



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
SOUTH ATLANTIC DIVISION, CORPS OF ENGINEERS
ROOM 9M15, 60 FORSYTH ST., S.W.
ATLANTA GA 30303-8801

JAN 23 2012

CESAD-PDP

MEMORANDUM FOR Commander, Jacksonville District (CESAJ-PD/Stuart J. Appelbaum)

SUBJECT: Port Everglades Feasibility Study, Peer Review Plan Second Update – Request for MSC Approval

1. Reference memorandum, CESAJ-PD, 24 June 2011, subject as above.
2. The attached Review Plan for the Port Everglades Harbor Feasibility Study has been prepared in accordance with EC 1165-2-209. This Review Plan was previously approved on 19 Dec 2007 and has been updated to reflect guidance in EC 1165-2-209 and changes that have occurred during study execution. The Review Plan has been coordinated with the Deep Draft Navigation Planning Center of Expertise of the South Atlantic Division which is the lead office to execute this plan. For further information, contact the DDNPCX at 251-694-3884. The Review Plan includes independent external peer review. I hereby approve this Review Plan, which is subject to change as circumstances require, consistent with study development under the Project Management Business Process. Subsequent revisions to this Review Plan or its execution will require new written approval from this office.
3. The District should take steps to post the updated RP and a copy of this approval memorandum to the SAJ District public internet website and provide links to the DDNPCX and SAD websites for their and our use. Before posting to the website the names of Corps/Army employees should be removed in accordance with EC 1165-2-209.
4. The point of contact for this action is Mr. Terry Stratton at (404) 562-5228.

FOR THE COMMANDER:

WILBERT V. PAYNES
Chief, Planning and Policy Division

Encl
CF: CECW-SAD



DEPARTMENT OF THE ARMY
MOBILE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 2288
MOBILE, AL 36628-0001

REPLY TO
ATTENTION OF:

CESAM-PD-D

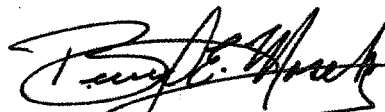
12 December 2011


MEMORANDUM FOR MR. JERRY T. MURPHY, PROJECT MANAGER, CESAJ-PM-W, U.S. ARMY CORPS OF ENGINEERS, 701 SAN MARCO BOULEVARD, JACKSONVILLE, FLORIDA 32207-0019

SUBJECT: Review Plan Approval, Port Everglades Harbor, Florida Feasibility Study, Florida

1. The Deep Draft Navigation Center of Expertise (DDNPCX) has reviewed the Review Plan (RP) for the subject study and concurs that the RP satisfies peer review policy requirements outlined in Engineering Circular (EC) 1165-2-209 Civil Works Review Policy, dated 31 January 2010.
2. The review was performed by Mr. Bernard E. Moseby, Technical Director, DDNPCX and Ms. Jodi K. Staebell, Operations Director, ECO-PCX. The RP and checklist documenting the review is enclosed.
3. The DDNPCX 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 website.
4. Thank you for the opportunity to assist in the preparation of the RP. Please coordinate any Agency Technical Review (ATR), Independent External Peer Review (IEPR), and Model Certification efforts outlined in the RP with the DDNPCX and the ECO-PCX.

Encl


BERNARD E. MOSEBY
Deputy Director, DDNPCX


JODI K. STAEBELL
Operations Director, ECO-PCX

CF:
CESAD-PD-S/PAYNE
CESAD-PD-/SMALL
CESAD-PD-S/STRATTON



DEPARTMENT OF THE ARMY
SOUTH ATLANTIC DIVISION, CORPS OF ENGINEERS
ROOM 9M15, 60 FORSYTH ST., S.W.
ATLANTA, GEORGIA 30303-8801

REPLY TO
ATTENTION OF

CESAD-PDS-P

19 December 2007

MEMORANDUM FOR Commander, Jacksonville District (CESAJ-PD-P/Marie G. Burns) ^{mb 12/08}

SUBJECT: Approval of Peer Review Plan (PRP) for Port Everglades Harbor, Florida;
Feasibility Study

1. References:

- a. Memorandum, CESAJ-PD, subject: Approval of Peer Review Plan (PRP) for Port Everglades Harbor, Florida; Feasibility Study, dated 5 December 2007.
 - b. EC 1105-2-408; "Peer Review of Decision Documents", 31 May 2005.
 - c. Supplemental Information on the "Peer Review Process"; memorandum dated 30 March 2007.
2. This memorandum serves as conditional approval of the subject PRP, subject to the holding of an Issue Resolution Conference (IRC), to be held with SAJ, SAD, and HQ staff, prior to initiation of EPR. The IRC would focus on continuing environmental and economic issues related to mitigation of the tentatively selected plan, and economic justification of the final array of alternatives, respectively. The results of the IRC will function as a policy review and approval action, for the purposes of ensuring adequacy of plan selection before release of the draft final report for External Peer Review.
3. Any questions on this action should be directed to Mr. Elden Gatwood, at (404) 562-5226.

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

PORT EVERGLADES HARBOR, FLORIDA FEASIBILITY STUDY
PEER REVIEW PLAN
OCTOBER 2007
SECOND UPDATE, FEBRUARY 2011

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.

PORT EVERGLADES HARBOR, FLORIDA FEASIBILITY STUDY
PEER REVIEW PLAN
OCTOBER 2007

SECOND UPDATE, FEBRUARY 2011

(First Update, May 2010: The approved review plan was revised to update project manager, reference current guidance and update the consolidated schedule. Changes are non-substantive, in that they do not alter quality control review commitments.)

Second Update: This update is to refine independent review requirements and to make miscellaneous terminology and editorial corrections. Substantive additions to review requirements and associated schedule are subject to PCX endorsement and South Atlantic Division approval. Substantive updates may be categorized as follows:

- Better described and discussed certification/approval processes for planning models
- Added ATR of Science Reports
- Added IEPR of Science Reports
- Added Mitigation Model Approval for Regional Use with specific application at Port Everglades.
- Added DDNPCX coordination with ECO-PCX for approval of use of the environmental mitigation model, HEA and ATR and IEPR of Science Reports
- Updated schedule

1. PURPOSE

The Peer Review Plan (PRP) for the Port Everglades Feasibility Study provides a technical peer review mechanism ensuring quality products are developed during the course of the study by the Jacksonville District (SAJ). All processes, 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 and not during the final study stages.

The PRP is intended to describe the processes that will be implemented to independently (of the Project Team) evaluate the technical sufficiency of the planning study. The PRP is a collaborative product of the Project Delivery Team (PDT) and the National Deep Draft Navigation Planning Center of Expertise (DDNPCX). The DDNPCX shall manage the peer review processes, which for this study includes an Agency Technical Review (ATR) and an Independent External Peer Review (IEPR).

ATR is a critical examination by a qualified person or team, predominantly within the 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.

IEPR is 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 the above-described criteria, high project cost may, by itself, necessitate IEPR.

2. REFERENCES

ER 1105-2-100, "Planning Guidance Notebook

EC1165-2-209, "Civil Works Review Policy", dated 31 January 2010

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

EC 1105-2-408, "Peer Review of Decision Documents", dated May 31, 2005

CECW-CP Memorandum, "Peer Review Process", dated March 30, 2007

CECW-CP Memorandum, "Initiatives to Improve Accuracy of Total Project Costs in Civil Works Feasibility Studies Requiring Congressional Authorization", dated September 19, 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).

3. PROJECT/STUDY BACKGROUND

The Port Everglades Harbor Federal Navigation Channel is located in the southeastern portion of Broward County at the adjoining city limits of Fort Lauderdale, Hollywood, and Dania Beach. It is located 24 miles north of Miami and 323 miles south of Jacksonville (Attachment 1, Project Location).

The Port Everglades Feasibility Study is authorized through House Document 126, 103rd Congress, 1st Session, and House Document 144, 93rd Congress, 1st Session and other pertinent documents. The scope of the original feasibility study has now been amended twice. The present scope investigates widening and deepening from an existing inner harbor project depth of 42 feet to potential depths of 50 feet for the major channels and basins within the port including expansion of the Turning Notch. . An Alternative Formulation Briefing was conducted in 2002 and 2005. The project team is currently in the advanced stages of completing an updated draft report.

Feasibility study approval authority is at the Secretary of the Army. The report will be subjected to a Civil Works Review Board.

Problems

- Difficult offshore crosscurrents impacting Entrance Channel navigation

- Channel configurations, width, depths that may not be optional for existing and future commercial ship navigation

Engineering Considerations

- Civil design
- Structural Design
- Hydraulic and hydrodynamic analysis
- Geotechnical analysis
- Engineering Geology
- Coastal analysis

Environmental Considerations

- Opportunities to enhance the environment
- Avoid or minimize environmental impacts
- Mitigate unavoidable impacts

Measures Considered

Structural and non-structural alternatives, including deepening and widening.

Model Studies (H&H Branch)

- (a) Hydraulic Modeling.
- (b) Coast Guard Basin Oscillation Model.
- (c) Ship Simulation Model.
- (d) Model Approach. Visual scene, channel, and radar databases will be developed for existing and proposed conditions.

Economic Studies

The commercial navigation benefit study conducted during the feasibility study phase will evaluate the transportation benefits for potential modifications to the Federal deep-draft navigation project at Port Everglades. The methods for assessing benefits are documented in the 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). The adopted procedures for USACE studies, associated with deep-draft navigation features of water resources plans and projects consist of Section 3-2 of Engineering Regulation (ER) 1105-2-100.

The Project Delivery Team

Project Manager

Civil Engineer

Jacksonville District

Planning Technical Lead	Civil Engineer	Jacksonville District
Engineering Technical Lead	Civil Engineer	Jacksonville District
Geotechnical Analysis	Geologist	Jacksonville District
Cost Engineering	Cost Engineer	Jacksonville District
Hydrodynamic Modeling	Hydraulic Engineer	Jacksonville District
Environmental Analysis	Biologist	Jacksonville District
	Real Estate	Jacksonville District
Real Estate Evaluation	Specialist	
Economic Analysis	Economist	Jacksonville District
Construction/Operations	Civil Engineer	Jacksonville District
Legal Evaluation	Attorney	Jacksonville District

4. AGENCY TECHNICAL REVIEW PLAN

ATR is performed at key points in the study process to ensure the proper application of appropriate regulations and professional procedures. 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. DrChecks document review and comment software will be used to document the ATRs.

The relevant National Planning Center of Expertise, in this case for Deep Draft Navigation (DDNPCX), has ultimate responsibility for accomplishing ATR. The DDNPCX is requested to form an ATR Team, and to conduct ATR of the Science Reports, including calculation of environmental impact mitigation requirements, Draft Feasibility Report and Final Feasibility Report. The DDNPCX is requested to coordinate review of the Science Reports with the National Ecosystem Restoration Planning Center of Expertise (ECO-PCX).

Previous ATR conducted in 2002 and 2005 were performed by in-house Jacksonville District personnel. Future ATR will be conducted by a DDNPCX team outside of the Jacksonville District, and in coordination with the ECO-PCX.

Also, a Cost Estimating Directory of Expertise (Cost Dx) has been established, at the Corps Walla Walla District (NWW). The completed draft report cost estimate will require review by the Cost Dx. The DDNPCX is requested, herein, to coordinate cost estimation review with the Cost Dx. The working assumption is that the DDNPCX would secure Cost Dx approval of the proposed cost estimating reviewer, and that the Draft Report review would apply the proper Cost Dx-provided checklist. The completed checklist would be returned to the Cost Dx for approval.

Technical disciplines determined to be appropriate for ATR review of the draft and final reports, at a minimum, include: plan formulation, economics, environmental/NEPA compliance, hydraulics and hydrology, geotechnical engineering, cost engineering, and real estate. SAJ and the DDNPCX will collaborate to produce detailed scopes of work

prior to each review. All should be well-versed in conduct of deep draft navigation studies that potentially include both the deepening and widening of channels and all associated activities. Suggested issues to inform the review include:

- a. Plan Formulation – Requires a Planner who is experienced in plan formulation for deep draft navigation studies to assess proposed navigation improvement measures and alternatives for adequacy and comprehensiveness.
- b. Economic Evaluation – Requires an Economist who is experienced in the economic assessment of deep draft navigation projects, including commodity and fleet projections, to assess the economic analyses for appropriateness of assumptions, analytical methods, and overall application of both. Experience with the Waterway Analysis Model (WAM) should be considered.
- c. Environmental Analysis:
 - i) General – Requires an Environmental Engineer/Scientist with expertise in both upland and marine habitats to assess whether or not all pertinent issues were adequately addressed throughout the study.
 - ii) NEPA Compliance – Requires an Environmental Engineer/Scientist with NEPA experience, as related to inland and marine navigation and waterways to assess whether or not all NEPA requirements were, or will be met.
 - iii) Hardbottom and relic coral reef habitat – Requires an Environmental Engineer/Scientist with expertise in coral reef/hardbottom habitats and associated marine life to assess whether or not existing and future-without-project conditions and with-project predicted impact analysis is reasonable.
 - iv) Environmental mitigation analysis modeling – Requires an Environmental Engineer/Scientist or Coastal Engineer with experience in the analytical modeling of environmental mitigation in a marine environment to assess the appropriateness of assumptions, analytical methods, and overall application of both. Experience with habitat equivalency analysis (HEA) should be considered.
- d. Engineering Geologist – Requires an Engineering Geologist with experience in core boring analysis and blasting science to assess whether or not materials and blasting analyses and conclusions are reasonable
- e. Geotechnical Engineering – Requires a registered professional Geotechnical Engineer with experience in complex bulkhead and retaining wall engineering and design.
- f. Hydraulic Engineering Evaluations – Requires a Hydraulic Engineer with experience in conducting hydrodynamic model studies of navigable waterways to assess whether or not hydrodynamic modeling analyses and conclusions are reasonable. Experience with the RMA-2 hydrodynamic model should be considered.
- g. Marine/Coastal Engineering:

- i) General – Requires a Hydraulic/Coastal Engineer with experience in assessing coastal conditions (waves, winds, currents, etc....) to assess whether or not all pertinent issues were adequately addressed throughout the study.
 - ii) Harbor response evaluations – Requires a Hydraulic/Coastal Engineer with experience in harbor response modeling to assess whether or not harbor response analyses and conclusions are reasonable. Experience with the CGWAVE harbor response model should be considered.
 - iii) Underkeel Clearance – Requires a Hydraulic/Coastal Engineer with experience in calculating underkeel clearance for deep draft navigation based on USACE engineering guidance (EM 1110-2-1613) to assess whether or not USACE guidance has been correctly interpreted and appropriately applied.
 - iv) Ship Simulation Analyses – Requires a Hydraulic/Coastal Engineer with experience in ship simulation modeling to assess whether or not ship simulations analyses and conclusions are reasonable.
- h. Structural engineering – Requires a Structural Engineer with experience in bulkhead design and construction in inland and marine environments to assess whether conceptual bulkhead designs and proposed construction methodologies are appropriate and properly applied.
 - i. Cost engineering – Requires a Cost Engineer with experience in cost formulation for deep draft navigation projects, including dredging, disposal and structural elements. Experience with MCACES and CEDEP should be considered.
 - j. Real Estate issues – Requires a Real Estate reviewer with experience in land acquisition and valuation to assess whether or not real estate analyses and conclusions are reasonable. Experience in preparation of Real Estate Plans and knowledge of EC 405-2-12 (Real Estate Planning and Acquisition Responsibilities for Civil Works Projects) and ER 405-1-12 (Chapter 12 – Real Estate Roles and Responsibilities for Civil Works: Cost Shared and Full Federal Projects), should be considered

The DDNPCX will be responsible for organizing and employing a qualified team. A detailed scope of work and cost estimate will be agreed to between the project District and the DDNPCX prior to each review.

5. CERTIFICATION/APPROVAL FOR USE OF PLANNING MODELS

- a. Economic Analysis
 - i). Deep Draft Waterway Analysis Model (WAM)

The operation of Port Everglades was simulated using the deep draft version of the Corps' Waterway Analysis Model (WAM). The WAM is a system simulation model originally developed to determine the impact of tow movements on the inland waterway system. It was developed as part of the U.S. Army Corps of Engineers Inland Navigation Systems Analysis Program (INSA) for the Office of the Chief of Engineers by CACI,

INC. The model is written in CACI's propriety programming language, Simscript II.5. The shallow draft WAM model is supported and maintained by the Corps' Inland Navigation Center of Expertise in Huntington, West Virginia, which has subsequently been modified for deep draft navigation. WAM is employed to evaluate potential economic benefits of channel-widening management measures.

b. Channel Deepening Spreadsheet Model

This is a spreadsheet model developed to evaluate potential benefits of channel deepening management measures. The spreadsheet model has not yet been approved for use by the DDN-PCX. Application of the spreadsheet model is integrated into the ATR process.

ii) Economic Analysis Certification/Approval for Use Process

Application of the WAM and spreadsheet models is integrated into the ATR process. The DDNPCX will review application of the models as part of the ATR of the Draft Feasibility Study. Current schedule for reviews is provided in the Consolidated Schedule, Section 8, below.

c. Environmental Impact Mitigation Analysis Model – Modified Habitat Equivalency Analysis (HEA) Model

i) Description

HEA is a spreadsheet model that calculates compensatory mitigation so that the total quantity of ecological services it provides is sufficient to offset the total quantity of lost ecological services resulting from project impacts.

ii) Certification/Approval for Use Process for Application of HEA

The DDNPCX will coordinate with the ECO-PCX. The ECO-PCX will manage review for approval for use of the modified HEA Model. Approval for use will be two-pronged, including for single use in the Port Everglades Feasibility Study, and for regional use for projects on the southeast coast of Florida (Martin – Miami-Dade Counties), where hard corals are the ecological species group that take the longest to recover after impact, although they are not the predominant hard bottom resource. Additionally, the ECO-PCX will recommend or approve one or more ATR Team members to review application of the model. SAJ recommends that the PCX coordinate with ERDC and/or POH as they have staff with the necessary biological expertise in coral and hardbottom environments.

Approval for single use, for Port Everglades, will be via application review in an ATR and an IEPR, in parallel with the regional approval for use process. As well, results of the ATR and IEPR will provide a case study for consideration in the regional use approval process. The Jacksonville District will submit a model documentation package for consideration of both levels of approval. The ECO-PCX will manage delivery of the ATR and IEPR, and HQ approval process.

6. INDEPENDENT EXTERNAL PEER REVIEW PLAN (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, 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 1165-2-209.

Independent External Peer Review Requirement Determination

It was concluded that independent external peer review is required for this project for two reasons. First, is the potential for controversy regarding potential impacts to hardbottom and relic coral reef habitats. Second, is the magnitude of the project since the cost will be in excess of \$45M (WRDA 2007 total project cost trigger).

Independent External Peer Review General Scope

“External peer review may be conducted to identify, explain, and comment upon assumptions that underlie economic, engineering, and environmental analyses, as well as to evaluate the soundness of models and planning methods. Panels should also be able to evaluate whether the interpretations of analysis and conclusions based on analysis are reasonable. To provide effective review, in terms of usefulness of results and of credibility, review panels should be given the flexibility to bring important issues to the attention of decision makers. However, review panels should be instructed to not make a recommendation on whether a particular alternative should be implemented, as the Chief of Engineers is ultimately responsible for the final decision on a planning or reoperations study.” (National Research Council, 2002, page 63, quoted in EC 1105-2-408, item 4.b). External panels may, however, offer their opinions as to whether there are sufficient analyses upon which to base a recommendation for construction, authorization, or funding (EC 1105-2-408, item 4.b).

The DDNPCX is responsible for conduct of the independent external peer review, in consultation with the South Atlantic Division (SAD) and SAJ. SAJ and the DDNPCX will collaborate to produce detailed scopes of work prior to each review. The DDNPCX will also coordinate with the ECO-PCX since a major issue involves potential impacts upon relic reef terrace habitat.

The Independent External Peer Review may be conducted in two phases. First, review of the science, models, and background information related to the environmental impacts and mitigation will be conducted, upon completion of the draft mitigation plan. The

second, Independent External Peer Review of the Draft Feasibility Study Report, will add other panel member disciplines including: environmental analysis economic analysis, engineering analysis, and plan formulation. Phase 2 IEPR would start concurrent to usual public review.

An estimated five to eight panel members will be required depending on mix and depth of qualifications and overlap between the Phase 1 and Phase 2 reviews. The following table provides description of the expertise required.

IEPR Panel Members/Disciplines	Expertise Required
Coral Reef Expert	Expert in Southeast Florida Coral reefs (for Reef Report)
Biologist	Coastal South Florida ecosystems - Corals, seagrasses, mangroves (for EBS). Should be from academia, public agency, non-governmental entity, or an Architect-Engineer or Consulting Firm with a minimum 10 years demonstrated experience with projects on the southern Atlantic coast of the United States. Panelist should have particular knowledge of the ecological value of near-shore rock resources, in coastal environments, particularly corals and seagrasses and survey and evaluation methodologies for those habitats.
Economist/Biologist	Expert in NOAA method HEA or Reef impact mitigation assessment methods (for HEA evaluation)
Biologist or Environmental Engineer	<u>This individual should be a scientist from academia, a public agency, a non-governmental entity, or an Architect-Engineer or Consulting Firm with a minimum 10 years demonstrated experience in environmental, estuarine, and coastal and estuarine processes and an understanding of ecological responses to shoreline erosion The Panel Member should have a minimum MS degree or higher in an appropriate field of study. Experience should include an understanding of environmental impacts associated with dredging. Active participation in related professional societies is encouraged.</u>
Dredging Expert	<u>One Hydraulic or Civil Engineering Panel Members will be provided. The Dredging Expert Panel Member should be a registered professional engineer with a minimum of 10 years experience from academia or an Architect-Engineer or Consulting Firm. The Panel Member should have demonstrated experience in deep draft navigation channels, dredged material disposal,</u>

	<u>confined disposal areas, erosion, coastal currents, channel modifications, with a minimum MS degree or higher in Civil, Hydraulic or related Engineering field. Active participation in related professional societies is encouraged.</u>
Economist	One Economics Panel Members will be provided. The Economics Panel Member should be a scientist from academia, a public agency, a non-governmental entity, or an Architect-Engineer or Consulting Firm with at least a Bachelors degree. Member must have at least 10 years experience in economic analysis, with project experience including evaluating and conducting multi-objective public works projects or transportation-related projects. Deep-draft navigation experience is encouraged. Experience directly working for or with USACE is highly recommended.
Plan Formulation	This individual should be a scientist from academia, public agency, non-governmental entity, or an Architect-Engineer or Consulting Firm with a minimum 10 years demonstrated experience in evaluating and comparing alternative plans for USACE.
Structural Engineer	Requires a Structural Engineer with experience in bulkhead design and construction in inland and marine environments to assess whether conceptual bulkhead designs and proposed construction methodologies are appropriate and properly applied. <u>Should be a registered professional engineer with a minimum of 10 years experience from academia or an Architect-Engineer or Consulting Firm.</u>

7. ADDITIONAL REVIEW CONSIDERATIONS

Public and Agency Comment and Dissemination

Extensive resource agency, stakeholder and public coordination has been conducted throughout the preparation of the Decision Document. Coordination meetings were conducted to inform other federal and state agencies, stakeholders and the general public, of the status of the project and alternatives being considered and workshops to address technical issues. At a minimum, future review will be conducted as part of the National Environment Policy Act (NEPA) compliance process, including public review period of the Draft Environmental Impact Statement. Public comments will be listed and responded to in the Final Environmental Impact Statement. As well, the public may comment on the Final EIS and Record of Decision.

8. CONSOLIDATED SCHEDULE – Start date or (completed date)

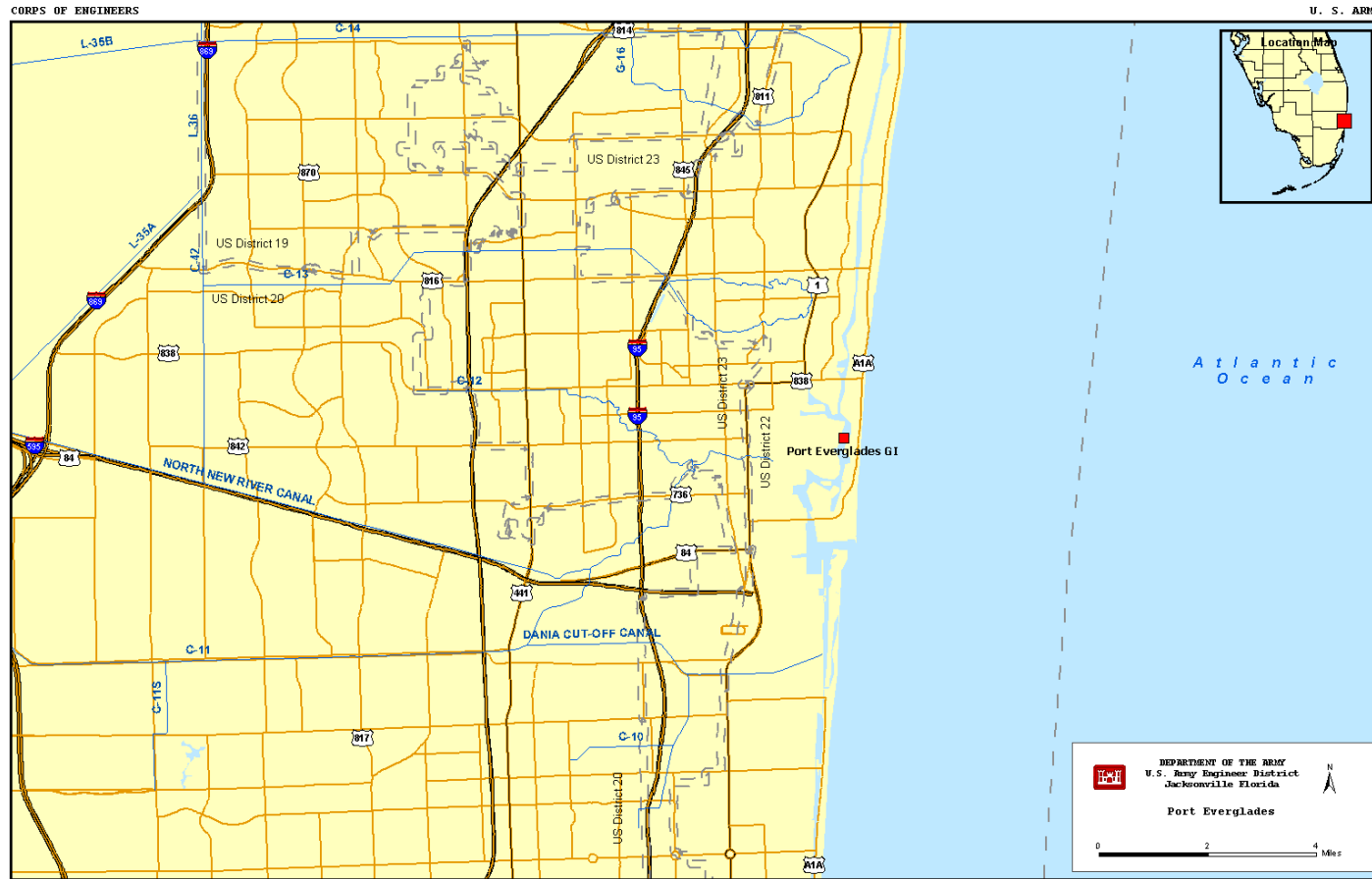
- ATR of FSM Package (completed)
- ATR of AFB Package (completed February 2005)
- ATR 1 - Environmental Analysis Science reports, including HEA Analysis, 14Mar11
- ATR 2 - AFB Materials/Draft Report (without EIS), 04Apr11
- IEPR 1 - Environmental Analysis Science Reports, including HEA Analysis, Apr11
- ATR 3 - Draft Report and EIS, Jul11
- IEPR 2 - Complete Draft Report with EIS, Nov11
- ATR 4 - Final Report, Sep12

9. POINTS OF CONTACT

Due to confidentiality law requirements with posting documents on websites for public review, only the Project Manager is listed as the point of contact for any questions concerning this Peer Review Plan and qualifications of members of the PDT team:

Title	Telephone	Email
Project Manager	904-232-1458	Project Manager

Attachment 1, Project Location



Review Plan Checklist For Decision Documents

Date: 01 DECEMBER 2011
Originating District: SAJ
Project/Study Title: Port Everglades Harbor, Florida - Feasibility Study Second Update
PWI #:
District POC: Jim Baker
PCX Reviewer: Bernard Moseby

Please fill out this checklist and submit with the draft Review Plan when coordinating with the appropriate PCX. Any evaluation boxes checked 'No' indicate the RP may not comply with EC 1165-2-209 (22 Aug 2008) and should be explained. Additional coordination and issue resolution may be required prior to MSC approval of the Review Plan.

REQUIREMENT	REFERENCE	EVALUATION
1. Is the Review Plan (RP) a stand alone document?	EC 1165-2-209 Appendix B	Yes <input checked="checked" type="checkbox"/> No <input type="checkbox"/>
a. Does it include a cover page identifying it as a RP and listing the project/study title, originating district or office, and date of the plan? b. Does it include a table of contents? c. Is the purpose of the RP clearly stated and EC 1165-2-209 referenced? d. Does it reference the Project Management Plan (PMP) of which the RP is a component? e. Does it succinctly describe the three levels of peer review: District Quality Control (DQC), Agency Technical Review (ATR), and Independent Technical Peer Review (IEPR)? f. Does it include a paragraph stating the title, subject, and purpose of the decision document to be reviewed? g. Does it list the names and disciplines of the Project Delivery Team (PDT)?*	Appendix B 4.a. EC 1165-2-209	a. Yes <input checked="checked" type="checkbox"/> No <input type="checkbox"/> b. Yes <input checked="checked" type="checkbox"/> No <input type="checkbox"/> c. Yes <input checked="checked" type="checkbox"/> No <input type="checkbox"/> d. Yes <input checked="checked" type="checkbox"/> No <input type="checkbox"/> e. Yes <input checked="checked" type="checkbox"/> No <input type="checkbox"/> f. Yes <input checked="checked" type="checkbox"/> No <input type="checkbox"/> g. Yes <input checked="checked" type="checkbox"/> No <input type="checkbox"/> Comments:
<p><i>*Note: It is highly recommended to put all team member names and contact information in an appendix for easy updating as team members change or the RP is updated.</i></p>		

2. Is the RP detailed enough to assess the necessary level and focus of peer review?	EC 1165-2-209	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<p>a. Does it indicate which parts of the study will likely be challenging?</p> <p>b. Does it provide a preliminary assessment of where the project risks are likely to occur and what the magnitude of those risks might be?</p> <p>c. Does it indicate if the project/study will include an environmental impact statement (EIS)?</p> <p><i>Is an EIS included? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></i> <i>If yes, IEPR is required.</i></p> <p>d. Does it address if the project report is likely to contain influential scientific information or be a highly influential scientific assessment?</p> <p><i>Is it likely? Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/></i> <i>If yes, IEPR is required.</i></p> <p>e. Does it address if the project is likely to have significant economic, environmental, and social affects to the nation, such as (but not limited to):</p> <ul style="list-style-type: none"> • more than negligible adverse impacts on scarce or unique cultural, historic, or tribal resources? • substantial adverse impacts on fish and wildlife species or their habitat, prior to implementation of mitigation? • more than negligible adverse impact on species listed as endangered or threatened, or to the designated critical habitat of such species, under the Endangered Species Act, prior to implementation of mitigation? <p><i>Is it likely? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></i> <i>If yes, IEPR is required.</i></p> <p>f. Does it address if the project/study is likely</p>	<p>EC 1165-2-209</p> <p>EC 1165-2-209</p> <p>EC 1165-2-209</p> <p>EC 1165-2-209</p> <p>EC 1165-2-209</p> <p>EC 1165-2-209</p> <p>EC 1165-2-209</p> <p>EC 1165-2-209</p> <p>EC 1165-2-209</p> <p>EC 1165-2-209</p> <p>EC 1165-2-209</p> <p>EC 1165-2-209</p>	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>d. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>e. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>Comments:</p> <p>f. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>

<p>to have significant interagency interest?</p> <p><i>Is it likely? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></i> <i>If yes, IEPR is required.</i></p> <p>g. Does it address if the project/study likely involves significant threat to human life (safety assurance)?</p> <p><i>Is it likely? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></i> <i>If yes, IEPR is required.</i></p> <p>h. Does it provide an estimated total project cost?</p> <p><i>What is the estimated cost: .GT. 45 million (best current estimate; may be a range)</i></p> <p><i>Is it > \$45 million? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></i> <i>If yes, IEPR is required.</i></p> <p>i. Does it address if the project/study will likely be highly controversial, such as if there will be a significant public dispute as to the size, nature, or effects of the project or to the economic or environmental costs or benefits of the project?</p> <p><i>Is it likely? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></i> <i>If yes, IEPR is required.</i></p> <p>j. Does it address if the information in the decision document will likely be based on novel methods, present complex challenges for interpretation, contain precedent-setting methods or models, or present conclusions that are likely to change prevailing practices?</p> <p><i>Is it likely? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></i> <i>If yes, IEPR is required.</i></p>	<p>EC 1165-2-209 ,</p> <p>EC 1165-2-209 ,</p> <p>EC 1165-2-209 ,</p>	<p>g. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>h. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>i. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>j. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>Comments:</p>
<p>3. Does the RP define the appropriate level of peer review for the project/study?</p>	<p>EC 1165-2-209</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p>a. Does it state that DQC will be managed by the home district in accordance with the Major Subordinate Command (MSC) and district Quality Management Plans?</p>	<p>EC 1165-2-209</p>	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p>b. Does it state that ATR will be conducted or managed by the lead PCX?</p>	<p>EC 1165-2-209 ,</p>	<p>b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>

<p>c. Does it state whether IEPR will be performed? <i>Will IEPR be performed? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></i></p> <p>d. Does it provide a defensible rationale for the decision on IEPR?</p> <p>e. Does it state that IEPR will be managed by an Outside Eligible Organization, external to the Corps of Engineers?</p>	<p>EC 1165-2-209</p> <p>EC 1165-2-209</p>	<p>c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>d. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>e. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> n/a <input type="checkbox"/></p> <p>Comments:</p>
<p>4. Does the RP explain how ATR will be accomplished?</p>	<p>EC 1165-2-209,</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p>a. Does it identify the anticipated number of reviewers?</p> <p>b. Does it provide a succinct description of the primary disciplines or expertise needed for the review (not simply a list of disciplines)?</p> <p>c. Does it indicate that ATR team members will be from outside the home district?</p> <p>d. Does it indicate that the ATR team leader will be from outside the home MSC?</p> <p>e. Does the RP state that the lead PCX is responsible for identifying the ATR team members and indicate if candidates will be nominated by the home district/MSC?</p> <p>f. If the reviewers are listed by name, does the RP describe the qualifications and years of relevant experience of the ATR team members?*</p> <p><i>*Note: It is highly recommended to put all team member names and contact information in an appendix for easy updating as team members change or the RP is updated.</i></p>	<p>EC 1165-2-209</p> <p>EC 1165-2-209</p> <p>EC 1165-2-209</p> <p>EC 1165-2-209</p> <p>EC 1165-2-209</p> <p>EC 1165-2-209</p>	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>d. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>e. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>f. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> n/a <input type="checkbox"/></p> <p>Comments:</p>
<p>5. Does the RP explain how IEPR will be accomplished?</p>	<p>EC 1165-2-209</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> n/a <input type="checkbox"/></p>
<p>a. Does it identify the anticipated number of</p>	<p>EC 1165-2-209</p>	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>

<p>reviewers?</p> <p>b. Does it provide a succinct description of the primary disciplines or expertise needed for the review (not simply a list of disciplines)?</p> <p>c. Does it indicate that the IEPR reviewers will be selected by an Outside Eligible Organization and if candidates will be nominated by the Corps of Engineers?</p> <p>d. Does it indicate the IEPR will address all the underlying planning, safety assurance, engineering, economic, and environmental analyses, not just one aspect of the project?</p>	<p>EC 1165-2-209</p> <p>EC 1165-2-209</p> <p>EC 1165-2-209</p>	<p>b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>d. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>Comments:</p>
<p>6. Does the RP address peer review of sponsor in-kind contributions?</p>		<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>
<p>a. Does the RP list the expected in-kind contributions to be provided by the sponsor?</p> <p>b. Does it explain how peer review will be accomplished for those in-kind contributions?</p>	<p>EC 1165-2-209</p>	<p>a. Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>b. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p> <p>Comments:</p>
<p>7. Does the RP address how the peer review will be documented?</p>		<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p>a. Does the RP address the requirement to document ATR and IEPR comments using DrChecks?</p> <p>b. Does the RP explain how the IEPR will be documented in a Review Report?</p> <p>c. Does the RP document how written responses to the IEPR Review Report will be prepared?</p> <p>d. Does the RP detail how the district/PCX will disseminate the final IEPR Review Report, USACE response, and all other materials related to the IEPR on the internet and include them in the applicable decision document?</p>	<p>EC 1165-2-209</p> <p>EC 1165-2-2-0</p> <p>EC 1165-2-209</p> <p>EC 1165-2-209</p>	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> n/a <input type="checkbox"/></p> <p>c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> n/a <input type="checkbox"/></p> <p>d. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> n/a <input type="checkbox"/></p> <p>Comments:</p>

8. Does the RP address Policy Compliance and Legal Review?	EC 1165-2-209	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Comments:
9. Does the RP present the tasks, timing and sequence (including deferrals), and costs of reviews?	EC 1165-2-209	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<p>a. Does it provide a schedule for ATR including review of the Feasibility Scoping Meeting (FSM) materials, Alternative Formulation Briefing (AFB) materials, draft report, and final report?</p> <p>b. Does it include interim ATR reviews for key technical products?</p> <p>c. Does it present the timing and sequencing for IEPR?</p> <p>d. Does it include cost estimates for the peer reviews?</p>	<p>EC 1165-2-209</p> <p>EC 1165-2-209</p>	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>c. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p> <p>d. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>Comments:</p>
<p>10. Does the RP indicate the study will address Safety Assurance factors?</p> <p>Factors to be considered include:</p> <ul style="list-style-type: none"> • Where failure leads to significant threat to human life • Novel methods\complexity\ precedent-setting models\policy changing conclusions • Innovative materials or techniques • Design lacks redundancy, resiliency of robustness • Unique construction sequence or acquisition plans • Reduced\overlapping design construction schedule 	EC 1165-2-209	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p> <p>Comments:</p>
11. Does the RP address model certification requirements?	EC 1165-2-209	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<p>a. Does it list the models and data anticipated to be used in developing recommendations (including mitigation models)?</p> <p>b. Does it indicate the certification/approval status of those models and if certification</p>	EC 1165-2-209	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>

<p>or approval of any model(s) will be needed?</p> <p>c. If needed, does the RP propose the appropriate level of certification/approval for the model(s) and how it will be accomplished?</p>		<p>c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> n/a <input type="checkbox"/></p> <p>Comments:</p>
<p>12. Does the RP address opportunities for public participation?</p>		<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p>a. Does it indicate how and when there will be opportunities for public comment on the decision document?</p> <p>b. Does it indicate when significant and relevant public comments will be provided to reviewers before they conduct their review?</p> <p>c. Does it address whether the public, including scientific or professional societies, will be asked to nominate potential external peer reviewers?</p> <p>d. Does the RP list points of contact at the home district and the lead PCX for inquiries about the RP?</p>	<p>EC 1165-2-209</p> <p>EC 1165-2-209</p> <p>EC 1165-2-209</p> <p>EC 1165-2-209</p>	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>d. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>Comments:</p>
<p>13. Does the RP address coordination with the appropriate Planning Centers of Expertise?</p>	<p>EC 1165-2-209</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p>a. Does it state if the project is single or multi-purpose? Single <input type="checkbox"/> Multi <input checked="" type="checkbox"/></p> <p>List purposes: Deep Draft Navigation</p> <p>b. Does it identify the lead PCX for peer review? Lead PCX: DD</p> <p>c. If multi-purpose, has the lead PCX coordinated the review of the RP with the other PCXs as appropriate?</p>	<p>EC 1165-2-209</p>	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> n/a <input type="checkbox"/></p> <p>Comments: DDNPCX AND ECO-PCX WILL MANAGE THE REVIEW PROCESS</p>
<p>14. Does the RP address coordination with the Cost Engineering Directory of Expertise (DX) in Walla Walla District for ATR of cost estimates, construction schedules and contingencies for all documents requiring Congressional authorization?</p>	<p>EC 1165-2-209</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p>a. Does it state if the decision document will</p>		<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>

<p>require Congressional authorization?</p> <p>b. If Congressional authorization is required, does the state that coordination will occur with the Cost Engineering DX?</p>		<p>b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> n/a <input type="checkbox"/></p> <p>Comments:</p>
<p>15. Other Considerations: This checklist highlights the minimum requirements for an RP based on EC 1165-2-209. Additional factors to consider in preparation of the RP include, but may not be limited to:</p> <p>a. Is a request from a State Governor or the head of a Federal or state agency to conduct IEPR likely?</p> <p>b. Is the home district expecting to submit a waiver to exclude the project study from IEPR?</p> <p>c. Are there additional Peer Review requirements specific to the home MSC or district (as described in the Quality Management Plan for the MSC or district)?</p> <p>d. Are there additional Peer Review needs unique to the project study?</p>	<p>EC 1165-2-209</p> <p>EC 1165-2-209</p>	<p>Comments:</p> <p>e. Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>f. Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>g. Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>h. Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>Comments:</p>
<p>Detailed Comments and Back check:</p>		