

REVIEW PLAN

**Palm Beach County Ocean Ridge, Florida, Hurricane & Storm Damage
Reduction Project
Limited Re-evaluation Report with Environmental Assessment**

Jacksonville District

Project # 113167

**MSC Approval Date: 12/13/12
Last Revision Date: 'none'**



**US Army Corps
of Engineers ®**

REVIEW PLAN

**Palm Beach County Ocean Ridge, Florida,
Hurricane & Storm Damage Reduction Project
Limited Re-evaluation Report with Environmental Assessment**

TABLE OF CONTENTS

1. PURPOSE AND REQUIREMENTS 1

2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION 1

3. STUDY INFORMATION 2

4. DISTRICT QUALITY CONTROL (DQC) 5

5. AGENCY TECHNICAL REVIEW (ATR) 5

6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR) 7

7. POLICY AND LEGAL COMPLIANCE REVIEW 9

**8. COST ENGINEERING DIRECTORY OF EXPERTISE (DX) REVIEW AND
CERTIFICATION 10**

9. MODEL CERTIFICATION AND APPROVAL 10

10. REVIEW SCHEDULES AND COSTS 10

11. PUBLIC PARTICIPATION 11

12. REVIEW PLAN APPROVAL AND UPDATES 11

13. REVIEW PLAN POINTS OF CONTACT 12

Figure 1: Project Location (Ocean Ridge, Palm Beach County) 13

ATTACHMENT 1: TEAM ROSTERS 14

**ATTACHMENT 2: SAMPLE STATEMENT OF TECHNICAL REVIEW FOR DECISION
DOCUMENTS 15**

ATTACHMENT 3: REVIEW PLAN REVISIONS 16

ATTACHMENT 4: ACRONYMS AND ABBREVIATIONS 16

1. PURPOSE AND REQUIREMENTS

a. Purpose. This Review Plan defines the scope and level of peer review for the Palm Beach County, Ocean Ridge, Florida, Hurricane & Storm Damage Reduction (HSDR) Project, Limited Reevaluation Report (LRR) with Environmental Assessment.

b. References

- (1) Engineering Circular (EC) 1165-2-209, Civil Works Review Policy, 31 Jan 2010
- (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
- (4) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007
- (5) Jacksonville District Quality Management Plan

c. Requirements. This review plan was developed in accordance with EC 1165-2-209, 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. In addition to these levels of review, decision documents are subject to cost engineering review and certification (per EC 1165-2-209), and planning model are subject to certification/approval (per EC 1105-2-412).

2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

The RMO is responsible for managing the overall peer review effort described in this Review Plan. The RMO for decision documents is typically either a Planning Center of Expertise (PCX) or the Risk Management Center (RMC), depending on the primary purpose of the decision document. The RMO for the peer review effort described in this Review Plan is National Planning Center of Expertise for Coastal Storm Damage Reduction (PCX-CSDR). This is a single-purpose Hurricane and Storm Damage Reduction (HSDR) project. Consequently, coordination with other planning centers of expertise is not needed.

The PCX-CSDR will coordinate with the Cost Engineering Directory of Expertise (DX) to ensure the appropriate expertise is included on the review teams to assess the adequacy of cost estimates, construction schedules and contingencies.

3. STUDY INFORMATION

- a. **Decision Document.** The Palm Beach County Ocean Ridge, Florida, Hurricane and Storm Damage Reduction Limited Re-evaluation Report (LRR) will be the decision document to accompany a new Project Partnership Agreement (PPA), and will allow the second re-nourishment for the Ocean Ridge segment. Approval level of the LRR will be the South Atlantic Division (SAD). A separate Environmental Assessment (EA) is the NEPA documentation being prepared along with the decision document to confirm that the project remains environmentally acceptable. The EA will be approved at the Division level. The FONSI (Finding of no significant impact) will be signed at the District level following Division approval.

The primary purpose of the LRR will be to verify the economics of the remaining periodic nourishments. In addition to the LRR, an EA will be done to confirm that the project remains environmentally acceptable.

The Sponsor, Palm Beach County, is accomplishing the LRR and construction for potential reimbursement, under the authority of WRDA 1992, Section 206.

- b. **Study/Project Description.** The Ocean Ridge segment LRR is intended to serve as the decision document to allow for a second re-nourishment cycle.

Construction of the Palm Beach County, Hurricane and Storm Damage Reduction Project (Ocean Ridge Segment) was completed in 1998. The authorized project provides for restoration of the primary dune and a protective berm (elevation +9.0 feet NGVD) along 1.4 miles of shoreline starting at FDEP monument R-152 to R-159 (Figure 1). The initial project resulted in the placement of approximately 784,300 cy of beach quality sand obtained from an offshore borrow area located 2,500 ft offshore and the initial cost of construction was \$6,894,000. Periodic re-nourishments of 433,800 cubic yards (cy) are planned for every 8 years. The estimated cost for the next re-nourishment is \$7,200,000 and the approximate cost for remaining period of federal participation (3 future nourishments) is \$21,600,000.

Authorizations:

The original authorization for the Ocean Ridge Segment project was a general authorization for Palm Beach shore protection project construction under WRDA 1962. However the Ocean Ridge segment was not constructed at that time. WRDA 1976, Section 156, authorized the Corps to provide periodic beach nourishment up to fifteen(15) years after the date of initial construction. WRDA 1986 added Section 934 to amend Section 156 of WRDA 1976 to change the authorization from 15 years to 50 years. The General Design Memorandum (GDM) Report for all of Palm Beach was prepared in 1987. WRDA 1996 Section 506(b)(3)(B) authorized the Secretary to carry out periodic beach nourishment for a period of 50 years beginning on the date of initiation of construction, if the Secretary determines necessary, specifically for the Palm Beach projects, including Ocean Ridge. The GDM Addendum for the Ocean Ridge segment was approved in 1997, serving as the decision document under Section 506, WRDA 1996 to allow for 50 years of Federal participation from the date of initial construction. The Ocean Ridge project initial construction began in 1998; Federal participation will end in 2048.

The first re-nourishment occurred in 2005, under a PPA which allowed a “one time placement” of material. An LRR was not required at that time, as the re-nourishment was done in conjunction with FCCE funds to rehabilitate the project under PL 84-99 authorization. The Project Implementation Report (PIR), approved April 20, 2005, served as the decision document for both events.

This Limited Re-evaluation Report will serve as the decision document to accompany a new PPA for the next re-nourishment, scheduled for construction in November 2012.

The Sponsor, Palm Beach County, will prepare the LRR under the authority of WRDA 1992, Section 206. Jacksonville District will provide coordination of the Environmental Assessment, and DQC, ATR, Model Review, and IEPR processes, in concert with the PCX-CSDR.

*Authorization Timeline:

- WRDA 1962 (River and Harbors Act)
 - Palm Beach County from Martin County line to Lake Worth Inlet and from South Lake Worth Inlet to Broward County line, Florida
- WRDA 1976, Section 156.
 - “The Secretary of the Army, acting through Chief of Engineers, is authorized to provide periodic beach nourishment in the case of each water resources development project where such nourishment has been authorized for a limited period for such additional period as he determines necessary but in no event such additional period extend beyond the fifteenth year which begins after the date of initiation of construction of such project.”
- WRDA 1986, Section 934.
 - “Section of 156 of the Water Resources Development Act of 1976 is amended by striking out “fifteenth” and inserting in lieu thereof “fiftieth”
- WRDA 1996, Section 506.3B.
 - Section 506.
 - (2) Authorizations – If the Secretary determines under paragraph (1) that periodic beach nourishment is necessary for a project, the Secretary shall carry out periodic beach nourishment for the project for a period of 50 years beginning on the date of initiation of construction of the project.
 - (3) Projects (B) – Palm Beach County, Florida – Project for shoreline protection for Jupiter/Carlin, Ocean Ridge and Boca Raton North Beach Segments

c. Factors Affecting the Scope and Level of Review.

This section addresses 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. The project cost, including the upcoming renourishment and remaining renourishments, is \$28,800,000. This cost is well under the \$45,000,000 threshold. Bulleted issues are addressed, as follows:

- *If parts of the study will likely be challenging (with some discussion as to why or why not and, if so, in what ways – consider technical, institutional, and social challenges, etc.):*
 - No. The intent of this beach fill project is to allow a second re-nourishment of the authorized project to provide continuation of hurricane and storm damage reduction over a 1.4 mile segment. The LRR is intended only to verify economics, update cost, update the EA to new NEPA regulations since the last EA, and verify that the project is still justified. The borrow area to be used will be the same one which was used for past nourishments.

- *A preliminary assessment of where the project risks are likely to occur and what the magnitude of those risks might be (e.g., what are the uncertainties and how might they affect the success of the project):*

This project is not making any changes to the template which was used, successfully, for the past re-nourishment.

- *If the project will likely be justified by life safety or if the project likely involves significant threat to human life/safety assurance (with some discussion as to why or why not and, if so, in what ways – consider at minimum the safety assurance factors described in EC 1165-2-209 including, but not necessarily limited to, the consequences of non-performance on project economics, the environmental and social well-being [public safety and social justice]; residual risk; uncertainty due to climate variability, etc.):*
 - No. The project would be justified on basis of storm damage reduction benefits. Life safety is not at issue since it is assumed that residents would evacuate, in the event of a major storm event. The project is not intended to, nor does it claim, to produce life safety benefits.
- *If there is a request by the Governor of an affected state for a peer review by independent experts:*
 - There has not been such a request.
- *If the project/study is likely to involve significant public dispute as to the size, nature, or effects of the project (with some discussion as to why or why not and, if so, in what ways):*
 - It is anticipated that public issues would not be significant and would not require preparation of an Environmental Impact Statement. There have been no significant public issues associated with the initial nourishment or past re-nourishment.
- *If the project/study is likely to involve significant public dispute as to the economic or environmental cost or benefit of the project (with some discussion as to why or why not and, if so, in what ways):*
 - It is anticipated that public issues would not be significant and would not require preparation of an Environmental Impact Statement. There have been no significant public issues associated with the initial nourishment or past re-nourishment.
- *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 (with some discussion as to why or why not and, if so, in what ways):*
 - Standard beach fill methods will be employed, following methodology from the past re-nourishment in 2005.
- *If the project design is anticipated to require redundancy, resiliency, and/or robustness, unique construction sequencing, or a reduced or overlapping design construction schedule (with some discussion as to why or why not and, if so, in what ways):*

- The design will not vary from the re-nourishment template from 2005. This is not expected to require redundancy, unusual resiliency and/or robustness, unique construction sequencing or reduced or overlapping design construction schedule.

In-Kind Contributions. Products and analyses provided by non-Federal sponsors as in-kind services are subject to DQC, ATR, and IEPR. No in-kind services are being provided by the sponsor. However, this report is being prepared by the Sponsor for potential reimbursement under Section 206 of WRDA 1992. The report will be subjected to DQC, ATR and IEPR (unless excluded from the requirement).

4. DISTRICT QUALITY CONTROL (DQC)

All decision documents (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 Jacksonville district will manage the DQC.

- a. Documentation of DQC.** District Quality Control of sponsor-provided products will be conducted at the district level by the PDT where each of the DQC team members will review the documents for accuracy of content related to their field, and enter comments into DrChecks. DQC will be conducted on the draft and final documents prior to submittal to ATR. A certification sheet will be provided to the ATR team to reflect that the district is satisfied with the quality of the document. The certification shall include a statement from each reviewer confirming they have reviewed the document, provided comments and comments were satisfactorily resolved, and shall be signed by each reviewer.
- b. Products to Undergo DQC.** The draft and final versions of the subject LRR and associated EA will undergo DQC.
- c. Required DQC Expertise.** Experienced Jacksonville District team members, representing all pertinent disciplines, will participate in DQC, including: plan formulation, economics, environmental compliance, engineering design, coastal hydraulics and hydrology, geotechnical engineering, cost engineering, real estate, and office of council. Sponsor interim products and draft and final reports will be reviewed by Jacksonville District team members.

5. AGENCY TECHNICAL REVIEW (ATR)

ATR is mandatory for all decision documents (including supporting data, analyses, environmental compliance documents, etc.). The objective of ATR is to ensure consistency with established criteria, guidance, procedures, and policy. The ATR will assess whether the analyses presented are technically correct and comply with published USACE guidance, and that the document explains the analyses and results in a reasonably clear manner for the public and decision makers. ATR is managed within USACE by the designated RMO, in this case the PCX-CSDR, and is conducted by a qualified team from outside the home district that is not involved in the day-to-day production of the project/product. ATR teams will be comprised of senior USACE personnel and may be supplemented by outside experts as appropriate. The ATR team lead will be from outside the home MSC.

- a. Products to Undergo ATR.** The Draft LRR will undergo ATR. The Final LRR will undergo an ATR consisting of backchecks to previous comments received to ensure appropriate revisions have

been made to the report. The cost estimate associated with the LRR will undergo ATR through the Cost DX. The draft EA will also go to ATR with the LRR.

Required ATR Team Expertise. The ATR team will be made up of personnel determined by the PCX-CSDR. The expertise represented on the ATR team should reflect the significant expertise involved in the work effort and will generally mirror the expertise on the PDT. Based on the factors affecting the scope and level of review outlined in Section 3, it is suggested that the review team include the disciplines listed in the below table.

ATR Team Members/Disciplines	Expertise Required
Plan Formulator / ATR Lead	The ATR lead should be a senior professional with experience in preparing Civil Works decision documents and conducting ATR. The lead should also have the necessary skills and experience to lead a virtual team through the ATR process. The ATR lead will also serve as the plan formulation reviewer. They should be a senior water resources planner with experience in HSDR projects and associated planning reports and documents.
Economics	The economics reviewer will be an expert in the field of economics and have a thorough understanding of HSDR projects with periodic re-nourishment, BCR updates, and 902 limit analyses.
Environmental Resources	The environmental reviewer will be an expert in the field of environmental resources and have a thorough understanding of NEPA, coastal ecosystems, and HSDR projects.
Coastal Engineering	The coastal engineering reviewer will be an expert in the field of coastal engineering, will have a minimum of five years of coastal engineering experience, and have a thorough understanding of HSDR projects, beach nourishment, and offshore borrow areas.
Cost Engineering	The cost engineering reviewer will be an expert in the field of cost engineering and have a thorough understanding of HSDR projects and dredging costs estimates. The cost engineer will be a Walla Walla Cost DX approved cost reviewer as the cost estimate for this document is anticipated to need CSRA and Cost DX review and Certification.

a. Documentation of ATR. DrChecks review software will be used to document all ATR comments, responses and associated resolutions accomplished throughout the review process. Comments should be limited to those that are required to ensure adequacy of the product. The four key parts of a quality review comment will normally include:

- (1) The review concern – identify the product’s information deficiency or incorrect application of policy, guidance, or procedures;
- (2) The basis for the concern – cite the appropriate law, policy, guidance, or procedure that has not be properly followed;
- (3) The significance of the concern – indicate the importance of the concern with regard to its potential impact on the plan selection, recommended plan components, efficiency (cost), effectiveness (function/outputs), implementation responsibilities, safety, Federal interest, or public acceptability; and

- (4) The probable specific action needed to resolve the concern – identify the action(s) that the reporting officers must take to resolve the concern.

In some situations, especially addressing incomplete or unclear information, comments may seek clarification in order to then assess whether further specific concerns may exist.

The ATR documentation in DrChecks will include the text of each ATR concern, the PDT response, a brief summary of the pertinent points in any discussion, including any vertical team coordination (the vertical team includes the district, RMO, MSC, and HQUSACE), and the agreed upon resolution. If an ATR concern cannot be satisfactorily resolved between the ATR team and the PDT, it will be elevated to the vertical team for further resolution in accordance with the policy issue resolution process described in either ER 1110-1-12 or ER 1105-2-100, Appendix H, as appropriate. Unresolved concerns can be closed in DrChecks with a notation that the concern has been elevated to the vertical team for resolution.

At the conclusion of each ATR effort, the ATR team will prepare a Review Report summarizing the review. Review Reports will be considered an integral part of the ATR documentation and shall:

- Identify the document(s) reviewed and the purpose of the review;
- Disclose the names of the reviewers, their organizational affiliations, and include a short paragraph on both the credentials and relevant experiences of each reviewer;
- Include the charge to the reviewers;
- Describe the nature of their review and their findings and conclusions;
- Identify and summarize each unresolved issue (if any); and
- Include a verbatim copy of each reviewer's comments (either with or without specific attributions), or represent the views of the group as a whole, including any disparate and dissenting views.

ATR may be certified when all ATR concerns are either resolved or referred to the vertical team for resolution and the ATR documentation is complete. The ATR Lead will prepare a Statement of Technical Review certifying that the issues raised by the ATR team have been resolved (or elevated to the vertical team). A Statement of Technical Review should be completed, based on work reviewed to date, for the AFB, draft report, and final report. A sample Statement of Technical Review is included in Attachment 2.

6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)

Type I IEPR is required for all **decision documents** except where no mandatory triggers apply, criteria for an exclusion are met, and a risk-informed recommendation justifies exclusion. 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 1165-2-209, 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 1165-2-209.

- **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 IEPR.** The Jacksonville District concludes that the authorized project and current nourishment recommended by the Ocean Ridge HSDR LRR is so limited in scope, where the recommended plan is placing beach fill over a 1.4 mile segment, that the project would not significantly benefit from an independent external peer review. If verification of the project economics or NEPA updates ultimately results in the need to reformulate the project such that modification of the authority is required, a risk-informed decision regarding the conduct of IEPR will be evaluated. Therefore, Type I IEPR is not proposed for this project. A memo requesting an exclusion from the IEPR requirement will be submitted.

However, EC 1165-2-209, Section 10.d, asserts a requirement for a Safety Assurance Review (SAR) of design and construction activities for hurricane and storm damage reduction projects. Scope of the SAR and coordination with the Corps Risk Management Center (RMC), if needed, will be described in a follow-on implementation phase review plan. RMC coordination is not anticipated in this, the decision document phase.

- b. **Products to Undergo Type I IEPR.** An exclusion from the Type I IEPR requirement will be requested. If exclusion is denied, the Draft LRR and EA will be reviewed.
- c. **Required Type I IEPR Panel Expertise.** In the event that Type I IEPR is required, the following provides a description of the proposed panel members and expertise. The proposed four member panel includes the necessary expertise to assess the engineering, environmental, and economic adequacy of the decision document as required by EC 1165-2-209, Appendix D. The Outside Eligible Organization (OEO) will determine the final participants on the panel. The following table lists the suggested types of disciplines that might be included on the panel.

IEPR Panel Members/Disciplines	Expertise Required
Economics	The Economics Panel member will be a scientist from academia, a public agency, non-governmental entity, or an Architect-Engineer or Consulting Firm and hold a M.S. in the field of economics with a specialty, or at least five years experience, in coastal economic evaluation or flood risk evaluation is required.
Environmental	The environmental panel member will be a scientist from academia, public agency, non-governmental entity, or an Architect-Engineer or Consulting Firm with a minimum 5 years demonstrated experience with environmental resources on the

	southern Atlantic coast of the United States.
Coastal Engineering	Coastal Engineer. Member will be a coastal or ocean engineer with a minimum of 7 years experience in coastal hydraulics and hydrology. The panel member will be familiar with USACE application of risk and uncertainty analyses in coastal damage reduction studies. The panel member will be familiar with USACE application of risk and uncertainty analyses in coastal damage reduction studies. The panel member will also be familiar with standard USACE hydraulic and hydrologic computer models.
Geotechnical Engineering	The panelist will be an Engineer from academia, a public agency whose primary mission is centered around coastal damage reduction, or an Architect-Engineer or Consulting Firm with a minimum 7 years demonstrated experience in geotechnical studies and design of stabilizing dunes, bluffs, and beach berms with at least a MS degree in Geotechnical Engineering. The Panel Member will be familiar with geotechnical practices used in Florida, and active participation in related professional societies is encouraged.

d. Documentation of Type I IEPR. In the event IEPR is needed, the IEPR panel will be selected and managed by an Outside Eligible Organization (OEO) per EC 1165-2-209, Appendix D. Panel comments will be compiled by the OEO and should address the adequacy and acceptability of the economic, engineering and environmental methods, models, and analyses used. IEPR comments should generally include the same four key parts as described for ATR comments in Section 4.d above. The OEO will prepare a final Review Report that will accompany the publication of the final decision document and shall:

- Disclose the names of the reviewers, their organizational affiliations, and include a short paragraph on both the credentials and relevant experiences of each reviewer;
- Include the charge to the reviewers;
- Describe the nature of their review and their findings and conclusions; and
- Include a verbatim copy of each reviewer's comments (either with or without specific attributions), or represent the views of the group as a whole, including any disparate and dissenting views.

The final Review Report will be submitted by the OEO no later than 60 days following the close of the public comment period for the draft decision document. USACE shall consider all recommendations contained in the Review Report and prepare a written response for all recommendations adopted or not adopted. The final decision document will summarize the Review Report and USACE response. The Review Report and USACE response will be made available to the public, including through electronic means on the internet.

7. POLICY AND LEGAL COMPLIANCE REVIEW

All decision documents will be reviewed throughout the study process for their compliance with law and policy. Guidance for policy and legal compliance reviews is addressed in Appendix H, ER 1105-2-100. These reviews culminate in determinations that the recommendations in the reports and the supporting analyses and coordination comply with law and policy, and warrant approval or further recommendation to higher authority by the home MSC Commander. DQC and ATR augment and complement the policy review processes by addressing compliance with pertinent published Army policies, particularly policies

on analytical methods and the presentation of findings in decision documents.

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

All decision documents shall be coordinated with the Cost Engineering DX, located in the Walla Walla District. The DX will assist in determining the expertise needed on the ATR team and Type I IEPR team (if required) and in the development of the review charge(s). The DX will also provide the Cost Engineering DX certification. The RMO is responsible for coordination with the Cost Engineering DX.

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. Planning models, for the purposes of the EC, are defined as any models and analytical tools that planners use to define water resources management problems and opportunities, to formulate potential alternatives to address the problems and take advantage of the opportunities, to evaluate potential effects of alternatives and to support decision making. The use of a certified/approved planning model does not constitute technical review of the planning product. The selection and application of the model and the input and output data is still the responsibility of the users and is subject to DQC, ATR, and IEPR (if required).

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. As part of the USACE Scientific and Engineering Technology (SET) Initiative, many engineering models have been identified as preferred or acceptable for use on Corps studies and these models should be used whenever appropriate. The selection and application of the model and the input and output data is still the responsibility of the users and is subject to DQC, ATR, and IEPR (if required).

- a. Planning Models.** The following planning models are anticipated to be used in the development of the decision document:

No planning models will be employed.

- b. Engineering Models.** The following engineering models are anticipated to be used in the development of the decision document:

No engineering models will be employed.

10. REVIEW SCHEDULES AND COSTS

- a. ATR Schedule and Cost.** ATR will take place after the sponsor has completed the Draft LRR and Draft EA, and the documents have undergone District Quality Control (DQC) by the District. DQC will occur immediately after the Sponsor has submitted the draft report to the district, by a team of approximately 9 people, including an editor, and will take approximately 1 month. The cost for DQC will be approximately \$23,000. ATR of the draft documents is scheduled to begin March 2013, and ATR of the final documents is scheduled for August 2013. The ATR of the draft document, including cost certification, will cost approximately \$30,000 and take approximately 5 weeks (2 weeks for the ATR team to provide comments, 2 weeks for the PDT to coordinate and provide responses, and 1 week for back check and close-out of the ATR). The ATR of the final document will be a shorter

review since it will be a backcheck to ensure that resolve to previous comments has been reflected in the document. The ATR of the final document will cost approximately \$10,000 and take approximately 2 weeks.

- b. **Type I IEPR Schedule and Cost.** Not-applicable.
- c. **Model Certification/Approval Schedule and Cost.** Not-applicable.
- d. General Project Schedule

Task	Start Date	End Date
Cost Risk Analysis	2/12/13	4/13/13
Sponsor submits LRR to SAJ	4/13/13	4/27/13
SAJ performs DQC on LRR	4/27/13	5/27/13
Sponsor revises LRR	5/27/13	6/26/13
Agency Technical Review (ATR) Conducted by PCX	6/26/13	8/10/13
Sponsor revises LRR	8/10/13	8/24/13
SAJ submits LRR to SAD	8/24/13	8/31/13
SAD reviews LRR	8/31/13	9/30/13
In Progress Review with SAD	9/30/13	10/14/13
SAD Policy Review Provided	10/14/13	10/28/13
LRR Revised	10/28/13	11/11/13
Final ATR (backcheck)	11/11/13	11/25/13
SAJ Sends LRR report to SAD for finalization	11/25/13	12/9/13
Final LRR Report	12/9/13	12/9/13
SAJ Provides Draft PPA to SAD for Review and approval	12/9/13	1/8/14

11. PUBLIC PARTICIPATION

There will not be any public comment period for the LRR. There are not anticipated to be any significant changes to the scope of the authorized project which has been successfully implemented since 1998 that would warrant public input. Rather the document is simply to ensure that the authorized project is still economically justified and environmentally acceptable for the remainder of Federal participation. The EA will be made available to the public in accordance with NEPA and the Coastal Zone Management program. The public review and comment period for the Draft EA will occur after ATR and SAD review.

12. REVIEW PLAN APPROVAL AND UPDATES

The South Atlantic Division Commander is responsible for approving this Review Plan. The 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 decision document. Like the PMP, the Review Plan is a living document and may change as the study 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 are documented in Attachment 3. Significant changes to the Review Plan (such as changes to the scope and/or level of review) must 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 Commanders' approval memorandum, will be posted on the Home District's webpage. The latest Review Plan should 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, 904-232-1671
- South Atlantic Division Point of Contact, 404-562-5228
- PCX-CSDR Point of Contact, 347-370-4571

Figure 1: Project Location (Ocean Ridge, Palm Beach County)



ATTACHMENT 1: TEAM ROSTERS

District Quality Control Team

Team Roster intentionally removed.

ATR TEAM MEMBERS TO BE DESIGNATED BY THE PCX-CSDR

ATTACHMENT 2: SAMPLE STATEMENT OF TECHNICAL REVIEW FOR DECISION DOCUMENTS

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the <type of product> for <project name and location>. The ATR was conducted as defined in the project’s Review Plan to comply with the requirements of EC 1165-2-209. During the ATR, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of: assumptions, methods, procedures, and material used in analyses, alternatives evaluated, the appropriateness of data used and level obtained, and reasonableness of the results, including whether the product meets the customer’s needs consistent with law and existing US Army Corps of Engineers policy. The ATR also assessed the District Quality Control (DQC) documentation and made the determination that the DQC activities employed appear to be appropriate and effective. All comments resulting from the ATR have been resolved and the comments have been closed in DrCheckssm.

SIGNATURE

Name
ATR Team Leader
Office Symbol/Company _____
Date

SIGNATURE

Name
Project Manager
Office Symbol _____
Date

SIGNATURE

Name
Architect Engineer Project Manager¹
Company, location _____
Date

SIGNATURE

Name
Review Management Office Representative
Office Symbol _____
Date

CERTIFICATION OF AGENCY TECHNICAL REVIEW

Significant concerns and the explanation of the resolution are as follows: Describe the major technical concerns and their resolution.

As noted above, all concerns resulting from the ATR of the project have been fully resolved.

SIGNATURE

Name
Chief, Engineering Division
Office Symbol _____
Date

SIGNATURE

Name
Chief, Planning Division
Office Symbol _____
Date

¹ Only needed if some portion of the ATR was contracted

ATTACHMENT 3: REVIEW PLAN REVISIONS

Revision Date	Description of Change	Page / Paragraph Number

ATTACHMENT 4: ACRONYMS AND ABBREVIATIONS

<u>Term</u>	<u>Definition</u>	<u>Term</u>	<u>Definition</u>
ASA(CW)	Assistant Secretary of the Army for Civil Works	PCX	Planning Center of Expertise
ATR	Agency Technical Review	PDT	Project Delivery Team
CSDR	Coastal Storm Damage Reduction	PMP	Project Management Plan
DQC	District Quality Control	PL	Public Law
EA	Environmental Assessment	QA	Quality Assurance
EC	Engineer Circular	QC	Quality Control
HQUSACE	Headquarters, U.S. Army Corps of Engineers	RED	Regional Economic Development
IEPR	Independent External Peer Review	RMC	Risk Management Center
LRR	Limited Reevaluation Report	RMO	Review Management Organization
MSC	Major Subordinate Command, in this case, SAD	RTS	Regional Technical Specialist
NED	National Economic Development	SAR	Safety Assurance Review
NEPA	National Environmental Policy Act	USACE	U.S. Army Corps of Engineers
OMRR&R	Operation, Maintenance, Repair, Replacement and Rehabilitation	WRDA	Water Resources Development Act