Department of the Army
Jacksonville District Corps of Engineers
P.O. Box 4970
Jacksonville, FL
Office: 904-232-1577
Mobile: 904-861-9967

Subject: Supplemental Environmental Assessment for the Modified Water Deliveries to Everglades National Park
THPO #: 0028534-16

Good Morning Ms. Moreno,

Thank you for contacting the Seminole Tribe of Florida – Tribal Historic Preservation Office (STOF-THPO) regarding the supplemental EA for the Modified Water Deliveries to Everglades National Park. The proposed undertaking does fall within the STOF Area of Interest. We have reviewed the documents you provided and completed our project assessment in order to determine if the undertaking would affect any areas important to the Tribe. We concur with your determination that removal of the unconstructed CSCF components from the MWD will have no effect on historic properties listed or eligible for listing in the National Register of Historic Places. In addition we agree that consultation and coordination should continue during the consideration of any construction alternatives. Thank you and feel free to contact us with any questions or concerns.

Regards,

Bradley M. Mueller, MA
Compliance Supervisor
Tribal Historic Preservation Office
Seminole Tribe of Florida
30290 Josie Billie Highway, PMB 1004
Clewiston, FL 33440

Tel: 863-983-6549 ext 12245

Fax: 863-902-1117
Email: bradleymueller@semtribe.com
Web: Blockedwww.stofthpo.com

FLORIDA DEPARTMENT of STATE

RICK SCOTT
Governor

KEN DETZNER
Secretary of State

Gina Paduano Ralph, Ph.D.
Environmental Branch Chief, Planning Division
Department of the Army
Jacksonville District Corps of Engineers
P.O. Box 4970
Jacksonville, Florida 32232-0019

January 31, 2017

RE: DHR Project File No.: 2017-0390 Received by DHR: January 13, 2017
RE: Supplemental Environmental Assessment for the Modified Water Deliveries Everglades National Park Project

Dr. Ralph:

Thank you for notifying our office of the Corps' decision to remove the unconstructed conveyance and seepage control features (CSCF) from the Modified Water Deliveries (MWD) Project at the request of Everglades National Park. The CSCF components will be addressed under the Central Everglades Planning Project (CEPP). The Supplemental Environmental Assessment and Finding of No Significant Impact prepared by the Corps addresses this transition. The Corps will continue Section 106 consultation with our office concerning CEPP and will address the CSCF components through that process.

Based on the ongoing Section 106 consultation for CEPP, we concur that removal of the unconstructed CSCF components from the MWD Project will have no effect of historic properties listed or eligible for listing in the National Register of Historic Places.

If you have any questions, please contact me by email at *Jason.Aldridge@dos.myflorida.com*, or by telephone at 850.245.6344 or 800.847.7278.

Sincerely,

Jason Aldridge
Deputy State Historic Preservation Officer
for Compliance and Review

FLORIDA DEPARTMENT of STATE

RICK SCOTT
Governor

KEN DETZNER
Secretary of State

Gina Paduano Ralph, Ph.D.
Environmental Branch Chief, Planning Division
Department of the Army
Jacksonville District Corps of Engineers
P.O. Box 4970
Jacksonville, Florida 32232-0019

January 31, 2017

RE: DHR Project File No.: 2017-0390 Received by DHR: January 13, 2017
RE: Supplemental Environmental Assessment for the Modified Water Deliveries Everglades National Park Project

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Based on the ongoing Section 106 consultation for CEPP, we concur that removal of the unconstructed CSCF components from the MWD Project will have no effect of historic properties listed or eligible for listing in the National Register of Historic Places.

If you have any questions, please contact me by email at *Jason.Aldridge@dos.myflorida.com*, or by telephone at 850.245.6344 or 800.847.7278.

Sincerely,

Jason Aldridge
Deputy State Historic Preservation Officer
for Compliance and Review

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

REPLY TO
ATTENTION OF

FEB 2 0 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, Florida 33144

Dear Chairman Cypress:

Pursuant to the National Environmental Policy Act (NEPA) and the U.S. Army Corps of Engineers (Corps) Regulation (33 CFR 230.11), this letter constitutes the Notice of Availability of the Environmental Assessment (EA) and Proposed Finding of No Significant Impact (FONSI) for the Modified Water Deliveries to Everglades National Park Project: Removal of Unconstructed Conveyance and Seepage Control Features.

In a letter dated March 14, 2012, Everglades National Park (ENP) requested the Corps to transfer constructed features of the MWD Project to the South Florida Water Management District for operations and recommended that the Corps not construct or complete conveyance and seepage control features (specifically the S-345A, B, and C or S-349A, B, and C structures located in the L-67A and L-67A Borrow Canal, respectively). In response to this request, the Corps undertook a technical analysis to evaluate whether the completed project features and those under construction improve flows into ENP and to the extent practicable restore the hydrologic connection within ENP. The July 17, 2015 technical analysis: (1) describes the constructed features and their benefits; (2) describes the anticipated benefits of the features currently under construction; (3) describes the unconstructed features and explains the limitations restricting completion of any unconstructed features; and (4) explains how water deliveries into ENP have been improved and natural hydrological conditions within ENP have been restored to the extent practicable. The purpose of this EA is to document and disclose to the public potential environmental consequences on the human environment related to the 2012 ENP request and conclusions in the subsequent Corps' 2015 technical analysis.

The EA and Proposed FONSI are enclosed for your review and are also available on the Corps Environmental planning website and the project website:

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Miami-Dade Public Library
Homestead Branch
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Homestead, FL 33030

We intend to pursue an open and public process and recognize the obligations that the Corps has to its tribal partners. The Corps is currently coordinating this action with the appropriate staff members and will continue to consult with your staff through implementation of this project. Any comments you may have must be submitted in writing to the letterhead address within 30 days of the date of this letter. If you have any questions regarding the information in this letter, please feel free to contact me at 904-232-2336 or by email at Gina.P.Ralph@usace.army.mil.

Sincerely,

Jason A. Kirk, P.E.
Colonel, US 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

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

FEB 2 8 2017

To Whom It May Concern:

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Homestead, FL 33030

Any comments you may have must be submitted in writing to the letterhead address within 30 days of the date of this letter. Questions concerning this EA may be submitted to me at the letterhead address or to Gina.P.Ralph@usace.army.mil. I may also be reached by telephone at 904-232-2336.

Sincerely,

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

Enclosure

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

FEB 2 0 2017

Miami-Dade Public Library
Homestead Branch
700 N Homestead Blvd.
Homestead, FL 33030

Dear Librarian:

Enclosed is a copy of the Environmental Assessment (EA) and Proposed Finding of No Significant Impact for the Modified Water Deliveries to Everglades National Park Project: Removal of Unconstructed Conveyance and Seepage Control Features. The proposed action within the EA would occur within Miami-Dade County, Florida. This EA is being provided for public review pursuant to the National Environmental Policy Act and the U.S. Army Corps of Engineers Regulation (33 CFR 230.11). We request that you make the copy available for public viewing in the reference section of your library for a period of 30 days, after which the copy of the report may be disposed.

Thank you for your assistance in this matter. If you have any questions or need further information, please contact me at 904-232-2336.

Sincerely,

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

Enclosure

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

FEB 2 0 2017

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Chief, Environmental Branch

Enclosure

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

REPLY TO
ATTENTION OF

Planning and Policy Division
Environmental Branch

FEB 2 0 2017

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

Dear Chairman Cypress:

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Sincerely,

Jason A. Kirk, P.E.
Colonel, US Army
District Commander

Enclosure

cc:
Dr. Paul N. Backhouse, Ph.D., Seminole Tribe of Florida, Tribal Historic Preservation Officer, Ah Tha 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
Patricia Powers, Bose Public Affairs Group, 2000 M Street, N.W., Suite 520, Washington, D.C. 20036
Cicero Osceola, Big Cypress General Council Office, Council Representative, 31000 Josie Billie Highway, Clewiston, FL 33440
Andrew J. Bowers, ESQ., Brighton Council Representative, Seminole Tribe of Florida Brighton Council, 500 Harney Pond Road, Okeechobee, FL 34974

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

REPLY TO
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FEB 2 0 2017

Planning and Policy Division
Environmental Branch

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Post Office Box 440021, Tamiami Station
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Enclosure

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Kevin Donaldson, Real Estate Services, Miccosukee Tribe of Indians of Florida, P.O. Box 440021, Tamiami Station, Miami, FL 33144
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JACKSONVILLE DISTRICT CORPS OF ENGINEERS
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Environmental Branch

FEB 2 0 2017

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

Dear Chairman Cypress:

Pursuant to the National Environmental Policy Act (NEPA) and the U.S. Army Corps of Engineers (Corps) Regulation (33 CFR 230.11), this letter constitutes the Notice of Availability of the Environmental Assessment (EA) and Proposed Finding of No Significant Impact (FONSI) for the Modified Water Deliveries to Everglades National Park Project: Removal of Unconstructed Conveyance and Seepage Control Features.

In a letter dated March 14, 2012, Everglades National Park (ENP) requested the Corps to transfer constructed features of the MWD Project to the South Florida Water Management District for operations and recommended that the Corps not construct or complete conveyance and seepage control features (specifically the S-345A, B, and C or S-349A, B, and C structures located in the L-67A and L-67A Borrow Canal, respectively). In response to this request, the Corps undertook a technical analysis to evaluate whether the completed project features and those under construction improve flows into ENP and to the extent practicable restore the hydrologic connection within ENP. The July 17, 2015 technical analysis: (1) describes the constructed features and their benefits; (2) describes the anticipated benefits of the features currently under construction; (3) describes the unconstructed features and explains the limitations restricting completion of any unconstructed features; and (4) explains how water deliveries into ENP have been improved and natural hydrological conditions within ENP have been restored to the extent practicable. The purpose of this EA is to document and disclose to the public potential environmental consequences on the human environment related to the 2012 ENP request and conclusions in the subsequent Corps' 2015 technical analysis.

The EA and Proposed FONSI are enclosed for your review and are also available on the Corps Environmental planning website and the project website:

http://www.saj.usace.army.mil/About/DivisionsOffices/Planning/EnvironmentalBranch/EnvironmentalDocuments.aspx

A copy of the report is also available at the following libraries:

Miami-Dade Public Library
Main Branch
101 West Flagler Street
Miami, FL 33130

Miami-Dade Public Library
Homestead Branch
700 N Homestead Blvd.
Homestead, FL 33030

We intend to pursue an open and public process and recognize the obligations that the Corps has to its tribal partners. The Corps is currently coordinating this action with the appropriate staff members and will continue to consult with your staff through implementation of this project. Any comments you may have must be submitted in writing to the letterhead address within 30 days of the date of this letter. If you have any questions regarding the information in this letter, please feel free to contact me at 904-232-2336 or by email at Gina.P.Ralph@usace.army.mil.

Sincerely,

Jason A. Kirk, P.E.
Colonel, US Army
District Commander

Enclosure

cc:
Dr. Paul N. Backhouse, Ph.D., Seminole Tribe of Florida, Tribal Historic Preservation Officer, Ah Tha 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
Patricia Powers, Bose Public Affairs Group, 2000 M Street, N.W., Suite 520, Washington, D.C. 20036
Cicero Osceola, Big Cypress General Council Office, Council Representative, 31000 Josie Billie Highway, Clewiston, FL 33440
Andrew J. Bowers, ESQ., Brighton Council Representative, Seminole Tribe of Florida Brighton Council, 500 Harney Pond Road, Okeechobee, FL 34974

Modified Water Deliveries to Everglades National Park Project:
Removal of Unconstructed Conveyance and Seepage Control Features
Draft Environmental Assessment
US Environmental Protection Agency Comments
March 28, 2017

Native American:

- On page 4-14, the US Army Corps of Engineers (USACE) discusses impacts to Native Americans and states, "As part of the consideration of effects, consultation with the appropriate federally recognized tribes was initiated on January 13, 3017 and is ongoing. Consultation will be finalized prior to implementation of the proposed action. Recommendation: The EPA recommends the USACE discuss any informal or formal consultation with the tribes within the Final Environmental Assessment (EA).
- Also in section 4.11, the USACE states, "The Miccosukee Tribe of Indians of Florida have continuously expressed concern with high water levels in Water Conservation Area (WCA) 3A where many tribal members live and utilize culturally sensitive areas. The EPA notes that in the subsequent discussions of Alternative A (the No Action Alternative) the USACE does discuss the impacts to Native American resources within WCA 3A regarding high water levels under this alternative; however, there is no similar high water level impact discussion in Alternative B (Removal of CSCF Components…). Recommendation: The EPA recommends the USACE expand their discussion regarding the impacts of potential high water levels in WCA 3A regarding Native American resources and compare impacts between Alternative A and Alternative B.

Cumulative Impacts:

- In Tables 4-1 (page 4-19) and 4-2 (page 4-21), the USACE outlines past, present, and reasonably foreseeable actions and plans affecting the project area and summarizes these impacts related to each resource area. The EPA thinks this is a good way of outlining the CERP related cumulative impacts; however, there are other past, present and reasonable foreseeable non-CERP related actions and projects that could impact the project area. For example, there could be other Everglades National Park (ENP) or Florida Department of Transportation (FDOT) actions that could impact the project area. Also, the Miccosukee Tribe of Indians of Florida could have future activities that could impact the project area. Recommendation: The EPA recommends the USACE expand their Cumulative Impacts section beyond CERP activities.
- In Table 4-1, the "CERP Projects" row and the "Past Actions/Authorized Plans" column has been left blank. Recommendation: Has there been no Past CERP Actions? If not, then the EPA recommends the USACE state so in this row/column.
- In Table 4-1 and in the "CERP Projects" row of the table and in the "Reasonably Foreseeable Future Actions and Plans" column, the USACE has listed "Future Projects",

but has not identified any future CERP projects. Recommendation: The EPA recommends the USACE list any reasonably foreseeable future projects.

From:	Bradley Mueller
To:	Ralph, Gina P CIV USARMY CESAJ (US)
Subject:	[Non-DoD Source] EA and Proposed FONSI for Modified Water Deliveries to Everglades National Park
Date:	Tuesday, April 25, 2017 4:37:55 PM
Attachments:	image002.png

April 25, 2017

Ms. Gina Paduano Ralph, Ph.D.

Environmental Branch Chief, Planning Division

Department of the Army

Jacksonville District Corps of Engineers

P.O. Box 4970

Jacksonville, FL 322322-0019

Subject: EA and Proposed FONSI for Modified Water Deliveries to Everglades National Park

THPO #: 0029742

Dear Ms. Ralph,

Thank you for contacting the Seminole Tribe of Florida – Tribal Historic Preservation Office (STOF-THPO) regarding the Environmental Assessment (EA) and Proposed Finding of No Significant Impact (FONSI) for Modified Water Deliveries (MWD) to Everglades National Park (ENP). The proposed undertaking does fall within the STOF Area of Interest. We have reviewed the EA and FONSI pursuant to Section 106 of the National Historic Preservation Act and its implementing authority, 36 CFR 800. We believe the Corps assessment that the Seminole Tribe of Florida places a priority on restoration of sheetflow and hydroperiods in the Everglades is generally accurate. The beneficial results that could accrue to tree islands would also be welcomed. We do caution however that, as noted in the EA, the effects of fluctuating water levels on cultural resources within the area of potential effect is currently still unknown. What we do know, and the Corp has acknowledged, is that unnatural inundation of burial resources is considered culturally objectionable by the STOF. We urge the Corps to keep this in mind and to continue to consult with us regarding any proposed actions related to Modified Water Deliveries in the ENP. 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

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