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

REPLY TO
ATTENTION OF

CENAD-PSD-P

APR 21 2008

MEMORANDUM FOR Commander, New England District, ATTN: CENAE-EP-P

SUBJECT: Review Plan Approval for Connecticut River Ecosystem Restoration, NH and VT Feasibility Study

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 Connecticut River Ecosystem Restoration, NH and VT Feasibility Study 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 is being coordinated with the Ecosystem Restoration 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

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

QUALITY CONTROL REPORT
CONNECTICUT RIVER ECOSYSTEM RESTORATION
NEW HAMPSHIRE AND VERMONT
SECTION 905(b) ANALYSIS

INTRODUCTION

Guidance contained in EC 1165-2-203, dated December 1995, states that Quality Control (QC) for all project decision and implementation documents are the function and responsibility of the districts and operating divisions. QC is the process used to ensure that each project/product is in compliance with all Corps of Engineers technical and policy requirements and meets the agreed upon requirements of the customer. The QC process is formalized in the Quality Control Plan (QCP) which is prepared at the start of work to ensure a quality product or service. This document is the Quality Control Report for the Connecticut River Ecosystem Restoration, New Hampshire and Vermont, Section 905(b) Analysis.

SCOPE OF THE CONNECTICUT RIVER ECOSYSTEM RESTORATION SECTION 905(b) ANALYSIS

The Connecticut River Ecosystem Restoration Section 905(b) Analysis was authorized by a resolution adopted by the Committee on Environment and Public Works of the United States Senate on 23 May 2001. The resolution is as follows:

> "Resolved by the Committee on Environment and Public Works of the United States Senate, that the Secretary of the Army is requested to review the report of the Chief of Engineers on the Connecticut River, Massachusetts, New Hampshire, Vermont, and Connecticut, published as House Document 455, Seventy-fifth Congress, 2nd Session, and other pertinent reports, to determine whether modifications of the recommendations therein are advisable in the interest of environmental restoration, streambank protection and other allied water resources purposes within the Connecticut River Basin."

The study sought to: (a) determine the environmental restoration and streambank protection related needs of the Connecticut River between New Hampshire and Vermont; (b) identify a possible plan of improvement which shows that Federal participation in a feasibility study is warranted; (c) define the Federal interest based on a preliminary appraisal consistent with Army policies, costs, and benefits; (d) prepare a Project Management Plan (PMP), which will identify the tasks and studies to be undertaken during the feasibility phase; and (e) assess the interest and support from non-Federal entities in the identified solutions and cost sharing of the feasibility phase and construction.

STUDY AND ITR TEAMS

Prior to initiation of the study, an inter-disciplinary study team was formed. This team consisted of personnel from the appropriate technical disciplines necessary to conduct and complete the study. The Bioengineering Group (TBG), a Corps contractor, was hired to assist in the effort and was an integral part of the team. This team met on a periodic basis to discuss

specific work tasks, schedules, progress, and overall study status. Study team members also participated in meetings with the public and other agencies as required.

During the study, Independent Technical Review (ITR) team members were selected. Since the New England District has the technical personnel with the necessary knowledge, skills and experience, and these personnel had no affiliation to the study, the decision was made to conduct the independent review at the district office. Mr. Larry Oliver was the ITR team leader based on his management ability and extensive experience in ecosystem restoration studies. ITR team members were also selected based on experience and technical expertise. All ITR team members have extensive experience and are considered senior staff specialists. The ITR team was provided with complete project development documentation, and, once appointed, conducted their review with complete independence.

The Study and ITR teams are shown on the attached listing.

ACTIVITIES AND SCHEDULE

The following are major activities developed to assure a quality product:

Activity	Completion Date
Federal/State/Local Meeting	Apr 02
Technical Team Meeting	May 02
Define Study Alternatives	May 02
Mid-Point Study Status Briefing	May 02
Division Assistance Briefing (Optional)	Jun 02
Site Visit(s) with Environmental Agencies/Local	Jul 02
Submit 905(b) Analysis/Letter of Intent, etc.	Aug 02
HQ Approval of 905(b) Analysis	Sep 02
Submit Draft Negotiated PMP	Nov 02
Recon. Review Conference (RRC)	Dec 02
Execute FCSA with Local Sponsor	Feb 03

RESPONSIBILITY FOR IMPLEMENTATION OF THE QCP

The study manager and the ITR team leader developed and implemented this QCP. Each received input from their respective teams. The scope of the QCP was developed commensurate with the level of risk and complexity for this reconnaissance level study. Both technical and policy considerations were addressed to ensure a quality product. Technical review confirmed the proper selection and application of clearly established criteria, regulations, laws, codes, principles, and professional procedures. Technical review also confirmed the utilization of clearly justified and valid assumptions. Policy compliance review examined the development and application of decision factors and assumptions used to determine the extent and nature of Federal interest and related issues. It also ensured the uniform application of clearly established policy and procedures nationwide, and that the proposed action is consistent with the overall goals and objectives of the Civil Works program.

- Responsibilities of the Study Manager
  - develop the QCP with the technical review team leader
  - keep the review team leader informed concerning study progress and the availability of items and findings to be reviewed
  - ensure that review team comments are addressed in a timely manner by the appropriate study team member
  - elevate unresolved comments up the chain of command for resolution
  - maintain a documented record of comment resolution

- Study Team Responsibilities
  - develop and evaluate alternative plans
  - address ITR review comments in a timely manner
  - assist in the development of the QCP

- Responsibilities of the Technical Review Team Leader
  - develop the QCP with the Study Manager
  - facilitate requests for review team members through the functional chiefs
  - verify the expertise and experience of the review team nominees and assure that they have no connection to the study
  - evaluate review team comments before forwarding to the study manager to ensure that they are: clearly stated; based on guidance, regulation, or scientific/engineering principles; significant; and contain specific action to resolve the concern
  - ensure that reviews are promptly completed and forwarded to the study manager in a timely manner
  - cooperate with the study manager in the resolution of comments that have been elevated up the chain of command

- Responsibilities of the Functional Branch Chiefs
  - selects technical review team members
  - assists in the resolution of review comments elevated by the study manager

- Responsibilities of the Chief of Engineering/Planning Division
  - approves selection of technical review team members
  - final arbiter of unresolved issues between the study and review teams
  - certifies District's Statement of Technical Review

STUDY AND ITR TEAMS
CONNECTICUT RIVER ECOSYSTEM RESTORATION
SECTION 905(b) ANALYSIS

New England District	Sponsor

Study Manager

Commonwealth of Massachusetts
Executive Office of Environmental Affairs

Study Team

Env. Resources, NAE
Geomorphologist, TBG
Watershed Bioengineer
& Planner, TBG
Ecologist, TBG
Water Res. Planner, TBG
GIS, NAE

ITR Team

ITR Team Leader, Biologist
Hydraulic Engineer
Geotechnical Engineer

STUDY REVIEW CERTIFICATION
CONNECTICUT RIVER ECOSYSTEM RESTORATION
SECTION 905(b) ANALYSIS

I certify that a study review was completed and all comments resulting from the Independent Technical Review have been resolved and are on file at the New England District

_____ _____
Date

Independent Technical Review Team Leader

_____ _____
Date

Hydraulic Engineer

_____ _____
Date

Geotechnical Engineer

NEW ENGLAND DISTRICT
DISTRICT ENGINEER'S STATEMENT OF TECHNICAL REVIEW

COMPLETION OF TECHNICAL REVIEW

The New England District has completed the Connecticut River Ecosystem Restoration Section 905(b) Analysis. Certification is hereby given that the study has been given an independent technical review appropriate to the level of risk and complexity inherent in the study and potential projects, as defined in the Quality Control Plan. An independent technical review team at the District accomplished the technical review.

FINDINGS AND RESPONSE

During the technical review, it was verified that this study was conducted in compliance with clearly established policy principles and procedures and that all assumptions were clearly justified and valid. The following study elements were included in the review: assumptions, projections, methods, procedures, data, and information used in the analyses; formulation and evaluation of alternatives; the appropriateness and level of detail of data collected and analysis performed; and the reasonableness of results, to include whether the product meets the customer's needs consistent with law and existing Corps of Engineers policy. Significant concerns and their resolution are as follows: None.

CERTIFICATION OF TECHNICAL REVIEW

As noted above, all concerns resulting from technical review of this study have been resolved. The study may proceed to the Feasibility phase.

_____ _____

Date

Chief, Engineering/Planning Division