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

REPLY TO
ATTENTION OF

CESAD-CG

19 JAN 2017

MEMORANDUM FOR Commander, Jacksonville District

SUBJECT: Lee County, Florida – Gasparilla Island Segment Hurricane and Storm Damage Reduction Project Section 934 Report with Environmental Assessment – Request for Review Plan Approval

1. References:

a. Memorandum, CESAJ-PD, 2 December 2016, subject as above.

b. Engineer Circular 1165-2-214, 15 December 2012, Civil Works Review.

c. Planning Bulletin PB 2016-02, Civil Works Review, 4 March 2016.

2. Jacksonville District prepared the enclosed review plan in accordance with Engineer Circular 1165-2-214. Jacksonville District coordinated preparation of the review plan with the National Coastal Storm Risk Management Planning Center of Expertise (CSRM-PCX) of the North Atlantic Division, which is the lead office to execute this review plan. The CSRM-PCX recommends approval of the review plan. The review plan does not include Independent External Peer Review (IEPR). HQUSACE approved the request for IEPR exclusion on 8 March 2016.

3. 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 significant revisions to this Review Plan or its execution will require new written approval from this office. The District shall post the approved Review Plan and a copy of this approval memorandum to the District public internet website and provide a link to the CSRM-PCX for their use. Before posting to the website, the names of Corps employees should be removed.

4. The point of contact for this action is [redacted] at (404) 562-5226 or [redacted]@usace.army.mil.

Encl

[redacted]
Brigadier General, USA
Commanding

REVIEW PLAN

Lee County, Florida Shore Protection Project, Gasparilla Island Segment Integrated Section 934 Report and Environmental Assessment

Jacksonville District

P2# 113085

MSC Approval Date: 19 January 2017
Last Revision Date: N/A

US Army Corps of Engineers ®

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REVIEW PLAN

Lee County, Florida Shore Protection Project, Gasparilla Island Segment Integrated Section 934 Report and Environmental Assessment

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1. PURPOSE AND REQUIREMENTS

a. Purpose. This Review Plan defines the scope and level of peer review for the Lee County, Florida Shore Protection Project, Gasparilla Island Segment Integrated Section 934 Report and Environmental Assessment.

b. References

(1) Engineer Circular (EC) 1165-2-214, Civil Works Review, 15 Dec 2012
(2) EC 1105-2-412, Assuring Quality of Planning Models, 31 Mar 2011
(3) Engineer Regulation (ER) 1110-1-12, Quality Management, 21 Jul 2006 (updated Sep 2006 and Mar 2011)
(4) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007
(5) PMP for study
(6) Planning Bulletin 2016-02, Civil Works Review, 4 March 2016

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

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 National Planning Center of Expertise for Coastal Storm Risk Management (PCX-CSRM).

The RMO will coordinate with the Civil Works Cost Engineering and Agency Technical Review Mandatory Center of Expertise (MCX) with Technical Expertise (TCX) to ensure the appropriate expertise is included on the review teams to assess the quality of the review products, including the main report and appendices, and to assess the quality and competence of the cost estimates, construction schedules and contingencies.

3. STUDY INFORMATION

a. Decision Document. The Lee County, Gasparilla Island, Florida Hurricane and Storm Damage Reduction Project Integrated Section 934 Report and Environmental Assessment (Gasparilla 934 Report) evaluates whether there is a sufficient basis to extend Federal participation in the project from the current 10 years to a 50-year period of Federal participation, or an additional 40 years. Without an extension, Federal participation in the project expired on 16 Dec 2016. Section 156 of the Water Resources Development Act (WRDA) of 1976 (Public Law (PL) 94-587), as amended by Section 934 of WRDA 1986 (PL 99-662), provides authority to the Secretary of the Army, acting through the Chief of Engineers, to provide periodic beach nourishment as he determines necessary but for a period not to exceed 50 years which begins after the date of initiation of construction. The approval level of the 934 Report is the Assistant Secretary of the Army (Civil Works) (ASA (CW)). Congressional authorization will not be required.

b. Study/Project Description. Lee County, Gasparilla Island, Florida is a single purpose Coastal Storm Risk Management (CSRM) (previously called Hurricane and Storm Damage Reduction) project. The Lee County, Florida Beach Erosion Control Project was authorized under Section 201 of the 1965 Flood Control Act by Senate Resolution dated 17 Dec 1970 and House Resolution dated 15 Dec 1970. The non-Federal sponsor (NFS) is Lee County, Florida.

The project is located in Lee County, on the lower Gulf of Mexico coast of Florida, about 90 miles south of the entrance to Tampa Bay. The 44-mile Gulf coastline of Lee County consists of all, or parts of, seven coastal barrier islands and several smaller islands separated from the mainland by shallow tidal lagoons. Gasparilla Island is bounded on the north by Gasparilla Pass and on the south by Boca Grande Channel. The Gulf shoreline of Gasparilla Island is about 6.5 miles in length. The Federal CSRM project is located on the southern 2.8 miles of the island. The south limit of the project is located at Florida Department of Environmental Protection (FDEP) monument R-24 plus a 600-foot taper section connecting the beach fill with the existing southern shoreline at R-24.5. The northern limit of the nourishment area is defined as FDEP monument R-11 plus a 1,200-foot long taper section connecting the beach fill with the existing northern shoreline at R-10.5. (**Figure 1)** The project consists of a Federally authorized berm at elevation +5 feet Mean Low Water (MLW), a foreshore slope of 1V:15H transitioning to a nearshore slope of 1V:25H at MLW extending out to the intersection with the existing profile. The renourishment volume is projected to be 542,000 cubic yards (cy) every seven years (2000 GRR (revised 2001)).

Lee County completed initial construction of the project in April 2007 with subsequent Federal reimbursement. The first renourishment was performed in 2013 in conjunction with the Flood Control and Coastal Emergency (FCCE) rehabilitation work following Tropical Storm Debby and Hurricane Isaac in 2012. The FCCE Project Information Report (PIR) recommended FCCE renourishment at the same

time as the renourishment of the full construction template. The PIR was approved, and funding was provided for both FCCE and CG construction work.

The Gasparilla 934 Report will update economic costs and benefits using the Beach-fx model and current MCACES cost estimates. Per CESAD memorandum dated 28 Sep 2012, “Although no other alternatives are implementable under the authority of Section 934, an analysis of alternatives, similar in scope to an initial appraisal under Section 216 of the 1970 Flood Control Act should be included as part of the Section 934 study.” Section 934 only allows evaluation of the existing authorized project to determine Federal interest in extending the Federal participation to fifty years following initial construction. The Gasparilla 934 report will evaluate nourishment intervals, performance of advance nourishment, and physical monitoring associated with the project. Alternatives will be economic optimization of the project (i.e., nourishment intervals and volume of advance nourishment).

The total project cost estimate based upon the Current Working Estimate (CWE) is $83 million in Fiscal Year (FY) 2013 price levels (Total Project Cost Summary for FY 15 Economic Update). The estimated cost of the five remaining nourishments is $63 million. It is estimated that the nourishments would begin in 2020 and continue every seven years through 2057. For the purpose of this Review Plan, the current estimated nourishment cycle is 2020, 2027, 2034, 2041, and 2048. The timing and cost of the periodic nourishments are subject to change pursuant to monitoring information and uncertainty of any future “extraordinary” storm impact on the authorized design berm. The 2048 nourishment will include nine years of advance nourishment in order to provide the authorized berm template through the end of Federal participation in 2057.

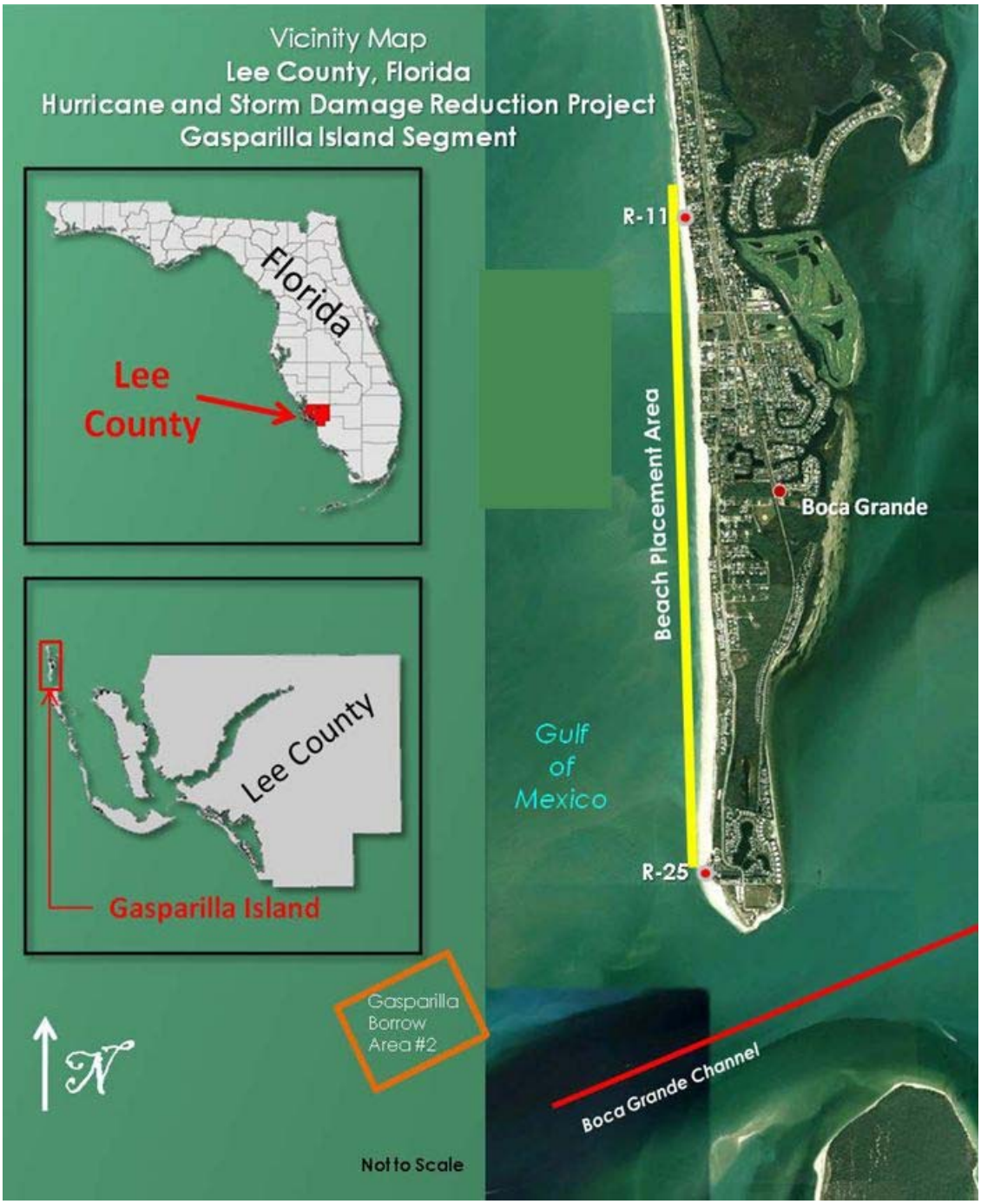

Figure 1. Study Area Vicinity Map

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 has a total cost estimate of less than $200 million: $83 million for the total project and $63 million for the remaining five nourishment events.
- It is not anticipated that the study will likely be challenging. The intent of this 934 Report is to evaluate whether to extend Federal participation from the current 10 years to a 50-year period of Federal participation, or an additional 40 years. The extension will allow continuation of the CSRM project with beach nourishment along a 2.8 mile length of shoreline. The completion of initial construction in 2007 and the first periodic nourishment in 2013 performed as expected.
- The preliminary anticipated risks are associated with the unpredictability of the number and severity of future storm events that may affect the duration of the renourishment benefits estimated by the Beach-fx model. Previous nourishments performed as intended. During the Section 934 Study, the PDT will evaluate the risks associated with the project through a formal cost and schedule risk analysis which will determine the contingency applied to the base cost estimate. This process will fully analyze the potential risks to the project if it were to be extended and renourished for an additional 40 years of Federal participation.
- To date, the Governor for the State of Florida has not requested a peer review by independent experts.
- The intent of this 934 Report is to determine whether to extend Federal participation in cost sharing from the current 10 years to a 50-year period of Federal participation. For this reason:
    - The project will not be justified by life safety nor does it involve significant threat to human life / safety assurance.
    - The project is not likely to involve significant public dispute as to the size, nature, effects, or economic or environmental cost or benefit of the project.
    - The information in the decision document will not 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 project design is not anticipated to require redundancy, resiliency, robustness, unique construction sequencing, or a reduced or overlapping design construction schedule.

d. In-Kind Contributions. Products and analyses provided by non-Federal sponsors as in-kind services are subject to DQC, ATR, and IEPR. The Project Cooperation

Agreement allows the NFS to construct the project and be reimbursed for the Federal cost share. In-kind services are not relevant for this project.

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 DQC. Documentation of DQC activities will be in accordance with the Quality Manual of Jacksonville District and South Atlantic Division (CESAD) as follows:

a. Documentation of DQC. DQC will be documented via signatures on a "Statement of Completion of DQC" outlining the interim or final product and required DQC.

b. Products to Undergo DQC. The draft and final Integrated Section 934 Report and Environmental Assessment and associated appendices/attachments will undergo DQC consistent with the Jacksonville District and CESAD Quality Management plans.

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 and real estate. These team members will not have had direct involvement with the development of the 934 Report.

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 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 CESAD.

a. Products to Undergo ATR. The Draft Integrated Section 934 Report and Environmental Assessment and associated appendices/attachments will undergo ATR. The Final 934 Report will undergo an ATR consisting of backchecks to previous comments received to ensure appropriate revisions have been made to the report. The draft report and associated appendices/attachments, primarily the Cost Appendix, will undergo review by the Cost MCX as part of the ATR process.

b. Required ATR Team Expertise. An ATR Team Leader and nine (9) technical disciplines were determined to be appropriate for review of the preliminary draft report, including plan formulation, economics, environmental resources, coastal engineering, geotechnical engineering, civil engineering, cost engineering and real estate. All selected team members should have sufficient experience in conducting CSRM studies and projects. Reviewers will be from outside of the Jacksonville District, and the review lead will be from outside CESAD. The names, organizations, contact information, credentials, and years of experience of the ATR members will be included in Attachment 1 once the ATR team is established.

ATR Team Members/Disciplines	Expertise Required
ATR Lead	The ATR lead will be a senior professional with extensive experience in preparing Civil Works decision documents and conducting ATR. The lead will also have the necessary skills and experience to lead a virtual team through the ATR process. The ATR lead may also serve as a reviewer for a specific discipline (such as planning, economics, or environmental resources).
Plan Formulation	The Planning reviewer will be a senior water resources planner approved to perform ATR on CSRM studies with a minimum of 5 years of experience in HSDR projects.
Economics	The economics reviewer will be a senior water resources economist approved to perform ATR on CSRM studies with a minimum of 5 years of experience in CSRM projects, specifically with experience in application of Beach-fx.
Environmental Resources	The environmental reviewer will be approved to perform ATR on CSRM studies, be an expert in the field of environmental resources, and have a thorough understanding of NEPA, coastal ecosystems, and CSRM projects.

ATR Team Members/Disciplines	Expertise Required
Coastal Engineering	The coastal engineering reviewer will be an expert in the field of coastal engineering, have a minimum of 5 years of coastal engineering experience, and have a thorough understanding of CSRM projects, beach nourishment, SBEACH, GENESIS, STWAVE, Beach-fx modeling, and offshore borrow areas.
Geotechnical Engineering	The geotechnical engineering reviewer will be a senior engineer with a minimum of 5 years of experience in geotechnical issues associated with CSRM projects.
Civil Engineering	The civil engineering reviewer will be a senior civil engineer with a minimum of 5 years of experience in CSRM projects.
Cost Engineering	The cost engineering reviewer will be a senior cost engineer with a minimum of 5 years of experience in CSRM projects. This team member will be designated by the Cost MCX.
Real Estate	The Real Estate reviewer must have expertise in the real estate planning process for cost shared and full Federal civil works projects, relocations, report preparation and acquisition of real estate interests. The reviewer should have a full working knowledge of EC 405-2-12, Real Estate Planning and Acquisition Responsibilities for Civil Works Projects; the portions of ER 405-2-12 that are currently applicable; and Public Law 91-646. The reviewer will be able to identify areas of the Real Estate Plan that are not in compliance with the guidance set forth in EC 405-2-12 and make recommendations for bringing the report into compliance. All estates suggested for use must be termed sufficient to allow project construction, and the real estate cost estimate must be validated as being adequate to allow for real estate acquisition.
Risk Analysis	The risk analysis reviewer will be experienced with performing and presenting risk analyses in accordance with ER 1105-2-101 and other related guidance. This reviewer will be familiar with how information from the various disciplines involved in the analysis interact and affect the results.

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 when addressing incomplete or unclear information, ATR team members 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 (where 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 EC 1165-2-214, 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 draft report and final report. A sample Statement of Technical Review is included in Attachment 2.

In some situations, the Cost MCX may request a separate Cost ATR DrChecks be established. This allows for separate cost comments to be evaluated and closed upon resolution. Resolution of comments is typically considered to be complete upon providing final cost products. In some cases these products are not provided by the end of the primary study ATR. Establishing a separate Cost ATR DrChecks could prevent the delay in certification of the primary study ATR.

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 1165-2-214, 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 IEPRs 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 IEPRs, or Safety Assurance Reviews (SARs), 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 intent of this 934 Report is to evaluate whether to extend Federal participation in cost sharing from the current 10 years to a 50-year period of Federal participation, or an additional 40 years. Contemplated renourishments are intended to provide a +5 foot MLW design berm and to provide additional material to offset erosive losses between each subsequent renourishment.

Per EC 1165-2-214, paragraph 11.d.(1), Type I IEPR is mandatory if any of the specified criteria are met, which are each addressed below.

- 11.d.(1)(a), Significant threat to human life: The project will not be justified by life safety nor does it involve significant threat to human life/safety assurance. This criterion is not met.

- 11.d.(1)(b), The estimated total cost of the project, including mitigation costs, is less than $200 million. (The project cost trigger of $45 million stated in paragraph 11.d.(1)(b) was revised by Section 1044(a) of WRRDA 2014.) The total project cost estimate based upon the Current Working Estimate (CWE) is $83 million in Fiscal Year (FY) 2013 price levels (Total Project Cost Summary for FY 15 Economic Update). The estimated cost of the five remaining nourishments is $63 million. Therefore, the total project cost is well beneath the total project cost trigger. This criterion is not met.

- 11.d.(1)(e), The Governor of an affected State requests a peer review by independent experts: To date, the Governor of the State of Florida has not requested a peer review by independent experts. This criterion is not met.

- 11.d.(1)(d), The Director of Civil Works or the Chief of Engineers determines that the project study is controversial due to significant public dispute over either the size, nature, or effects of the project or the economic or environmental costs or benefits of the project: The project is not likely to involve significant public dispute as to the size, nature, effects, or economic or environmental cost or benefit of the project. This criterion is not met.

The Jacksonville District and South Atlantic Division reviewed EC 1165-2-214, Paragraph 15.d. and carefully considered the consequences of non-performance on project economics, the environment, and social well-being (public safety and social justice), and determined that the risks are negligible as described above. The study does not contain influential scientific information or a highly influential scientific assessment. The 934 Report is so limited in scope and/or impact that it would not significantly benefit from Type I IEPR and an exclusion from Type I IEPR in this instance is consistent with Section 2034(a)(5)(A) of the Water Resources Development

Act of 2007. On 8 Mar 16, , the U.S. Army Corps of Engineers Director of Civil Works concurred with these conclusions and granted a Type I IEPR Exclusion.

Per EC 1165-2-214, Appendix E, paragraph 2, Type II IEPR is required if the project would pose a significant threat to human life (public safety). The project will not be justified by life safety nor does it involve significant threat to human life/safety assurance. In addition, other factors to consider for conducting a Type II IEPR include:

- E-2a, The project involves the use of innovative materials or techniques where the engineering is based on novel methods, presents complex challenges for interpretations, contains precedent-setting methods or models, or presents conclusions that are likely to change prevailing practices. This factor is not met.
- E-2b, The project design requires redundancy, resiliency, and robustness. This factor is not met.
- E-2c, The project has unique construction sequencing or a reduced or overlapping design construction schedule. This factor is not met.

Based on the project as currently authorized, the Jacksonville District Chief of Engineering, as the Engineer-In-Responsible-Charge, does not recommend a Type II IEPR Safety Assurance Review of this project at this time. A risk-informed decision concerning the timing and the appropriate level of reviews for the project implementation phase will be prepared and submitted for approval in an updated Review Plan prior to initiation of the next periodic renourishment in the implementationphase of this project, if Federal participation is extended.

b. Products to Undergo Type I IEPR. Not applicable, as a Type I IEPR Exclusion was granted on 8 Mar 2016.

c. Required Type I IEPR Panel Expertise. Not applicable

d. Documentation of Type I IEPR. Not applicable.

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 report 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 AND ATR MANDATORY CENTER OF EXPERTISE (MCX) REVIEW AND CERTIFICATION

All decision documents shall be coordinated with the Civil Works Cost Engineering and Agency Technical Review Mandatory Center of Expertise (MCX) with Technical Expertise (TCX), located in the Walla Walla District. The MCX 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 MCX will also provide the Cost Engineering Certification for the Total Project Cost Summary. 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 Corps' Scientific and Engineering Technology (SET) initiative is provided in Enterprise Standard (ES)-08101 Software Validation for the Hydrology, Hydraulics and Coastal Community of Practice. 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 model is anticipated to be used in the development of the decision document: Beach-fx, a certified Corps-developed national model, to estimate storm damage reduction benefits for the study area over the period of analysis.

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

- SBEACH (Storm-induced BEAch CHange model), which simulates cross-shore beach, berm, and dune erosion produced by storm waves and water levels, will be used in conjunction with the Beach-fx planning model listed above.

- Currently, it is possible that the use of GENESIS and STWAVE will be required, but this will not be known for certain until the PDT determines data availability and appropriate modeling assumptions. GENESIS (GENEralized model for Simulating Shoreline Change) simulates the long-term platform evolution of the beach in response to imposed wave conditions, coastal structures, and other engineering activity (e.g., beach nourishment). STWAVE (STeady state spectral WAVE) simulates nearshore wind-wave growth and propagation.
- SBEACH, GENESIS and STWAVE are on the Science and Engineering Technology Program "Approved for Use" list.

10. REVIEW SCHEDULES AND COSTS

a. ATR Schedule and Cost. ATR will follow DQC of the draft report. The schedule for ATR is in the following table. The cost for ATR is currently estimated to be $30,000.

Task	Start Date	End Date
Cost and Schedule Risk Analysis / Total Project Cost Summary	08-26-2016	22-Sep-2016
Agency Technical Review (ATR) Conducted by PCX	08-Nov-2016	11-Jan-2017

b. Type I IEPR Schedule and Cost. Not applicable.

c. Model Certification/Approval Schedule and Cost. The planning economics model that will be utilized is Beach-fx, a certified Corps-developed national model. As stated in Section 9.b. above, the engineering models that will and/or might be used are on the Science and Engineering Technology Program "Approved for Use" list. No further model certification or approval is required.

11. PUBLIC PARTICIPATION

Pursuant to NEPA requirements (Part 11, ER 200-2-2), the draft 934 Report and draft Finding of No Significant Impact (FONSI) will be posted on the Jacksonville District website and made available for public and agency review and comment following ATR and cost certification and SAD Policy Review in a "Notice of Availability" (NOA) letter through a mass mailing to interested parties and stakeholders or press release. The NOA will include the Jacksonville District website location and will advise of availability of the draft report and draft FONSI on CD or hardcopy, as well. The NOA will also advise that the thirty-day comment period begins on the date stamped on the NOA. Significant public comments are not anticipated since the 934 Report is intended to evaluate whether to extend Federal participation in cost sharing from the current 10 years to a 50-year period of Federal participation, or an additional 40 years, and therefore is limited in scope. However, should any significant public comments be received that would require subsequent review, they will be provided to the appropriate review team in the "Charge to Reviewers", i.e. scope of the review. The final decision document and associated review reports will be posted on the Jacksonville District

website. If a determination is made during the review process that notification of the Final Report and FONSI is required for State and Agency review pursuant to ER 1105-2-100, Appendix H, paragraph H-5.c., appropriate notification will provided.

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 applicable) 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 Jacksonville District is responsible for keeping the Review Plan up to date. Minor changes to the review plan since the last SAD Commander approval will be documented in Attachment 3. Significant changes to the Review Plan (such as changes to the scope and/or level of review) will be approved by the SAD 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 Jacksonville District's webpage. The latest Review Plan will also be provided to the RMO and CESAD.

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, 904-232-1458
- South Atlantic Division: Senior Plan Formulator, (404) 562-5226
- Planning Center of Expertise: Deputy, National Planning Center of Expertise for Coastal Storm Risk Management, (347) 370-4571

ATTACHMENT 1: TEAM ROSTERS

JACKSONVILLE DISTRICT PDT MEMBERS

	Project Manager
	Plan Formulation
	Economic Analysis
	Environmental Analysis
	Engineering (Waterways Design)
	Cost Engineering
	Coastal Engineering
	Real Estate Evaluation
	Cultural Resources
	Legal Evaluation

ATR TEAM MEMBERS TO BE DESIGNATED BY THE PCX-CSDR (designation will include credentials and years of experience when available)

VERTICAL TEAM, INCLUDING RMO (PCX-CSDR in this case), MSC, RIT, OEO (team members will be added as they are identified through the approval process of this Review Plan)

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[sm].

SIGNATURE _____ _____

Name Date
ATR Team Leader
Office Symbol/Company

SIGNATURE _____ _____

Name Date
Project Manager
Office Symbol

SIGNATURE _____ _____

Name Date
Architect Engineer Project Manager[1]
Company, location

SIGNATURE _____ _____

Name Date
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 _____ _____

Name Date
Chief, Engineering Division
Office Symbol

SIGNATURE _____ _____

Name Date
Chief, Planning Division
Office Symbol

[1] Only needed if some portion of the ATR was contracted

ATTACHMENT 3: REVIEW PLAN REVISIONS

Revision Date	Description of Change	Page / Paragraph Number

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
441 G STREET, NW
WASHINGTON, DC 20314-1000

REPLY TO
ATTENTION OF

CECW-SAD

MAR 0 8 2016

MEMORANDUM FOR COMMANDER, SOUTH ATLANTIC DIVISION

SUBJECT: Lee County, Gasparilla Island, Florida, Hurricane and Storm Damage Reduction (HSDR) Section 934 Report and Environmental Assessment (EA) – Independent External Peer Review (IEPR) Exclusion Request

1. The Lee County, Gasparilla Island, Florida, HSDR Project Section 934 Report with EA is intended to provide the basis for extension of federal participation in cost sharing from the current 10 years to a 50-year period of federal participation, or an additional 40 years. In accordance with Section 2034 of the Water Resources Development Act (WRDA) of 2007, as amended, HQUSACE has reviewed your request to exclude the study from Type I IEPR.

2. The potential project is not controversial and the study will not involve preparation of an Environmental Impact Statement. There has not been a request for IEPR from the governor of an affected state or the head of a federal or state agency. The estimated cost of the project is $83 million. The project formulation is not based on novel methods; does not present complex challenges for interpretation; does not contain precedent-setting methods or models; or present conclusions that are likely to change prevailing practices. The proposed project involves only the continuation of project re-nourishment within the same footprint and for the same purpose as the authorized project and there is ample experience within USACE and the industry to consider the activity as being routine, with expected minimal life safety risk assuming continued viability of the federal project. Based on applicable laws and policy, the request for exclusion is approved.

3. Questions or concerns should be directed to [redacted], Deputy Chief, South Atlantic Division Regional Integration Team, at (202) 761-4106.

[redacted]
Director of Civil Works