QUALITY CONTROL (QC) AND INDEPENDENT TECHNICAL REVIEW (ITR) PLAN

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 QC and ITR Plan define 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 integrated 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 ITR will be conducted by specialists from organizations outside of the district responsible for the study. Independent Technical Review will be conducted for all decision documents and will be independent of the technical production of the project. This QC and ITR 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 Phase 1 Feasibility Study. It identifies quality control processes and independent technical review for all work to be conducted under this study authority, including in-house, sponsor and contract work. The goal of Phase 1 is to further consider the ecosystem problems of the Anacostia watershed and develop a scope for a detailed master plan effort (Phase 2). Upon execution of a revised feasibility cost-sharing agreement (FCSA), a new QC and ITR Plan will be developed.

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 is intended to grow into a multipurpose feasibility study that 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.

This phase includes all efforts necessary to completely develop and describe all future efforts and resources needed to complete the Anacostia Watershed Restoration Plan Study. It is fully anticipated that the 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 (MWCOG) has agreed to partner with the U.S. Army Corps of Engineers, Baltimore District as the non-Federal sponsor for Phase I of this study. They are contributing 50% of the cost of Phase I.

5.0 REVIEW REQUIREMENTS

Since this effort will result in a scope of work and not include any plan formulation, designs, or NEPA documentation, there is no need for the ITR process as described in the referenced guidance. Project Management Plan (PMP) development and approval are District functions, so all QC efforts will be handled within the Section or Branch that will perform the work or by staff

in the corresponding Sponsor Department when it involves In-Kind Services. Additional QC will be performed by the Project Delivery Team (PDT) during the course of completing the PMP. Should the Sponsor desire any modifications to the existing FCSA, those changes will need to be approved by HQUSACE. The QC and ITR Plan for Phase 2 will include any required ITR and model certification efforts as detailed in EC 1105-2-408 and EC 1105-2-407.

6.0 REVIEW PROCESS

As discussed above, for the Phase 1 effort, the review process will be internal to the Baltimore District and will include QC of assumptions and process by each of the interested disciplines. Once the PMP is developed and the FCSA is modified, a revised Plan will be devised to begin the ITR Team Review Process, which will include the assignment of an ITR Team. The first tasks of this team will be to review the PMP and the models to be used in the Phase 2 analysis in preparation for the Feasibility Scoping Meeting. Further Review Process milestones will be developed.

7.0 REVIEW COST

Since there is no ITR for the Phase 1 effort, there is no ITR cost.

8.0 REVIEW SCHEDULE

TASK	START DATE	FINISH DATE
Develop draft PMP for internal review	Feb-07	Mar-07
Sponsor initial review	Mar-07	Apr-07
PMP revisions and negotiations of FCSA amendment	Apr-07	Jul-07
FCSA amendment execution		Jul-07
Development of Phase 2 Review Plan	Aug-07	Sep-07

9.0 PROJECT RISK

As part of the negotiations over level of review and the need for external peer review (EPR), it is necessary to assess the risk associated with projects based upon five factors and rate the project quantitatively among five levels of project risk of failure ranging from low to high (risk score class). This exercise is unnecessary for the Phase 1 effort, and will likely be unnecessary for the Phase 2 effort since no construction is to be recommended.

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 Phase 1. Below is some discussion on the internal and Sponsor review process for the product (Phase 2 PMP) of this effort.

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
Study Team Leader
410.962.4458

CENAB-PL
Biologist
410.962.6134

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

Technical Review Team:

CENAB-PL
Branch Chief, Civil Project Development Branch
410.962.4713

CENAB-PL
Environmental Team Leader
410.962-6141

CENAB-PP
Acting Chief, Civil PPMP
410.962.3358

10.3 Timing
The QC Review process is underway and will be completed in time for the FCSA amendment execution in July 2007.

10.4 External Peer Review Process
No External Peer Review process is required at this time.

10.5 Public Comment
Public involvement is anticipated throughout the Phase 2 effort and is being scoped into the PMP. The PMP itself is to be reviewed by members of the Anacostia Watershed Citizen's Advisory Committee, which is a standing committee within the existing Anacostia Watershed Governance Structure.

10.6 Technical Reviewers
It is anticipated that the internal reviewers will be made up of the following disciplines, as shown above:
1) Plan Formulation/Planning, 2) Ecology/Environmental and 3) Management. The reviewer contact information is in Section 10.1 of this Review Plan.

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