

DEC 14 2012

North Atlantic Division

**REGIONAL
CONTINUING AUTHORITIES PROGRAM
REVIEW PLAN**

US Army Corps of Engineers

December 2012

Overview. This document is to serve as the North Atlantic Division (NAD) Review Plan for all documentation required for Continuing Authorities Program (CAP) products as required by EC 1165-2-209 (Civil Works Review Policy) and EC 1165-2-214, and as modified by the Director of Civil Works Policy Memorandum #1 (CECW-P memorandum, Subject: Continuing Authority Program Planning Process Improvements), 19 Jan 2011. The purpose of this Review Plan is to define the requirements of how reviews will be conducted for CAP products.

1. Applicability. This document only applies to all documentation required for review of CAP products within NAD for the following CAP authorities:

a. Section 14 of the Flood Control Act of 1946, as amended, authorizes the US Army Corps of Engineers (USACE) to study, design and construct emergency streambank and shoreline works to protect public services including (but not limited to) streets, bridges, schools, water and sewer lines, National Register sites, and churches from damage or loss by natural erosion. It is a Continuing Authorities Program (CAP) which 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.

b. Section 107 of River and Harbor Act of 1960, as amended, authorizes the Corps to study, adopt, construct and maintain navigation projects. This is a Continuing Authorities Program which focuses on water resource related projects of relatively smaller scope, cost and complexity. Unlike the traditional Corps' civil works projects that are of wider scope and complexity, the Continuing Authorities Program is delegated authority to plan, design, and construct certain types of water resource and environmental restoration projects without specific Congressional authorization.

c. 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.

d. Section 204 of the Water Resources Development Act of 1992, Public Law 102-580, provides the authority to carry out projects to reduce storm damage to property, to protect, restore and create aquatic and ecologically related habitats, including wetlands, and to transport and place suitable sediment, in connection with dredging for construction, operation, or maintenance by the Secretary of an authorized Federal water resources project. It is a Continuing Authorities Program (CAP) which 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.

e. Section 206 of the Water Resources Development Act of 1996, Public Law 104-305, authorizes the Secretary of the Army to carry out a program of aquatic ecosystem restoration with the objective of restoring degraded ecosystem structure, function, and dynamic processes to a less degraded, more natural condition considering the ecosystem's natural integrity, productivity, stability and biological diversity. This authority is primarily used for manipulation of the hydrology in and along bodies of water, including wetlands and riparian areas. This authority also allows for dam removal. It is a Continuing Authorities Program (CAP) which 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.

f. Section 208 of the Flood Control Act 1954, as amended, authorizes the US Army Corps of Engineers (USACE) to study, adopt and construct in-stream clearing and snagging projects in the interest of flood risk management. It is a Continuing Authorities Program (CAP) which 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.

g. Section 1135 of the Water Resources Development Act of 1986, Public Law 99-662, provides the authority to modify existing Corps projects to restore the environment and construct new projects to restore areas degraded by Corps projects with the objective of restoring degraded ecosystem structure, function, and dynamic processes to a less degraded, more natural condition considering the ecosystem's natural integrity, productivity, stability and biological diversity. This authority is primarily used for manipulation of the hydrology in and along bodies of water, including wetlands and riparian areas. It is a Continuing Authorities Program (CAP) which 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.

h. Section 103 of the Rivers and Harbors Act of 1962, as amended, authorizes the US Army Corps of Engineers (USACE) to study, adopt and construct continuing authority beach erosion control (coastal storm damage reduction) 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.

***i. Section 205** of the Flood Control Act of 1948, as amended, authorizes USACE to study, design and construct flood risk management projects. It is a Continuing Authorities Program (CAP) which 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.*

Additional Information on this program can be found in Engineering Regulation 1105-2-100, Planning Guidance Notebook, Appendix F.

2. District Quality Control (DQC). DQC is required for all CAP products. DQC means quality checks and reviews that occur during the document 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. All DQC efforts will include the necessary expertise to address compliance with published Corps policy. The DQC shall be documented and kept in the project files for internal and MSC Quality Assurance audits to check for proper DQC implementation.

3. AGENCY TECHNICAL REVIEW (ATR)

ATR is mandatory for the final feasibility report. ATR is optional and scalable for all other CAP products (including supporting data, analyses, environmental compliance documents, etc.). In these instances, NAD will provide oversight. 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 any document explains the analyses and results in a reasonably clear manner for the public and decision makers. ATR is managed by NAD which is the designated Review Management Organization (RMO). The ATR is conducted by a qualified team from outside the home district that is not involved in the day-to-day production of the project/product. ATR teams will be comprised of senior USACE personnel and may be supplemented by outside experts as appropriate. The ATR team lead will be from outside the home district. Guidance on conducting ATR can be found in EC 1165-2-209 Civil Works Review Policy and EC 1165-2-214.

4. Independent External Peer Review (IEPR)

Section 14, 107, 111, 204, 206, 208 and 1135 project decision documents, implementation documents and other CAP products do NOT require Independent External Peer Review (IEPR), as defined in EC 1165-2-209 Civil Works Review Policy and EC 1165-2-214.

There may be cases where a Section 14, 107, 111, 204, 206, 208 and 1135 CAP product does not meet all of the following specific IEPR criteria as follows:

- 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/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 decision 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;
- The project design is not anticipated to require redundancy, resiliency, and/or robustness, unique construction sequencing, or a reduced or overlapping design construction schedule; and
- There are no other circumstances where the Chief of Engineers or Director of Civil Works determines Type I IEPR is warranted.

If any of the above criteria are not met, the home district needs to prepare a risk-based decision analysis on whether IEPR is applicable to the CAP product and submit to NAD for review and concurrence on whether IEPR is required or not. Consultation with the appropriate Planning Center of Expertise (PCX) is encouraged. If NAD staff concurs that an IEPR is not applicable, then the NAD Commander will need to concur by memo. If NAD staff determines that IEPR is applicable, then a study specific review plan must be prepared by the home district utilizing **Enclosure A**, coordinated with the appropriate Planning Center of Expertise (PCX) and approved by the NAD Commander.

Section 103 and 205 CAP products may require IEPR. Using the IEPR criteria as shown above, the home district must prepare a risk-based decision analysis on whether IEPR is applicable to the CAP product and submit it to NAD for review and concurrence on whether IEPR is required or not. Consultation with the appropriate Planning Center of Expertise (PCX) is encouraged. For Section 205 the PCX is the Flood Risk Management PCX. For Section 103 the PCX is the Coastal Storm Damage Reduction PCX. If NAD staff concurs that an IEPR is not applicable, then the NAD Commander will need to concur by memo. If NAD staff determines that IEPR is applicable, then a study specific review plan must be prepared by the home district, utilizing **Enclosure A**, the model review plan for CAP Section 103 and 205. The review plan must be coordinated with the appropriate Planning Center of Expertise (PCX). The home district will submit the review plan, cover memo, and PCX endorsement memo to NAD for approval. Approval must be by the NAD Commander. Districts should expect IEPR to be conducted for Section 205 documents.

5. Model Certification and Approval

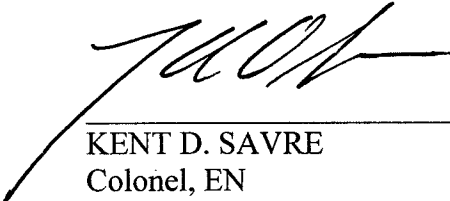
Per the Director of Civil Works Policy Memorandum #1 (CECW-P memorandum, Subject: Continuing Authority Program Planning Process Improvements), 19 Jan 2011, approval of planning models under EC 1105-2-412 is not required for CAP projects. MSC commanders remain responsible for assuring the quality of the analysis used in these projects. ATR will be used to ensure that models and analyses are compliant with Corps policy, theoretically sound, computationally accurate, transparent, described to address any limitations of the model or its use, and documented in study reports.

6. This Review Plan is hereby approved for implementation.

Districts shall reference this Regional CAP Review Plan as part of the Quality Management Plan section in each project's Project Management Plan. The PMP must show the estimated cost and schedule for conducting DQC and ATR. For Section 103 and Section 205 projects that will conduct IEPR and therefore will have individual Review Plans, the PMP will cite the project specific Review Plan and will add in the estimated cost and schedule for IEPR.

7. Updates and Approvals of this Review Plan.

Modifications to this Review Plan may be made by submitting a request through the NAD CAP Manager to the MSC Commander.



KENT D. SAVRE
Colonel, EN
Commanding

14 DEC 12

Date

Enclosure A

DECISION DOCUMENT REVIEW PLAN
USING THE NATIONAL PROGRAMMATIC REVIEW PLAN MODEL
for
Continuing Authorities Program
Section 103 and 205 Projects

Project Name and Location
Section < *103 or 205* > Project

Home District

MSC Approval Date: *(enter date of approval, or state 'Pending' if not yet approved)*

Last Revision Date: *(enter date of last revision or 'none' if no changes since last approved by MSC)*

SECTIONS 103 and 205 - PROGRAMMATIC REVIEW PLAN MODEL, Approved XX XXX 2010 (See the PCX page on the Planning and Policy SharePoint site for the latest version of this model plan:
<https://kme.usace.army.mil/CoPs/CivilWorksPlanning-Policy/pcx/default.aspx>)

NOTE: This National Programmatic Review Plan Model may be used for studies consistent with the criteria presented in Paragraph 1b of the plan. If these criteria are not met, a project specific review plan must be prepared in accordance with EC 1165-2-209. Required model review plan text is provided in **normal black font** and should not be changed. Areas where study specific information must be added is shown in *underlined blue italic font*. Supplemental information is shown in red text in a text box (like this note) and should be deleted in the final review plan. **DELETE THIS TEXT BOX BEFORE FINALIZING THE REVIEW PLAN.**



**US Army Corps
of Engineers** ®

**DECISION DOCUMENT REVIEW PLAN
USING THE NATIONAL PROGRAMMATIC REVIEW PLAN MODEL**

Project Name and Location
Section <103 or 205> Project

TABLE OF CONTENTS

1. PURPOSE AND REQUIREMENTS	1
2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION	2
3. STUDY INFORMATION	2
4. DISTRICT QUALITY CONTROL (DQC)	4
5. AGENCY TECHNICAL REVIEW (ATR)	4
6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)	7
7. POLICY AND LEGAL COMPLIANCE REVIEW	11
8. COST ENGINEERING Directory of Expertise (DX) REVIEW AND CERTIFICATION	11
9. MODEL CERTIFICATION AND APPROVAL	11
10. REVIEW SCHEDULES AND COSTS	13
11. PUBLIC PARTICIPATION	13
12. REVIEW PLAN APPROVAL AND UPDATES	13
13. REVIEW PLAN POINTS OF CONTACT	14
ATTACHMENT 1: TEAM ROSTERS	15
ATTACHMENT 2: SAMPLE STATEMENT OF TECHNICAL REVIEW FOR DECISION DOCUMENTS	16
ATTACHMENT 3: REVIEW PLAN REVISIONS	17
ATTACHMENT 4: ACRONYMS AND ABBREVIATIONS	18

1. PURPOSE AND REQUIREMENTS

- a. **Purpose.** This Review Plan defines the scope and level of peer review for the <ENTER project name and location>, Section <ENTER 14, 107, 111, 204, 206, 208 or 1135> project decision document.

<ENTER the appropriate CAP Authority description from the list below: >

< Section 103 of the Rivers and Harbors Act of 1962, as amended, authorizes the US Army Corps of Engineers (USACE) to study, adopt and construct continuing authority beach erosion control (coastal storm damage reduction) 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.>

<Section 205 of the Flood Control Act of 1948, as amended, authorizes USACE to study, design and construct flood risk management projects. It is a Continuing Authorities Program (CAP) which 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.>

Additional Information on this program can be found in Engineering Regulation 1105-2-100, Planning Guidance Notebook, Appendix F.

- b. **Applicability.** This review plan is based on the model National Programmatic Review Plan for Section 103 and 205 project decision documents, which is applicable to projects that do not require an EIS. If an EIS is required, 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 appropriate Planning Center of Expertise (PCX) 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 if warranted) without additional coordination with a PCX or Headquarters, USACE. The initial decision as to the applicability of the model plan should be made no later than the Federal Interest Determination (FID) milestone (as defined in Appendix F of ER 1105-2-100, F-10.e.1) during the feasibility phase of the project. A review plan for the project will subsequently be developed and approved prior to execution of the Feasibility Cost Sharing Agreement (FCSA) for the study. In addition, per EC 1165-2-209, the home district and MSC should assess at the Alternatives Formulation Briefing (AFB) whether the initial decision on Type I IEPR is still valid based on new information. If the decision on Type I IEPR has changed, the District and MSC should begin coordination with the appropriate PCX immediately.

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 1105-2-407, Model Certification, 31 May 2005
- (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 1105-2-407).

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 <ENTER 103 or 205> decision documents is the home MSC. The MSC will coordinate and approve the review plan and manage the ATR. If Type I IEPR will be performed, the MSC will coordinate with the IEPR effort with the appropriate PCX, which will administer the Type I IEPR. 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 <ENTER the appropriate PCX: (PCX-CSDR) or (FRM-PCX)> to keep the PCX apprised of requirements and review schedules.

3. STUDY INFORMATION

- a. Decision Document.** The <ENTER project name and location> decision document will be prepared in accordance with ER 1105-2-100, Appendix F. The approval level of the decision document (if policy compliant) is the home MSC. An Environmental Assessment (EA) will be prepared along with the decision document.
- b. Study/Project Description.** <DESCRIBE the basic background information on the study/project to provide an overview for the PDT, RMO, review teams, and public. At minimum, briefly describe the study area, the types of measures/alternatives to be considered in the study, the estimated cost (or range of cost) for a potentially recommended plan, and the non-Federal sponsor(s). Also identify the status of any existing or anticipated policy waiver requests (pursued per paragraph F-10.f.(4) of ER 1105-2-100, Appendix F).>

c. **Factors Affecting the Scope and Level of Review.** <DISCUSS the factors supporting the use of the Model Programmatic Review Plan to determine the appropriate scope and level of review for the study. The discussion must be detailed enough to assess the applicability of the Model Programmatic Review Plan and the types of expertise represented on the various review teams. At minimum, the discussion should address:

- If parts of the study will likely be challenging (with some discussion as to why or why not and, if so, in what ways – consider technical, institutional, and social challenges, etc.); and
- A preliminary assessment of where the project risks are likely to occur and what the magnitude of those risks might be (e.g., what are the uncertainties and how might they affect the success of the project);
- If the project will likely be justified by life safety or if failure of the project would pose a significant threat to human life (with some discussion as to why or why not and, if so, in what ways);
- If life safety consequences and risk of non-performance of a project are greater than under existing conditions (with some discussion as to why or why not and, if so, in what ways – consider at minimum the safety assurance factors described in EC 1165-2-209 including, but not necessarily limited to, the consequences of non-performance on project economics, the environmental and social well-being [public safety and social justice]; residual risk; uncertainty due to climate variability, etc.);
- If there is a request by the Governor of an affected state for a peer review by independent experts;
- If the project/study is likely to involve significant public dispute as to the size, nature, or effects of the project (with some discussion as to why or why not and, if so, in what ways);
- If the project/study is likely to involve significant public dispute as to the economic or environmental cost or benefit of the project (with some discussion as to why or why not and, if so, in what ways);
- If the information in the decision document or anticipated project design is likely to be based on novel methods, involve the use of innovative materials or techniques, present complex challenges for interpretation, contain precedent-setting methods or models, or present conclusions that are likely to change prevailing practices (with some discussion as to why or why not and, if so, in what ways); and
- If the project design is anticipated to require redundancy, resiliency, and/or robustness, unique construction sequencing, or a reduced or overlapping design construction schedule (with some discussion as to why or why not and, if so, in what ways).

Several of the bulleted items above, if answered in the affirmative, may indicate the need for an EIS. If an EIS is required, the model National Programmatic Review Plan is not applicable and a study specific review plan must be prepared by the home district, coordinated with PCX-CSDR or FRM-PCX, and approved by the home Major Subordinate Command (MSC) in accordance with EC 1165-2-209.>

NOTE: This sub-section supports the decision on whether or not to perform IEPR, but the actual decision is documented in Section 5 – Independent External Technical Review. The information in this sub-section also supports decisions on the scope of ATR/IEPR and the expertise needed on the ATR/IEPR teams. DELETE THIS TEXT BOX BEFORE FINALIZING THE REVIEW PLAN.

- 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. <DESCRIBE the expected in-kind products/analyses to be provided by the sponsor, or indicate that no in-kind products are anticipated.>

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 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 MSC.

<DESCRIBE how DQC will be documented and what DQC documentation will be provided to the ATR team.>

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 the home MSC.

- 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 Alternative Formulation Briefing (AFB) milestone. Certification of the ATR will be provided prior to the District Commander signing the final report. Products to undergo ATR include <DESCRIBE the products/analyses to undergo ATR.>
- b. **Required ATR Team Expertise.** <PROVIDE an estimate of the number of ATR team members and briefly describe the types of expertise that should be represented on the ATR team (not just a list of disciplines). The expertise represented on the ATR team should reflect the significant expertise involved in the work effort and will generally mirror the expertise on the PDT. The PDT should make the initial assessment of what expertise is needed based on the PMP and the factors affecting the scope and level of review outlined in Section 3 of the review plan and may suggest candidates. The RMO, in cooperation with the PDT and vertical team, will determine the final make-up of the ATR team. For Section 14, 107 and 208 Projects, at a minimum, Plan Formulation, NEPA Compliance, Engineering/Hydraulics and Hydrology, Real Estate, Economics and Cost Estimating will be represented on the ATR Teams. For Section 204 Projects, at a minimum, Plan Formulation, Biology/NEPA/Ecosystem Output Evaluation, Engineering/Hydraulics and Hydrology, Real Estate, Economics(CE/ICA), Operations/Dredging and Cost Estimating will be represented on the ATR Teams. For Section 206 and 1135 Projects, at a minimum, Plan Formulation, Biology/NEPA/Ecosystem Output Evaluation, Engineering/Hydraulics and Hydrology, Real Estate, Economics(CE/ICA) and Cost

Estimating will be represented on the ATR Teams. The ATR Team Leader role can be assigned to any of the ATR team members. An ATR Team member may serve multiple roles if the scope of the study and the level of effort warrant. The ATR Team Leader should use the “ATR Lead Checklist” and “ATR Charge Template” developed by the National Planning Centers of Expertise as resources when conducting the review. The following table provides examples of the types of disciplines that might be included on the ATR team and some sample descriptions of the expertise required. Pick from the listed disciplines and/or add additional disciplines as needed and provide a short description of the expertise required for each discipline. The names, organizations, contact information, credentials, and years of experience of the ATR members should be included in Attachment 1 once the ATR team is established.>

ATR Team Members/Disciplines	Expertise Required
ATR Lead	The ATR lead should be a senior professional preferably with experience in preparing Section <103> <205> 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). The ATR Lead MUST be from outside <the home district's MSC>.
Planning	The Planning reviewer should be a senior water resources planner with experience in <DESCRIBE the specific experience/credentials required for the reviewer.>
Economics	
Environmental Resources	
Cultural Resources	
Hydrology	
Hydraulic Engineering	<u>Example Description: The hydraulic engineering reviewer will be an expert in the field of hydraulics and have a thorough understanding of <inert specific requirements based on study objectives and proposed measures – for example, knowledge of open channel dynamics, enclosed channel systems, application of detention/retention basins, application of levees and flood walls, non-structural solutions involving flood warning systems and flood proofing, etc and/or computer modeling techniques that will be used such as HEC-RAS, FLO-2D, UNET, TABS, etc>.</u>
Coastal Engineering	
Geotechnical Engineering	
Civil Engineering	
Structural Engineering	
Electrical/Mechanical Engineering	
Cost Engineering	<u>Cost DX Staff or Cost DX Pre-Certified Professional with experience preparing cost estimates for....add the specific experience required (e.g., Harbors, levee projects, etc.)</u>
Construction/Operations	
Real Estate	

Hazardous, Toxic and Radioactive Waste (HTRW)	
<i>Pick from the above disciplines (delete any disciplines that are not applicable) and add other disciplines as appropriate...</i>	<i>Add the expertise required for each discipline based on the specific needs of the study...</i>

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

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

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

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

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 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.

For Section 103 and 205 decision documents prepared under the model National Programmatic Review Plan, Type I IEPR may or may not be required.

- **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 Section 103 and 205 decision documents prepared under the model National Programmatic Review Plan, Type II IEPR may or may not be anticipated to be required in the design and implementation phase. The decision on whether Type II IEPR is required will be verified and documented in the review plan prepared for the design and implementation phase of the project.

- a. Decision on IEPR.** It is the policy of USACE that Section <ENTER 103 or 205> project decision documents should undergo Type I IEPR unless ALL of the following criteria are met:

- Federal action is not justified by life safety or failure of the project would not pose a significant threat to human life;
- Life safety consequences and risk of non-performance of a project are not greater than under existing conditions;
- There is no request by the Governor of an affected state for a peer review by independent experts;
- The project does not require an 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 decision 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;
- The project design is not anticipated to require redundancy, resiliency, and/or robustness, unique construction sequencing, or a reduced or overlapping design construction schedule; and
- There are no other circumstances where the Chief of Engineers or Director of Civil Works determines Type I IEPR is warranted.

Further, if Type I IEPR will not be performed:

- Risks of non-performance and residual flooding must be fully disclosed in the decision document and in a public forum prior to final approval of the decision document;
- The non-Federal sponsor must develop a Floodplain Management Plan, including a risk management plan and flood response plan (and evacuation plan if appropriate for the conditions), during the feasibility phase; and
- The non-Federal sponsor must explicitly acknowledge the risks and responsibilities in writing in a letter or other document (such as the Floodplain Management Plan) submitted to the Corps of Engineers along with the final decision document.

The decision on whether the above criteria are met (and a Type I IEPR exclusion is appropriate) is the responsibility of the MSC Commander. Additional factors the MSC Commander might consider include in deciding if an exclusion is appropriate include, but are not limited to: Hydrograph / period of flooding, warning time, depth of flooding, velocity of flooding, nature of area protected, and population protected.

<STATE if Type I IEPR will be performed or if an exclusion is appropriate. If exclusion is recommended, DOCUMENT the risk informed decision on why the project meets ALL of the above criteria for exclusion. The decision should be based on compliance with the exclusion criteria above and the discussion in Section 3 – Factors Affecting the Scope and Level of Review.>

<Type II IEPR may also be anticipated for Section 103 or 205 projects. STATE whether Type II IEPR is anticipated during the design and implementation phase based on the criteria for conducting Type II IEPR described in Paragraph 2 of Appendix E of EC 1165-2-209, including:

- if the Federal action is justified by life safety or failure of the project would pose a significant threat to human life;
- if 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;
- if the project design requires redundancy, resiliency, and/or robustness; and/or
- if the project has unique construction sequencing or a reduced or overlapping design construction schedule.

Note: If Type II IEPR is required, the Review Plan should state that Safety Assurance will also be addressed during the Type I IEPR per Paragraph 2.c.(3) of Appendix D of EC 1165-2-209>.

- b. Products to Undergo Type I IEPR.** < If Type I IEPR will not be conducted for this study, 'Not-Applicable' should be indicated; otherwise IDENTIFY the specific products to undergo Type I IEPR. At minimum, Type I IEPR should be performed for the entire decision document (including supporting documentation), which is typically available at the draft report stage; however, it is encouraged to initiate IEPR early in the study process to reduce the chances of significant changes to the decision document occurring at the end of the study due to IEPR panel findings and recommendations. Depending on the complexity and magnitude of the study, IEPR could be performed for key interim technical products).
- b. Required Type I IEPR Panel Expertise.** < If Type I IEPR will not be conducted for this study, 'Not-Applicable' should be indicated; otherwise PROVIDE an estimate of the number of Type I IEPR panel members and briefly describe the types of expertise that should be represented on the panel (not just a list of disciplines). The expertise represented on the Type I IEPR panel may be similar to those on the ATR team, but may be more specifically focused and generally won't involve as many disciplines/individuals except for very large and/or complex studies. At minimum, the panel should include the necessary expertise to assess the engineering, environmental, and economic adequacy of the decision document as required by EC 1165-2-209, Appendix D. The PDT should make the initial assessment of what expertise is needed based on the PMP and the factors affecting the scope and level of review outlined in Section 3 of the review plan and may suggest candidates. The Outside Eligible Organization (OEO) will determine the final participants on the panel. The following table provides examples of the types of disciplines that might be included on the ATR team and a sample description of the expertise required. Pick from the listed disciplines and/or add additional disciplines as needed and provide a short description of the expertise required for each discipline.>

IEPR Panel Members/Disciplines	Expertise Required
<u>Economics (an economics panel member is required; the PDT may specify one or more specific economic disciplines to participate on the panel – e.g. Navigation Economist and Agricultural Economist)</u>	<u>The Economics Panel Member should ... the specific experience/credentials required for the reviewer should be added here.</u>
<u>Environmental (an environmental panel member is required; the PDT may specify one or more specific</u>	

<u>environmental disciplines to participate on the panel – e.g. NEPA Compliance Expert and Fisheries Biologist)</u>	
<u>Engineering (an engineering panel member is required; the PDT may specify one or more specific engineering disciplines to participate on the panel – e.g. Hydraulic Engineer and Geotechnical Engineer)</u>	<u>Example Description for a geotechnical engineering panel member: The geotechnical engineering reviewer should have an extensive experience in <inert specific requirements based on study objectives and proposed measures – for example, geotechnical evaluation of flood risk management structures such as static and dynamic slope stability evaluation, evaluation of the seepage through earthen embankments and underseepage through the foundation of the flood risk management structures, including dam and levee embankments, floodwalls, closure structures and other pertinent features, and in settlement evaluation of the structure>.</u>
<u>Add additional IEPR panel members as needed (may include additional economic, environmental, or engineering disciplines or other disciplines such as real estate, planning, etc)</u>	<u>Add the expertise required for each discipline based on the specific needs of the study...</u>

c. Documentation of Type I IEPR. *<If Type I IEPR will not be conducted for this study, 'Not-Applicable' should be indicated; otherwise the following text can be used.>* The IEPR panel will be selected and managed by an Outside Eligible Organization (OEO) per EC 1165-2-209, Appendix D. Panel comments will be compiled by the OEO and should address the adequacy and acceptability of the economic, engineering and environmental methods, models, and analyses used. IEPR comments should generally include the same four key parts as described for ATR comments in Section 4.d above. The OEO will prepare a final Review Report that will accompany the publication of the final decision document and shall:

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

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

<If IEPR of interim products will be performed, DESCRIBE how the interim reviews will be documented>.

7. POLICY AND LEGAL COMPLIANCE REVIEW

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

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

All decision documents shall be coordinated with the Cost Engineering DX, located in the Walla Walla District. For decision documents prepared under the National Programmatic Review Plan Model, Regional cost personnel that are pre-certified by the DX will conduct the cost engineering ATR. The DX will provide the Cost Engineering DX certification. The RMO will coordinate with the Cost Engineering DX on the selection of the cost engineering ATR team member.

9. MODEL CERTIFICATION AND APPROVAL

EC 1105-2-407 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 1105-2-407 does not cover engineering models used in planning. The responsible use of well-known and proven USACE developed and commercial engineering software will continue and the professional practice of documenting the application of the software and modeling results will be followed. As part of the USACE Scientific and Engineering Technology (SET) Initiative, many engineering models have been identified as preferred or acceptable for use on Corps studies and these models should be used whenever appropriate. The selection and application of the model and the input and output data is still the responsibility of the users and is subject to DQC, ATR, and IEPR (if required).

- a. **Planning Models.** The following planning models are anticipated to be used in the development of the decision document: <LIST the planning models (including version number as appropriate) to be used, briefly describe each model and how it will be applied ON THIS STUDY, and indicate the certification/approval status of each model. Planning models could include, but are not limited to: economic damage models (e.g., HEC-FDA, Beach FX, IMPLAN), environmental models for habitat evaluation or mitigation planning (e.g., IWRPlan, HEP HSI models, HGM), transportation or navigation models, and homegrown or spreadsheet models (e.g., excel spreadsheets, @Risk, etc; see EC 1105-2-407 for more information about what constitutes a planning model). Below are some

examples of the type of information that might be included in this section (Note: Lesser known models, including local/regional models, will need a more complete description than widely used, nationally recognized models).

Model Name and Version	Brief Description of the Model and How It Will Be Applied in the Study	Certification / Approval Status
<u>Example: HEC-FDA 1.2.4 (Flood Damage Analysis)</u>	<u>The Hydrologic Engineering Center's Flood Damage Reduction Analysis (HEC-FDA) program provides the capability for integrated hydrologic engineering and economic analysis for formulating and evaluating flood risk management plans using risk-based analysis methods. The program will be used to evaluate and compare the future without- and with-project plans along the Wild River near River City to aid in the selection of a recommended plan to manage flood risk.</u>	<u>Certified</u>
<u>Example: Study specific spreadsheet model</u>	<u>Add model description and how it will be applied...</u>	<u>Add certification / approval status</u>
<u>Example: Mitigation model</u>	<u>Add model description and how it will be applied...</u>	<u>Add certification / approval status</u>

- b. Engineering Models.** The following engineering models are anticipated to be used in the development of the decision document: List the engineering models (including version number as appropriate) to be used, briefly describe each model and how it will be applied ON THIS STUDY, and indicate the approval status of each model. (Note that the approval status of many engineering models can be found on the Hydraulics, Hydrology, and Coastal Engineering CoP SharePoint site at <https://kme.usace.army.mil/CoPs/EANDC/HHC/default.aspx> under shared documents/SET Software Lists.) Engineering models could include, but are not limited to: hydrologic, hydraulic, geotechnical, civil, structural, cost engineering and similar models. Below is an example of the type of information that might be included in this section (Note: Lesser known models will need a more complete description than widely used, nationally recognized models).

Model Name and Version	Brief Description of the Model and How It Will Be Applied in the Study	Approval Status
<u>Example: HEC-RAS 4.0 (River Analysis System)</u>	<u>The Hydrologic Engineering Center's River Analysis System (HEC-RAS) program provides the capability to perform one-dimensional steady and unsteady flow river hydraulics calculations. The program will be used for steady flow analysis to evaluate the future without- and with-project conditions along the Wild River and its tributaries. [For a particular study the model could be used for unsteady flow analysis or both steady and unsteady flow analysis. The review plan should indicate how the model will be used for a particular study.]</u>	<u>HH&C CoP Preferred Model</u>

10. REVIEW SCHEDULES AND COSTS

- a. **ATR Schedule and Cost.** <IDENTIFY the estimated schedule for ATR and provide an estimated cost for the ATR effort. Coordination with the RMO may be needed to complete this section. The ATR schedule and budget should include participation of the ATR Lead in the AFB milestone conference to address the ATR process and any significant and/or unresolved ATR concerns.
- 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 1105-2-407 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.

11. 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. <DESCRIBE how and when there will be opportunities for public comment on the development of the decision document and how the final decision document and associated review reports will be made available to the public>.

12. 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.

NOTE: It is critical that the Review Plan is kept up to date and the latest version (complete with the team rosters) be provided to the MSC. An informational copy of the latest plan should also be provided to the appropriate PCX. Appropriate PCXs are: Section 103: PCX-CSDR; Section 205: FRM-PCX. In particular, the schedule for ATR must be kept updated so that the RMO can provide timely delivery of these services. The PDT should contact the RMO about 8 weeks in advance of any scheduled peer review or model certification effort to coordinate the effort. DELETE THIS TEXT BOX BEFORE

13. REVIEW PLAN POINTS OF CONTACT

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

- Add title and phone number for the point of contact(s) at the home District
- Add title and phone number for the point of contact(s) at the home MSC

ATTACHMENT 1: TEAM ROSTERS

NOTE: Attachment 1 should include rosters and contact information for the PDT, ATR team, and MSC. The credentials and years of experience for the ATR team should also be included when available.
DELETE THIS TEXT BOX BEFORE FINALIZING 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 <type of product> for <project name and location>. The ATR was conducted as defined in the project's Review Plan to comply with the requirements of EC 1165-2-209. During the ATR, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of: assumptions, methods, procedures, and material used in analyses, alternatives evaluated, the appropriateness of data used and level obtained, and reasonableness of the results, including whether the product meets the customer's needs consistent with law and existing US Army Corps of Engineers policy. The ATR also assessed the District Quality Control (DQC) documentation and made the determination that the DQC activities employed appear to be appropriate and effective. All comments resulting from the ATR have been resolved and the comments have been closed in DrCheckssm.

SIGNATURE

Name

ATR Team Leader

Office Symbol/Company

Date

SIGNATURE

Name

Project Manager (home district)

Office Symbol

Date

SIGNATURE

Name

Architect Engineer Project Manager¹

Company, location

Date

SIGNATURE

Name

Review Management Office Representative

Office Symbol

Date

CERTIFICATION OF AGENCY TECHNICAL REVIEW

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

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

SIGNATURE

Name

Chief, Engineering Division (home district)

Office Symbol

Date

SIGNATURE

Name

Chief, Planning Division (home district)

Office Symbol

Date

¹ Only needed if some portion of the ATR was contracted

ATTACHMENT 3: REVIEW PLAN REVISIONS

Revision Date	Description of Change	Page / Paragraph Number

NOTE: Revisions to the Review Plan since it was last approved by the MSC Commander should be documented in Attachment 3. Significant changes (such as a change in the level or scope of review) require re-approval by the MSC Commander following the process used for initially approving the plan. DELETE THIS TEXT BOX BEFORE FINALIZING THE REVIEW PLAN.

ATTACHMENT 4: ACRONYMS AND ABBREVIATIONS

<u>Term</u>	<u>Definition</u>	<u>Term</u>	<u>Definition</u>
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 of 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

NOTE: This attachment is optional. The PDT can modify the table as desired. DELETE THIS TEXT BOX BEFORE FINALIZING THE REVIEW PLAN.