



REPLY TO
ATTENTION OF

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

CENAD-PSD-P

DEC 17 2007

MEMORANDUM FOR Commander, Baltimore District, ATTN: CENAB-PL

SUBJECT: Review Plan Approval for Anacostia Watershed Restoration Plan, Prince George's and Montgomery Counties, Maryland and the District of Columbia

1. Reference:

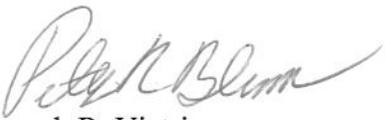
- a. EC 1105-2-408, Peer Review of Decision Documents, 31 May 2005.
- b. Memorandum, CECW-CP, 30 March 2007, subject: Peer Review Process.

2. The enclosed Review Plan for the Anacostia Watershed Restoration Plan, Prince George's and Montgomery Counties, Maryland and the District of Columbia has been prepared in accordance with the referenced guidance.

3. The Plan has been made available for public comment, and any comments received have been incorporated. It has been coordinated with the Ecosystem Planning Center of Expertise of Mississippi Valley Division which is the lead office to execute this Plan. The Plan currently does not include external peer review.

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

Encl


for Joseph R. Vietri
Chief, Planning & Policy Community of Practice
Program Support Division
Programs Directorate

QUALITY CONTROL AND PEER REVIEW PLAN

**Anacostia Watershed Restoration Plan
Prince George's and Montgomery Counties, Maryland, and
the District of Columbia**

Metropolitan Washington Council of Governments

In partnership with:

Montgomery County, Maryland

Prince George's County, Maryland

District of Columbia

Maryland Department of Natural Resources

Maryland Department of the Environment

General Investigation – Master Plan

November 2007

QUALITY CONTROL (QC) AND PEER REVIEW PLAN (PRP)

1.0 PURPOSE

This Review Plan presents the process that assures quality products for the Anacostia Watershed Restoration Plan General Investigation (GI) Feasibility Study. This PRP defines the responsibilities and roles of each member on the study and technical review team.

The product to be reviewed by the technical review team is the Feasibility Report. Under the provisions of new U.S. Army Corps of Engineers (USACE) policy, as detailed in EC1105-2-408 dated May 31, 2005, the independent technical review (ITR) will be conducted by specialists from organizations outside of the district responsible for the study. ITR will be conducted for all decision documents and will be independent of the technical production of the project. This plan is, by reference, a part of the PMP for this Feasibility Study.

2.0 APPLICABILITY

This document provides the Quality Control Plan for the Anacostia Watershed Restoration Plan Study. It identifies quality control processes and ITR for all work to be conducted under this study authority, including in-house, sponsor and contract work. The goal of the study is to produce a master plan for the restoration of the Anacostia River ecosystem. This study will not directly lead to project construction. This document replaces the QC and ITR Plan developed for the previous Phase 1 effort.

3.0 REFERENCES

EC 1105-2-408 "Peer Review of Decision Documents" (May 31, 2005)
EC 1105-2-407 "Planning Models Improvement Program: Model Certification" (May 31, 2005)
EC 1105-2-409 "Planning in a Collaborative Environment" (May 31, 2005)
ER 1105-2-100 "Planning Guidance Notebook & Appendices"

4.0 GENERAL PROJECT DESCRIPTION

This study will be conducted in response to the September 8, 1988, resolution of the Committee on Public Works and Transportation, U.S. House of Representatives, which reads as follows:

"Resolved by the Committee on Public Works and Transportation of the United States House of Representatives, that the Board of Engineers for Rivers and Harbors is hereby requested to review the report of the Chief of Engineers on the Anacostia River and Tributaries, District of Columbia and Maryland, published as House Document No. 202, 81st Congress, 1st Session, with a view to determining if further

improvements for flood control, navigation, erosion, sedimentation, water quality and other related water resources needs are advisable at this time."

Further language in the House of Representatives Energy and Water Appropriations Bill for Fiscal Year 2004 included funding to begin a "Comprehensive Plan" to prioritize restoration activities in the Anacostia River basin.

The reconnaissance phase of the Anacostia Watershed Restoration Plan Study resulted in a report entitled *Anacostia River and Tributaries, Maryland and the District of Columbia, Comprehensive Watershed Plan 905(b) Reconnaissance Report*, dated July 2005. This reconnaissance study established a Federal interest in participating in a feasibility study to develop a comprehensive restoration plan and identify focused restoration measures in an effort to restore the ecological health of the Anacostia River watershed. Potential solutions and measures exist that are consistent with Army and budgetary policies and the project will meet criteria for Corps participation in project implementation. In addition, many solutions to problems in the watershed can be addressed by other Federal agencies and non-Federal interests.

The Anacostia Watershed Restoration Plan Study will support a larger effort underway to develop a Comprehensive Plan for the protection and restoration of aquatic habitat, water quality and natural resources in the Anacostia River Basin. A governance structure known as the Anacostia Watershed Restoration Partnership is overseeing the development of the Comprehensive Plan that will integrate activities among local, state and Federal entities and include restoration plans for the entire Anacostia Watershed including all associated tributaries. It is anticipated that the restoration plan will be a critical part of the Comprehensive Plan and will afford the team the opportunity to find and identify a diverse set of opportunities to protect and restore the resources of this watershed including, but not limited to, tidal and non-tidal stream restoration, wetland protection and creation, fish barrier mitigation or removal, stormwater management and hydrologic regime restoration, stormwater management and low-impact development (LID) practices, habitat creation for endangered or threatened species, forest and riparian planting and protection, implementation of trash management plans, and protection of native ecosystems.

The Anacostia Watershed Restoration Plan Study will be carried out with significant contribution from the Montgomery County, Maryland Department of Environmental Protection (MCDEP); the Prince George's County, Maryland Department of Environmental Resources (PGDER); the District of Columbia Department of the Environment (DCDOE); and the State of Maryland Department of Natural Resources (MDDNR) and Department of the Environment (MDE). The Metropolitan Washington Council of Governments (MWCOC) has agreed to partner with the U.S. Army Corps of Engineers, Baltimore District as the non-Federal sponsor and has executed a feasibility cost-sharing agreement for the effort. They are contributing 50% of the cost of the study in cash and in-kind services.

5.0 REVIEW REQUIREMENTS

Initial QC review will be handled within the Corps section or branch office performing the work or by staff in the corresponding sponsor jurisdiction when the work involves in-kind services.

Additional QC will be performed by the project team during the course of completing the study. The detailed checks of computations and methodology should be performed at the District level, and the processes for this level of review are well established.

Pursuant to EC 1105-2-408, item 2c(2), any models used in the preparation of decision documents covered by that circular will be reviewed in accordance with EC 1105-2-407, *Planning Models Improvement Program: Model Certification*, and are not subject to the requirements of the [1105-2-408] circular. The uses and applications of models in individual studies that lead to the preparation of decision documents will be reviewed in accordance with its requirements by the related discipline(s) as part of this technical review. Models to be used in this effort include the Hydrologic Simulation Program – Fortran (HSPF), the Watershed Treatment Model (which is a spread sheet analysis), and the Best Management Practices Decision Support System (BMPDSS).

The District, in cooperation with the Planning Center of Expertise (PCX), will determine what model certifications are required and develop appropriate scopes for these efforts. The HSPF model is an older model that has become a standard for its type. Furthermore, this planning effort may only use the outputs of this model as run by others. It is unlikely that this model will need to be certified. The BMPDSS model is a new model that is still being developed. Prince George's County is overseeing its development by a contractor. It is being done largely with money from the Environmental Protection Agency (EPA). It is unknown at this time if EPA is conducting any review or certification that could be acceptable to the Corps. If not, then it is certain that this model will require Corps certification. The Watershed Treatment Model has been used in many applications around the country. It is owned and used by the Center for Watershed Protection. The District and the PCX will need to determine if the ITR covering the use of this model will be sufficient, or if certification will be needed. As the study progresses and study funds are allocated, the need to certify of this model should be considered likely.

Pursuant to EC 1105-2-408, an ITR team will be assigned by the PCX for Environmental Restoration (National Ecosystem Planning) projects. Dr. Dave Vigh (CEMVD-RB-T) of the appointed PCX will assign this team. This is being done even though the study will not recommend construction and, therefore, will not be reported to Congress. Approval of the process and recommendations by an ITR team will add credibility to the effort. It is recommended that an ITR, handled entirely within USACE, will satisfy the peer review requirements, as there is to be no implementation recommendation or NEPA assessment and so an additional external peer review (EPR) is not warranted. It is anticipated that while this study will be challenging and beneficial, it will not be novel, controversial or precedent-setting, nor will it have significant national importance. As a result, the ITR will focus on:

- Review of the planning process and criteria applied,
- Review of the methods of analysis and plan formulation,
- Compliance with project authority,
- Completeness of master plan, and
- Assessment of interdisciplinary coordination.

6.0 REVIEW PROCESS

It is anticipated that the ITR process will begin after the ITR team has been assigned, and will initially review the project management plan and the models to be used in the analysis. As alternative plans are formulated, the review process will focus on data, assumptions, and the formulation and master planning analyses.

The first tasks of this team will be to review the PMP and the read ahead materials in preparation for the Feasibility Scoping Meeting. Further Review Process milestones will be developed as appropriate for this type of analysis. Per Issue Resolution Conference among NAB, NAD and HQUSACE, November 2006, this study will not follow the standard process for milestone meetings or reviews. Since no construction recommendation is being made, it is understood that EPR is not required. Through approval of this PRP, the PCX and NAD will confirm this understanding.

7.0 REVIEW COST

The cost of the ITR will be negotiated between the Baltimore District and the PCX. It is assumed that documents to be reviewed will be transmitted electronically to the assigned ITR members. Comments will be recorded using DrChecks software if technical in nature; otherwise another suitable format will be coordinated with the ITR member. All comments will be provided electronically to the Baltimore District study manager. It is also assumed that the ITR team will be working virtually. The ITR team should participate in all milestone meetings via conference call or video teleconference.

8.0 REVIEW SCHEDULE

Since this study will result in a restoration plan for the Anacostia Watershed and not a recommendation for project implementation to Congress, the typical Corps of Engineers milestones may not be appropriate. For example, this effort will not result in a Civil Works Review Board Meeting, a Chief's Report, or a Record of Decision. The schedule below will be modified as needed to best fit the conduct of the planning effort.

TASK	START DATE	FINISH DATE
FCSA amendment execution		Sep-07
Develop review plan and post to website, PCX	Sep-07	Nov-07
PCX assigns/approves ITR team	Nov-07	Dec-07
ITR team review of feasibility scoping meeting documents	Feb-08	Mar-08
Feasibility scoping meeting (FSM)		May-08
Review of models (by PCX/ITR)	TBD	
P-7 Meeting – or equivalent	TBD	
Other review/status meetings as necessary	TBD	

Preparation for alt. formulation briefing (AFB)	TBD	
AFB – If appropriate	TBD	
Review of draft restoration plan	Jul-09	Aug-09

9.0 PROJECT RISK

Item 4 of EC 1105-2-408 discusses the factors that go into determining the need for external peer review (EPR). The factors fall under the categories of project magnitude and project risk. Typically, an assessment must be made as to the potential for failure of a project, level of controversy, and the uncertainties of predictions and outcomes. These are the factors that go into determining the risk inherent in a project. The product of this study effort is a master plan. Since there is not construction to be done based solely on this analysis, there is no direct risk involved. There is, however, a level of complexity involved in the predictions and a fairly large long-term impact should all or most of the recommendations be implemented. That being said, subsequent studies with appropriate environmental documentation will need to be conducted before the recommendations are realized. The resulting plan will be devised based on the professional judgment of experts and models that have been, or will be reviewed and certified. Therefore, the inherent risk of this effort is low.

10.0 REVIEW PLAN

The components of the Review Plan were developed pursuant to the requirements of EC1105-2-408. According to EC 1105-2-408, the Review Plan guidance applies to all studies “that lead to decision documents that require authorization by the U.S. Congress...” This is clearly not the case for the Anacostia Watershed Restoration Plan. Below is some discussion on the internal and Sponsor review process for the product of this effort. Whereas a review plan may not have been necessary for this study, the team determined that due to the use of models and the far reaching recommendations that will likely be made, it would be prudent to have a level of independent review.

10.1 Team Information

The PDT is listed as follows. This list provides the names and points of contact of NAB team members that are available to answer specific technical questions as part of the Review Process. The list also provides the names and organization of participating outside entities.

District PDT Members:

CENAB-PPMD
Project Manager
410.962.3377

CENAB-PL
Biologist
410.962.7440

CENAB-PL
Study Team Leader
410.962.0685

Non-District PDT Members:

John Galli
Phong Trieu
Metropolitan Washington Council of
Governments

Pete Hill
District of Columbia Department of the
Environment

Dan Harper
Craig Carson
Montgomery County Department of
Environmental Protection

Mow Soung Cheng, PhD
Prince George's County Department of
Environmental Resources

Ken Yetman
Maryland Department of Natural Resources

George Harman
Maryland Department of the Environment

Independent Technical Review Team:

The Ecosystem Restoration PCX will provide the name, organization, and contact information for ITR team members for these disciplines pending approval of this plan by North Atlantic Division:

Plan Formulation

Ecology

Engineering:

- Hydrologist
- Cost Estimator

10.2 Scientific Information

Based upon the self-evaluation by the project team, it is unlikely that the feasibility report will contain influential scientific information. The restoration plan will be developed using available information, watershed assessments using standard evaluation techniques, GIS, professional judgment and models. These models include HSPF, which has been widely used for many years, Watershed Treatment Model (a spread sheet model), and BMPDSS, which is being developed by Prince George's County, Maryland and EPA. The need for model certification has already been discussed.

While the restoration of these watersheds and estuaries is a key component of the Chesapeake Bay Program goals, the efforts envisioned to date will not result in a highly influential scientific assessment.

10.3 Timing

The ITR process is envisioned to begin in December 2007 with a review of the FSM read-ahead materials and virtual participation in the meeting. Following that, the issue of model certification

and what may be required will be addressed. The estimated schedule is noted in section 8 of this review plan.

10.4 External Peer Review Process

No External Peer Review process is required.

10.5 Public Comment

Public involvement is anticipated throughout the effort including public meetings and regular contact with existing watershed groups and the Anacostia Watershed Citizen's Advisory Committee (AWCAC), which is a standing committee within the existing Anacostia Watershed Governance Structure. The PMP for the study was reviewed by members of the AWCAC. There is also a website planned for the study that will not only present progress and conclusions of the study, but will also act as a receptacle for data and maps for the Anacostia Watershed.

A representative of the AWCAC will be invited to every monthly team meeting beginning in early 2008. This representative will report back to the AWCAC and the many watershed groups located throughout the Anacostia. There will also be meetings, as deemed appropriate, with the watershed groups within the first 9 months of the study as part of the data gathering effort. This will be culminated by a public meeting in fall 2008 during which the data will be presented and future actions will be discussed. Toward the end of the two-year process, another public meeting will be held to obtain input on the tentative conclusions of the master plan. As stated above, the public is welcome to provide input at any point as information is posted on the website, or as information is disseminated. It is anticipated that there will be significant public input throughout the process and this will all be made available to any and all reviewers of the master plan.

10.6 ITR Reviewers

It is anticipated that there will be three independent reviewers (aside from cost estimating) who will be made up of the following disciplines, as discussed above, although this assessment could change as the effort progresses. The leader of the ITR team, at a minimum, must be from an MSC other than NAD. Cost engineering information will be reviewed by the Center of Expertise in the Walla Walla District:

1) Plan Formulation/Planning: This person should be well versed in urban ecosystem restoration including sediment, nutrient and storm water issues. There will be extensive alternative analyses within the plan that would need to be reviewed along with determinations of likely interested parties for project implementation.

2) Ecology/Environmental: This person should also be well versed on urban ecosystems and cost-effective analyses. Although the master plan will not include any NEPA evaluations, the concepts and principles behind NEPA will be used to determine the appropriateness of recommended actions.

3) Hydrology: The interaction between land use and its impact on urban streams is of paramount importance in this investigation. Familiarity with standard hydrologic modeling and its application will be required.

10.7 External Peer Review Selection

Because an External Peer Review is not needed for this effort, there is no EPR selection.

11.0 APPROVALS

The PDT will carry out the review plan as described. The Study Manager will submit the plan to the PDT District Planning Chief for approval. Coordination with PCX will occur through the PDT District Planning Chief, or his designee.



DEPARTMENT OF THE ARMY
MISSISSIPPI VALLEY DIVISION, CORPS OF ENGINEERS
P.O. BOX 80
VICKSBURG, MISSISSIPPI 39181-0080

REPLY TO
ATTENTION OF:

CEMVD-PD-N

19 November 2007

MEMORANDUM FOR Commander, North Atlantic Division
ATTN: Joe Vietri CENAD-PDS

SUBJECT: Anacostia Watershed Restoration Study, Ecosystem Planning
Center of Expertise Recommendation for Approval of Peer Review Plan

1. References:
 - a. EC 1105-2-408, Peer Review of Decision documents, 31 May 2005.
 - b. CECW-CF Memorandum, 30 March 2007, subject: Peer Review Process.
 - c. Supplemental information for the "Peer Review Process" Memorandum, dated March 2007.
2. The proposed PRP has been coordinated with the National Ecosystem Planning Center of Expertise (ECO-PCX) and concurred in by the ECO-PCX. The PRP complies with all applicable policy and provides an adequate independent technical review of the plan formulation, engineering, and environmental analyses, and other aspects of the plan development. The ECO-PCX concurs with the conclusion that external peer review of this project is not necessary because project specific construction authorization will not be sought. Non-substantive changes to this PRP do not require further approval.
3. The district should post the PRP to its web site and provide a link to the ECO-PCX for posting on their web page, as well as providing a copy of the final approved PRP to the ECO-PCX for their use. Before posting to the web site the names of Corps/Army employees should be removed in accordance with reference 1.c. above.
4. Conclusion. The ECO-PCX recommends the PRP for approval by NAD.

Rayford Wilbanks
Director, National Ecosystem Planning
Center of Expertise

CF:
CEMVD-RB-T (D. Vigh)
CEMVR-PM-F (C. Knollenberg)
CENAB-PL (R. Pace)
CENAB-PL-P (A. Guise)
CENAB-PL-P (D. Bierly)
CENAB-PPMD (M. Dan)