



REPLY TO
ATTENTION OF

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

15 FEB 2013

CESAD-PDP

MEMORANDUM FOR COMMANDER, Savannah District (CESAS-PD/W. Bailey)

SUBJECT: Approval Request - Limited Reevaluation Report Tybee Island, GA, 2015
Renourishment, Review Plan

1. References:

- a. Memorandum, CESAS-PD, 07 December 2012, subject as above.
- b. EC 1165-2-209, Civil Works Review Policy, 31 January 2010.
- c. EC1165-2-214, Civil Works Review, 15 December 2012.

2. The enclosed Review Plan for the Tybee Island Limited Reevaluation Report has been prepared in accordance with Engineer Circular (EC) 1165-2-209. The Review Plan has been coordinated with the National Coastal Storm Damage Reduction Planning Center of Expertise (CSDRPCX) of the North Atlantic Division (NAD), which is the lead office to execute this plan. For further information, please contact the CSDRPCX at (347) 370-4571. The Review Plan does not include independent external peer review.

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 revisions to this Review Plan after 31 January 2013 or its execution will require new written approval from this office in accordance with the new EC 1165-2-214, Civil Works Review. 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 CSDRPCX for their use. Before posting to the website, the names of Corps employees should be removed.

4. If you have any questions, please contact Mr. Patrick O'Donnell at (404) 562-5226.

DONALD E. JACKSON, JR.
COL, EN
Commanding

Encl

Rec'd 11 Dec 2012



REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
SAVANNAH DISTRICT, CORPS OF ENGINEERS
100 W. OGLETHORPE AVENUE
SAVANNAH, GEORGIA 31401-3640

DEC 07 2012

CESAS-PD

MEMORANDUM FOR Commander, South Atlantic Division, (ATTN: Wilbert Paynes, CESAD-PDP) 60 Forsyth Street, RM 10M15, Atlanta, Georgia 30303

SUBJECT: Approval Request – Limited Reevaluation Report Tybee Island, GA, 2015 Renourishment, Review Plan

1. Enclosed for your review and approval is the revised Review Plan (RP) for the Limited Reevaluation Report (LRR) 2015 Renourishment for Tybee Island, GA. This revised RP is in accordance with the e-mail sent from SAD dated December 5th, 2012 which states that “Based on what HQ provided on the Martin County beach renourishment project, SAD view is that IEPR exclusion request to HQ is not required. You have reached the point where you know that you do not need to reformulate the project such that a modification of the authority is required, the project will use the same footprint and you will use the same borrow site for the periodic renourishment.”
2. This RP defines the scope and level of peer review for the Tybee LRR project decision document. The LRR includes an Environmental Assessment (EA). It will be prepared in accordance with ER1105-2-100.
3. Please direct any questions or comments related to this work effort to Monica Simon-Dodd, Plan Formulator, at (912) 652-5375.

Enclosures

A handwritten signature in cursive script that reads "William G. Bailey".

William G. Bailey
Chief, PD

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|---------------------------------------------|-----------------------------------|------------------------------------|
| STAFF ACTION SUMMARY HQSAD | Control #: <i>20130215-003</i> | Suspense Date: 01 February 2013 |
|---------------------------------------------|-----------------------------------|------------------------------------|

Subject: Updated Review Plan for Tybee Island, GA, Limited Reevaluation Report and EA

| | | |
|---------------------------|------------------------------|------------------------|
| Office Symbol: <i>PDP</i> | Action Officer: O'DONNELL | Telephone #: 2-5226 |
|---------------------------|------------------------------|------------------------|

| | | | | |
|--------------------|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|------------------------------------------------------|
| Routing: <i>CS</i> | <input checked="" type="checkbox"/> <i>EA</i> | <input checked="" type="checkbox"/> <i>DO</i> | <input checked="" type="checkbox"/> <i>OC</i> | <input checked="" type="checkbox"/> <i>Signature</i> |
|--------------------|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|------------------------------------------------------|

For: Information Decision Resource Impact Approval Signature

Purpose: Approval of Updated Review Plan

Background: SAS has requested SAD approval of the attached Updated Review Plan for Tybee Island, GA, LRR and EA. The review plan was approved 09 November 2012. This updated review plan changes a few sentences based on policy guidance SAD provided them on periodic renourishment documents for coastal storm damage reduction projects and IEPR determinations.

** I have reviewed the comments from OC (dated 5 Feb 13) and concur with the changes made to address OC comments.*
W. Paynes 2/11/13

Releaser: O'DONNELL, Patrick, released 02Nov2012.

Recommendation:

| | | | |
|---------|------------------------------------|----------------------------------|---------------------------------|
| Action: | Approved: <input type="checkbox"/> | See Me: <input type="checkbox"/> | Other: <input type="checkbox"/> |
|---------|------------------------------------|----------------------------------|---------------------------------|

| Coordination | | | |
|------------------------------|-----------------------|------------------|------------------|
| Staff Element | Name | Concur/Nonconcur | Date |
| PDP | Bailey <i>HB</i> | <i>Concur</i> | <i>25 Jan 13</i> |
| PDP | O'Donnell <i>PSP</i> | <i>Concur</i> | <i>25 Jan 13</i> |
| PDP <i>2/11/13 see above</i> | Paynes <i>WIP</i> | <i>Concur</i> | <i>1/30/13</i> |
| PDR | Hallstrom <i>PH</i> | <i>Concur</i> | <i>2/4/13</i> |
| PDO | Whittington <i>PH</i> | <i>Concur</i> | <i>2/4/13</i> |
| RBT | Smith <i>CS</i> | <i>Concur</i> | <i>5 Feb 13</i> |
| OC | Purcell <i>PH</i> | <i>Concur</i> | <i>5 Feb 13</i> |
| PDC | McCarthy <i>PH</i> | <i>Concur</i> | <i>5 Feb 13</i> |
| PD | Dixon <i>PH</i> | <i>OK</i> | <i>2/12</i> |
| PD | Bridges | <i>and LRP</i> | |

Pat will address the revision date. I defer to Planning's path forward on the larger PUMP/EP issues I raised. (Talked w/ Pat)

The USC Approval date would be 9 Nov 12(?) + on 2/11/13 revision date pending. Please verify SAD's position on this.

**REVIEW PLAN
for**

**LIMITED REEVALUATION REPORT
TYBEE ISLAND BEACH EROSION CONTROL PROJECT, GEORGIA
2015 RENOURISHMENT**

Savannah District

P2# 113002

**MSC Approval Date: 15 February 2013
Last Revision Date: February 2013**



**US Army Corps
of Engineers ®**

REVIEW PLAN

**LIMITED REEVALUATION REPORT
TYBEE ISLAND BEACH EROSION CONTROL PROJECT, GEORGIA
2015 RENOURISHMENT**

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1. PURPOSE AND REQUIREMENTS

a. Purpose. This Review Plan (RP) defines the scope and level of peer review for the Limited Reevaluation Report (LRR) for a 2015 renourishment of the Tybee Island Beach Erosion Control Project.

b. Applicability. This RP is applicable to the Tybee LRR, its accompanying Draft Environmental Assessment, and the technical models used in the analyses.

c. References

- (1) Engineering Circular (EC) 1165-2-209, Civil Works Review Policy, 31 Jan 2010
- (2) EC 1105-2-412, Planning: 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) CECW-SAD Memorandum, Subject: Martin County, FL, draft Limited Reevaluation Report (LRR): Request for exclusion from Type I Independent External Peer Review (IEPR), 15 Feb 2011

d. Requirements. This RP 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).

e. HQUSACE guidance directs that the study follow the 3x3x3 rule: "One of the transformation initiatives is Planning Modernization, which includes an effort to streamline the Civil Works planning process. To ensure an expedited, economical and focused study process, a 3x3x3 rule has been established, where studies are limited to 3 years and \$3 Million, with 3-levels of vertical team integration (District, Division and Headquarters)...". Savannah District will ensure that the study follows the 3x3x3 rule and that the vertical team coordination includes the Savannah District and South Atlantic Division (CESAD).

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 this LRR for renourishment of Tybee Island is the Coastal Storm Damage Reduction Planning Center of Expertise (CSDR-PCX).

3. PROJECT BACKGROUND

a. Study Document. This Limited Reevaluation Report (LRR) is not considered to be a decision document, for the purposes of determining independent review requirements since the purpose is simply to verify the economics of the remaining periodic nourishments for the Tybee Island Beach Erosion Control project. The document is to be approved at the Major Subordinate

Command level, by the South Atlantic Division (SAD), and additional Congressional Authorization is not expected to be required. The purpose of the LRR is to verify continued economic justification of the renourishment, document continued environmental compliance of the project, and verify that the project has not exceeded its Section 902 limits. The LRR for the 2015 renourishment of the Tybee Island Erosion Control Project is a Post Authorization Change study and will include an updated Environmental Assessment (EA). It will be prepared in accordance with ER 1105-2-100.

b. Authorization. The original Federal Tybee Island Beach Erosion Control Project was authorized in June 1971 by Senate and House resolutions pursuant to Section 201 of the Flood Control Act of 1965 (Public Law 89-298), as presented in House Document No. 92-105, for a life of 10 years. Section 201 provided a procedure for authorization of projects with, at that time, an estimated Federal first cost of construction of less than \$10 million. The authorizing language reads as follows:

“RESOLVED BY THE COMMITTEE ON PUBLIC WORKS OF THE UNITED STATES SENATE, That pursuant to the provisions of Section 201 of Public Law 298, Eighty-ninth Congress, (79 Stat. 1073; 42 U.S.C. 1962d-5) the project providing for beach erosion control on Tybee Island, Georgia, is hereby approved substantially in accordance with the recommendations of the Secretary of the Army and the Chief of Engineers in House Document Numbered 105, Ninety-second Congress, at an estimated cost of \$404,000.”

The authority for Federal participation in periodic renourishment of beach projects was increased from 10 years to 15 years by Section 156 WRDA 1976, which reads as follows:

“The Secretary of the Army, acting through the 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 periods as he determines necessary but in no event shall such additional period extend beyond the fifteenth year which begins after the date of initiation of construction of such project.”

Section 934 of WRDA 1986 modified Section 156 of WRDA 1976 by extending the authority for Federal participation in periodic renourishment from 15 years to 50 years and reads as follows:

“Section 156 of the Water Resources Development Act of 1976 (42 U.S.C. 1962d-5f) is amended by striking out "fifteenth" and inserting in lieu thereof "fiftieth.”

Following the passage of WRDA 1986, a “Section 934” report was prepared which concluded that the authorized Federal project for Tybee Island was economically feasible under the current policy and economic guidelines, and the project should be extended for the remaining life of 30 years (from 1994). The study was initiated in 1990, completed in October 1994 and approved in June 1995. Accordingly, the project life of the Tybee Island Project started in September 1974, with initiation of construction of the North Terminal Groin, and ends September 2024.

The Tybee Island Project was further modified by Section 301(b)(4) of WRDA 1996, which amended the authorized project as follows:

“The project for beach erosion control, Tybee Island, Georgia, authorized pursuant to section 201 of the Flood Control Act of 1968 (42 U.S.C. 1962d-5; 79 Stat. 1073-1074), is modified to include as an integral part of the project the portion of Tybee Island located south of the existing south terminal groin between 18th and 19th Streets, including the east bank of Tybee Creek up to Horse Pen Creek.”

By letter dated 14 March 1997, Headquarters, U.S. Army Corps of Engineers (HQUSACE) authorized a study to determine if the South Tip Beach and Tybee Creek up to Horse Pen Creek should be added to the authorized Tybee Island Beach Erosion Control Project. The “Special Report on South Tip Beach/Tybee Creek” was completed in May 1998 in response to this authority and was approved by HQUSACE in August 1998. The existing Tybee Island project was modified to include South Tip in Section 301 of WRDA 1996. The report recommended extending the southern limits of the authorized project for an additional 1,100 feet to provide protection for structures along the South Tip and another 1,800 feet to provide protection to the northern bank of the Back River/Tybee Creek. Another name for Tybee Creek is Back River. Both names are used throughout this report due to the long history of addressing this area by both names.

Study Description. Tybee Island is a 3.5-mile long barrier island, located 18 miles east of Savannah at the mouth of the Savannah River on the Atlantic Ocean. The highly developed island is bordered on the north by the South Channel of the Savannah River, on the east by the Atlantic Ocean, and on the south and west by the Back River and other tidal creeks. Tybee Island has an average width of 0.5 miles and the ground elevation varies from 10 to 18 feet above mean low water (MLW) and slopes westward to the salt marshes.

The authorized project for Tybee Island consists of nourishment of 13,200 linear feet of beach between two groins (referred to as Oceanfront Beach); construction of a groin field along 1,100 linear feet of shoreline from the southern terminal groin around the South Tip to the mouth of Tybee Creek (also known as Back River) including periodic nourishment (referred to as South Tip Beach); and construction of a groin field and nourishment of 1,800 linear feet of the eastern bank of Tybee Creek to the city fishing pier (referred to as Back River Beach). The remaining shoreline from the fishing pier to the mouth of Horse Pen Creek, although included in the authorizing language of WRDA 1996, is relatively stable at this time and no hurricane and storm damage protection measures have been constructed in this reach.

It is anticipated that Borrow Area #4 will be used for the 2015 renourishment. This borrow site is 5,000 feet southeast of the southern tip of Tybee Island. This borrow area was used for the 1994 and 2008 renourishments, although it was expanded to provide sufficient material. The PDT will confirm that adequate material is located within the expanded area for the 2015 renourishment.

Study Purpose. The purpose of this Limited Reevaluation Report (LRR) is to evaluate the project under current policies, criteria, and guidelines and to document the economic justification of renourishing the Tybee Island beach under authority of Tybee Island Project for beach erosion control, hurricane & coastal storm damage reduction, and related purposes. Additionally, the EA will be updated to reflect current conditions.

4. REVIEWS

EC 1165-2-209 describes four general levels of review: District Quality Control/Quality Assurance (DQC), Agency Technical Review (ATR), Independent External Peer Review (IEPR) Type I and Type II, and Policy and Legal Compliance Review. In addition to these levels of review, study documents are subject to cost engineering review and certification.

a. District Quality Control (DQC)

District Quality Control is an internal review process of basic science and engineering work products focused on fulfilling the project quality requirements. All work products undergo DQC. Basic quality control tools include quality checks and reviews, supervisory reviews, and Project Delivery Team (PDT) reviews. The home district is responsible for managing the DQC.

Quality checks and reviews occur during the development process and are carried out as a routine management practice. Quality checks may be performed by staff responsible for the work, such as supervisors, work leaders, team leaders, designated individuals from the senior staff, or other qualified personnel. However, they should not be performed by the same people who performed the original work, including managing/reviewing the work in the case of contracted efforts.

PDT reviews are performed by members of the PDT to ensure consistency and effective coordination across all project disciplines. Additionally, the PDT is responsible for a complete reading of any reports and accompanying appendices prepared by or for the PDT to assure the overall coherence and integrity of the report, technical appendices, and the recommendations before approval by the District Commander.

A DQC review is a standard requirement for all studies. All DQC comments will be formally answered in a normal comment/response format and compiled together. The DQC comments and responses and the back-check will be provided to the ATR team and will become a permanent part of the study documentation.

b. Agency Technical Review(ATR)

The objective of the 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 study. The CSDR-PCX will select the ATR team members except for the cost engineer. The Cost Engineering Directory of Expertise (DX), located in the Walla Walla District, will provide the cost engineering review and resulting certification. A Plan Formulation Regional Technical Specialist (RTS) will be the lead in addition to performing the Plan Formulation review, and will certify the ATR. As stipulated in ER 1110-1-12, ATR members are sought from the following disciplines and sources: regional technical specialists (RTS); appointed subject matter experts (SME) from other districts; senior level experts from other districts; Center of Expertise staff, appointed SME or senior level experts from the responsible district; experts from other USACE commands; contractors; academic or other technical experts; or a combination of the above. The ATR lead will be from outside the home MSC.

Products to Undergo ATR. During the planning process, the draft LRR and EA and final LRR and EA will undergo ATR.

Required ATR Team Expertise. The ATR reviewers' objective is to develop, maintain, and apply the best and most appropriate nationally available expertise, science, and engineering technology. The ATR team will be comprised of personnel from following disciplines:

(1) ATR Lead- The ATR lead must be a senior professional preferably with experience in coastal projects and conducting ATRs. The ATR lead must have a minimum of 5 years experience in Corps civil works. Typically, the ATR lead will also serve as a reviewer for a specific discipline (such as planning, economics, environmental etc). The ATR lead MUST be from outside Savannah District's MSC. At this time, it is anticipated that the lead ATR will also be the lead planner.

(2) Plan Formulator – The Plan formulator must have recent experience in conducting the plan formulation process for Beach renourishment projects and have a minimum of 5 years experience as a Plan formulator.

(3) Economist – The ATR team member must be an Economist and have recent experience with coastal projects and renourishment.

(3) Environmental/Biologist - The ATR team member will review the Environmental Assessment (EA). This person must also review the EA from a cultural resources standpoint. They must also have a good understanding of coastal projects and renourishments, and have a thorough understanding of coordination requirements with federal and state agencies.

(4) Hydraulics and Hydrology – This ATR member must have a minimum of 10 years relative experience in coastal projects and be a register professional engineer with a good understanding of coastal projects and renourishments and have a thorough understanding of coordination requirements with federal and state agencies.

(5) Cost Estimator- Team member(s) should be familiar with the most recent version of MII software and total project cost summary. The Cost Reviewer is required to coordinate with the Walla Walla Cost Dx staff for further cost engineering review and resulting certification.

(6) The Real Estate reviewer is to 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 including Coastal Storm Damage Reduction projects. The reviewer should have a full working knowledge of EC 405-2-12, Real Estate Planning and Acquisition Responsibilities for Civil Works Projects and Public Law 91-646. The reviewer should be able

to identify areas of the REP that are not in compliance with the guidance set forth in EC405-2-12 and should make recommendations for bringing the report into compliance. All estates suggested for use should be reviewed to assure they are sufficient to allow project construction, and the real estate cost estimate should be validated as being adequate to allow for real estate acquisition.

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 to address 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 (the vertical team includes the district and MSC), 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 1110-2-12 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 their 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.

The ATR will 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 prior to the MSC review.

c. Independent External Peer Review (IEPR) Process

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. An 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, will be 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.

Based on the guidance provided by HQUSACE in the attached memo, Type I IEPR is not required for this LRR and EA. POSSIBLE INCLUSION SIMILAR TO DADE COUNTY LRR: Reference CECW-SAD Memorandum Subject: *Martin County, Florida draft Limited Reevaluation Report (LRR): Request for exclusion from Type 1 Independent External Peer Review (IEPR), dated Feb 15, 2011*. This memorandum discusses that an LRR does not trigger the need for an IEPR unless “verification of the project economics or the NEPA update ultimately result in the need to reformulate the project such that a modification of the authority is required. If the LRR determines additional project authorization is required then, a risk-informed decision regarding the conduct of the IEPR or the possibility of exclusion from IEPR would then need to be evaluated.” Therefore, per guidance in EC 1165-2-209 this LRR is considered an “Other Work Product” and Type I IEPR is not proposed for this project.

For this study, the PDT reviewed the mandatory triggers that warrant Type I IEPR and reached the following conclusions were reached:

- The project does not involve a significant threat to human life/safety assurance;
- The total project cost is less than \$45 million; to date, the cumulative cost of this project, including all renourishments, is \$28,085,815.30.
- There is no request by the Governor of an affected state for a peer review by independent experts;
- The project does not require an Environmental Impact Statement (EIS),
- The project/study is not likely to involve significant public dispute as to the size, nature, or effects of the project;
- The project/study is not likely to involve significant public dispute as to the economic or environmental cost or benefit of the project;
- The information in the study document or anticipated 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; and
- The project design is not anticipated to require redundancy, resiliency, and/or robustness, unique construction sequencing, or a reduced or overlapping design construction schedule.

Type II IEPR. Type II IEPRs, or Safety Assurance Reviews (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 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 consider the adequacy, appropriateness, and acceptability of the design and construction activities in assuring public health safety and welfare. The District Chief of Engineering, as the Engineer-in-Responsible-Charge, does not recommend a Type II IEPR Safety Assurance Review since the project does not require design and construction activities and present no significant threat to human life. Failure of the project, as currently envisioned, will not pose a significant threat to human life. Therefore, a Type II IEPR is not planned at this time. A risk-informed decision concerning the timing and 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 design/implementation phase of this project.

d. Policy and Legal Compliance Reviews

Documents will be reviewed throughout the project development process for their compliance with law and policy. 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.

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

All study 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.

6. ENGINEERING AND PLANNING MODELS

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. 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.** No economic models are anticipated to be used.
- b. **Engineering Models.** The following engineering models are anticipated to be used in the renourishment:
 - Micro-Computer Aided Cost Estimating System (MCACES), Second Generation (Mil), 4.1;
 - Abbreviated Risk Analysis Spreadsheet maintained by USACE Cost Center of Expertise, Walla Walla, Washington;
 - Bentley InRoads, V8i;

- MicroStation V8i; and
- Corps of Engineers Dredge Estimating Program (CEDEP).

7. REVIEW SCHEDULES AND COSTS

a. ATR and IEPR Schedule and Cost.

The following table shows the present schedule for the ATR reviews and their estimated costs.

| Project Element | Type of Review | Approximate Date | Appropriate Cost |
|-------------------------|-----------------------|--------------------------|-------------------------|
| Draft LRR and EA | ATR | 1/15/13 –1/29/13 | \$14,000 |
| Final LRR and EA | ATR | 4/25/13 – 5/15/13 | \$20,000 |

8. PUBLIC PARTICIPATION

The District is responsible for providing an opportunity for public comments and for considering those comments in the final and draft reports.

State and Federal resource agencies will be invited to participate in the study covered by this Review Plan as partner agencies or as technical members of the PDT, as appropriate. Agencies with regulatory review responsibilities will be contacted for coordination as required by applicable laws and procedures.

The public and State and Federal natural resource agencies will be provided the draft report for comment. When the draft reports are available for review by the public, joint public notices will be sent out to the public residing in the general project area and to the individuals, organizations and agencies that are on the Savannah District Regulatory mailing list. Notices will be published in the newspaper. The PDT will consider all public comments as it prepares the report.

9. REVIEW PLAN APPROVAL AND UPDATES

The South Atlantic Division Commander is responsible for approving this RP. This RP is a living document and may change as the project progresses. The Savannah District is responsible for keeping the RP current. Minor changes to the RP since the last South Atlantic Division Commander approval will be documented and included in the latest RP. Significant changes to the RP (such as changes to the scope and/or level of review) must be re-approved by the South Atlantic Division Commander following the process used for initially approving the Plan. The latest version of the RP, along with the Commanders’ approval memorandum, will be posted on the home District’s webpage.

10. REVIEW PLAN POINTS OF CONTACT

Public questions and/or comments on this RP can be directed to the following points of contact: Savannah District Project Manager, at (912) 652-5214; and the South Atlantic Division Planning Manager at (404) 562-5228.

ATTACHMENT 1

TEAM ROSTERS

PROJECT DELIVERY TEAM

| | | | |
|-------------------|------------------|---------------|---------------|
| Priya Desai | Project Manager | CESAS-OP-N | (912)652-5214 |
| Monica Simon-Dodd | Plan Formulator | CESAS-PD | (912)652-5375 |
| Jeff Morris | Economist | CESAS-PD | (912)652-5008 |
| Ellie Covington | Biologist | CESAS-PD | (912)652-5578 |
| Carol Abercrombie | Project Engineer | CESAS-EN-H | (912)652-5514 |
| Elliot Roughen | Cost Engineer | CESAW-EN-ET | (912)652-5663 |
| John Hinely | Real Estate | CESAS-RE-AP | (912)652-5207 |
| Diane Schleicher | City Manager | City of Tybee | (912)786-4573 |
| Jason Buelterman | Mayor | City of Tybee | (912)786-4573 |

MAJOR SUBORDINATE COMMAND

| | | | |
|----------------|-----------------------------|-----------|---------------|
| Kenitra Myles | Plan Formulator | CESAD-PDP | (404)562-5229 |
| Terry Stratton | Economist & Plan Formulator | CESAD-PDP | (404)562-5228 |

*Once selected, the ATR team will be added in the next revision of the 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 2013 LRR for the Tybee Island Beach Erosion Control Project, Georgia. 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, using 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 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

Priya Desai, Project Manager, Savannah District

PM-CM

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

Gordon Simmons, P.E.
Chief, Engineering Division (home district)
EN

Date

SIGNATURE

William Bailey, P.E.
Chief, Planning Division (home district)
PD

Date

¹ Only needed if some portion of the ATR was contracted

ATTACHMENT 3

ACRONYMS AND ABBREVIATIONS

| <u>Term</u> | <u>Definition</u> | <u>Term</u> | <u>Definition</u> |
|-------------|-----------------------------------------------------------------|-------------|---------------------------------------|
| | | | |
| ATR | Agency Technical Review | QMP | Quality Management Plan |
| CSDR-PCX | Coastal Storm Damage Reduction Planning Center of Expertise | QA | Quality Assurance |
| | | QC | Quality Control |
| DQC | District Quality Control/Quality Assurance | RP | Review Plan |
| DX | Directory of Expertise | | |
| EA | Environmental Assessment | RMO | Review Management Organization |
| EC | Engineer Circular | RTS | Regional Technical Specialist |
| EIS | Environmental Impact Statement | SAR | Safety Assurance Review |
| HH&CoP | Hydraulics and Hydrology and Coastal community Practice | SET | Scientific and Engineering Technology |
| HQUSACE | Headquarters, U.S. Army Corps of Engineers | SME | Subject Matter Experts |
| IEPR | Independent External Peer Review | USACE | U.S. Army Corps of Engineers |
| LRR | Limited Reevaluation Report | WRDA | Water Resources Development Act |
| MSC | Major Subordinate Command | | |
| NEPA | National Environmental Policy Act | | |
| OMRR&R | Operation, Maintenance, repair, replacement, and rehabilitation | | |
| PCX | Planning Center of Expertise | | |
| PDT | Project Delivery Team | | |
| PAC | Post Authorization Change | | |
| PMP | Project Management Plan | | |
| PL | Public Law | | |
| | | | |