

REVIEW PLAN

Letter Report to Assess the Completion Status for the Modified Waters Deliveries Project

Jacksonville District

Project Number: 114911

MSC Approval Date: 12 April 2013
Last Revision Date: None



**US Army Corps
of Engineers®**

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Assess the Completion Status for the
Modified Waters Deliveries Project**

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1. PURPOSE AND REQUIREMENTS

- a. Purpose.** This Review Plan defines the scope and level of peer review for the Letter Report to Assess the Completion Status on the Modified Water Deliveries Project (MWD). This Letter Report is an Other Work Product under EC 1165-2-214. Upon approval, this review plan will be included into the Project Management Plan as an appendix to the Quality Management Plan.

b. References

- (1) Engineering Circular (EC) 1165-2-214, Civil Works Review, 15 Dec 2012
- (2) EC 1105-2-412, Assuring Quality of Planning Models, 31 Mar 2011
- (3) Engineering Regulation (ER) 1110-1-12, Quality Management, 21 Jul 2006 (Change 1: 20 SEP 06; Change 2: 31 MAR 11)
- (4) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007
- (5) ER 1165-2-119, Modifications to Completed Projects, 20 Sep 1982

- c. Requirements.** This review plan was developed in accordance with EC 1165-2-214, which establishes an accountable, comprehensive, life-cycle review strategy for Civil Works products by providing a seamless process for review of all Civil Works projects from initial planning through design, construction, and operation, maintenance, repair, replacement and rehabilitation (OMRR&R). The EC outlines four general levels of review: District Quality Control/Quality Assurance (DQC), Agency Technical Review (ATR), Independent External Peer Review (IEPR), and Policy and Legal Compliance Review.

2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

The RMO is responsible for managing the overall peer review effort described in this Review Plan. It has been determined that the RMO for the peer review effort described in this Review Plan will be the South Atlantic Division (SAD).

3. STUDY/REPORT INFORMATION

- a. Document.** The purpose of the Letter Report is as follows.

1. To present the status of the Modified Waters Deliveries project;
2. To provide an evaluation of whether hydrologic improvements have been achieved to the maximum extent practicable as required by the project authorization with the existing features and those currently under construction
3. To recommend any action required to complete the project.

b. Project Description. Public Law (P.L.) 101-229 authorized the 1989 Everglades National Park Protection and Expansion Act. A General Design Memorandum (GDM) describing the plan for modifying the flows to Everglades National Park (ENP) was approved in 1993. The Project Cooperation Agreement (PCA) was executed in 1994 with South Florida Water Management District (SFWMD) and construction was initiated in 1995. In 2000, a General Re-evaluation Report (GRR)/Supplemental Environmental

Impact Statement (EIS) was completed for the 8.5 Square Mile Area (8.5 SMA), modifying the original plan and in 2001, the first amendment to the PCA was executed. After a district court ruling stopped efforts, P.L. 108-7 was passed in 2003 directing the U.S. Army Corps of Engineers (USACE) to immediately proceed with efforts in accordance with the 2000 Report. In 2005, a Revised GRR/Supplemental EIS was completed recommending modifications to Tamiami Trail (U.S. Highway 41) to address the higher water levels under the authorized plan. The high costs of the 2005 plan led to a Limited Re-evaluation Report (LRR) of the Tamiami Trail (TTM) project in 2007-2008. The second amendment to the PCA was executed in 2008. After a preliminary injunction stopped Tamiami Trail efforts, P.L. 111-8 was passed in March 2009 directing immediate construction of the 2008 LRR/EA plan with addendum. The preliminary injunction was dissolved in June 2009. The National Park Service funding cap imposed in November 2010 enables the completion of the 8.5 SMA and the modifications to the Tamiami Trail. See Figure 1.

The purpose of this project was to make modifications to the existing Central and Southern Florida (C&SF) project to improve the natural water flows to Shark River Slough, the lifeline of the ENP. The project purpose was to enable restoration of more natural hydrologic conditions using three dimensions: timing, location and volume of water. The project consists of four major components: 1) 8.5 SMA Flood Mitigation Plan; 2) Conveyance and Seepage Control Features; 3) Tamiami Trail Modifications; and 4) Project Implementation Support. The 8.5 SMA Flood Mitigation plan includes acquisition of approximately 4,320 acres of land (2,040 acres under the original authorization and 2,280 acres under the 8.5 SMA authorization) and construction of a levee, seepage canal, pump station, and detention area to prevent additional flooding due to construction and operation of the Modified Water Deliveries (MWD) project.

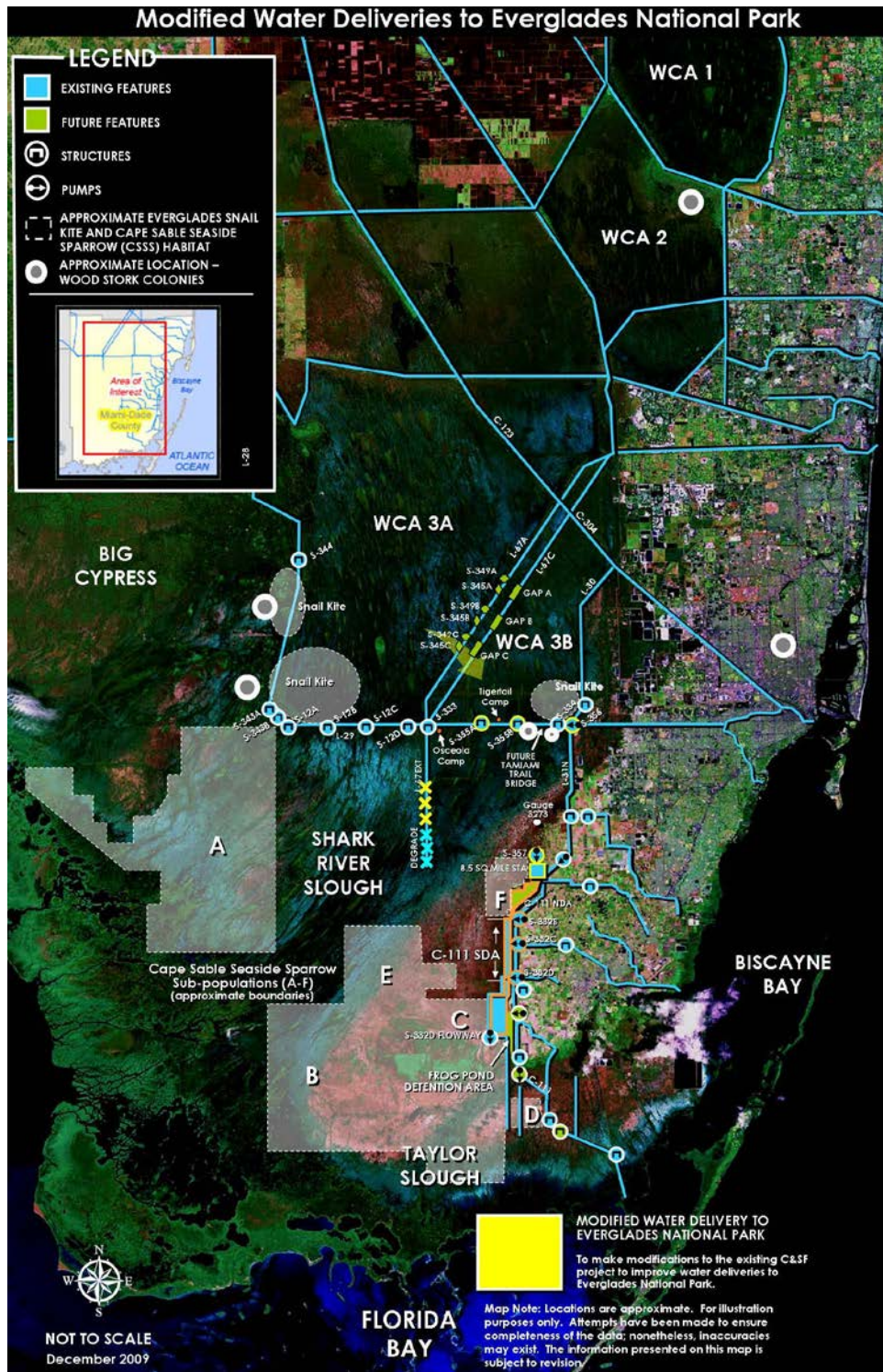


Figure 1.

c. **Factors Affecting the Scope and Level of Review.** This section discusses the factors affecting the risk informed decisions on the appropriate scope and level of review. The discussion is intended to be detailed enough to assess the level and focus of review and support the PDT, PCX, and vertical team decisions on the appropriate level of review and types of expertise represented on the various review teams. Pertinent areas of importance, from EC 1165-2-214, are presented as bullets that are then addressed for this specific Letter Report:

- *If parts of the study will likely be challenging: The Letter Report presents no challenges. This document is an assessment of whether the Modified Waters Deliveries to the Everglades National Park project authorization requirements have been completed.*
- *If the project will likely be justified by life safety or if the project likely involves significant threat to human life/safety assurance:* As a technical assessment of project status and needs, the Letter Report will present no threat to human life.
- *If there is a request by the Governor of an affected state for a peer review by independent experts:*
There has been no request by the Governor and it is not expected to be a request from the Governor for peer review of this Letter Report.
- *If the project/study is likely to involve significant public dispute as to the size, nature, or effects of the project:* As a technical assessment of project status and needs, the Letter Report is not expected to involve significant public dispute.

If the project/study is likely to involve significant public dispute as to the economic or environmental cost or benefit of the project: As a technical assessment of project status and needs, the Letter Report is not likely to involve significant public dispute as to the economic or environmental cost or benefit of the project.

If the information in the decision document or anticipated project design is likely to be based on novel methods, involve the use of innovative materials or techniques, present complex challenges for interpretation, contain precedent-setting methods or models, or present conclusions that are likely to change prevailing practices: No novel methods, innovative materials or techniques were used or are a part of this Letter Report.

- *If the project design is anticipated to require redundancy, resiliency, and/or robustness, unique construction sequencing, or a reduced or overlapping design construction schedule:* The Letter Report does not involve redundancy, resiliency, and/or robustness.

d. **In-Kind Contributions.** Products and analyses provided by non-Federal sponsors as in-kind services are subject to DQC and may be subject to ATR, and IEPR. The in-kind products and analyses to be provided by the non-Federal sponsor include: None.

4. DISTRICT QUALITY CONTROL (DQC)

All other work products (including supporting data, analyses, environmental compliance documents, etc.) shall undergo DQC. DQC is an internal review process of basic science and engineering work products focused on fulfilling the project quality requirements defined in the Project Management Plan (PMP). The home district shall manage DQC. Documentation of DQC activities is required.

- a. **Documentation of DQC.** District Quality Control will be accomplished by comprehensive review of the Letter Report by the PDT and independent reviewers. Comments will be provided by tracked changes to the report. Tracked changes/comments will be incorporated into the subsequent version. DQC comments will be compiled and maintained in the project files. This DQC will involve the PDT as well as the supervisory chain of command, independent review from District.
- b. **Products to Undergo DQC.** The Letter Report will undergo DQC. The Letter Report will be reviewed by the PDT, and will also undergo a supervisory review.
- c. **Additional Review.** There will not be any review in addition to the DQC.

5. AGENCY TECHNICAL REVIEW (ATR)

Based on the answers to the questions below and the assessment of the factors in paragraph 3.c above, an ATR is not recommended for this Letter Report.

The following questions were explicitly considered:

(1) Does it include any design (structural, mechanical, hydraulic, etc)? No. Ongoing projects have already been designed and no additional design is proposed in this Report.

(2) Does it evaluate alternatives? No.

(3) Does it include a recommendation? Yes. However, the recommendation is for a strategy to complete the MWD project and is not based on an evaluation of alternatives. It does not evaluate nor recommend additional projects.

(4) Does it have a formal cost estimate? No.

(5) Does it have or will it require a NEPA document? No. A NEPA document is proposed to be compiled at a later date to close out the MWD project. However, a NEPA document is not specifically required by this Letter Report and one is completed at a later date it will be addressed in a subsequent Review Plan.

(6) Does it impact a structure or feature of a structure whose performance involves potential life safety risks? No. Any alteration of project operations for S-356 would be recommended in a subsequent update to the 2012 Water Control Plan. An analysis of life safety, if applicable, would be completed under authority of that effort.

(7) What are the consequences of non-performance? The Letter Report only provides a project closeout assessment and strategy and does not include the recommendation of a specific project or design.

(8) Does it support a significant investment of public monies? No. Recommended steps to complete the MWD project described in the Letter Report do not require additional investments for infrastructure. Although no additional projects are proposed, some costs remain to conduct operational testing and prepare a Water Control Plan. These activities are not expected to represent significant costs.

(9) Does it support a budget request? No. Recommended budgets for efforts to complete the project would be required regardless of the Letter Report. The Letter Report only includes rough order estimates for informational purposes only.

(10) Does it change the operation of the project? No. The specific actions to complete the operational testing would be included in a separate report. The Letter Report merely recommends these actions be taken to complete the S-356 and G-3273 tests, which, if successful, would result in an update to the 2012 Water Control Plan. Updates to the Water Control Plan will be addressed in a subsequent Review Plan.

(11) Does it involve ground disturbances? No. The Letter Report merely provides a project closeout assessment and strategy and does not recommend specific authorization for any project.

(12) Does it affect any special features, such as cultural resources, historic properties, survey markers, etc, that should be protected or avoided? No. The Report is not expected to recommend any actions for construction of new facilities or that would result in a physical disturbance of the lands.

(13) Does it involve activities that trigger regulatory permitting such as Section 404 or stormwater/NPDES related actions? No. The Report is not expected to recommend any actions for construction of new facilities or that would result in a physical disturbance of the lands requiring a permit.

(14) Does it involve activities that could potentially generate hazardous wastes and/or disposal of materials such as lead based paints or asbestos? No. The Report is not expected to recommend any actions for construction of new facilities or that would result in a physical disturbance of the lands.

(15) Does it reference use of or reliance on manufacturers' engineers and specifications for items such as prefabricated buildings, playground equipment, etc? No.

(16) Does it reference reliance on local authorities for inspection/certification of utility systems like wastewater, stormwater, electrical, etc? No.

(17) Is there or is there expected to be any controversy surrounding the Federal action associated with the work product? No. The recommendations are based on current Everglades restoration efforts that have undergone robust coordination.

a. **Products to Undergo ATR.** None. Based upon an assessment of the risks discussed above it has been determined that ATR will not be required.

b. **Required ATR Team Expertise.** Not applicable.

- c. **Documentation of ATR.** Not applicable.

6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)

IEPR may be required for documents under certain circumstances. IEPR is the most independent level of review, and is applied in cases that meet certain criteria where the risk and magnitude of the proposed project are such that a critical examination by a qualified team outside of USACE is warranted. A risk-informed decision, as described in EC 1165-2-214, is made as to whether IEPR is appropriate. IEPR panels will consist of independent, recognized experts from outside of the USACE in the appropriate disciplines, representing a balance of areas of expertise suitable for the review being conducted. There are two types of IEPR:

- **Type I IEPR.** Type I IEPR reviews are managed outside the USACE and are conducted on project studies. Type I IEPR panels assess the adequacy and acceptability of the economic and environmental assumptions and projections, project evaluation data, economic analysis, environmental analyses, engineering analyses, formulation of alternative plans, methods for integrating risk and uncertainty, models used in the evaluation of environmental impacts of proposed projects, and biological opinions of the project study. Type I IEPR will cover the entire decision document or action and will address all underlying engineering, economics, and environmental work, not just one aspect of the study. For decision documents where a Type II IEPR (Safety Assurance Review) is anticipated during project implementation, safety assurance shall also be addressed during the Type I IEPR per EC 1165-2-214.
- **Type II IEPR.** Type II IEPR, or Safety Assurance Review (SAR), are managed outside the USACE and are conducted on design and construction activities for hurricane, storm, and flood risk management projects or other projects where existing and potential hazards pose a significant threat to human life. Type II IEPR panels will conduct reviews of the design and construction activities prior to initiation of physical construction and, until construction activities are completed, periodically thereafter on a regular schedule. The reviews shall consider the adequacy, appropriateness, and acceptability of the design and construction activities in assuring public health safety and welfare.

a. **Decision on Type I IEPR.** This Letter Report does not trigger any of the mandatory Type I IEPR factors and based on the discussion above would not significantly benefit from a Type I IEPR. Therefore, an IEPR review is not recommended for this project.

b. **Decision on Type II IEPR.** The project does not involve activities where existing and potential hazards pose a significant threat to human life.

The District Chief of Engineering, as the Engineer-In-Responsible-Charge, does not recommend a Type II IEPR Safety Assurance Review for this project. Innovative materials or novel engineering methods will not be used. Redundancy, resiliency, or robustness is not required for design. Also, the project has no unique construction sequencing, or a reduced or overlapping design construction schedule. Therefore, a Type II IEPR of implementation documents will not be undertaken. If the project scope is changed, this determination will be reevaluated.

c. **Products to Undergo Type I IEPR.** None. Based upon an assessment of the risks discussed above it has been determined that IEPR will not be required.

d. **Required Type I IEPR Panel Expertise.** Not applicable.

e. **Documentation of Type I IEPR.** Not applicable.

7. POLICY AND LEGAL COMPLIANCE REVIEW

The Letter Report will be reviewed for compliance with applicable law and policy.

8. COST ENGINEERING DIRECTORY OF EXPERTISE (DX) REVIEW AND CERTIFICATION

The Letter Report does not require DX review and certification.

9. MODEL CERTIFICATION AND APPROVAL

EC 1105-2-412 mandates the use of certified or approved models for all planning activities to ensure the models are technically and theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions.

EC 1105-2-412 does not cover engineering models used in planning. The responsible use of well-known and proven USACE developed and commercial engineering software will continue and the professional practice of documenting the application of the software and modeling results will be followed.

- a. **Planning Models.** The following planning models are anticipated to be used in the development of the Letter Report: None.
- b. **Engineering Models.** No engineering models were used in the development of the Letter Report.

10. REVIEW SCHEDULES AND COSTS

- a. **ATR Schedule and Cost.** None
- b. **Estimated total ATR Team cost.** None.
- c. **Type I & Type II IEPR Schedule and Cost.** None.
- d. **Model Certification/Approval Schedule and Cost.** No planning models are being used in support of the analyses included in the Letter Report

11. PUBLIC PARTICIPATION

The initial construction of the project was covered by an EIS and the project documents were coordinated with the public. The Letter Report assesses if the project is meeting the objectives for which it was authorized and designed. It evaluates the need for any modifications that may need to be made to existing facilities to enable the project to perform as planned and designed.

12. REVIEW PLAN APPROVAL AND UPDATES

The South Atlantic Division Commander is responsible for approving this Review Plan. The MSC Commander's approval reflects vertical team input (involving district, MSC, RMO, and HQUSACE members) as to the appropriate scope and level of review for the documents addressed in the Review Plan. Like the PMP, the Review Plan is a living document and may change as the effort progresses. The home district is responsible for keeping the Review Plan up to date. Minor changes to the review plan since the last MSC Commander approval will be documented in Attachment 3. Significant changes to the Review Plan (such as changes to the scope and/or level of review) shall be re-approved by the MSC Commander following the process used for initially approving the plan. The latest version of the Review Plan, along with the MSC Commander's approval memorandum, shall be posted on the Home District's webpage. The latest Review Plan shall also be provided to the RMO and home MSC.

13. REVIEW PLAN POINTS OF CONTACT

Public questions and/or comments on this Review Plan can be directed to the following points of contact:

- Jacksonville District Project Manager, 904-232-1766
- Jacksonville District Planning Technical Lead, 904-232-3967
- Jacksonville District Review Coordinator, 904-232-1102
- South Atlantic Division Point of Contact, 404-562-5206

ATTACHMENT 1: TEAM ROSTERS

Team rosters intentionally deleted

PDT

Name	Organization	Role

DQC Team (Preliminary)

Name	Organization	Role

ATTACHMENT 2: REVIEW PLAN REVISIONS

Revision Date	Description of Change	Page / Paragraph Number