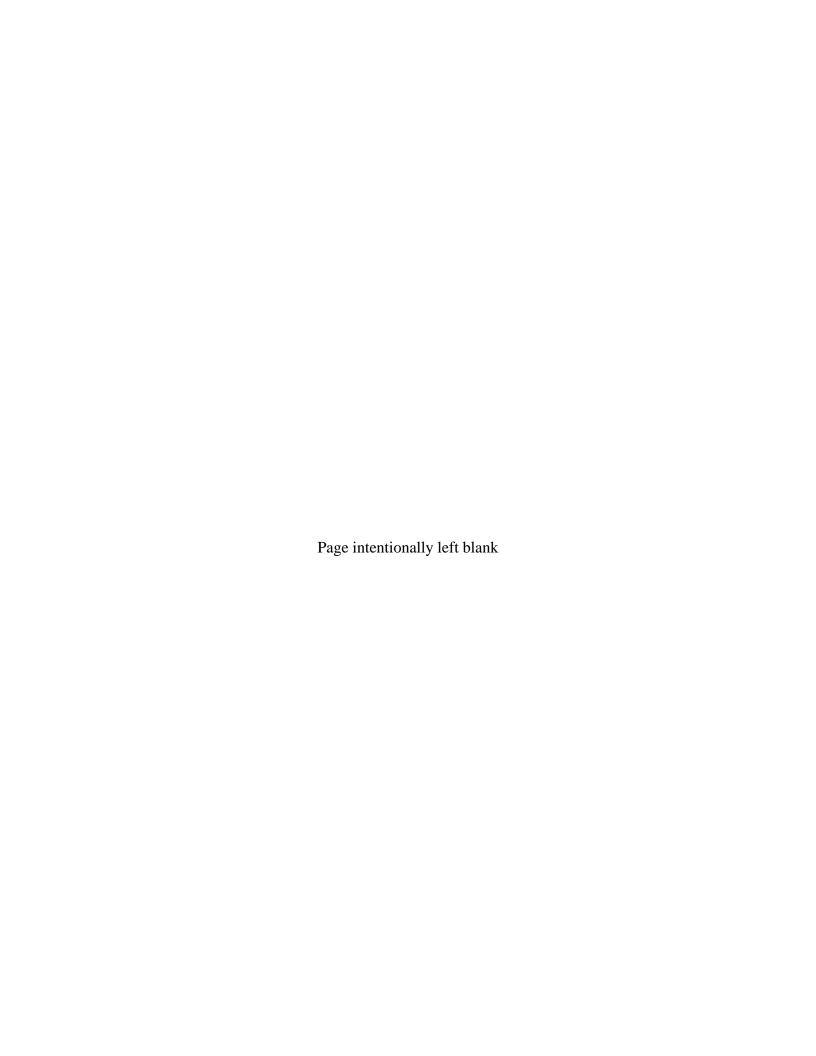
APPENDIX H DUKE DECLARATIONS



UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF FLORIDA MIAMI DIVISION

MICCOSUKEE TRIBE OF INDIANS OF FLORIDA,)
Plaintiff,) Case No. 02-22778-Civ-Moore) (Magistrate Judge O'Sullivan)
v.)
UNITED STATES OF AMERICA, et al.,	
Defendants.)

DECLARATION OF DENNIS R. DUKE

1. I am a supervisory Civil Engineer, Program Manager for Ecosystem Restoration and Chief of the Restoration Program Division of the Jacksonville District, U.S. Army Corps of Engineers (Corps). I have provided prior declarations in the abovecaptioned litigation. I previously served the Jacksonville District as the Chief of the Project Management Branch and Assistant Chief of the Programs and Project Management Division prior to my promotion in February 2002. In my present position, I serve as special advisor to the District Commander on Ecosystem Restoration projects. programs, and issues. I directly supervise 4 subordinate managers and oversee the work of 50 permanent Government employees, 5 temporary employees, and approximately 25 on-site contract support personnel. The programs I oversee involve over 70 projects with a total value in excess of \$10 billion. As Program Manager I am responsible for the overall restoration effort to ensure that projects are planned, designed, and constructed to achieve the restoration goals and objectives. As such, I identify restoration goals and recommend restoration actions and initiatives for the District, direct the activities of program staff through subordinate supervisors to achieve these goals, review the status of ongoing activities to determine accomplishment of those goals, and implement or recommend actions as needed to ensure goals are met. In addition to these internal responsibilities, I represent the District and the Corps in meetings with other Federal, State, and Local Government Agencies, Native American Tribes, and stakeholders at large on matters related to ecosystem restoration. In this capacity, I frequently attend meetings and provide overall status of Corps efforts and initiatives in restoration.

- 2. This declaration responds to the March 2006 Order in this case directing the Corps to file a brief no later than April 24, 2006 on (1) its definition of "marsh operational criteria;" (2) its progress in implementing "marsh operational criteria;" and (3) a proposed timeline to complete implementation of marsh operational criteria.
- 3. The Corps' definition of "marsh operational criteria" is derived from the Final Environmental Impact Statement (FEIS) for the Interim Operational Plan (IOP) for Protection of the Cape Sable Seaside Sparrow, May 2002. The IOP FEIS Table 2.11 states the following for S332B North Seepage Reservoir, S-332B West Seepage Reservoir, S-332C Seepage Reservoir, S-332C Connector and Frog Pond Reservoir:

Normal operations will be targeted to achieve marsh restoration. However, this provision does not include a requirement to maintain water levels in the reservoirs during dry conditions by bringing water in from outside the drainage basin. The seepage reservoir will have a normal maximum depth of water of 2.0 feet. However, if Corps determines that a flood emergency exists similar to an event like the "No Name" storm, the depth of water would be increased to maximum of 4 feet.

FEIS pages 40-43. More specifically, for the S332B pump station, the IOP FEIS Table 2.11 states:

Pump to capacity if limiting conditions within the sparrow habitat are not exceeded. There will be no overflow into the Park when the project, (i.e., the S332B North Seepage Reservoir and the partial S-332B/S332C Connector) is complete and when it is practical to do the construction necessary to raise the western levee. There may be overflow during emergency events until the project is complete and the western levee is raised.

In addition, Appendix B of the FEIS, the U.S. Fish and Wildlife Service's (Service) Amended Biological Opinion, refers to restoration of the marsh or marshes in several places.

This biological opinion is predicated on the assumption that further Interagency modeling will identify operations that will provide hydropatterns that support sparrow habitat in adjacent marshes, consistent with the project purpose as defined for ENP by the 1994 Integrated General Design Memorandum and Environmental Impact Statement for the C-111 Project.

FEIS page B 14.

Our assessment of the effects of the action is therefore based on the best-available sources of information, which are: (1) the model results of assuming that there would be 400 acres of reservoir associated with the S-332B pump station, with no overflow except during emergency storm

events, and (2) analyses by staff at Everglades National Park that operating the S-332C reservoir at a maximum depth of 2.0 feet during non-emergency conditions would reestablish desired short-hydroperiod marsh conditions in adjacent marshes (Tom VanLent, Everglades National Park, personal communication). We therefore base our evaluation of effects of the action on the assumption that it is possible to extrapolate from these two sources of information that operations of the S-332D reservoir and the B-C connector reservoir could produce similar results.

FEIS pages B 45-46.

The FEIS recognized that implementation of Alternative 7R would be phased:

Further, the information provided with the March 15, 2002, reinitiation letter indicates that several portions of IOP-Alt.7R are likely to be phased in, depending on the rate of acquisition of private lands; how quickly the boundary of Everglades National Park can be adjusted; the availability of funds to construct the reservoir associated with the S-332D pump station; modeling to determine the appropriate operations of the S-332D to assist in flood control but not at the expense of the surrounding marsh condition; modeling to ascertain the operations of the S-356 pump station to control seepage; and the operational experience gained during the 2002 wet season and modeling to determine whether raising the northern, western, and southern levees of existing S-332B reservoir would compromise flood protection to a significant degree. Our analysis of the effects of the action are predicated on all of these structures being constructed and operated to achieve flood control while also hydrating marshes in eastern Everglades National Park and western Southern Glades Wildlife and Environmental Area to conditions that support short-hydroperiod marl prairies during non-emergency conditions.

FEIS page B 52.

Appendix C of the FEIS, the Fish and Wildlife Coordination Act Report, also has a reference to marsh operations:

IOP-Alt 7R only states the proposed and existing reservoir would be operated to a maximum of a two-foot depth, but it does propose an initial operating regimen that is targeted at marsh restoration. This FWCA report assumes that the existing reservoir associated with the S-332B pump station, the new S-332B reservoir, the B-C Connector Reservoir, the S-332C reservoir, and the S-332D reservoir will be operated consistent with the intent of the C-111 Project during non-emergency operations; that is, to a "no harm" standard for ENP;

A "no-harm" standard would include an operation plan for the S-332B, C, and D pumps that allows for each to be turned on incrementally and, likewise, to be turned off incrementally to avoid damaging pulses to the surrounding marsh. Even though these pump stations will discharge into artificial reservoirs, experience in this area indicates that the substrate is sufficiently transmissive that the stage of water produced in the reservoirs soon translates into water levels in the surrounding marsh[.]

FEIS page C38. Similarly, the Fish and Wildlife Coordination Act Report states:

Our best available information is that the proposed reservoirs will be operated in such a way as to maintain suitable habitat in the marsh (marl wet prairies).

FEIS page C 43.

- 4. In summary, the development of the IOP included evaluation of alternative operations designed to protect the Cape Sable seaside sparrow (CSSS), which culminated in selection of Alternative 7R. Alternative 7R included provisions for operation of the C-111 detention areas such that "normal operation will be targeted to achieve marsh restoration". The specific operational criteria needed to implement operations targeted to achieve marsh restoration was not specified beyond the 2-foot default, nor was a timeframe for its implementation. It was recognized that specific operations would need to be identified, developed and evaluated for implementation.
- 5. Based on the FEIS, the Corps considers "marsh operational criteria" to include operation at the 2-foot default depth, plus variations from the 2-foot default agreed upon for operation of the C-111 reservoirs to restore the wet marl prairies within Everglades National Park (ENP) adjacent to the C-111 reservoirs. These variations will include testing and working toward parameters that have been agreed to by an interagency team in development of a plan for operations that will follow IOP.
- 6. While the IOP team was considering marsh operations, the interagency team developing the next operating plan, the Combined Structural and Operation Plan (CSOP) to be implemented upon completion of C-111 and MWD, composed of many of the same members who had worked on IOP, was evaluating CSOP alternatives including alternative 7R under IOP. Marsh operations, which are a component of alternatives being considered under CSOP, were thereafter discussed in the context of CSOP formulation.
- 7. Staff from ENP initially provided the Corps proposed criteria to be considered for marsh operations. These were modeled and further refined, and a tentatively selected plan has been agreed upon by the interagency team. The tentatively selected plan for CSOP relaxes the IOP's 2-foot maximum depth criteria for the detention areas and raises it to 2.5-feet. Under normal operations under the tentatively selected plan, the S-332B and S-332C pump stations that discharge into the buffer will pump from the L-31N Canal based on the gradient and water levels between the marsh in the ENP and the detention areas. The target gradient is based on measured water levels ½ mile and 4 miles from the detention basin. The gradient or change in water level should be less than 0.4 feet per

mile. Pumping into the detention area can be continued until this gradient is exceeded. At that point, pumping would be reduced to a level that would maintain the target gradient or until stages exceed 2.5 feet in the detention basin. The tentatively selected CSOP plan includes an override for these marsh driven operations based upon water levels in the canals to provide for continued pumping in order to maintain flood protection in the developed areas east of the canals and reduce discharges through C-111 into Barnes Sound.

- 8. The time table for completion of the efforts needed to evaluate, coordinate and implement marsh operational criteria was not specified during the IOP process. The Corps previously reported to the court that it anticipated interagency agreement on marsh operational criteria in November 2005. The interagency team agreed upon a tentatively selected plan for CSOP in January 2006 that included the proposed Marsh operations noted above. In accordance with the IOP plan to test various marsh operational scenarios, the Corps intends to begin field testing of the operational criteria identified under CSOP. This will provide the information necessary to extrapolate model output to more accurately reflect actual conditions.
- 9. To implement refinements to marsh operational criteria, monitoring wells which have been installed in the ENP must be equipped with real-time monitoring equipment. Installation of the real-time monitoring equipment for the wells has not yet occurred, but the Corps is working with the United States Geological Survey to have this equipment installed.
- 10. The Corps is currently operating the C-111 reservoirs at the 2-foot default depth and upon installation of the monitoring equipment, the Corps will observe operations at 2-foot depth under various hydrologic conditions. To monitor marsh effects of stage changes in the detention areas, the Corps, in coordination with other agencies, plans to begin testing at stages varying from the 2-feet default and working toward the CSOP operational criteria with a maximum depth of 2.5 feet while targeting the 0.4-foot per mile gradient between the detention areas and the adjacent marsh.
- 11. The Corps will monitor effects of detention area operations on water levels in the ENP during this testing period, in coordination with other agencies. The testing will use adaptive management and flexible water management operations to test various pumping rates and detention area water levels. Accordingly, the Corps will be implementing marsh operational criteria through this process based on best available information derived from coordination with the ENP staff and other team members. Although the final EIS for CSOP is scheduled to be published February 12, 2007, CSOP will not be implemented until completion of construction of remaining C-111 detention areas and Mod Waters features. Because of real estate issues, all of the C-111 detention areas have not yet been constructed and the detention areas are not continuous from north to south. For Mod Waters to be fully constructed, the Corps must construct three new conveyance features (a combination of culverts and weirs), along L-67A, create three opening along L-67C, elevate Tamiami Trail including construction of 3 miles of bridges,

degrade the L-67 extension, and complete construction of the 8.5-Square Mile Area pump station, flow-way, levee and STA.. All C-111 detention areas and Mod Waters project features are scheduled to be built by 2010. The Corps will continue to adjust operations under IOP until the C-111 and Mod Waters construction is completed and CSOP can be fully implemented.

- 12. The Corps has experienced delays in furthering refinements to marsh operation criteria for a number of reasons. It took a year to obtain special use permits to construct the wells within the ENP. The Corps began the process of pursuing the permits in March 2002. Delays were related to geotechnical analysis, site selection and Wilderness Committee Approval of the permit. The Corps finally obtained the permits in August 2003. In February March 2004 the Corps installed six wells in the ENP marsh for monitoring water levels. The wells do not yet have monitoring equipment installed. SFMWD had planned to install this equipment, but following the 2004 and 2005 hurricanes the SFWMD had to replace equipment at many other operating locations, which delayed installation at the new wells. The SFWMD will not be ready to install the monitoring equipment and begin remote monitoring until June 2007. So, the Corps is pursuing the installation through the U.S. Geological Survey that will allow monitoring to begin earlier than with SFWMD. Upon installation of the monitoring equipment, the Corps will continue its implementation of marsh operational criteria.
- 13. Currently, there is no continuous reservoir system as envisioned under IOP. SFWMD is required to certify adequate real estate interests for construction of the federal project. SFWMD was unable to certify lands for certain portions of the project until Congressional action in 2005 allowed for the transfer of lands from the ENP to SFWMD. Title has now been transferred and SFWMD is expected to be able to certify in the near future.
- 14. To summarize, the Corps' timeline for implementation of marsh operational criteria is as follows. The Corps anticipates the monitoring equipment will be installed by July 2006. Testing will begin in August 2006. This testing will be coordinated with the build out of the full detention basins for the C-111 project. Those features will be under construction in 2007 and completed in 2008. Thus, full testing will be conducted upon completion of the detention basins in 2008. The results of this testing will determine the marsh operational criteria for the IOP and determine if any changes are needed for the CSOP criteria. Since this is being implemented in an adaptive management mode and because CSOP, by definition, cannot be fully implemented until construction of all Mod Waters features and C-111 detention areas are constructed, changes in operational criteria can be expected to continue until CSOP becomes fully operational in 2010. During this time period, the marsh operational criteria will be varied to determine the effects of various pumping rates and water levels on the marsh within the ENP under various conditions.
 - 15. The CSOP interagency team met on bi-monthly basis to develop, model and

evaluate operational scenarios as part of the CSOP. The Service currently participates in weekly informational calls with the Corps operations staff regarding operations under IOP. The Service has not at any time indicated that current operations of the detention areas are posing a problem or are outside of their expectations under IOP. The Service indicated that its amended biological opinion was predicated on the assumption that further interagency modeling would identify operations that will provide hydropatterns that support sparrow habitat in adjacent marshes, consistent with the purposes of the C-111 project and that extreme care would needs to be taken when attempting to extrapolate model output to actual conditions. The Corps considers its current operations and plans for refinements to marsh operational criteria to be consistent with the Service's Biological Opinion but is prepared to reinitiate consultation if that becomes appropriate.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on: April 24, 2006

Signed by: /
Dennis R. Duke

UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF FLORIDA MIAMI DIVISION

MICCOSUKEE TRIBE OF INDIANS OF FLORIDA,)
Plaintiff,) Case No. 02-22778-Civ-Moore) (Magistrate Judge O'Sullivan)
v.)
UNITED STATES OF AMERICA, et al.,)
Defendants.)))

DECLARATION OF DENNIS R. DUKE

- 1. I am a supervisory Civil Engineer, Program Manager for Ecosystem Restoration and Chief of the Restoration Program Division of the Jacksonville District, U.S. Army Corps of Engineers (Corps). I have provided prior declarations in the above-captioned litigation.
- 2. This declaration responds to Intervenors/Cross-Plaintiffs' Response to Federal Defendants' Marsh Operational Criteria Submission and the Plaintiff Miccosukee Tribe's Response to Federal Defendants' Filing on Marsh Operational Criteria and Additional Remedies.
- 3. I personally participated in the development of the Interim Operational Plan (IOP) plan. While Intervenors focus heavily on marsh operations, marsh operational criteria was only one of the many complex issues addressed in IOP. The concept of marsh operational criteria arose toward the end of the process and was not fully spelled out but mentioned on several pages of the 100-page IOP Environmental Impact Statement. Default operations were described, and no time frame for implementation was provided for. As reflected in my previous declaration, the Corps considers "marsh operational criteria" to include operation at the 2-foot default depth, plus variations from the 2-foot default agreed upon for operation of the C-111 reservoirs to restore the wet marl prairies within Everglades National Park (ENP) adjacent to the C-111 reservoirs. These variations will include monitoring, or testing, of the parameters that have been

agreed to for the operational plan that will follow IOP. This will also include adaptive management to insure project purposes are achieved.

- 4. The Corps has been implementing the 2-foot default operational criteria under IOP and plans to implement refined marsh operational criteria prior to implementation of the Combined Structural and Operational Plan (CSOP). However, the extent to which marsh operations can be immediately implemented is physically limited as all of the features to be constructed for the C-111 and Modified Water Deliveries Projects are yet to be completed. While adjustments to the existing facility operations can and will be made to improve overall marsh operations as noted, it must be recognized that the effects are somewhat limited and will require adjustment as new features are completed. We fully intend to continue to adjust operations to better achieve the desired marsh operational performance and thus the reference to "testing" throughout most of this implementation period. However, this testing is in fact implementing marsh operational criteria in a continuous modification cycle that reflects the status of the planned work and the hydrologic conditions that exist at any point in time. Thus, contrary to assertions by Thomas Van Lent at ¶14 in his May 16, 20006 declaration, marsh operations have been implemented with the default criteria and further modifications must be phased in consistent with the completion of the overall works. CSOP will not be implemented until completion of construction of remaining C-111 detention areas and Mod Waters features. See IOP EIS collaborative Process Interagency Modelers' Telephone Conference, April 29, 2002 Facilitator's Summary at 2 (Attachment A). The Corps will continue to adjust operations under IOP, implementing marsh operational criteria for new detention areas as they are constructed, until the C-111 and Mod Waters construction is completed and CSOP can be fully implemented.
- 5. In addition to phased construction, phased implementation of operational criteria was anticipated. The interagency team recognized the need to develop an understanding of the relationships among various components of the system including canal stages, seepage reservoirs, and the marsh. See IOP EIS collaborative Process Interagency Meeting, October 22, 2002 Facilitator's Summary at 3 (Attachment B). The interagency team has understood that testing would not occur for the entire period of IOP but that following testing, marsh operational criteria would supersede Note 2 under S-332B in the IOP table. See IOP EIS collaborative Process Interagency Meeting, October 22, 2002 Facilitator's Summary at 3 (Attachment B). This phased approach involving testing and construction has always been anticipated.
- 6. Contrary to assertions by Thomas Van Lent at ¶¶14 and 18, the Corps does plan to implement marsh operations prior to CSOP implementation as previously described. The Corps has in fact implemented marsh operations at the 2-foot default. Contrary to assertions by Thomas Van Lent at ¶17, the Corps does not contend that field testing is required before "any implementation of the marsh operations." Upon installation of monitoring equipment, in July 2006 the Corps will begin monitoring marsh reactions to reservoir levels and will begin the testing that was anticipated. Once sufficient data has been collected to understand how the 2-foot default affects the marl-prairie within the ENP, the Corps will begin operating at elevations slightly above and below the 2-foot

default. As data is collected on the marsh response, the Corps, in conjunction with the U.S. Fish and Wildlife Service (FWS), will move toward the 0.4-foot gradient that is anticipated for CSOP. Field testing, or monitoring, is a requisite part of implementation of marsh operations. Field testing will verify results of different operational criteria. Given the dearth of hydrogeologic data for the area, marsh operations have been theoretical to date and can only be confirmed through monitoring. Without the required monitoring equipment in place and operational, there is no way to measure or otherwise determine if marsh operational objectives are actually being achieved. This litigation illustrates that there are varying opinions about modeling results among interested parties and stakeholders. Physical data is required to calibrate and verify models and adaptively implement operations to restore the wet marl prairies.

- 7. Contrary to assertions by Thomas Van Lent at ¶14 that the Corps has "not been doing anything at all, i.e., waiting until CSOP," the Corps has been moving forward with marsh operations, albeit with time-consuming challenges and obstacles. The Corps has obtained Wilderness Committee permits for installation of wells, installed wells, and on June 23, 2006, obtained Wilderness Committee permits for installation of monitoring equipment. The Corps has made arrangements with the U.S. Geological Survey to have monitoring equipment installed the week of June 26, 2006 and expects data transmission to begin on July 1. In the interim, the Corps has been working with an interagency team on marsh operational criteria for CSOP, which will inform marsh operational criteria for IOP. Contrary to Assertions by Thomas Van Lent at ¶17, the Corps is moving forward and does desire to implement marsh operational criteria. While there have been numerous delays, the most significant of which have been attempting to obtain interagency agreement on criteria to be implemented and obtaining requisite permits for installation of wells, the Corps is making progress. Moreover, as agreed upon by the agencies and required by the BO, the Corps has been using the 2-foot default criteria for current operations.
- 8. Mr. Van Lent apparently considers "testing" to be different from actual implementation of marsh operation. That is not how the Corps views this implementation. Conditions in the reservoirs, marl prairies and C-111 basin are not static but are constantly changing. While there may be several weeks with little change in hydrologic conditions in the area, a single rain event can reverse the gradient from the detention areas to the marsh. In addition, the implementation of operations to protect the marsh requires an understanding of how the marsh reacts to various gradients. That is a very complex question which an interagency team of scientists is working to address as a part of the overall \$10.5 billion Comprehensive Everglades Restoration Plan. It may appear that the simple solution is to restore pre-drainage conditions to the marshes of the Everglades; however, the challenge is the 6 million plus people who currently depend on the system for water supply and flood control. While undertaking efforts to further marsh operations, the Corps must also insure flood control is maintained to the east and that canals are maintained within their operating ranges. This monitoring or testing is essential for the Corps to achieve all of its project purposes and requirements.
- 9. In ¶12, Mr. Van Lent takes issue with my prior declaration at ¶3 referring to "analyses by staff at Everglades National Park that operating the S-332C reservoir at a

maximum depth of 2.0 feet during non-emergency conditions would reestablish desired short-hydroperiod marsh conditions in adjacent marshes (Tom VanLent, Everglades National Park, personal communication)." This language is taken directly from the U.S. Fish & Wildlife Service Final Amended Biological Opinion for the U.S. Army Corps of Engineers Interim Operational Plan (IOP) for the Protection of the Cape Sable Seaside Sparrow, March 28, 2002. This document was signed by the Regional Director of FWS and relied upon by the Corps as the position of the Department of Interior. The Corps is not aware of any change in position of FWS with respect to the 2.0-foot criteria.

- 10. There are several issues raised by Mr. Van Lent regarding water quality impacts from operations at ¶ 9. The Corps has long recognized the potential impacts associated with water quality and has worked in coordination with the ENP, EPA, and Florida DEP to protect the quality of water flowing to ENP. First, it should be noted that the term "polluted waters" should be clarified. The water quality that exists in the canals of the C-111 basin, the source of the water that is conveyed into the reservoirs via pumps, meets state water quality standards for present use. It is normally of a very high quality with low levels of phosphorus and other constituents. The Taylor Slough/Coastal Basin inflows have been meeting the long term Consent Decree (United States v. SFWMD, et al., Case No. 88-1886-CIV-HOEVELER) phosphorus requirements for concentration and frequency of events exceeding 10 ppb since 2001. The Corps recognizes that there is a present potential risk to the ENP marsh ecosystem from overflow conveyances of water from the L31N canal under extreme rainfall conditions. One such event occurred on October 2000 with short duration overflows having peak concentrations of approximately 100ppb phosphorous. Since that extreme event nothing approaching that level has occurred for any S-332B surface water conveyance event into ENP. The highest recorded value since the October 2000 event was approximately 14 ppb for a conveyance into the ENP from the S-332B. Under most conditions, the risk to the ENP marsh system from conveyances of water from the C-111 detention system is low based on the recent phosphorus data. Impacts noted adjacent to the S-332B are likely linked to the October 2000 event as well as antecedent farming activities. The S-332C impacts noted could also be at least partially attributed to the pre-project agricultural activities. The impacts from seepage presently are not clearly linked to the S-332B and S-332C operations.
- 11. As Mr. Van Lent notes, the marshes of the ENP are extremely sensitive to any change in the quality of water entering the ENP. In recognition of this, the Congress, in addition to authorizing the C-111 project per the 1994 General Re-evaluation Report (GRR), also provided the Corps with the authority to construct such works as may be needed to ensure water quality of those waters conveyed into the ENP would not have an adverse affect on the resources of the ENP. The Corps has been working to determine the potential for impact and the need for such specific works as a part of the project. At present, investigations have revealed an indeterminate need for any specific water quality features, i.e., the existing quality of water in C-111 that is conveyed in the detention basins via pumps should meet the standards for conveyance into the ENP. This is based on observed water quality within the canals. However, as Mr. Van Lent notes, there have been observed impacts proximate to the overflow area at the S-332B detention basin. These appear to result from both the impact of nearby construction, increased surface

flow, and spikes in phosphorus content during flood events. The stated impacts from S-332C related to water quality are not readily understood as there is no surface conveyance to the ENP. Seepage from the S-332C reservoir as well as construction impacts or previous agricultural activities could account for the observed changes. To minimize any potential for impacts due to water quality, the design of the C-111 project has been modified to remove the many surface water conveyance culverts from the authorized plan. The original plan had these culverts conveying surface water directly into the ENP. Only emergency spillways are now included to prevent loss of the levee during extreme events. Thus, the Corps has been actively working to address this potential problem. Also, as additional C-111 detention basins are constructed, the overflow weir at S-332B will be raised to reduce frequency of operation. The desired end state and the current plan are to eliminate all direct surface water conveyance from the C-111 project. Modeling performed for the CSOP alternatives analyses indicated that surface water conveyances from the fully built out system (8.5 SMA STA connected to a levee system adjacent to the ENP and extending to the S-332B and S-332C features) would not occur into the ENP for a 100 year rainfall event at the beginning of a wet year (designated as a wet year by Corps technical staff as 1995).

- 12. In response to the Tribe's brief, the Corps has anticipated the potential for marsh operations to trigger the need for additional National Environmental Policy Act (NEPA) analysis. Pursuant to the March 2006 order in this case, the Corps is in the process of supplementing its IOP NEPA analysis. The Corps intends to continue to comply with the requirements of NEPA and will prepare supplemental documentation in the future if there are substantial changes in the proposed action that are relevant to environmental concerns or if there are significant new circumstances or information relevant to environmental concerns. And as previously stated, the Corps has proposed to reinitiate consultation pursuant to Section 7 of the Endangered Species Act (ESA) as part of its preparation of the SEIS. The Corps will pursue further consultation in the future if that becomes appropriate.
- 13. The Miccosukee Tribe asserts that implementation of marsh operations categorically triggers additional NEPA and ESA consultation requirements. That presupposes impacts not analyzed as part of IOP. The Tribe expresses concerns that implementation of variations from the 2' default reservoir level could compromise flood protection to the east. The Corps intends to monitor canal levels to the east of the C-111 reservoirs and operate the project consistent with IOP to insure that flood damage prevention is maintained. Nevertheless, monitoring canal levels within the C-111 Basin will be an integral part of the Corps' implementation of marsh operations.
- 14. With regard to the Tribe's allegations concerning Water Conservation Area 3A, the Tribe is correct that modeling for Alternative 7R showed more weeks of higher levels. However, the modeling results from November 2002 showed only three weeks of higher water levels in the 31-year period of record. Modeling results have been shared with the U.S. Fish and Wildlife Service and will be included in the supplemental NEPA analysis that is currently underway.

15. Based on the foregoing, we urge the court to recognize the validity of the 2.0-foot default and allow the Corps to proceed with refinements to marsh operations as set forth herein.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on: 30 June 2006

Signed by: Dennis R. Duke