

# **REVIEW PLAN**

**San Juan Harbor Federal Navigation Project, Puerto Rico  
Limited Reevaluation Report**

**Jacksonville District**

P2# 114386

**MSC Approval Date: May 30 2013  
Last Revision Date: None**



**US Army Corps  
of Engineers ®**

**REVIEW PLAN**

**San Juan Harbor Federal Navigation Project, Puerto Rico  
Limited Reevaluation Report**

**TABLE OF CONTENTS**

**1. PURPOSE AND REQUIREMENTS..... 1**

**2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION ..... 1**

**3. STUDY INFORMATION..... 1**

**4. DISTRICT QUALITY CONTROL (DQC) ..... 6**

**5. AGENCY TECHNICAL REVIEW (ATR) ..... 7**

**6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR) ..... 9**

**7. POLICY AND LEGAL COMPLIANCE REVIEW..... 10**

**8. COST ENGINEERINGMANDATORY CENTER OF EXPERTISE (MCX) REVIEW AND CERTIFICATION .... 10**

**9. MODEL CERTIFICATION AND APPROVAL..... 10**

**10. REVIEW SCHEDULES AND COSTS ..... 11**

**11. PUBLIC PARTICIPATION..... 12**

**12. REVIEW PLAN APPROVAL AND UPDATES..... 12**

**13. REVIEW PLAN POINTS OF CONTACT ..... 12**

**ATTACHMENT 1: TEAM ROSTERS..... 13**

**ATTACHMENT 2: SAMPLE STATEMENT OF TECHNICAL REVIEW FOR DECISION DOCUMENTS ..... 14**

**ATTACHMENT 3: REVIEW PLAN REVISIONS..... 15**

## 1. PURPOSE AND REQUIREMENTS

**Purpose.** This Review Plan (RP) is a standalone document that is a component of the Project Management Plan (PMP), and defines the scope and level of peer review for the single purpose San Juan Harbor Federal Navigation Project, Puerto Rico - Limited Reevaluation Report (LRR).

### a. References

- (1) Engineering Circular (EC) 1165-2-214, Civil Works Review Policy, 15 December 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
- (4) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007

**b. 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. In addition to these levels of review, decision documents are subject to cost engineering review and certification (per EC 1165-2-214) and planning models 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 the South Atlantic Division (SAD), and will coordinate reviews with the Deep Draft Navigation Planning Center of Expertise (DDN-PCX).

The RMO will also coordinate with the Cost Engineering Mandatory Center of Expertise (MCX) 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. Study Document.

The San Juan Harbor Federal Navigation Project, Limited Reevaluation Report (LRR) is not considered to be a decision document, but is an Other Work Product, for the purposes of determining independent review requirements since the purpose is to identify a new mitigation plan for the authorized project, provide a cost estimate, and provide evidence that the plan fully mitigates for project impacts. The document is to be approved at the Major Subordinate Command level, by the South Atlantic Division (SAD), and additional Congressional Authorization will not be required. A separate Environmental Assessment (EA), consistent with the National Environmental Policy Act (NEPA) will be prepared along with the study document to confirm that the project remains economically justified, environmentally acceptable and within the projects current authorization.

The EA will be approved at the Division level. If it is determined that there are no significant impacts, the FONSI (Finding Of No Significant Impact) will be signed at the District level following Division approval.

**b. Study/Project Description.**

The non-Federal sponsor for the project is the Puerto Rico Ports Authority (PRPA). The purpose of the proposed LRR is to identify a new mitigation plan. Mitigation is for impacts caused by channel widening completed in 2001 as authorized by the 1994 General Reevaluation Report and Environmental Assessment for San Juan Harbor. It is proposed that the San Juan Harbor Submerged Aquatic Vegetation (SAV) Compensatory Mitigation project site be relocated to the Condado Lagoon in San Juan, Puerto Rico rather than be located adjacent to the Puerto Nuevo Channel in San Juan Harbor as described in the *2003 San Juan Harbor Mitigation Baseline Survey and Conceptual Design Report*. The Puerto Rico Ports Authority (PRPA), National Marine Fisheries Service (NMFS), and the San Juan Bay Estuary Program (SJBEP) support the proposed relocation.

In response to requests from the Puerto Rico government, studies of the authorized San Juan Harbor (SJH) Federal Navigation project were completed and improvements were proposed in a Survey Report dated 1974. A Final Environmental Impact Statement (FEIS) was filed in 1976. The Congress of the United States authorized the preparation of a Phase I General Design Memorandum (GDM) in the Water Resources Development Act (WRDA) of 1976 (Public Law 94-587 dated 22 October 1976). The Phase I GDM and S-EIS were prepared in 1982. The S-EIS incorporated new information provided by the U.S. Fish and Wildlife Service (FWS) on significant wildlife habitat areas, fisheries resources and submerged aquatic vegetation in the Puerto Nuevo-Army Terminal channel area. Congress authorized the deep draft navigation project recommended in the Phase I GDM in WRDA of 1986 (Public Law 99-662 dated 17 November 1986). The SJH improvement project authorized by WRDA of 1986 was re-authorized to include the recommendations made in the 1994 General Reevaluation Report (GRR) and Environmental Assessment (EA) by Section 301 of WRDA of 1996. Figure 1 shows the SJH Federal Navigation Project location.



**Figure 1: San Juan Harbor Federal Navigation Project location**

The Modified Plan was the selected plan for implementation presented in the 1994 GRR and EA. It provided for the following improvements: a) Bar Channel alignment and depth increasing from the authorized 48 feet to 56 feet, b) Anegado Channel improvements included a stepped channel bottom that varies from 46 feet at the intersection with the Bar Channel to 40 feet at the intersection with Army Terminal Channel. The channel width was reduced to 800 feet while easing the turn into Army Terminal, c) Army Terminal Channel recommended width was reduced from 450 feet to 350 feet with the recommended width increase distributed as 25 feet on each side of the existing channel, d) Puerto Nuevo Channel recommended depth was decreased from 40 to 39 feet. The channel width decreased from 400 to 350 feet, e) Graving Dock Channel width decreased from 400 to 350, and f) SAV environmental mitigation to compensate for approximately 1.2 acres of SAV impacted during the Puerto Nuevo Channel improvements. All dredging work was completed in September 2001, but the mitigation plan was never fully budgeted. Due to the inability to construct the mitigation due to funding constraints, less costly mitigation was investigated which led to the current plan. The environmental mitigation cost estimated in 1994 was \$111,900.

In order to determine the location and design of a mitigation site in the SJH to compensate for the loss of SAV, the 2003 *San Juan Harbor Mitigation Baseline Survey and Conceptual Design Report* was developed and circulated to Federal and Commonwealth agencies for review and comment. As a result, the plan called for the restoration of approximately 1.2 acres of SAV in a 10-acre fill template within three years of placement of suitable sediment to support maturation of SAV (Figure 2). A combination of



geotech-tubes, silt curtains and small riprap was recommended in order to stabilize and contain the material to be placed. With these features, the estimated mitigation cost was \$2,139,083 in 2010.



**Figure 2: San Juan Harbor SAV Restoration Site and proposed relocation site**

A meeting between Corps, PRPA (non-Federal sponsor), National Marine Fisheries Service (NMFS), and the San Juan Bay Estuary Program (SJBE) staff was held in the Antilles Area Office on March 18, 2011. The purpose of the meeting was to discuss the status of the SJH SAV Compensatory Mitigation Project. During the meeting, the possibility of integrating the SJH SAV Compensatory Mitigation Project into the San Juan Bay Estuary Program Water Quality Improvement and Seagrass Restoration Project at the Condado Lagoon was discussed. Condado Lagoon is a shallow lagoon with several deep depressions (Figure 2). The proposed source of the dredged material for the mitigation needs would be obtained from the next maintenance dredging event of the SJH Navigation Project, scheduled for FY17. The proposed handling of the dredged material could involve several methods for transporting all suitable material from the SJH to the selected site in the Condado Lagoon. A combination of scow barge and pumping through a floating pipeline could be implemented for transporting the material along the San Antonio Channel into the lagoon. The estimated mitigation construction cost in the Condado Lagoon was \$1,285,000, considerably less than the previously selected SJH SAV mitigation site. This includes the additional cost of placement of the maintenance material over the cost of the usual disposal method (placement in the Ocean Dredged Material Disposal Site).

During the meeting held on March 18, 2011, verbal support for the proposed relocation was received from PRPA, NMFS, and SJBEP. The proposed relocation will be coordinated with Federal and Commonwealth resource agencies. The Jacksonville District will complete NEPA documentation consisting of an Environmental Assessment. The FONSI, associated with the relocated mitigation, will be provided to the MSC once complete.

**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. Factors affecting the risk informed decisions on the appropriate scope and level of review include the following:

- *If parts of the study will likely be challenging;*  
The purpose of the proposed LRR is simply to identify a proposed new mitigation site and plan for work completed in 2001. It is proposed that the San Juan Harbor Submerged Aquatic Vegetation (SAV) Compensatory Mitigation project site be relocated to the Condado Lagoon in San Juan, Puerto Rico. The proposed relocation is supported by the Puerto Rico Ports Authority (PRPA), National Marine Fisheries Service (NMFS), and the San Juan Bay Estuary Program (SJBEP).
- *A preliminary assessment of where the project risks are likely to occur and what the magnitude of those risks might be;*  
The only proposed change is relocation of the mitigation site. There is risk associated with the mitigation not being effective. However, this risk is less than at the original proposed site since the Condado Lagoon is removed from the shipping channels and SAV will not be impacted by shipping activities. In addition, restoration of seagrass beds (by providing appropriate bottom elevations) in the Condado Lagoon is one of the goals of the SJBEP Comprehensive Conservation and Management Plan (CCMP), Action Plan HW-2, completed in August 2000. The restoration to a more natural lagoon depth would create areas of SAV (e.g. seagrass), and an increase in the area occupied by seagrasses would enhance the fisheries of the Condado Lagoon. A 902 cost analysis has been completed and the proposed mitigation change does not exceed the 902 limit. Fuel prices and other variables that fluctuate with transportation distance have the potential to affect costs.
- *If the project will likely be justified by life safety or if the project likely involves significant threat to human life/safety assurance - );*  
The project will not be justified by life safety. The project modification proposed in the LRR, to relocate the mitigation site, would not add significant threat to human life/safety assurance.
- *If there is a request by the Governor of an affected state for a peer review by independent experts;*  
The Governor of Puerto Rico has not requested a peer review by independent experts.
- *If the project/study is likely to involve significant public dispute as to the size, nature, or effects of the project;*

The project is not likely to involve dispute as to the size, nature, or effects of the project. The proposed relocation is supported by the Puerto Rico Ports Authority (PRPA), National Marine Fisheries Service (NMFS), and the San Juan Bay Estuary Program (SJBEP). It is expected that there will also be public support of the proposed change.

- *If the project/study is likely to involve significant public dispute as to the economic or environmental cost or benefit of the project;*

The project is not likely to involve dispute as to the economic or environmental cost or benefit. There is greater environmental and public benefit to restoring SAV in the Condodo Lagoon. Public recreation (kayaking, fishing, etc.) is popular in the lagoon and it is expected that the restoration will improve environmental and recreational value. A 902 cost analysis has been completed and the proposed mitigation change does not break the 902 limit.

- *If the information in the study 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; and*

The information in the study document or project design is not 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. The proposed mitigation will use the same design and construction techniques that have been used on similar projects.

- *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 proposed project design does not require any additional redundancy, resilience, or robustness. The consequence of failure will not impose additional life safety, risk, or negative environmental impacts. The construction method has been performed previously in other locations, and there are no unique components related to sequencing or schedule.

**d. In-Kind Contributions.** *Products and analyses provided by non-Federal sponsors as in-kind services are subject to DQC, ATR, and IEPR.* There are no anticipated in-kind contributions to be provided by the sponsor for the preparation of the subject LRR or EA.

#### **4. DISTRICT QUALITY CONTROL (DQC)**

All study 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 home district shall manage DQC. Documentation of DQC activities is required.

##### **a. Documentation of DQC.**

District Quality Control will be conducted at the district level. DQC team members will review the documents for accuracy of content related to their field. DQC will be conducted on the draft and final documents prior to submittal to ATR. The DQC team will be composed of the PDT and persons independent of the PDT conducting the LRR and shall consist of, at a minimum, cost engineering, plan formulation, environmental, economics and legal disciplines. Documentation of DQC review comments and resolution and 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. DQC documentation will become a permanent part of the study products and records.

**b. Products to Undergo DQC.**

The draft and final versions of the subject LRR and associated EA will undergo DQC.

**5. AGENCY TECHNICAL REVIEW (ATR)**

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 Review Management Organization (RMO) 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 ATR backchecks of 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 MCX. The draft EA for the new borrow area will also go to ATR with the LRR.

**b. Required ATR Team Expertise.**

The ATR team will be made up of personnel determined by the DDN-PCX. The expertise represented on the ATR team will 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
ATR Lead	The ATR lead will be a senior professional with extensive experience in preparing Civil Works study documents and conducting ATR. The lead will also have the necessary skills and experience to lead a virtual team through the ATR process
Plan Formulator	The plan formulator reviewer will be a senior water resources planner with experience in Navigation projects and associated planning reports and documents.
Economics	The economics reviewer will be well qualified in the field of economics and have a thorough understanding of Navigation projects and mitigation, BCR updates, and 902 limits. analyses.
Environmental Resources	. The environmental reviewer will be well qualified in the field of environmental resources and have a thorough understanding of NEPA, coastal ecosystems, and SAV mitigation.

Cost Engineering	The cost engineering reviewer will be well qualified in the field of cost engineering and have a thorough understanding of Navigation projects and dredging/beneficial use/mitigation costs estimates. The cost engineer will be Walla Wall Cost MCX approved cost reviewer as the cost estimate for this document is anticipated to need CSRA and Cost MCX review and Certification.
Real Estate	The Real Estate Specialist should have experience with acquisition of diverse properties in support of flood risk management projects. Preferably familiar with pertinent real estate nuances in Puerto Rico (but not mandatory).

**c. 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 been 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 lead 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 RMO 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 will be completed, based on work reviewed to date, for the draft report, and final report. A sample Statement of Technical Review is included in Attachment 2.

## **6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)**

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), is managed outside the USACE and conducted on design and construction activities 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.**

As this is an Other Work Product, IEPR is not mandated. Based upon the above, the LRR is so limited in scope or impact that it would not significantly benefit from Type I IEPR. Identifying a non-controversial new mitigation plan, providing a cost estimate, and providing evidence that the plan fully mitigates for project impacts are modest changes in project scope not requiring reformulation. Absent project reformulation, a Risk-Informed Decision has determined that the proposed changes to the project do not pose a significant threat to human life, public health safety, or welfare. Further, none of the automatic triggers for IEPR are met and therefore, a Type I IEPR will not be conducted.

Type II IEPR Failure of the project, as currently envisioned, will not pose a significant threat to human life. Therefore, the District Chief of Engineering, as the Engineer-in-Charge, does not recommend a Type II IEPR Safety Assurance Review of the project at this time. A final risk-informed decision concerning the timing and the appropriate level of reviews including a Type II IEPR for the project implementation documents will be prepared and submitted for approval in an updated Review Plan prior to initiation of the design/implementation phase of this project.

- b. Products to Undergo Type I IEPR.** Not-Applicable
- c. Required Type I IEPR Panel Expertise.** Not-Applicable
- d. Documentation of Type I IEPR.** Not-Applicable

## **7. POLICY AND LEGAL COMPLIANCE REVIEW**

All study 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 study documents.

## **8. COST ENGINEERING MANDATORY CENTER OF EXPERTISE (MCX) REVIEW AND CERTIFICATION**

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

## **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 process the Hydrology, Hydraulics and Coastal Community of Practice (HH&C CoP) of USACE follows to validate engineering software for use in planning studies and to satisfy the requirements of the Corp's Scientific and Engineering Technology (SET) initiative is provided in Enterprise Standard (ES)-08101 Software Validation for the Hydrology, Hydraulics and Coastal Community of Practice. 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.**

There are no planning models anticipated to be used for the development of the subject document. There are no significant changes to the authorized plan. There are no significant changes to the project design or function. The propose of the LRR is simply to identify a new mitigation plan for work completed in 2001. A new cost estimate will be provided, and evidence will be provided that the plan fully mitigates for project impacts.

**b. Engineering Models.**

There are no engineering models anticipated to be used in the development of the study document.

**10. REVIEW SCHEDULES AND COSTS**

**a. ATR Schedule and Cost.**

ATR will take place after Jacksonville District has completed the Draft and Final LRR and Draft and Final EA, and the documents have undergone DQC. To expedite completion, after DQC completion of the draft LRR/EA, SAJ will have an In Progress Review with SAD followed by concurrent ATR, SAD policy review and public review. Subject to the availability of FY 14 funds, ATR of the draft documents is scheduled to begin in October 2013, and ATR of the final documents is scheduled for May 2014. The ATR of the draft document, including cost certification, will cost approximately \$30,000 and take approximately 6 weeks (2 weeks for the ATR team to provide comments, 2 weeks for the PDT to coordinate and provide responses, and 2 weeks 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 resolution of 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. No models are anticipated to need certification or approval for the development of this study document.

**d. Forecast Schedule.**

<b>Milestone</b>	<b>Date Complete</b>
• NEPA scoping	Feb. 28, 2013
• DQC of LRR/EA	Sep. 24, 2013
• ATR of draft LRR/EA	Oct. 23, 2013
• Submit draft LRR/EA to SAD	Oct. 23, 2013
• Public review of EA	Oct. 23, 2013
• ATR of final LRR/EA	May. 01, 2014
• Submit final LRR/EA to SAD	May. 15, 2014

- Final LRR/EA approval July. 23, 2014

## **11. PUBLIC PARTICIPATION**

The NEPA scoping period is currently scheduled for 15 January 2013 through 28 February 2013. There are not anticipated to be any significant changes to the scope of the authorized project that would warrant public input. The EA for the new mitigation area 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 start around February 2014.

## **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 study 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. Significant changes to the Review Plan (such as changes to the scope and/or level of review) will 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 Commander's approval memorandum, will be posted on the home district's webpage. The latest Review Plan will 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  
Jacksonville District Planning Technical Lead (904)232-2043  
Jacksonville District Review Coordinator (904)232-1102  
RMO, DDN-PCX POC (251)694-3884  
South Atlantic Division POC (404)562-5228



**ATTACHMENT 1: TEAM ROSTERS**

Team Rosters Intentionally Removed

**AGENCY TECHNICAL REVIEW (ATR) TEAM**

To be determined by the DDN-PCX.

**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 1165-2-214. 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 DrChecks<sup>sm</sup>.

SIGNATURE \_\_\_\_\_ Date \_\_\_\_\_  
Name  
ATR Team Leader  
Office Symbol/Company

SIGNATURE \_\_\_\_\_ Date \_\_\_\_\_  
Name  
Project Manager  
Office Symbol

SIGNATURE \_\_\_\_\_ Date \_\_\_\_\_  
Name  
Architect Engineer Project Manager<sup>1</sup>  
Company, location

SIGNATURE \_\_\_\_\_ Date \_\_\_\_\_  
Name  
Review Management Office Representative  
Office Symbol

**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 \_\_\_\_\_ Date \_\_\_\_\_  
Name  
Chief, Engineering Division  
Office Symbol

SIGNATURE \_\_\_\_\_ Date \_\_\_\_\_  
Name  
Chief, Planning Division  
Office Symbol

<sup>1</sup> Only needed if some portion of the ATR was contracted

**ATTACHMENT 3: REVIEW PLAN REVISIONS**

<b>Revision Date</b>	<b>Description of Change</b>	<b>Page / Paragraph Number</b>