



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, NORTH ATLANTIC DIVISION
FORT HAMILTON MILITARY COMMUNITY
302 GENERAL LEE AVENUE
BROOKLYN NY 11252-6700

CENAD-PD-PP

SEP 15 2016

MEMORANDUM FOR Commander, Baltimore District, (CENAB-PLP/Dave Robbins)
10 S. Howard St. Baltimore, MD 21201

SUBJECT: Review Plan Approval for Chesapeake Bay Comprehensive Water
Resources and Restoration Plan (CBCP) Watershed Assessment

1. Reference CENAB-PL-P memorandum dated 8 Aug 2016, subject as above.
2. The Ecosystem Restoration Planning Center of Expertise of the Mississippi Valley Division is the lead office to execute the referenced Review Plan. The Review Plan does not include Independent External Peer Review, as it is not required.
3. The enclosed Review Plan is approved for execution and 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 require new written approval from the NAD Commander.
4. The point of contact is Mr. Larry Cocchieri, NAD Planning Program Manager, 347-370-4571, Lawrence.J.Cocchieri@usace.army.mil.

Encl
as


WILLIAM H. GRAHAM
Brigadier General, USA
Commanding



DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, CORPS OF ENGINEERS
10 S. HOWARD STREET
BALTIMORE, MD 21201

CENAB-PL-P

AUG 08 2016

MEMORANDUM FOR COMMANDER, U.S. Army Engineer Division North Atlantic, (CENAD-PD-X/Mr. Cocchieri), Fort Hamilton Military Community, 302 General Lee Avenue, Brooklyn, NY 11252-6700

SUBJECT: The Chesapeake Bay Comprehensive Water Resources and Restoration Plan (CBCP) Watershed Assessment (P2 No. 128545) – Project Review Plan Update

1. References:

- a. EC 1165-2-214, Civil Works Review, 15 DEC 2012.
- b. ECB 2016-9, Civil Works Review dated 4 MAR 2016.
- c. Memorandum, CENAD-PD-PP, 14 DEC 2012, subject: Review Plan Approval for Chesapeake Bay Comprehensive Water Resource and Restoration Plan, DC, DE, MD, NY, PA, VA & WV.
- d. Memorandum, CEMVD-PD-L, 3 NOV 2015, subject: Chesapeake Bay Comprehensive Water Resources and Restoration Plan, DC, DE, MD, NY, PA, VA & WV, Baltimore and Norfolk Districts, Ecosystem Planning Center of Expertise Recommendation for Review Plan Revision Approval.

2. The CBCP watershed assessment requires a project review plan (reference 1a and 1b). The subject review plan was initially approved on 14 DEC 2012 (reference 1c). As part of the scoping process to develop the project management plan for the CBCP watershed assessment, the project review plan has been updated. Updates include revisions to review schedules and costs.

3. The Ecosystem Planning Center of Expertise reviewed and endorsed the subject review plan (reference 1d).

4. CENAB requests review and approval of the updated project review plan, dated 15 JUL 2016.

CENAB-PL-P

SUBJECT: The Chesapeake Bay Comprehensive Water Resources and Restoration Plan (CBCP) Watershed Assessment (P2 No. 128545) – Project Review Plan Update

5. If you have any questions regarding the watershed assessment or project review plan, please contact Mr. Daniel Bierly, Chief, Civil Project Development Branch at Daniel.M.Bierly@usace.army.mil or (410) 962-6139.

A handwritten signature in black ink, appearing to read 'E. Chamberlayne', with a stylized flourish at the end.

Encl
Project Review Plan, 15 JUL 2016

EDWARD P. CHAMBERLAYNE, P.E.
COL, EN
Commanding

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Comprehensive Plan\Reconnaissance Phase\Correspondence\NAD&HQ\RP_Trans_Jul2016

CF:
CPD Branch Reading File
PL Division Reading File

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ENCLOSURE

REVIEW PLAN

**Chesapeake Bay Comprehensive Water Resources and Restoration
Plan,
DC, DE, MD, NY, PA, VA & WV**

Baltimore and Norfolk Districts, U.S. Army Corps of Engineers

**MSC Approval Date: December 14, 2012
Last Revision Date: July 15, 2016**



**US Army Corps
of Engineers®**

REVIEW PLAN

**Chesapeake Bay Comprehensive Water Resources and Restoration Plan,
DC, DE, MD, NY, PA, & VA**

Watershed Assessment

TABLE OF CONTENTS

1. PURPOSE AND REQUIREMENTS 1

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

3. STUDY INFORMATION..... 1

4. DISTRICT QUALITY CONTROL (DQC) 4

5. AGENCY TECHNICAL REVIEW (ATR) 4

6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR) 6

7. POLICY AND LEGAL COMPLIANCE REVIEW 8

**8. CIVIL WORKS COST ENGINEERING AND AGENCY TECHNICAL REVIEW MANDATORY
CENTER OF EXPERTISE (MCX) REVIEW AND CERTIFICATION 8**

9. MODEL CERTIFICATION AND APPROVAL 9

10. REVIEW SCHEDULES AND COSTS10

11. PUBLIC PARTICIPATION10

12. REVIEW PLAN APPROVAL AND UPDATES10

13. REVIEW PLAN POINTS OF CONTACT11

ATTACHMENT 1: TEAM ROSTERS.....12

**ATTACHMENT 2: SAMPLE STATEMENT OF TECHNICAL REVIEW FOR DECISION
DOCUMENTS.....13**

ATTACHMENT 3: REVIEW PLAN REVISIONS14

ATTACHMENT 4: ACRONYMS AND ABBREVIATIONS15

1. PURPOSE AND REQUIREMENTS

Purpose. This Review Plan defines the scope and level of peer review for the Chesapeake Bay Comprehensive Water Resources and Restoration Plan, DC, DE, MD, NY, PA, VA & WV (CBCP).

a. References

- (1) Engineering Circular (EC) 1165-2-214, Civil Works Review, 15 Dec 2012
- (2) EC 1105-2-412, Assuring Quality of Planning Models, 31 Mar 2011
- (3) Engineering Regulation (ER) 1110-1-12, Quality Management, 30 Sep 2006
- (4) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007
- (5) Planning SMART Guide (<http://planning.usace.army.mil/toolbox/smart.cfm>)
- (6) U.S. Army Corps of Engineers (USACE), Baltimore District Quality Management Plan
- (7) USACE, Norfolk District Quality Management Plan
- (8) CBCP (USACE Project Number 128545) Project Management Plan (PMP)

- b. Requirements.** This review plan was developed in accordance with EC 1165-2-214, which establishes an accountable, comprehensive, life-cycle review strategy for Civil Works products by providing a seamless process for review of all Civil Works projects from initial planning through design, construction, and operation, maintenance, repair, replacement and rehabilitation. The EC outlines four general levels of review: District Quality Control/Quality Assurance (DQC), Agency Technical Review (ATR), Independent External Peer Review (IEPR), and Policy and Legal Compliance Review. In addition to these levels of review, decision documents are subject to cost engineering review and certification (per EC 1165-2-214) and planning model certification/approval (per EC 1105-2-412).

2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

The RMO is responsible for managing the overall peer review effort described in this Review Plan. The RMO for decision documents is typically either a Planning Center of Expertise (PCX) or the Risk Management Center (RMC), depending on the primary purpose of the decision document. The RMO for the peer review effort described in this Review Plan is the National Ecosystem Planning Center of Expertise (ECO-PCX). The ECO-PCX may also consult with the Flood Risk Management Planning Center of Expertise (FRM-PCX) and the National Deep Draft Navigation Planning Center of Expertise (DDNPCX).

The RMO will coordinate with the Civil Works Cost Engineering Agency Technical Review and Mandatory Center of Expertise (Cost MCX), or the Risk Management Center (RMC) to ensure the appropriate expertise is included on the review team. It is envisioned that the Cost MCX or RMC would not participate in the watershed assessment because the CBCP report is not a decision document and will not contain detailed cost estimates or construction schedules.

3. STUDY INFORMATION

- a. Watershed Assessment.** The CBCP watershed assessment will be conducted under the authority provided by the United States Senate Committee on Environment and Public Works,

Committee Resolution adopted September 26, 2002. The CBCP study resolution reads as follows:

“Resolved by the Committee on Environment and Public Works on the United States Senate, that the Secretary of the Army is requested to review the report of the Army Corps of Engineers on the Chesapeake Bay Study, dated September 1984, and other pertinent reports, with a view to developing a coordinated, comprehensive master plan within the Corps mission areas for restoring, preserving and protecting the Chesapeake Bay ecosystem. The plan shall focus on integrating existing and future work of the Corps of Engineers, shall be developed in cooperation with State and local governments, other Federal agencies, the Chesapeake Bay Program, the Chesapeake Bay Commission, and the Chesapeake Executive Council, and shall encompass all Corps actions necessary to assist in the implementation of the goals of the 2000 Chesapeake Bay Agreement. The plan shall identify additional feasibility studies and research efforts required to better understand and solve the environmental problems of the Chesapeake Bay.”

The CBCP will serve as an integrated water resources assessment and evaluation of the problems, needs, and opportunities in the Chesapeake Bay region. The CBCP will focus on USACE existing and future work areas informed by the priorities of partnering organizations in cooperation with State and local governments, other Federal agencies, non-government organizations, the Chesapeake Bay Program, the Chesapeake Bay Commission, and the Chesapeake Executive Council. The Bay Agreement and Executive Order 13508 commit Federal agencies, and USACE, to the task of restoring the Chesapeake Bay and its habitats. The CBCP is expected to identify a number of potential feasibility studies and research efforts for the Chesapeake Bay region for action by USACE, which would complement the efforts of other ongoing efforts associated with the Chesapeake Bay Program.

However, there will be no implementation of site-specific USACE projects without subsequent analyses and environmental impact assessment. Thus, there will be no need for a National Environmental Policy Act (NEPA) document associated with this watershed assessment. The CBCP will coordinate existing Federal (including Department of Defense), State and local plans and will address the 2014 Chesapeake Bay Agreement commitments and Executive Order 13508, which mandates the integration of living resource protection and restoration, vital habitat protection and restoration, water quality protection and restoration, sound land use, and stewardship and community engagement.

- b. Study/Project Description.** The study area is the Chesapeake Bay watershed encompassing portions of DC, DE, MD, NY, PA, VA & WV. The Chesapeake Bay's ecosystem is an intricate system of terrestrial and aquatic habitats. It is composed of the thousands of miles of river and stream habitat that interconnect the land, water, living resources and human communities of the Chesapeake Bay watershed.

The CBCP watershed assessment will result in a plan that provides a single, comprehensive and integrated restoration plan to guide the implementation of projects affecting the Chesapeake Bay estuary and will be developed to avoid duplication of any ongoing or planned actions of other Federal, State and local agencies and non-government organizations. The CBCP seeks to align USACE mission areas with priorities of participating stakeholders to identify opportunities that can contribute toward achievement of the 2014 Chesapeake Bay Agreement goals and improve conditions in the Chesapeake Bay and its watershed by maximizing the unique expertise and resources of USACE. The CBCP will support future investment, and actions and activities from USACE and various sectors including Federal,

state and local government, tribes, non-government organizations, academia and the public. A core principle of the CBCP will be to maximize the unique added value of USACE expertise and resources in the multi-faceted, multi-disciplinary, and multi-scalar ecosystem restoration efforts underway by Federal and non-federal partners in the region. The following figure presents the location of the study area.



- c. **Factors Affecting the Scope and Level of Review.** Upon execution of a feasibility cost sharing agreement with a non-Federal sponsor, the CBCP will include the predefined milestone meetings with the PDT, ECO-PCX, and vertical team following the USACE Planning

SMART Guide (<http://planning.usace.army.mil/toolbox/index.cfm>). With the ecosystem restoration and protection watershed assessment purpose there is no life safety concern.

- d. **In-Kind Contributions.** Upon execution of a feasibility cost sharing agreement with a non-Federal sponsor, products and analyses provided by non-Federal sponsors as in-kind services are subject to DQC, ATR, and IEPR.

4. DISTRICT QUALITY CONTROL (DQC)

All decision documents (including supporting data, analyses, environmental compliance documents, etc.) shall undergo DQC prior to ATR. DQC is an internal review process of basic science and engineering work products focused on fulfilling the project quality requirements defined in the 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. The cost of DQC among numerous staff and several iterations of peer review and the associated DQC is approximately \$300,000. DQC of the draft report is anticipated in June 2017, and DQC of the final report is anticipated in November 2017.

- a. **Documentation of DQC.** DQC will be documented via a memorandum signed by USACE, Baltimore and Norfolk Districts division or branch chiefs for various organizational branches/sections involved in preparation of the decision document or supporting analyses. This document will certify that DQC has been accomplished and will serve as the Quality Control Review Report. This memorandum will be provided to the ECO-PCX as proof that DQC occurred.
- b. **Products to Undergo DQC.** The CBCP report documentation and technical products produced during the feasibility study, including any products included as in-kind services.
- c. **Required DQC Expertise.** DQC will be conducted by senior level USACE, Baltimore and Norfolk District staff and supervisors of the respective functional organizations. Comments and responses will be formally documented in DrChecks for both the project delivery team and the DQC review.

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.** It is envisioned that the primary products to undergo ATR include the CBCP draft geospatial analyses, and the draft report documentation and technical appendices. ATR team members may also review information prior to meetings with Baltimore and Norfolk District staff and the vertical team primarily for the team members' preparation to participate during the meeting.

- b. Required ATR Team Expertise.** The number of ATR reviewers participating in the various reviews will depend on the corresponding segment of the assessment. The disciplines identified to serve as the ATR team include an ATR lead, plan formulation, GIS/geospatial specialist, and environmental resources.

ATR Team Members/Disciplines	Expertise Required
ATR Lead	The ATR lead should be a senior professional with extensive experience in preparing Civil Works decision documents and conducting ATR. The lead should also have the necessary skills and experience to lead a virtual team through the ATR process. The ATR lead may also serve as a reviewer for a specific discipline (such as planning, economics, environmental resources, etc.).
Plan Formulation	The Plan Formulation reviewer should be a senior water resources planner with experience in ecosystem restoration. The Planner should have experience associated with stream restoration and non-tidal wetland restoration actions with preference toward ecosystem restoration in urban watersheds. In addition, the planner should have experience with water resource planning and watershed assessment utilizing GIS and geospatial analyses using ESRI ArcInfo software products.
GIS/Geospatial Specialist	The GIS Geospatial reviewer should be a senior cartographer, geographer, or engineer with experience completing various geospatial applications in support of USACE civil and military missions using ESRI ArcInfo software products. The reviewer should have experience managing extensive geodatabases and combining various spatial data from various sources to store in personal geodatabase format. The reviewer should also have experience creating rasters or grids from vector format as well as raster analyses associated with 3D and spatial analyst tools.
Environmental Resources	The environmental resources reviewer should be a senior water resources planner or biologist with experience in ecosystem restoration. The reviewer should have knowledge of aquatic and wetland ecology, with extensive experience associated with environmental impact assessment. In addition, the environmental resources reviewer should have experience with watershed assessments with some experience using ESRI ArcInfo software products.

- 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 1110-1-12 or ER 1105-2-100, Appendix H, as appropriate. Unresolved concerns can be closed in DrChecks with a notation that the concern has been elevated to the vertical team for resolution.

At the conclusion of each ATR effort, the ATR team will prepare a Review Report summarizing the review. Review Reports will be considered an integral part of the ATR documentation and shall:

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

ATR may be certified when all ATR concerns are either resolved or referred to the vertical team for resolution and the ATR documentation is complete. The ATR Lead will prepare a Statement of Technical Review certifying that the issues raised by the ATR team have been resolved (or elevated to the vertical team). A Statement of Technical Review should be completed, based on work reviewed to date, for the AFB, draft report, and 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 1165-2-214, is made as to whether IEPR is appropriate. IEPR panels will consist of independent, recognized

experts from outside of the USACE in the appropriate disciplines, representing a balance of areas of expertise suitable for the review being conducted. There are two types of IEPR:

- **Type I IEPR.** Type I IEPR reviews are managed outside the USACE and are conducted on project studies. Type I IEPR panels assess the adequacy and acceptability of the economic and environmental assumptions and projections, project evaluation data, economic analysis, environmental analyses, engineering analyses, formulation of alternative plans, methods for integrating risk and uncertainty, models used in the evaluation of environmental impacts of proposed projects, and biological opinions of the project study. Type I IEPR will cover the entire decision document or action and will address all underlying engineering, economics, and environmental work, not just one aspect of the study. For decision documents where a Type II IEPR (Safety Assurance Review (SAR)) is anticipated during project implementation, safety assurance shall also be addressed during the Type I IEPR per EC 1165-2-214.
- **Type II IEPR.** Type II IEPR, or 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.

a. Decision on IEPR. It is anticipated that Type I IEPR will not be required to be completed on the CBCP and based on the risk informed decision as prescribed in EC 1165-2-214, Section 11.d(1). Additionally, with the study purpose identified as a comprehensive watershed assessment, there is not a significant threat to human life that would require a Type II IEPR. Table 1 summarizes these trigger and a discussion on each point is below:

Table 1. Mandatory Triggers	Yes	No
Significant threat to human life		X
Exceeds \$200 million (Sect 1044 WRDA 14)		X
Governor's Request		X
Controversial by DCW		X

- (1) Significant threat to human life. The CBCP likely would not impact a structure or feature of a structure whose performance involves potential life safety risks.
- (2) The CBCP likely would not have investments of public monies required beyond the study cost.
- (3) No governor likely would not request IEPR.
- (4) There is no anticipated controversy surrounding Federal actions associated with this work product. CBCP outcomes will be based on best available scientific information, opinion, and consensus.

Guidance also indicates other triggers that may influence the need for IEPR. These are listed in Table 2 and are discussed below.

Table 2. Additional Triggers	Yes	No
Environmental Impact Statement		X

Impacts tribal/cultural/historic		X
Impacts on Fish & Wildlife		X
Endangered Species Act impacts		X

The CBCP will not lead to project implementation and does not require NEPA documentation. Study products may inform future feasibility or implementation documents, at which point as part of those respective studies' review plans further assessment of the need for IEPR would occur. The study is not anticipated to generate influential scientific information that would be either controversial or of sufficient risk and magnitude to require IEPR. The public and Chesapeake Bay Program Partnership, a consortium of Federal, state, and local government agencies along with NGOs and academia are working in the Chesapeake Bay watershed. If subsequent studies are undertaken NEPA documentation and compliance with all environmental laws would be required during those study processes, along with further coordination with various stakeholders.

The CBCP likely would not trigger any of the requirements contained in Table 1 or 2.

The CBCP watershed assessment is a USACE-led watershed effort that will not evaluate specific projects for USACE construction. As such, IEPR and an exclusion request are not required. However, the vertical team should determine if a single IEPR for the watershed effort is more cost effective than potential multiple IEPRs on subsequent spinoff feasibility studies.

- a. **Products to Undergo Type I IEPR.** N/A
- b. **Required Type I IEPR Panel Expertise.** N/A
- c. **Documentation of Type I IEPR.** N/A

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. CIVIL WORKS COST ENGINEERING AND AGENCY TECHNICAL REVIEW MANDATORY CENTER OF EXPERTISE (MCX) REVIEW AND CERTIFICATION

All decision documents shall be coordinated with the Cost MCX, located in the Walla Walla District. The Cost MCX will assist in determining the expertise needed on the ATR team and Type I IEPR team (if required) and in the development of the review charge(s). The RMO is responsible for coordination with the Cost MCX. Detailed cost estimates will not be prepared as part of the CBCP. Existing cost information may be used to help determine future courses of action as part of the plan formulation effort. The District, in coordination with the RMO, will seek Cost MCX guidance as to the appropriate level of review. Certification will not be required.

9. MODEL CERTIFICATION AND APPROVAL

EC 1105-2-412 mandates the use of certified or approved models for all planning activities to ensure the models are technically and theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions. Planning models, for the purposes of the EC, are defined as any models and analytical tools that planners use to define water resources management problems and opportunities, to formulate potential alternatives to address the problems and take advantage of the opportunities, to evaluate potential effects of alternatives and to support decision making. The use of a certified/approved planning model does not constitute technical review of the planning product. The selection and application of the model and the input and output data is still the responsibility of the users and is subject to DQC, ATR, and IEPR (if required).

EC 1105-2-412 does not cover engineering models used in planning. The 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 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.** Currently, planning models to be utilized during the feasibility study have not been determined. The plan formulation activities would be completed using geospatial analyses in lieu of detailed modeling.

It is envisioned that various readily available GIS datasets would be used as part of geospatial analyses to identify geographically ongoing and planned water quality actions, habitat restoration, conservation priority areas to emphasize habitat restoration opportunities, as well as to identify data gaps and inconsistencies in datasets among the various jurisdictions. Additionally, these datasets would also then identify areas where no or limited restoration actions are occurring. These analyses are anticipated to identify priority areas, problems, opportunities, implemented projects, and planned projects as part of future conditions forecasting using various data layers obtained from the Chesapeake Bay Program Partnership, Federal, state, local, and non-governmental organization entities. Geospatial analyses, as opposed to detailed modeling, will identify those problems, needs, and opportunities to align USACE mission areas with priorities of participating stakeholders to identify opportunities that can contribute toward achievement of the 2014 Chesapeake Bay Agreement goals and improve conditions in the Chesapeake Bay and its watershed by maximizing the unique expertise and resources of USACE as part of subsequent actions. Alternatives analyses including evaluation and comparison is not anticipated as part of the CBCP watershed assessment because the CBCP watershed assessment is not a USACE decision document.

- b. **Engineering Models.** Currently, no engineering models are expected to be used to complete analyses included in the CBCP watershed assessment.

10. REVIEW SCHEDULES AND COSTS

- a. **ATR Schedule and Cost.** The USACE planning modernization initiative incorporates the assumption that feasibility studies will be completed within three years. In order to comply with the current guidance presented ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007, activity milestones, particularly the review requirements associated with EC 1165-2-214, Civil Works Review Policy, 31 Jan 2012, must be completed within predefined and accepted durations. Approximately \$105,600 has been budgeted for ATR activities to review draft analyses, draft report documentation, and meeting participation for ECO-PCX staff, as well as other PCX participation including the FRM-PCX or DDNPCX, if appropriate. ATR of the draft geospatial analyses is anticipated in March 2017, and ATR of the draft report and technical appendices report is anticipated in June 2017.
- b. **Type I IEPR Schedule and Cost.** N/A.
- c. **Model Certification/Approval Schedule and Cost.** N/A

11. PUBLIC PARTICIPATION

The Chesapeake Bay watershed includes numerous public organizations that advocate for its restoration. Existing avenues for public coordination would be used during the watershed assessment, and managed appropriately for effective information sharing. A 30-day public and stakeholder comment period to review the draft report and technical appendices will be conducted. Public comments will be addressed by Baltimore and Norfolk District staff, and edits to the report documentation to incorporate changes will occur to generate the final report and technical appendix documentation for USACE vertical team review. Should public comments affect the technical analyses associated with the CBCP watershed assessment, further coordination with the ECO-PCX would be required to ensure the ATR team can review any substantial changes from the draft report and technical appendix documentation will occur.

12. REVIEW PLAN APPROVAL AND UPDATES

The North Atlantic Division Commander is responsible for approving this Review Plan. The Commander's approval reflects vertical team input (involving district, MSC, RMO, and HQUSACE members) as to the appropriate scope and level of review for the decision document. Like the PMP, the Review Plan is a living document and may change as the study progresses. Baltimore District is responsible for keeping the Review Plan up to date. 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. The latest version of the Review Plan, along with the Commanders' approval memorandum, will be posted on North Atlantic Division's approved Review Plan webpage at <http://www.nad.usace.army.mil/BusinessWithUs/CivilWorksReviewPlans.aspx>. The latest Review Plan should also be provided to the RMO and home MSC. It is anticipated that the review plan will reside on the North Atlantic Division's Review Plan webpage until the completion of the study.

13. REVIEW PLAN POINTS OF CONTACT

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

- Planning Division, Baltimore District, (410) 962-4900.
- North Atlantic Division, (347) 370-4550.
- ECO-PCX Deputy Director, (309) 794-5349.

ATTACHMENT 1: TEAM ROSTERS

The following table presents the anticipated team roster for the CBCP.

Name	Role	Affiliation/Office Symbol
Kim Gross	Project Manager	CENAB-PP-C
Amy Guise	Chief, Planning Division	CENAB-PL
Daniel Bierly	Chief, Civil Projects Development Branch	CENAB-PL-P
Susan Conner	Chief, Planning Branch	CENAO-WRP
Eddie DuRant	Chief, Planning Resources Section	CENAO-WRP-P
David Robbins	Plan Formulation, Study Manager	CENAB-PL-P
Andrew Roach	Plan Formulation and Policy Advisor; Quality Control	CENAB-PL-P
Angela Sowers, Ph.D.	Biologist	CENAB-PL-P
Alicia Logalbo	Biologist	CENAO-WRP-E
Michele Gomez	Environmental Resources Quality Control	CENAB-PL-P
Jason O'Neal	GIS/Geospatial	CENAO-WRO-G
<i>Team Members, ATR</i>		
Kenneth Barr	Acting Operational Director, ECO-PCX	CEMVD-PD-N
Chip Hall	Staff, ECO-PCX	CELRN-PM-P
Marshall Plumley	ATR Lead	CEMVP-PD-F
TBD	Plan Formulation	TBD
TBD	GIS/Geospatial	TBD
Tomma Barnes, Ph.D.	Environmental Resources	CELRP-PM-E
<i>Team Members, CENAD</i>		
Rena Weichenberg	Plan Formulation and Environmental Resources	CENAD
Hank Gruber	Policy Review	CENAD
<i>Federal Team Members, HQUSACE</i>		
Ray Wimbrough	Plan Formulation, RIT	HQUSACE
TBD	Plan Formulation, Office of Water Policy Review	HQUSACE
TBD	Biologist, Office of Water Policy Review	HQUSACE

ATTACHMENT 2: SAMPLE STATEMENT OF TECHNICAL REVIEW FOR DECISION DOCUMENTS

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the *<type of product>* for *<project name and location>*. The ATR was conducted as defined in the project's Review Plan to comply with the requirements of EC 1165-2-214. During the ATR, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of: assumptions, methods, procedures, and material used in analyses, alternatives evaluated, the appropriateness of data used and level obtained, and reasonableness of the results, including whether the product meets the customer's needs consistent with law and existing US Army Corps of Engineers policy. The ATR also assessed the District Quality Control (DQC) documentation and made the determination that the DQC activities employed appear to be appropriate and effective. All comments resulting from the ATR have been resolved and the comments have been closed in DrCheckssm.

SIGNATURE

Name

ATR Team Leader

Office Symbol/Company

Date

SIGNATURE

Name

Project Manager

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

Office Symbol

Date

SIGNATURE

Name

Chief, Planning Division

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
October 20, 2015	Updated to add USACE, Norfolk District; Review Management Organization (RMO) Coordination; Study Information; DQC; ATR (including ATR team member/disciplines); IEPR; Civil Works Cost Engineering and Agency Technical Review Mandatory Center of Expertise (MCX) Review and Certification; Review Schedules and Costs; Attachment 3; Attachment 4	1-9,13,14I
July 15, 2016	Updated format, schedules and costs.	All

ATTACHMENT 4: ACRONYMS AND ABBREVIATIONS

Term	Definition	Term	Definition
DQC	District Quality Control/Quality Assurance	HQUSACE	Headquarters, U.S. Army Corps of Engineers
CBCP	Chesapeake Bay Comprehensive Water Resources and Restoration Plan	IEPR	Independent External Peer Review
Cost MCX	Civil Works Cost Engineering Agency Technical Review and Mandatory Center of Expertise	NEPA	National Environmental Policy Act
DDNPCX	National Deep Draft Navigation Planning Center of Expertise	PCX	Planning Center of Expertise
EC	Engineer Circular	PMP	Project Management Plan
ECO-PCX	National Ecosystem Planning Center of Expertise	QMP	Quality Management Plan
ER	Engineering Regulation	RMC	Risk Management Center
FRM-PCX	Flood Risk Management Planning Center of Expertise	USACE	U.S. Army Corps of Engineers
GIS	Geographic Information System	WRDA 2007	Water Resources Development Act of 2007