**DEPARTMENT OF THE ARMY**
**NORTH ATLANTIC DIVISION, US ARMY CORPS OF ENGINEERS**
**FORT HAMILTON MILITARY COMMUNITY**
**BROOKLYN, NEW YORK 11252-6700**

REPLY TO
ATTENTION OF

NOV 23 2010

CENAD-PSD-PP

MEMORANDUM FOR Chief, Civil Integration Division, ATTN: CENAD-PD-CID-S

SUBJECT: Review Plan Approval for Saco River and Camp Ellis Beach Shore Damage Mitigation Section 111 Project, Saco, Maine

1. The attached Review Plan for the subject study has been prepared in accordance with EC 1165-2-209, Civil Works Review Policy.

3. The Review Plan has been coordinated with the Coastal Storm Damage Reduction Planning Center of Expertise of the North Atlantic Division, which is the lead office to execute this plan. For further information, contact Mr. Larry Cocchieri at 347-370-4571. The Review Plan does not include independent external peer review, as this is not required for Continuing Authorities Program Section 111 projects.

4. I hereby approve this Review Plan, which is subject to change as study circumstances require, consistent with study development under the Project Management Business Process. Subsequent revisions to this Review Plan or its execution will require new written approval from this office.

Encl

for Joseph R. Vietri
Chief, Planning & Policy Division
Programs Directorate

**Continuing Authorities Program**
**Section 111, Rivers and Harbors Act of 1968, as amended**
**Mitigation of Damages Caused by Federal Navigation Projects**

# DRAFT DECISION DOCUMENT REVIEW PLAN

***SACO RIVER AND CAMP ELLIS BEACH***
***SHORE DAMAGE MITIGATION PROJECT***
***SACO, MAINE***

***New England District***

**MSC Approval Date: Nov 23, 2010**
**Last Revision Date:** None

US Army Corps
of Engineers ®

**NATIONAL PROGRAMMATIC REVIEW PLAN**

**Section 111, Rivers and Harbors Act of 1968, as amended**
**Mitigation of Damages Caused by Federal Navigation Projects**

**SACO RIVER AND CAMP ELLIS BEACH, SACO, MAINE**

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## 1. PURPOSE AND REQUIREMENTS

**a. Purpose.** This Review Plan defines the scope and level of peer review for the Saco River and Camp Ellis Beach, Saco, Maine Mitigation of Damages Caused by Federal Navigation Projects decision document developed under Rivers and Harbors Act of 1968, as amended.

Section 111 of the Rivers and Harbors Act of 1968, as amended, authorizes the US Army Corps of Engineers (USACE) to investigate, study, plan and implement measures (structural or nonstructural) to prevent or mitigate damage to shorelines attributable to Federal navigation projects. The Continuing Authorities Program (CAP) focuses on water resource related projects of relatively smaller scope, cost and complexity. Traditional USACE civil works projects are of wider scope and complexity and are specifically authorized by Congress. The Continuing Authorities Program is a delegated authority to plan, design, and construct certain types of water resource and environmental restoration projects without specific Congressional authorization. The Federal share of costs for any one Section 111 project may not exceed $5,000,000. Section 3085 of WRDA 2007 authorized a project limit of $26,900,000 under Section 111 for the Saco River and Camp Ellis Beach, Saco, Maine project.

**b. Applicability.** This review plan is based on the model National Programmatic Review Plan for Section 111 project decision documents, which is applicable to projects that do not require Independent External Peer Review (IEPR), as defined in EC 1165-2-209 Civil Works Review Policy. A Section 111 project does not require IEPR if <u>ALL</u> of the following specific criteria are met:

- The project does not involve a significant threat to human life/safety assurance;
- The total project cost is less than $45 million;
- 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 is not likely to have significant economic, environmental, and/or social effects to the Nation;
- The project/study is not likely to have significant interagency interest;
- The project/study is not likely highly controversial;
- The decision document is not likely to contain influential scientific information or be a highly influential scientific;
- The information in the decision document or proposed 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 has not been deemed by the USACE Director of Civil Works or Chief of Engineers to be controversial nature.

If any of the above criteria are not met, the model National Programmatic Review Plan is not applicable and a study specific review plan must be prepared by the home district, coordinated with the Planning Center of Expertise for Coastal Storm Damage Reduction (PCX-CSDR) and approved by the home Major Subordinate Command (MSC) in accordance with EC 1165-2-209.

Applicability of the model National Programmatic Review Plan for a specific project is determined by the home MSC. If the MSC determines that the model plan is applicable for a specific study, the MSC Commander may approve the plan (including exclusion from IEPR) without additional coordination with the PCX-CSDR or Headquarters, USACE. The initial decision as to the applicability of the model plan should be made no later than the Federal Interest Determination milestone (as defined in Appendix F of ER 1105-2-100, F-10.e.1) during the feasibility phase of the project. In addition, the home district and MSC should assess at the Alternatives Formulation Briefing (AFB) whether the initial decision on the use of the model plan is still valid or if a project specific review plan should be developed based on new information. If a project specific review plan is required, it must be approved prior to execution of the Feasibility Cost Sharing Agreement (FCSA) for the study.

This review plan does not cover implementation products. A review plan for the design and implementation phase of the project will be developed prior to approval of the final decision document in accordance with EC 1165-2-209.

**c. References**

(1) Engineering Circular (EC) 1165-2-209, Civil Works Review Policy, 31 Jan 2010
(2) EC 1105-2-412, Assuring Quality of Planning Models, xxx 2010
(3) Engineering Regulation (ER) 1110-1-12, Quality Management, 30 Sep 2006
(4) ER 1105-2-100, Planning Guidance Notebook, Appendix F, Continuing Authorities Program, Amendment #2, 31 Jan 2007
(5) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007

**d. Requirements.** This programmatic review plan was developed in accordance with EC 1165-2-209, which establishes an accountable, comprehensive, life-cycle review strategy for Civil Works products by providing a seamless process for review of all Civil Works projects from initial planning through design, construction, and operation, maintenance, repair, replacement and rehabilitation (OMRR&R). The EC outlines four general levels of review: District Quality Control/Quality Assurance (DQC), Agency Technical Review (ATR), Independent External Peer Review (IEPR), and Policy and Legal Compliance Review. In addition to these levels of review, decision documents are subject to cost engineering review and certification (per EC 1165-2-209) and planning model certification/approval (per EC 1105-2-412).

(1) District Quality Control/Quality Assurance (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 home district shall manage DQC. Documentation of DQC activities is required and should be in accordance with the Quality Manual of the District and the home Major Subordinate Command (MSC).

(2) 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 US Army Corps of Engineers (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 a 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.

For decision documents prepared under the model National Programmatic Review Plan, the leader of the ATR team shall be from outside the home district, but may be from within the home MSC.

(3) Independent External Peer Review (IEPR). IEPR may be required for decision documents under certain circumstances. IEPR is the most independent level of review, and is applied in cases that meet certain criteria where the risk and magnitude of the proposed project are such that a critical examination by a qualified team outside of USACE is warranted. A risk-informed decision, as described in EC 1165-2-209, is made as to whether IEPR is appropriate. IEPR panels will consist of independent, recognized experts from outside of the USACE in the appropriate disciplines, representing a balance of areas of expertise suitable for the review being conducted. There are two types of IEPR: Type I is generally for decision documents and Type II is generally for implementation products.

(a) 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 an biological opinions of the project study. Type I IEPR will cover the entire decision document or action and will address all the 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.

For decision documents prepared under the model National Programmatic Review Plan, Type I IEPR is not required.

(b) Type II IEPR. Type II IEPR, or Safety Assurance Review (SAR), are managed outside the USACE and are conducted on design and construction activities for hurricane, storm, and flood risk management projects or other projects where existing and potential hazards pose a significant threat to human life. Type II IEPR panels will conduct reviews of the design and construction activities prior to initiation of physical construction and, until construction activities are completed, periodically thereafter on a regular schedule. The reviews shall consider the adequacy, appropriateness, and acceptability of the design and construction activities in assuring public health safety and welfare.

For decision documents prepared under the model National Programmatic Review Plan, Type II IEPR is not required.

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

(5) Cost Engineering Review and Certification. All decision documents shall be coordinated with the Cost Engineering Directory of Expertise (DX), located in the Walla Walla District.

For decision documents prepared under the model National Programmatic Review Plan, Regional cost personnel that are pre-certified by the DX will conduct the cost estimate ATR. The DX will provide the cost engineering certification.

(6) Model Certification/Approval. EC 1105-2-412 mandates the use of certified or approved models for all planning activities to ensure the models are technically and theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions. Planning models, for the purposes of the EC, are defined as any models and analytical tools that planners use to define water resources management problems and opportunities, to formulate potential alternatives to address the problems and take advantage of the opportunities, to evaluate potential effects of alternatives and to support decision making. The use of a certified/approved planning model does not constitute technical review of the planning product. The selection and application of the model and the input and output data is still the responsibility of the users and is subject to DQC, ATR, and IEPR (if required). EC 1105-2-412 does not cover engineering models used in planning. The responsible use of well-known and proven USACE developed and commercial engineering software will continue and the professional practice of documenting the application of the software and modeling results will be followed. The use of engineering models is also subject to DQC, ATR, and IEPR (if required).

For decision documents prepared under the model National Programmatic Review Plan, use of existing certified or approved planning models is encouraged. Where uncertified or unapproved model are used, approval of the model for use will be accomplished through the ATR process. The ATR team will apply the principles of EC 1105-2-412 during the ATR to ensure the model is theoretically and computationally sound, consistent with USACE policies, and adequately documented. If specific uncertified models are identified for repetitive use within a specific district or region, the appropriate PCX, MSC(s), and home District(s) will identify a unified approach to seek certification of these models.

## 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 Section 111 decision documents is the home MSC. The MSC will coordinate and approve the review plan and manage the ATR. The home District will post the approved review plan on its public website. A copy of the approved review plan (and any updates) will be provided to the Planning Center

of Expertise for Coastal Storm Damage Reduction (PCX-CSDR) to keep the PCX apprised of requirements and review schedules.

## 3. STUDY INFORMATION

a. **Decision Document.** The Saco River and Camp Ellis Beach, Saco, Maine decision document will be prepared in accordance with ER 1105-2-100, Appendix F. The approval level of decision documents (if policy compliant) is the home MSC. An Environmental Assessment (EA) will be prepared along with the decision document.

b. **Study/Project Description.** Camp Ellis Beach is located in Saco, Maine, about 16 miles south of Portland, Maine. The Camp Ellis Beach neighborhood is situated at the mouth of the Saco River adjacent to the Saco River Federal Navigation Project. This navigation project consists of an 8-foot deep channel that is protected to the south by a 4,800-foot long jetty and to the north by a 6,600-foot long jetty. Camp Ellis Beach lies adjacent to the north jetty and extends 2,500 feet north to Ferry Beach. The north jetty (or breakwater) at the mouth of the Saco River separates the river from Camp Ellis Beach to the north. The project was authorized and constructed in several increments between 1828 and 1968. During the last modification in 1968, the shoreward end of the north jetty was raised and tightened to reduce the maintenance dredging frequency in the river channel. The area of Camp Ellis beach within about 2,500 feet of the jetty has experienced severe erosion over the past several decades, with losses of over 30 homes and property, roadways, and public and private infrastructure.

Detailed coastal modeling has been used to assess the erosion problem at Camp Ellis Beach, and to develop and evaluate alternative solutions. These studies determined that continued erosion of the beach is due not only to reflected wave energy off the breakwater, but also to the loss of river-transported sand diverted offshore by the inlet structures. After analyzing some 26 alternative plans, alternatives retained for further study include a jetty spur, possibly in combination with off-shore breakwater(s), and beach fill and re-nourishment. The cost of these alternatives is in the $20-25 million range. As costs to provide adequate protection to the shoreline exceeded the $5 million per project limit under the Section 111 authority, the Maine Congressional delegation acted on behalf of the city of Saco and specific authority was provided in the Water Resources Development Act of 2007 to exceed this limitation. Enacted on November 8, 2007, this Act authorized a maximum Federal expenditure of $26,900,000 for work under Section 111 at Camp Ellis Beach. No other waivers to policy are anticipated.

The City of Saco, Maine requested a study of Camp Ellis Beach and will be the non-Federal Sponsor for the Section 111 project. Section 111 requires that project implementation be shared at the same percentage as that of the navigation project requiring damage mitigation. The Saco River jetties, from the initial structures of the early 19$^{th}$ century through the 1968 extensions, were constructed and maintained at 100% Federal expense. There will be no monetary cost sharing requirement for design and construction activities associated with the Section 111 project, however, the City will be required to execute a Project Partnership Agreement (PPA) and will be responsible for the requirements outlined in the agreement, including future operations and maintenance costs. The project has been named in almost every Energy & Water Development Appropriations Bill starting in 2002 with direction to first complete the design and subsequently to initiate construction.

c. **Factors Affecting the Scope and Level of Review.** Use of the Model Programmatic Review Plan was determined to be appropriate for the Saco River and Camp Ellis Beach, Saco, Maine study as solutions were developed using standard engineering models and potential solutions are not technically challenging. The project will prevent continued shoreline erosion that has slowly eroded areas adjacent to the Saco River north jetty. Prior erosion has not been a significant threat to human life and safety due to the slow pace of erosion and City efforts to evacuate and control access to this area. Failure of the project will not pose a significant threat to human life and the consequences and risk of non-performance of a project are not greater than under existing conditions. No significant economic, environmental or social effects are anticipated as impacts are minimal and localized. NEPA compliance will be achieved by preparing and EA and FONSI. The project will have a positive effect on reducing erosion and damage to coastal properties. Project solutions are not expected to be controversial as potential solutions have been coordinated with all Federal and state regulatory agencies and other interested parties and impacts of concern have been minimized. The project has been coordinated with numerous agencies and no significant interagency interest has been expressed. The project report will not contain proposed plans that contain influential scientific information or be a highly influential scientific assessment as alternatives were developed using standard Corps engineering models that are available to the public. The project design of both the stone structures and beach fill are based on standard techniques and materials and will not include novel or precedent setting practices. The beach fill will be designed to replicate the existing beach area north of the project location which has not been affected by the Corps structures.

d. **In-Kind Contributions.** Products and analyses provided by non-Federal sponsors as in-kind services are subject to DQC and ATR, similar to any products developed by USACE. No non-Federal in-kind services or products are anticipated

## 4. DISTRICT QUALITY CONTROL (DQC)

The decision document for Camp Ellis Beach will follow standard New England District quality control procedures. The results of this review, including and significant concerns, will be provided to the ATR team for their consideration.

## 5. AGENCY TECHNICAL REVIEW (ATR)

a. **Products to Undergo ATR.** ATR will be performed throughout the study in accordance with the District and MSC Quality Management Plans. The ATR shall be documented and discussed at the AFB milestone. Certification of the ATR will be provided prior to the District Commander signing the final report. Products to undergo ATR include the draft decision document, Environmental Assessment, and supporting studies and documentation.

b. **Required ATR Team Expertise.**

| ATR Team Members/Disciplines | *Expertise Required* |
|---|---|
| ATR Lead | The ATR lead should be a senior professional with experience in preparing Section 111 decision documents and conducting ATR. The lead should also have the necessary skills and experience to lead a virtual team through the ATR process. Typically, the ATR lead will also serve as a reviewer for a specific discipline (such as planning, economics, environmental resources, etc). |

| | |
|---|---|
| Planning | The Planning reviewer will be a senior water resources planner with experience in Section 111 coastal navigation projects. The focus of the planning review will be to confirm that the study documents and recommendations are consistent with current policies and procedures. The planner should be familiar with coastal engineering processes |
| Economics | The economic reviewer must be familiar with assessing the impacts of continued long term coastal erosion. |
| Environmental Resources | The environmental resources reviewer must be a senior environmental specialist with experience in preparing NEPA documents for coastal projects. |
| Cultural Resources | Not required |
| Hydrology | Not required |
| Hydraulic Engineering | Not required |
| Coastal Engineering | The coastal engineering reviewer must be an expert in the field of coastal processes and be familiar with computer techniques that were used during the study. Engineering models used during the study include WAVAD, CGWAVE, STWAVE and SBEACH. |
| Geotechnical Engineering | The geotechnical engineering reviewer must be familiar with design of coastal structures in areas where subsurface materials vary with depth and location. |
| Civil Engineering | The civil engineering reviewer must be familiar with design of coastal protection features (jetties and breakwaters) and beach fills. |
| Structural Engineering | Not Required |
| Electrical/Mechanical Engineering | Not Required |
| Cost Engineering | The cost engineering reviewer must be familiar with MCACES software and unit costs associated with shore work and must be certified by the Walla Walla Cost DX. |
| Construction/Operations | Not Required |
| Real Estate | The real estate reviewer must be familiar with temporary easements, and other USACE real estate procedures and requirements. |
| Hazardous, Toxic and Radioactive Waste (HTRW) | Not Required |

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 be properly followed;
(3) The significance of the concern – indicate the importance of the concern with regard to its potential impact on the plan selection, recommended plan components, efficiency (cost),

effectiveness (function/outputs), implementation responsibilities, safety, Federal interest, or public acceptability; and

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

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

The ATR documentation in DrChecks will include the text of each ATR concern, the PDT response, a brief summary of the pertinent points in any discussion, including any vertical team coordination (the vertical team includes the district, RMO, MSC, and HQUSACE), and the agreed upon resolution. If an ATR concern cannot be satisfactorily resolved between the ATR team and the PDT, it will be elevated to the vertical team for further resolution in accordance with the policy issue resolution process described in either ER 1110-2-12 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 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 prior to the District Commander signing the final report. A sample Statement of Technical Review is included in Attachment 2.

## 6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)

**a. Decision on IEPR.** Based on the information and analysis provided in paragraph 3(c) of this review plan, the project covered under this plan is excluded from IEPR because it does not meet the mandatory IEPR triggers and does not warrant IEPR based on a risk-informed analysis. If any of the criteria outlined in paragraph 1(b) are not met, the model National Programmatic Review Plan is not applicable and a study specific review plan must be prepared by the home district, coordinated with the Planning Center of Expertise for Coastal Storm Damage Reduction (PCX-CSDR) and approved by the home Major Subordinate Command (MSC) in accordance with EC 1165-2-209. Based on discussion with the PCX-CSDR, it was agreed that an expanded ATR would be conducted to review critical elements of the project design to include the Coastal Engineering appendix and the

foundation analysis for the proposed breakwater locations. The PCX-CSDR will identify individuals with expertise in these areas and will add them to the established ATR team.

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. **MODEL CERTIFICATION AND APPROVAL**

a. **Planning Models.** The following planning models are anticipated to be used in the development of the decision document: The use of planning models is not anticipated.

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

| Model Name and Version | Brief Description of the Model and How It Will Be Applied in the Study |
|---|---|
| WAVAD | This Regional Scale/Ocean Scale Wave Generation Model represents the state-of-the art in our present understanding of wave generation. The WAVAD model was used to generate the offshore boundary conditions for near shore wave modeling. |
| STWAVE | STWAVE (Steady state spectral WAVE) is a flexible, robust, half-plane model for nearshore wind-wave growth and propagation. STWAVE was used for the near shore model and used boundary condition data from WAVAD. STWAVE was also used to provide wave information for long shore sediment transport. |
| CGWAVE | CGWAVE is a general purpose wave prediction model for simulating the propagation and transformation of ocean waves in coastal regions and harbors. It was used to model the near shore waves within the immediate study/project area. |
| Boussinesq (BOUSS-2D) | BOUSS-2D is a comprehensive wave model for simulating the propagation and transformation of ocean waves in coastal regions and harbors. As CGWAVE handled the wave modeling in the study area well, limited BOUSS-2D was preformed. |
| RMAP | RMAP (Regional Morphology Analysis Package) supports analysis of beach profile, channel or river cross sectional data, and shoreline position data for engineering and scientific applications. RMAP was used to process and visualize beach cross sectional data, design and compute beach fill volumes, and provide beach fill information into SBEACH. |

| | |
|---|---|
| SBEACH | SBEACH simulates cross shore beach, berm and dune erosion produced by storm waves and water levels. SBEACH was used to model the storm performance of the existing beach and various beach fill scenarios that were considered. |

## 8. REVIEW SCHEDULES AND COSTS

a. **ATR Schedule and Cost.** The ATR should begin in December 2010 and be complete in January 2011. Considering that 9 reviewers are required, the cost of this review is estimated at $35,000.

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

c. **Model Certification/Approval Schedule and Cost.** For decision documents prepared under the model National Programmatic Review Plan, use of existing certified or approved planning models is encouraged. Where uncertified or unapproved model are used, approval of the model for use will be accomplished through the ATR process. The ATR team will apply the principles of EC 1105-2-412 during the ATR to ensure the model is theoretically and computationally sound, consistent with USACE policies, and adequately documented. If specific uncertified models are identified for repetitive use within a specific district or region, the appropriate PCX, MSC(s), and home District(s) will identify a unified approach to seek certification of these models. Not applicable.

## 9. PUBLIC PARTICIPATION

State and Federal resource agencies may 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 ATR team will be provided copies of public and agency comments. The public has been provided with the opportunities to comment on studies and alternative solutions at numerous public information meeting held in Saco, Maine during the study. This coordination with local officials and citizens groups is expected to continue. In addition, a Public Notice announcing a 30-day review period for the Environmental Assessment is scheduled for December 2010.

## 10. REVIEW PLAN APPROVAL AND UPDATES

The home MSC Commander is responsible for approving this review plan and ensuring that use of the Model Programmatic Review Plan is appropriate for the specific project covered by the plan. The review plan is a living document and may change as the study progresses. The home district is responsible for keeping the review plan up to date. Minor changes to the review plan since the last MSC Commander approval are documented in Attachment 3. Significant changes to the review plan (such as changes to the scope and/or level of review) should be re-approved by the MSC Commander following the process used for initially approving the plan. Significant changes may result in the MSC Commander determining that use of the Model Programmatic Review Plan is no longer appropriate. In these cases, a project specific review plan will be prepared and approved in accordance with EC 1165-2-209. The latest version of the review plan, along with the Commanders' approval memorandum, will be posted on the home district's webpage.

## 11. REVIEW PLAN POINTS OF CONTACT

Public questions and/or comments on this review plan can be directed to the following points of contact:

- Richard Heidebrecht, Project Manager, New England District 978-318-8513
- *Rich Ring, North Atlantic Division 978-318-8643*

**ATTACHMENT 1: TEAM ROSTERS**

PDT – Camp Ellis Beach, Saco, Maine

| Team Member | Discipline | Contact Information |
|---|---|---|
| | | |
| Richard Heidebrecht | Project Manager | 978-318-8513 |
| Catherine Rogers | Environmental Resources | 978-318-8231 |
| Edmund O'Leary | Economics | 978-318-8235 |
| Marc Paiva | Cultural Resources | 978-318-8796 |
| John Winkelman | Coastal Engineering | 978-318-8615 |
| Erik Matthews | Geotechnical Engineering | 978-318-8365 |
| Robert Meader | Civil Engineering | 978-318-8205 |
| Michael Remy | Cost Engineering | 978-318-8040 |
| Joseph Redlinger | Real Estate | 978-318-8585 |

## ATTACHMENT 2: SAMPLE STATEMENT OF TECHNICAL REVIEW FOR DECSION DOCUMENTS

### COMPLETION OF AGENCY TECHNICAL REVIEW

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

| Term | Definition | Term | Definition |
|---|---|---|---|
| AFB | Alternative Formulation Briefing | NED | National Economic Development |
| ASA(CW) | Assistant Secretary of the Army for Civil Works | NER | National Ecosystem Restoration |
| ATR | Agency Technical Review | NEPA | National Environmental Policy Act |
| CAP | Continuing Authorities Program | O&M | Operation and maintenance |
| CSDR | Coastal Storm Damage Reduction | OMB | Office and Management and Budget |
| DPR | Detailed Project Report | OMRR&R | Operation, Maintenance, Repair, Replacement and Rehabilitation |
| DQC | District Quality Control/Quality Assurance | OEO | Outside Eligible Organization |
| DX | Directory of Expertise | OSE | Other Social Effects |
| EA | Environmental Assessment | PCX | Planning Center of Expertise |
| EC | Engineer Circular | PDT | Project Delivery Team |
| EIS | Environmental Impact Statement | PAC | Post Authorization Change |
| EO | Executive Order | PMP | Project Management Plan |
| ER | Ecosystem Restoration | PL | Public Law |
| FDR | Flood Damage Reduction | QMP | Quality Management Plan |
| FEMA | Federal Emergency Management Agency | QA | Quality Assurance |
| FRM | Flood Risk Management | QC | Quality Control |
| FSM | Feasibility Scoping Meeting | RED | Regional Economic Development |
| GRR | General Reevaluation Report | RMC | Risk Management Center |
| HQUSACE | Headquarters, U.S. Army Corps of Engineers | RMO | Review Management Organization |
| IEPR | Independent External Peer Review | RTS | Regional Technical Specialist |
| ITR | Independent Technical Review | SAR | Safety Assurance Review |
| LRR | Limited Reevaluation Report | USACE | U.S. Army Corps of Engineers |
| MSC | Major Subordinate Command | WRDA | Water Resources Development Act |
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