

DEPARTMENT OF THE ARMY SOUTH ATLANTIC DIVISION, CORPS OF ENGINEERS ROOM 10M15, 60 FORSYTH ST., S.W. ATLANTA GA 30303-8801

CESAD-PDS-P

9 December 2009

MEMORANDUM FOR Commander, Jacksonville District (Rebecca Griffith/CESAJ-PD)

SUBJECT: Approval of the Review Plan (RP) for the Western C-111 Spreader Canal (C111SC) Project Implementation Report (PIR), Comprehensive Everglades Restoration Plan (CERP)

1. References:

a. Memorandum, CESAJ-PD, dated 2 December 2009, subject: Approval of the Review Plan (RP) for the Western C-111 Spreader Canal (C111SC) Project Implementation Report (PIR), .Comprehensive Everglades Restoration Plan (CERP)

b. EC 1105-2-410, Review of Decision Documents, dated 22 August 2008.

- c. Memorandum, CECW-CP, dated 30 March 2007, subject: Peer Review Process.
- d. Supplemental information for the "Peer Review Process" memorandum, dated March 2007.

e. EC 1165-2-209, Water Resources Policies and Authorities, Civil Works Review Policy, dated 1 July 2009 (Draft).

2. In accordance with EC 1105-2-410, "Review of Decision Documents," the Review Plan (RP) for the Western C-111 Spreader Canal (C111SC) Project Implementation Report (PIR), Comprehensive Everglades Restoration Plan (CERP) with Environmental Impact Statement has been coordinated with and concurred on by National Ecosystem Planning Center of Expertise (ECOPCX). The Western C-111 Spreader Canal Review Plan dated December 2009 (enclosure) has been reviewed by this office and is approved.

3. We concur with the conclusion that independent external peer review (IEPR) of this project is required due estimated project cost in excess of \$45,000,000. The PRP complies with all applicable policy and provides for adequate agency technical review of the plan formulation, engineering, and environmental analyses, and other aspects of the plan development. Non-substantive changes to this PRP do not require further approval. Given that the SFWMD already has design underway and construction to begin shortly thereafter, the District should update this RP for these and future activities. Updates should include adding references to the latest Corps guidance on Review

CESAD-PDS-P 9 December 2009 SUBJECT: Approval of the Review Plan (RP) for the Western C-111 Spreader Canal (C111SC) Project Implementation Report (PIR), Comprehensive Everglades Restoration Plan (CERP)

Plans and incorporating Tier II IEPR. Please note for Engineering Models, the MODBRANCH, South Florida Water Management Model (SFWMM 2X2), and the Interconnected Channel and Pond Routing (ICPR) models are designated as "Approved for Use". In the case of the SFWMM 2X2 and the ICPR Model the Corps allows for their use in CERP only. It is very important that the Jacksonville District Review Plans properly identify the appropriate model designation.

4. The district should take steps to post the PRP and a copy of this approval memorandum to the Jacksonville District public internet website and provide a link to the HSDR- PCX for their use. Before posting to the web site the names of Corps/Army employees should be removed in accordance with reference 1.d. above

5. The point of contact is Mr. Terry Stratton, CESAD-PDS-P.

WILBERT V. PAYNES Chief, Planning and Policy Community of Practice

CF: Jodi Staebell (CEMVD-RB-T)



DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT CORPS OF ENGINEERS P.O. BOX 4970 JACKSONVILLE, FLORIDA 32232-0019

CESAJ-PD

0 4 DEC-2009

MEMORANDUM FOR CHIEF, PLANNING DIVISION, SOUTH ATLANTIC DIVISION (CESAD-PD)

SUBJECT: Approval of the Review Plan (RP) for the C&SF: CERP: C-111 Spreader Canal Western Project - Project Implementation Report and Environmental Impact Statement

1. Reference: EC 1105-2-410, Review of Decision documents, 22 August 2008.

2. I hereby request approval of the subject Review Plan and concurrence with the conclusion that external peer review of this project is necessary because it triggers criteria provided in the above reference. The RP has been coordinated with and concurred by the National Ecosystem Restoration Planning Center of Expertise (ECO-PCX). The RP complies with all applicable policies and provides an adequate agency technical review of the plan formulation, engineering, environmental analyses, other aspects of the plan development and also for independent external peer review. It is our understanding that non-substantive changes to this RP, should they become necessary, are authorized by CESAD. The Review Plan, Review Plan Checklist and PCX endorsement are enclosed.

3. The District will post the CESAD-approved Final RP to its web site and provide a link to the PCX for their use.

4. The SAJ point of contact is James M. Baker, CESAJ Review Coordinator, Planning Division, CESAJ-PD-PW, (904) 232-2698.

Rebecca S Griffith, Ph.D, PMP

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Chief, Planning Division



DEPARTMENT OF THE ARMY

MISSISSIPPI VALLEY DIVISION, CORPS OF ENGINEERS P.O. BOX 80 VICKSBURG, MISSISSIPPI 39181-0080

REPLY TO ATTENTION OF:

CEMVD-RB-T

1 December 2009

MEMORANDUM FOR Commander, South Atlantic Division ATTN: (Michael Magley, CESAD-PDC)

SUBJECT: Western C-111 Spreader Canal (C111SC) Project Implementation Report (PIR), Comprehensive Everglades Restoration Plan (CERP), Ecosystem Restoration Planning Center of Expertise Endorsement of Review Plan

References:

 a. EC 1105-2-410, Review of Decision Documents, 22 August 2008.

2. The enclosed Review Plan (RP) complies with all applicable policy and provides an adequate agency technical review of the plan formulation, engineering, and environmental analyses, and other aspects of the plan development. The Ecosystem Restoration Planning Center of Expertise (ECO-PCX) has reviewed the RP and documentation of the review is enclosed.

3. The ECO-PCX concurs with the conclusion that Independent External Peer Review of this project is necessary. Review of the ecosystem output model will also be required. Non-substantive changes to this RP do not require further approval.

3. The ECO-PCX recommends the RP for approval by the MSC Commander. Upon approval of the RP, please provide a copy of the approved RP, a copy of the MSC Commander approval memorandum, and the link to where the RP is posted on the District to Jodi Staebell.

4. Thank you for the opportunity to assist in the preparation of the Review Plan.

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Enclosures (2)

9 odi Staebell Operational Director, National Ecosystem Planning Center of Expertise

CF: CEMVD-RB-T (Vigh, Staebell) CEMVD-PD-N (Smith, Wilbanks) CESAD-PDS (W. Paynes) CESAJ-PD (B. Griffith CESAD-DR-PE (M. Collis) CESAD-PD-PW (J. Baker) CESAD-PD-PR (R. Wimbrough) CECW-SAD (S. Kopecky)

PEER REVIEW PLAN FOR THE WESTERN C-111 SPREADER CANAL (C111SC) PROJECT PROJECT IMPLEMENTATION REPORT (PIR) COMPREHENSIVE EVERGLADES RESTORATION PLAN (CERP) DECEMBER 2009

For questions or comments regarding this Peer Review Plan, please forward your comments to:

Title	Telephone	Email
Project Manager	904-232- 1889	Click here to email the Project Manager

THE INFORMATION CONTAINED IN THIS PEER REVIEW PLAN IS DISTRIBUTED SOLELY FOR THE PURPOSE OF PREDISSEMINATION PEER REVIEW UNDER APPLICABLE INFORMATION QUALITY GUIDELINES. IT HAS NOT BEEN FORMALLY DISSEMINATED BY THE U.S. ARMY CORPS OF ENGINEERS, JACKSONVILLE DISTRICT. IT DOES NOT REPRESENT AND SHOULD NOT BE CONSTRUED TO REPRESENT ANY AGENCY DETERMINATION OR POLICY.

PEER REVIEW PLAN FOR THE WESTERN C-111 SPREADER CANAL (C111SC) PROJECT PROJECT IMPLEMENTATION REPORT (PIR) COMPREHENSIVE EVERGLADES RESTORATION PLAN (CERP) DECEMBER 2009

Executive Summary

This document describes the general rational and procedures used to conduct Agency Technical Reviews (ATR), Independent External Peer Review (IEPR) and planning model certification, in support of the proposed Western C111SC Project.

The Western C111SC Project is the first of two Project Implementation Reports (PIR) that focuses on environmental restoration in the southeastern portion of the Everglades and Florida Bay. The two Reports stemmed from the original C-111 Spreader Canal Project that was envisioned in the CERP Comprehensive Review Study (Restudy). The Western C111SC project generally focuses on optimizing the quantity, timing, and distribution of water into Florida Bay via Taylor Slough. Project components may include installation/construction/operation of water detention, pump stations, canals, culverts, canal/culvert plugs, and operational triggers. The current estimated total cost for the Western C111SC project is approximately \$120 million.

The relevant National Planning Center of Expertise, in this case for Ecosystem Restoration (ECO-PCX), has ultimate responsibility for accomplishing ATR, IEPR and Planning Model Certification.

CONSOLIDATED PRELIMINARY COST ESTIMATE

- Planning Model Certification \$129
- Cost of ATR activities \$127K
- IEPR \$200K

CONSOLIDATED SCHEDULE

- ATR of FSM Package, completed April 2005
- ATR of AFB Package, completed January 2008
- ATR of Draft Report, completed April 2009
- Public and Agency review of Integrated Draft Report and EIS, completed July 2009
- Independent External Peer Review (IEPR), completed November 2009
- ATR of Final Report, completed November 2009

DRAFT PEER REVIEW PLAN FOR THE WESTERN C-111 SPREADER CANAL (C111SC) PROJECT PROJECT IMPLEMENTATION REPORT (PIR) COMPREHENSIVE EVERGLADES RESTORATION PLAN (CERP) JULY 2008

1.0 PURPOSE

This Peer Review Plan (PRP) provides a technical peer review mechanism to ensure that quality products are developed during the course of the study by the Jacksonville District (SAJ). All processes, including quality control, quality assurance, and policy review will be done to complement each other, producing a review process that identifies and resolves technical and policy issues during the course of the study rather than during the final study stages.

This PRP describes the processes implemented to independently evaluate the technical sufficiency of the planning study independent of the Project Team. The PRP is a collaborative product of the Project Delivery Team (PDT) and the National Planning Center of Expertise for Ecosystem Restoration (ECO-PCX). The ECO-PCX manages the peer review processes, which for this study includes Agency Technical Reviews (ATR) and Independent External Peer Review (IEPR).

ATR is a critical examination by a qualified person or team, predominantly within the U.S. Army Corps of Engineers (Corps), which was not involved in the day-to-day technical work that supports a decision document. ATR is intended to confirm that such work was done in accordance with clearly established professional principles, practices, codes and criteria informed by Engineering Regulation (ER) 1105-2-100.

Independent External Peer Review (IEPR) is done in addition to ATR, and is added to the Corps existing review process in special cases where the risk and magnitude of the proposed project are such that a critical examination by a qualified person or team outside of the Corps and not involved in the day-to-day production of a technical product is necessary. IEPR will similarly be added in cases where information is based on novel methods, presents complex challenges for interpretation, contains precedent-setting methods or modes, presents conclusions that are likely to change prevailing practices, or is likely to affect policy decisions that have a significant impact. In the absence of a technical requirement high project cost, by itself, may necessitate IIEPR.

2.0 REFERENCES

ER 1105-2-100, "Planning Guidance Notebook EC 1105-2-410, "Review of Decision Documents", dated August 22, 2008 CECW-CP Memorandum, "Peer Review Process", dated March 30, 2007 Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies, Chapter II - (National Economic Development NED) Benefit Evaluation Procedures (March 10, 1983). EC-1105-2-407, "Planning Models Improvement Program – Model Certification", dated May 31, 2005

3.0 STUDY BACKGROUND

Overview

First authorized by Congress in as part of the Flood Control Act of 1948 (FCA 1948), the Central and Southern Florida (C&SF) Project provides the South Florida ecosystem with flood control, regional water supply, prevention of saltwater intrusion, preservation of fish and wildlife, recreation, and navigation. In fulfilling these objectives, the project has had unintended adverse effects on the natural environment that constitutes the Everglades and South Florida ecosystem.

In an attempt to mitigate or reverse the unintended adverse effects on the natural environment from the CS&F Project, and to protect the South Florida ecosystem while providing for other water-related needs of the region in 2000 Congress authorized the Comprehensive Everglades Restoration Plan (CERP) or "Plan" in the Water Resources Development Act of 2000 (WRDA 2000),. Over the next 35 years it is envisioned that CERP will bring about a variety of structural and operational modifications to structures installed as part of the C&SF Project.

The various components of the CERP are anticipated to benefit the ecological functioning of over 2.4 million acres of the South Florida ecosystem, improve urban and agricultural water supply, improve deliveries to coastal estuaries, and improve regional water quality conditions, while maintaining existing levels of flood protection. One of the 68 components was the C-111 Spreader Canal Project (identified in CERP as the C-111 N Spreader Canal, component WW) located in the Lower East Coast Region of Florida.

Western C-111 Spreader Canal Project

The Western C111SC project is located in the extreme southeastern portion of the Everglades system (Figure 1). The C-111 Canal is the southernmost canal of the Central and South Florida Flood Control Project and is located in south Miami-Dade County. The canal provides several critical functions, including providing flood protection for the approximately 100-square-miles which make up the C-111 Basin. A second canal, the C-111E, assists the C-111 in providing flood protection to the Basin and becomes tributary to the C-111 Canal just southwest of Homestead and Florida City.





The purpose of the original C-111 Spreader Canal project as envisioned in the Restudy is to improve deliveries and enhance the connectivity and sheetflow in the Model Lands and Southern Glades areas, reduce wet season flows in C-111, and decrease potential flood risk in the lower south Miami-Dade County area. In order to reduce risk and uncertainty and optimize restoration within the project area, the original project was separated into two separate projects, the Western C111SC and the Eastern C111SC.

The Western C111SC recommended plan will focus on improving the quantity, timing, and distribution (QTD) of water delivered to Florida Bay via Taylor Slough. The objectives of Western C111SC are to:

- 1. Improve the quantity, timing, and distribution of water delivered to Florida Bay via Taylor Slough;
- 2. Improve hydroperiods and hydropatterns in the Southern Glades and Model Lands;
- 3. Reduce ecologically damaging flows;
- 4. Assess water treatment capabilities and source reduction treatments; and,
- 5. Resolve decision critical uncertainties for the Eastern C111SC project.

The Western C111SC project report will also contain a discussion and future recommendations to formulate and evaluate the conceptual features for the Eastern C111SC. A Design Test Spreader Canal will be constructed in Fiscal Year 2009 under the CERP Engineering Design Agreement between the Corps and SFWMD. The Design Test will be monitoring and optimized for inclusion in the Eastern C111SC project.

A wealth of additional project information may be found at the following weblink: <u>http://www.evergladesplan.org/pm/projects/proj_29_c111.aspx</u>

Study Authority

The Water Resources Development Act (WRDA) of 2000 (PL 106-541) provided authority for the CERP in Section 601(b)(1)(A). The authorization states:

- (b) Comprehensive Everglades Restoration Plan.
 - (1) Approval. –

(A) IN GENERAL. — Except as modified by this section, the Plan is approved as that are needed to restore, preserve, and protect the South Florida ecosystem while providing for other water-related needs of the region, including water supply and flood protection. The Plan shall be implemented to ensure the protection of water quality in, the reduction of the loss of fresh water from, and the improvement of the environment of the South Florida ecosystem and to achieve and maintain the benefits to the natural system and human environment described in the Plan, and required pursuant to this section, for as long as the project is authorized. The initial, conditional authorization of the C-111 Spreader Canal as one of the ten initially authorized projects is contained in Section 601(b)(2)(C), (D), and (E) WRDA 2000, which states:

(2) Specific Authorizations. –

(C) INITIAL PROJECTS. – The following projects are authorized for implementation, after review and approval by the Secretary, subject to the conditions stated in subparagraph (D), at a total cost of \$1,100,918,000, with an estimated Federal cost of \$550,459,000 and an estimated non-Federal cost of \$550,459,000: (x) C-111 Spreader Canal, at a total cost of \$94,035,000, with an estimated cost of \$47,017,500 and an estimated non-Federal cost of \$47,017,500.
(D) CONDITIONS. –

(i) PROJECT IMPLEMENTATION REPORTS. – Before implementation of a project described in any of clauses (i) through (x) of subparagraph (C), the Secretary shall review and approve for the project a project implementation report prepared in accordance with subsections (f) and (h) (ii) SUBMISSION OF REPORT. —The Secretary shall submit to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Environment and Public Works of the Senate the project implementation report required by sub-sections (f) and (h) for each project under this paragraph (including all relevant data and information on all costs). (iii) Funding Contingent on Approval. — No appropriation shall be made to construct any project under this paragraph if the project implementation report for the project has not been approved by resolutions adopted by the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Environment and Public Works of the Senate. (E) MAXIMUM COST OF PROJECT. – Section 902 of the Water Resources Development Act of 1986 (33 U.S.C. 2280) shall apply to each project feature authorized under this subsection.

4. 0 PROJECT DELIVERY TEAM

The project delivery team (PDT) is an interagency team of individuals directly involved in the development of the decision document. Team member and agency information are listed below.

Discipline	Agency
Project Management	U.S. Army Corps of
	Engineers (USACE)

Plan Formulation	USACE
Real Estate	USACE
Project Assurances	USACE
Economics	USACE
Archaeology/Cultural	USACE
Resources	
Biology/NEPA	USACE
Hydrologic/Hydraulic	USACE
Modeling	
Water Control/Operations	USACE
Civil Engineering Design	USACE
Geology	USACE
Cost Engineering	USACE
Water Quality	USACE
Value Engineering	USACE
Plan Formulation	USACE
Office of Counsel	USACE
Construction Operations	USACE
Regulatory	USACE
Project Management	South Florida Water
	Management District
	(SFWMD) Acceler8
	Contractor
Planning, Project Assurances	SFWMD
Ecology	SFWMD
Water Quality	SFMWD
State Compliance	SFWMD
Hydrologic/Hydraulic	SFWMD
Modeling	
Water Control	SFWMD
Biology/Project Assurances	U.S. Fish and Wildlife
	Service (USFWS)
Biology/Water Quality	Florida Department of
	Environmental Protection
	(FDEP)
Biology/Plan Formulation	Miami-Dade Co. Department
	of Environmental Resources
	Management (DERM)
Plan Evaluation	National Park Service (NPS)

5.0 PLANNING MODELS EMPLOYED

Evaluation Performance Measures

The Western C111SC Project Team evaluated and selected a subset of Performance Measures that would best predict ecological response within the natural system. These Performance Measures were utilized to compare the restoration potential of each alternative in the plan evaluation process. The Performance Measures are listed as follows:

- PM 1.5 Flow Timing and Distribution
- PM 2.1 Hydroperiods
- PM 2.4 Stage-Based Estuarine Salinity Estimates

In addition to the above-referenced performance measures, other graphical outputs (i.e., hydroperiod maps, Cape Sable seaside sparrow habitat compatibility maps, and various other maps/figures) were referenced by the PDT during the review of model results for each alternative, baseline, and target condition. For Engineering Models, the Engineering Community of Practice has a Model Vetting process that classifies models into one of five categories: Enterprise Community of Practice (CoP), Preferred, Approved For Use, Retired, and Not Allowed For Use. The MODBRANCH, South Florida Water Management Model (2X2), and the ICPR models are designated as "Approved For Use". In the case of the 2X2 and ICPR they are allowed for use in CERP Only.

The planning models have been certified for use by the ECO-PCX consistent with EC 1105-2-407. Cost estimate for model certification was \$129,000.

6.0 AGENCY TECHNICAL REVIEW (ATR)

ATR has been performed at key points in the study process to ensure the proper application of appropriate regulations and professional procedures. ATRs are typically performed at two Corps vertical team review points interim to the Draft Report: the Feasibility Scoping Meeting (FSM, completed) and Alternative Formulation Briefing (AFB, completed). Subsequently the Draft report is subjected to ATR (Draft, completed) and the Final Report (Final, completed) in the case of projects requiring an Environmental Impact Statement (EIS). DrChecks document review and comment software has been used to document the ATRs.

Skilled and experienced personnel who have not been associated with the development of the study products perform the ATR. ATR team members may be employees of U.S. Army Corps of Engineer Districts, other Federal agencies, state or local government agencies, universities, private contractors or other institutions. The key factor is extensive, expert knowledge in their field of expertise.

The ATR team was nominated and identified by the ECO-PCX and is comprised of individuals from all the technical disciplines that were significant in the preparation of the report. Technical disciplines determined to be appropriate for this review include: Plan Formulation, Economics, Environmental Restoration Analysis, Environmental

Regulatory Compliance (e.g., NEPA documentation preparation), Engineering Design, Cost Estimating, H&H, H&H Modeling, Water Control, Geotechnical Engineering, and Real Estate. Cost of performing all ATR reviews was \$127,000..

The relevant National Planning Center of Expertise, in this case for Ecosystem Restoration (ECO-PCX), has ultimate responsibility for accomplishing ATR. The ECO-PCX formed an ATR Team, and conducted the ATR of the Draft and Final Reports.

Also, a Cost Engineering Directory of Expertise (Cost Dx) was established, at the Corps Walla Walla District (NWW). The completed draft and final report cost estimates were reviewed and certified by the Cost Dx. The ECO-PCX coordinated cost estimation review with the Cost Dx.

7.0 INDEPENDENT EXTERNAL PEER REVIEW (IEPR)

In order to determine if independent external peer review is warranted for this particular project, an evaluation was conducted of the risk and magnitude of the proposed project, including consideration of whether or not study conclusions were based on novel methods, present complex challenges for interpretation, contain precedent-setting methods or modes, disseminate influential scientific information or a highly influential scientific assessment, present conclusions that are likely to change prevailing practices, or are likely to affect policy decisions that have a significant impact, as called for in EC 1105-2-408, Section 4.b.

External Peer Review Requirement Determination

The Jacksonville District opinion is that this project is considered large, approximately \$120M in total cost. Magnitude of the project triggers the requirement for Independent External Peer Review. Other criteria are not considered to be sufficiently significant to trigger IEPR. IEPR has been conducted on the Final report. Detailed scope of the IEPR will be determined in advance of the review. The cost of IEPR was approximately \$200,000.

Evaluations of individual decision criteria are provided below, in support of the abovestated opinion.

Unusually high risk or magnitude indicated?

The proposed project does not appear to include risks that are greater than normally would be expected for actions of this type. Work to be performed includes the installation/construction/operation of water detention, pump stations, canals, culverts, canal/culvert plugs, and operational triggers. The Corps and SFWMD have extensive experience in water resources related construction and the work would not require any unusual or innovative construction techniques. There are no life safety issues. Maximum impoundment of water would be three feet and there are no populated areas downstream.

The Western C111SC Project is the first of a two-part restoration effort in the project area. This method of implementation is being done in the spirit of Incremental Adaptive Restoration, which is based on identifying the parts of a project with low uncertainty for immediate implementation. By planning and constructing the first increments of restoration, information that is gathered from monitoring can be utilized to further calibrate models and guide the remainder of restoration in the project area. As such, the Western C111SC Project has been identified as having low risk and uncertainty, and will be recommended for immediate implementation.

Another factor that will lower risk and uncertainty is the CERP practice of adaptive management. Through monitoring and on-site observations, information is gathered to optimize operations and project performance. System managers will be able to alter operations and maintenance schedules to better drive ecosystem restoration towards the goal of a healthy Everglades system.

Study conclusions based upon novel methods?

The project will focus on improving the quantity, timing, and distribution (QTD) of water delivered to central Florida Bay via Taylor Slough. All targets have been based on historical flows calculated from the Natural System Model (NSM). The NSM is the standard that is utilized throughout Everglades Restoration as the overall restoration goal.

Modeling for the Selected Plan was accomplished using Modbranch and the South Florida Water Management Model (SFWMM). Modbranch is a certified United States Geological Survey (USGS) model that has been utilized for prior hydrological studies that require a complex surface water and groundwater model. The SFWMM is also a certified, peer-reviewed model that has been used historically to manage water management operations in south Florida.

Study conclusions present complex challenges for interpretation?

The project does not present any unusually complex challenges for interpretation. The Performance Measures developed for the Western C111SC project were based on those developed by RECOVER. RECOVER (Restoration, Coordination, and Verification) is a group of interdisciplinary scientists and engineers that provides support to CERP in meeting its goals and purposes by evaluating and assessing CERP performance, refining and improving the plan during implementation, and ensuring system-wide perspectives are maintained throughout the restoration process. The Ecological Model that was utilized by the Western C111SC project team to predict ecological performance was based on Conceptual Ecological Models (CEMs) that were developed by RECOVER. All of the CEMs developed by RECOVER have been certified and peer-reviewed. Other CERP projects that have been authorized to date utilized these CEMs for predicting ecosystem responses to projects. In addition, the Western C111SC Ecological Model will be evaluated and certified by the Planning Center of Expertise, adding another layer

of review to an already thorough and comprehensive process. As such, all results of the planning process are put to rather exhaustive review and evaluation which greatly reduces any uncertainties concerning the predictions and outcomes of the proposed project.

Study conclusions contain precedent-setting methods or modes?

The proposed construction/restoration methods are not precedent-setting. The potential for controversy regarding project implementation is low. The construction/restoration methods that will be utilized for this project do not represent any new technologies. The Western C111SC project in essence is to construct a seepage management system that creates a hydraulic ridge. Water that is normally drained back into the C-111 Canal will be retained in the natural system, restoring historical flows through historical drainage patterns such as those through Taylor Slough.

The State of Florida supports the project as demonstrated by their continuing commitment to the project. All methods have also been reviewed by entities such as the U.S. Fish and Wildlife Service, National Park Service, DERM, FDEP, and other members of the Project Delivery Team.

Study conclusions likely to change prevailing practices?

The project is unlikely to affect policy decisions or have any impact on the principles and procedures associated with Everglades restoration. The proposed Western C111SC project meets the goals and objectives of the CERP and would not set any new precedents. The plan for the Western C111SC project has been fully vetted and evaluated by all members of the Project Delivery Team including stakeholders, and represent the most cost effective restoration plan that would still meet the goals and objectives set forth for the project. The proposed project has been identified by the local sponsor as critical to ensuring the continued health of the Everglades. As such, the SFWMD has required 404 permits and is planning to proceed with construction of the project in late 2009.

Proposed general scope of independent external peer review (IEPR)

The total cost of the project is the primary driver of the requirement to perform IEPR for this project. The scope of IEPR includes:

- General review of the draft report for completeness and adequate telling of the story.
- Completeness and appropriateness of ecosystem restoration analyses
- Completeness and appropriateness of economic analyses
- Completeness and appropriateness of engineering analyses

The IEPR was conducted by a panel of reviewers that were selected by an eligible organization as defined in Section 2035(1) Definitions of WRDA 2007. The IEPR team is comprised of 6 individuals from all the technical disciplines that were significant in the preparation of the report. Technical disciplines determined to be appropriate for this review include: design and construction cost engineering, civil works planning, estuarine and freshwater ecology, hydrogeology and hydraulics, and economics. The IEPR has been documented in a Review Report. DrChecks document review and comment software has been used to document the IEPR comments. Written responses to the IEPR Review Report have been prepared and posted on the internet.

Current consolidated schedule (See Section 8.0 below) provides for concurrent IEPR and public and agency review of the integrated draft report and EIS. Significant or relevant public or agency comments received prior to or during IEPR will be provided to the panel of reviewers.

8. CONSOLIDATED SCHEDULE

- ATR of FSM Package, completed April 2005
- ATR of AFB Package, completed January 2008
- ATR of Draft Report, completed April 2009
- Public and Agency review of Integrated Draft Report and EIS, completed July 2009
- Independent External Peer Review (IEPR), completed November 2009
- ATR of Final Report, completed November 2009

9.0 PLANNING CENTER OF EXPERTISE POINT OF CONTACT

The email address for the USACE Planning Center of Expertise is: <u>ECO-PCX@usace.army.mil</u>.