



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

CENAD-PD-P


2 July 2019

MEMORANDUM FOR Commander, U.S. Army Corps of Engineers, New York District,
26 Federal Plaza, New York, NY 10278-0090

SUBJECT: Request for Approval of the Hudson River Habitat Restoration, New York
Ecosystem Restoration Feasibility Study Review Plan

1. Reference Memorandum, CENAN-DE, dated 15 April 2019, subject as above.
2. The Ecosystem Restoration Planning Center of Expertise of the Mississippi Valley Division (MVD) 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 for this study.
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 at 347-370-4571 or Lawrence.J.Cocchieri@usace.army.mil.

Encl


JEFFREY L. MILHORN
Major General, USA
Commanding



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, NEW YORK DISTRICT
JACOB K. JAVITS FEDERAL BUILDING
26 FEDERAL PLAZA
NEW YORK NEW YORK 10278-0090

APR 15 2019

CENAN-DE

MEMORANDUM FOR COMMANDER: North Atlantic Division (CENAD-PD-X/Mr. Lawrence Cocchieri), Fort Hamilton Military Community, 301 General Lee Avenue, Brooklyn, New York 11252-6700

SUBJECT: Request for Approval of the Hudson River Habitat Restoration, New York Ecosystem Restoration Feasibility Study Review Plan

1. References

- a. Engineer Circular (EC) 1165-2-214, Civil Works Review, 15 DEC 12
- b. EC 1105-2-412, Planning, Assuring Quality of Planning Models, 31 MAR 11
- c. Engineer Regulation (ER) 1110-2-12, Quality Management, 30 SEP 06

2. The subject draft Review Plan is enclosed for your approval in accordance with Appendix B of Reference 1 (Enclosure 1). The Review Plan complies with all applicable policies and provides an adequate approach to District Quality Control and Agency Technical Review of the plan formulation, engineering and environmental analyses, and other required planning considerations.

3. The Review Plan was prepared in coordination with CENAD Planning Division Programs Directorate and the National Ecosystem Restoration Planning Center of Expertise (ECO-PCX). Mr. Gregory Miller, ECO-PCX Operating Director, has reviewed the Review Plan and has endorsed the plan for approval (Enclosure 2).

4. If you should require more information, my point of contact is Ms. Lisa Baron, Project Manager, at lisa.a.baron@usace.army.mil or 917-790-8306.

THOMAS D. ASBERY
COL, EN
Commanding

- 2 Encls
1. Review Plan
 2. ECO-PCX Endorsement

REVIEW PLAN

April 2019

Project Name: Hudson River Habitat Restoration, New York State

P2 Number: 396168

Decision Document Type: Feasibility Report

Project Type: Ecosystem Restoration

District: New York District

District Contact: Lisa Baron, Project Manager, 917-790-8306

Major Subordinate Command (MSC): North Atlantic Division

MSC Contact: Hank Gruber, Program Manager, 347-370-4566

Review Management Organization (RMO): National Ecosystem Restoration Planning Center of Expertise (ECO-PCX)

RMO Contact: Charles (Chip) Hall, ECO-PCX Lead, 615-736-7666

Key Review Plan Dates

Date of RMO Endorsement of Original Review Plan: 08/23/2017

Date of MSC Approval of Original Review Plan: 09/18/2017

Date of RMO Endorsement of Updated Review Plan: 02/13/2019

Date of MSC Endorsement of Updated Review Plan: TBD

Date of IEPR Exclusion Approval: TBD

Has the Review Plan changed since PCX Endorsement? No

Date of Last Review Plan Revision: 02/07/2019

Date of Original Review Plan Web Posting: 09/19/2017

Date of Congressional Notifications: N/A

Milestone Schedule

	<u>Scheduled</u>	<u>Actual</u>	<u>Complete</u>
<u>Alternatives Milestone:</u>	07/20/2017	07/22/2017	Yes
<u>Tentatively Selected Plan:</u>	12/17/2018	12/18/2018	Yes
<u>Release Draft Report to Public:</u>	06/10/2019	TBD	No
<u>Agency Decision Milestone:</u>	10/02/2019	TBD	No
<u>Final Report Transmittal:</u>	07/17/2020	TBD	No
<u>Senior Leaders Briefing:</u>	09/04/2020	TBD	No
<u>Chief's Report:</u>	11/16/2020	TBD	No

Project Fact Sheet

April 2019

Project Name: Hudson River Habitat Restoration

Location: New York State: Albany, Rensselaer, Greene, Columbia, Ulster, Dutchess, Orange, Putnam, Rockland, and Westchester counties

Authorities:

- o Water Resources Development Act of 1996 (P.L. 104-303) § 551
- o River and Harbors Act of 1970 (P.L. 91-611) § 216

Sponsors:

- o New York State Department of Environmental Conservation (NYSDEC)
- o New York State Department of State (NYSDOS)

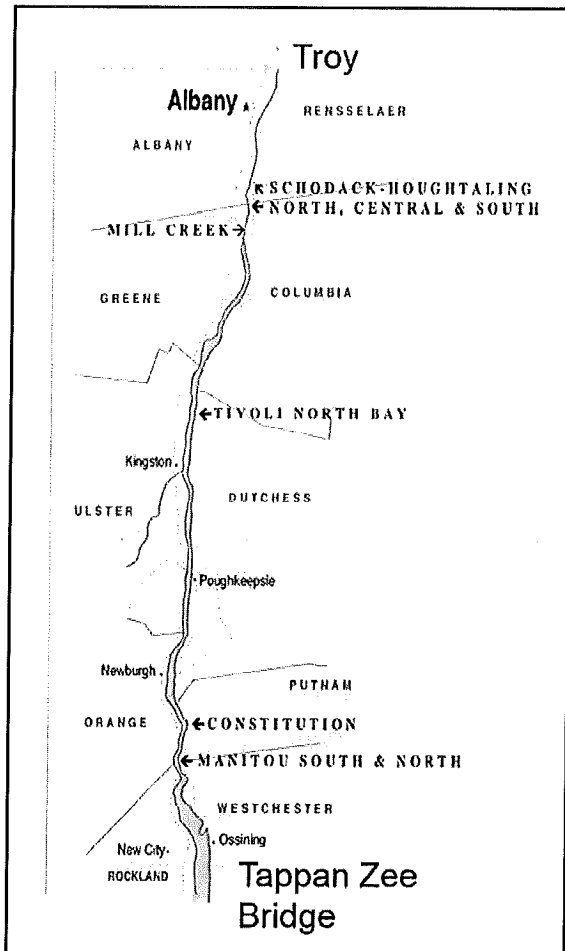
Type of Study: Feasibility Study. The Study's overall ecosystem restoration objective is to restore degraded aquatic, riparian, and wetland ecosystem structure, function, and dynamic processes to a less degraded, more natural condition.

SMART Planning Status: A waiver will be sought to extend the duration of the study beyond three years and to increase its cost above \$3 million.

Project Area: The Hudson River and tributaries, from the Troy Lock and Dam to the new Governor Mario M. Cuomo Bridge (former Tappan Zee Bridge) (approximately 125 river miles).

Problem Statement: Aquatic and wetland ecosystems in the project area have lost structure, function, and dynamic processes due to anthropogenic activities, resulting in degraded aquatic habitat.

Federal Interest: The reconnaissance report for this project, completed in 1995, found that US Army Corps of Engineers activities had caused or contributed to the decline of environmental resources in the project area and that there were multiple sites in the area at which ecosystem restoration could improve environmental quality. The Corps signed a feasibility cost sharing agreement with NYSDEC and NYSDOS in 1996. The feasibility study, which began in 1998, focused on four sites that subsequently became unavailable followed by study suspension following 2001. The Corps officially resumed the study in April 2016, following a re-scoping charrette in 2014.



The resumed feasibility study focused on three categories of restoration including plans to restore shorelines, large scale mosaic sites/side channels and tributary connectivity for fish passage. The restoration plans proposed in the Tentatively Selected Plan (approved at the TSP Milestone on 18 December 2018) are estimated under \$100,000,000.

Risk Identification: This project is not controversial and existing and future conditions do not pose a significant threat to human life or the environment. The main risks associated with the study are that the project would cost more and/or take longer to implement than planned.

1. FACTORS AFFECTING THE LEVELS OF REVIEW

Scope of Review.

- The feasibility study is not likely to be especially challenging.
- The project's risks are most likely to occur when the project is being implemented. Issues with acquiring needed real estate, the potential presence of hazardous, toxic, or radioactive waste in the project area, and the need for cultural mitigation could drive project costs up and delay the project from providing environmental benefits, as could not receiving Federal and non-Federal funds when and in the amount needed. The project not performing as designed could result in the project having lower environmental benefits than anticipated and the Hudson River retaining its poor aquatic habitat and water quality. The magnitude of these risks is medium for real estate acquisition and low for the others.
- The project will not be justified by life safety and poses no significant threats to life safety.
- The Governor of the affected state (New York) has not requested a peer review by independent experts.
- The project is not likely to involve significant public dispute as to its size, nature, or effects. The non-Federal sponsors and stakeholders are interested in accelerating the project's implementation.
- The information in the decision document or anticipated project design will not be based on novel methods and does not 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 will not require redundancy, resiliency, and/or robustness, unique construction sequencing, or a reduced or overlapping design construction schedule.
- The estimated total cost of the project is less than \$200 million. The first level cost estimate for the TSP is approximately \$95 million.
- An Environmental Assessment will be prepared as part of the study and integrated in the feasibility report.
- The project will not have more than negligible impacts on scarce or unique tribal, cultural, or historic resources.
- The project will not have substantial adverse impacts on fish and wildlife species or their habitat.
- The project is not expected to have more than a negligible adverse impact on an endangered or threatened species or their designated critical habitat.

2. REVIEW EXECUTION PLAN

This section describes each level of review to be conducted. Based upon the factors discussed in Section 1, this study will undergo the following types of review:

District Quality Control. All decision documents (including data, analyses, environmental compliance documents, etc.) undergo DQC. DQC is an internal review of basic science and engineering work products that fulfills the project quality requirements of the Project Management Plan.

Agency Technical Review. ATR is performed by a qualified team from outside the home district that is not involved in the day-to-day production of the project/product. These teams will be comprised of certified USACE personnel. The ATR team lead will be from outside the home MSC. Because significant life safety issues are not involved in the study or project a safety assurance review will not need to be conducted during ATR.

Independent External Peer Review. The project does not meet the criteria that would require Type I IEPR of the decision documents. IEPR, the most independent level of review, is applied to projects that have a risk and magnitude warranting a critical examination by a qualified team outside of USACE. A risk-informed decision is made as to whether Type I IEPR is appropriate.

Cost Engineering Review. All decision documents shall be coordinated with the Cost Engineering Mandatory Center of Expertise (MCX). The MCX will assist in determining the expertise needed on the ATR team. The MCX will provide the Cost Engineering certification. The RMO is responsible for coordinating with the MCX for the reviews. These reviews typically occur as part of ATR.

Model Review and Approval/Certification. EC 1105-2-412 mandates the use of certified or approved models for all planning work, to ensure the models are technically and theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions.

Policy and Legal Review. All decision documents shall be reviewed for their compliance with law and policy, in accordance with ER 1105-2-100, Appendix H. These reviews culminate in determinations that report recommendations 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.

Table 1 provides the schedules and costs for reviews. The specific expertise required for the teams are identified in later subsections covering each review. These subsections also identify requirements, special reporting provisions, and sources of more information.

Table 1: Levels of Review

Product(s) to undergo Review	Review Level	Start Date	End Date	Cost	Complete
Evaluation of Planned Wetlands (EPW)	Model Review	-	06/30/2016	-	Yes
Watershed-Scale Upstream Connectivity Toolkit (WUCT)	Model Review	7/18/2018	10/30/2018	\$11,400	Yes
Draft Feasibility Report and EA	District Quality Control	3/21/2019	4/19/2019	\$35,000	No
Draft Feasibility Report and EA	Agency Technical Review	6/10/2019	7/25/2019	\$40,000	No
Draft Feasibility Report and EA	Policy and Legal Review	6/10/2019	7/25/2019	-	No
Final Feasibility Report and EA	District Quality Control	4/30/2020	6/1/2020	\$35,000	No
Final Feasibility Report and EA	Agency Technical Review	6/9/2020	7/9/2020	\$40,000	No
Final Feasibility Report and EA	Policy and Legal Review	7/31/2020	8/31/2020	-	No

a. DISTRICT QUALITY CONTROL

The home district shall manage DQC and will appoint a DQC Lead to manage the local review (see EC 1165-2-217, section 8.a.1). The DQC Lead should prepare a DQC Plan and provide it to the RMO and MSC prior to starting DQC reviews. Table 2 identifies the required expertise for the DQC team.

Table 2: Required DQC Expertise

DQC Team Disciplines	Expertise Required
DQC Lead	A senior professional with extensive experience preparing Civil Works decision documents and conducting DQC. The lead may also serve as a reviewer for a specific discipline (such as planning, economics, environmental resources, etc).
Planning	A senior water resources planner with experience in the plan formulation process. Familiar with evaluation of alternative plans for ecosystem restoration projects.
Economics	Ability to evaluate the appropriateness of cost effectiveness and incremental cost analysis (CE/ICA). Experience with National Ecosystem Restoration analysis procedures.
Environmental Resources	Particular knowledge of ecosystem restoration, including the methods used to evaluate benefits. Familiar with all National Environmental Policy Act (NEPA) requirements. Experience in wetland ecology of urban regions, preferably in the densely populated mid-Atlantic or Northeast.
Cultural Resources	Familiar with Section 106 requirements, USACE practices and ERs.
Engineering – Civil and Hydrology	Experience with engineering analysis and design of wetland restoration or related projects in urban areas and have a thorough understanding of hydrologic transport models.
Cost Engineering	A senior Certified Cost Engineer familiar with cost estimating for similar projects using MII.
Real Estate	Familiar with civil works real estate laws, policies, and guidance, and experienced in working with sponsor real estate issues.

Documentation of DQC. Quality Control should be performed continuously throughout the study. A specific certification of DQC completion is required at the draft and final report stages. Documentation of DQC should follow the District Quality Manual and the MSC Quality Management Plan. An example DQC Certification statement is provided in EC 1165-2-217, on page 19 (see Figure F).

Documentation of completed DQC should be provided to the MSC, RMO and ATR Team leader prior to initiating an ATR. The ATR team will examine DQC records and comment in the ATR report on the adequacy of the DQC effort. Missing or inadequate DQC documentation can result in delays to the start of other reviews (see EC 1165-2-217, section 9).

DrChecks software is recommended for documenting DQC. A DrChecks Report may be attached to the DQC certification to help illustrate the thoroughness of the DQC. The DQC comments and PDT

responses and associated resolutions accomplished will be made available to the ATR Team to demonstrate a thorough DQC was performed.

b. AGENCY TECHNICAL REVIEW

The ATR will assess whether the analyses are technically correct and comply with guidance, and that documents explain the analyses and results in a clear manner. An RMO manages ATR. The review is conducted by an ATR Team, from outside the home district, whose members are certified to perform reviews. Lists of certified reviewers are maintained by the various technical Communities of Practice (see EC 1165-2-217, section 9(h)(1)). Table 3 identifies the disciplines and required expertise for this ATR Team.

Table 3: Required ATR Team Expertise

ATR Team Disciplines	Expertise Required
ATR Lead	A senior professional from outside North Atlantic Division with extensive experience in preparing Civil Works decision documents and conducting ATR. The lead should have the skills to manage a virtual team through an ATR. The lead may serve as a reviewer for a specific discipline (such as planning).
Planning	A senior water resources planner with experience in the plan formulation process. Familiar with evaluation of alternative plans for ecosystem restoration projects.
Economics	Ability to evaluate the appropriateness of cost effectiveness and incremental cost analysis (CE/ICA), as applied to dollar costs and ecosystem restoration benefits. Experience with National Ecosystem Restoration analysis procedures.
Environmental Resources	Particular knowledge of ecosystem restoration, including the methods used to evaluate benefits. Familiar with all NEPA requirements. Experience in wetland ecology of urban regions, preferably in the densely populated mid-Atlantic or Northeast. Familiar with Hazardous, Toxic and Radioactive Waste (HTRW) investigations, USACE practices, and ERs.
Cultural Resources	Familiar with Section 106 requirements, USACE practices and ERs.
Hydrology/Hydraulic Engineering	Familiar with ecosystem restoration planning, with a thorough understanding of hydrologic transport models, including point source and surface area run-off inputs, for the analysis of sediment and pollutant movements within the river system.
Civil Engineering	Experience with engineering analysis and design of wetland restoration or related projects in urban areas.
Cost Engineering	A Certified Cost Technician, Certified Cost Consultant, or Certified Cost Engineer familiar with cost estimating for similar projects using MII. A separate process and coordination is required through the MCX.
Real Estate	Familiar with civil works real estate laws, policies, and guidance, and experienced in working with sponsor real estate issues.
Climate Preparedness and Resilience CoP Reviewer	A member of the Climate Preparedness and Resiliency Community of Practice (CoP)

ATR Team Disciplines	Expertise Required
Risk and Uncertainty	A subject matter expert in multi-discipline flood risk analysis, who can ensure consistent and appropriate identification, analysis, and written communication of risk and uncertainty.

Documentation of ATR. DrChecks will be used to document all ATR comments, responses and resolutions. Comments should be limited to those needed to ensure product adequacy. If a concern cannot be resolved by the ATR team and PDT, it will be elevated to the vertical team for resolution using the EC 1165-2-217 issue resolution process. Concerns can be closed in DrChecks by noting the concern has been elevated for resolution. The ATR Lead will prepare a Statement of Technical Review (see EC 1165-2-217, Section 9), for the draft and final reports, certifying that review issues have been resolved or elevated. ATR may be certified when all concerns are resolved or referred to the vertical team and the ATR documentation is complete.

All members of the ATR team are advised to use the four-part comment structure (see EC 1165-2-217, Section 9(k)(1)).

c. INDEPENDENT EXTERNAL PEER REVIEW

i. Type I IEPR.

Type I IEPR is managed outside of the USACE and conducted on 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.

Decision on Type I IEPR. Because this study does not meet the mandatory triggers for Type I IEPR outlined in EC 1165-2-217, and is unlikely to significantly benefit from this type of review, an exclusion is requested. When the previous review plan for this study was approved, the plans the feasibility study would propose were estimated to exceed \$200 million. Subsequently, the Tentatively Selected Plan first level costs are under \$100,000,000 and are therefore below the IEPR cost threshold. The other mandatory triggers never applied to this study. The study is neither controversial nor based on especially complex or innovative information or methods. The project does not involve life safety issues nor is there any public dispute as to its size, nature, effects, and/or economic or environmental costs or benefits. Additionally, the study will not include an EIS, and the project will have no more than negligible adverse impacts on scarce or unique tribal, cultural, or historic resources; no substantial adverse impacts on fish and wildlife species and their habitat; and no more than a negligible adverse impact on endangered or threatened species or their critical habitat.

ii. Type II IEPR.

The second kind of IEPR is Type II IEPR. These Safety Assurance Reviews are managed outside of the USACE and are conducted on design and construction for hurricane, storm and flood risk management projects or other projects where existing and potential hazards pose a significant threat to human life. A Type II IEPR Panel would be convened to review the design and construction

activities before construction begins, and until construction activities are completed, and periodically thereafter on a regular schedule.

Decision on Type II IEPR. Because this project will not be justified by life safety and poses no significant threats to life safety, Type II IEPR is not warranted and will not be conducted.

d. MODEL CERTIFICATION OR 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 are any models and analytical tools used 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 a planning product. The selection and application of the model and the input and output data is the responsibility of the users and is subject to DQC and ATR.

Table 4: Planning Models. The following models may be used to develop the decision document:

Model Name and Version	Brief Model Description and How It Will Be Used in the Study	Certification / Approval
IWR-PLAN	This model for Cost Effectiveness/Incremental Cost Analysis (CE/ICA) may be used to evaluate alternatives.	Certified
Evaluated Planned Wetlands (EPW)	EPW is a rapid assessment procedure that documents and highlights differences between a wetland assessment area and a planned wetland based on their capacity to provide six functions: shoreline bank erosion control, sediment stabilization, water quality, wildlife, fish (tidal, non-tidal stream/river, and non-tidal pond/lake), and uniqueness/heritage. The differences between wetlands are expressed in terms of individual elements: Functional Capacity Indices, and Functional Capacity Units. The results provide information on individual design elements and measures of functional capacity which are a necessity under current regulatory programs that require tangible goals and a method for calculating planned wetland size.	Approved for regional use (Northeastern Coastal Zone, Northern Piedmont, and Atlantic Coastal Pine Barrens Level III Ecoregions), 30 Jun 16
Watershed-Scale Upstream Connectivity Toolkit (WUCT)	The WUCT, developed by ERDC (based on prior work in McKay et al. 2013, 2016, and 2017), is used to quantify benefits associated with the removal of organism movement barriers within a watershed, allowing for the evaluation and comparison of alternatives associated with the restoration of aquatic tributary connectivity.	Approved for National use, 30 Oct 18

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. The professional practice of documenting the application of the software and modeling results will be followed. The USACE Scientific and Engineering Technology Initiative has identified many

engineering models as preferred or acceptable for use in studies. These models should be used when 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 and ATR.

Table 5: Engineering Models. These models may be used to develop the decision document:

Model Name and Version	Brief Model Description and How It Will Be Used in the Study	Approval Status
N/A	No engineering models were used in this study.	N/A

e. POLICY AND LEGAL REVIEW

Policy and legal compliance reviews for draft and final planning decision documents are delegated to the MSC (see Director’s Policy Memorandum 2018-05, paragraph 9).

(i) Policy Review.

The policy review team is identified through the collaboration of the MSC Chief of Planning and Policy and the HQUSACE Chief of the Office of Water Project Review. The team is identified in Attachment 1 of this Review Plan. The makeup of the Policy Review team will be drawn from Headquarters (HQUSACE), the MSC, the Planning Centers of Expertise, and other review resources as needed.

- o The Policy Review Team will be invited to participate in key meetings during the development of decision documents as well as SMART Planning Milestone meetings. These engagements may include In-Progress Reviews, Issue Resolution Conferences or other vertical team meetings plus the milestone events.
- o The input from the Policy Review team should be documented in a Memorandum for the Record (MFR) produced for each engagement with the team. The MFR should be distributed to all meeting participants.
- o In addition, teams may choose to capture some of the policy review input in a risk register if appropriate. These items should be highlighted at future meetings until the issues are resolved. Any key decisions on how to address risk or other considerations should be documented in an MFR.

(ii) Legal Review.

Representatives from the Office of Counsel will be assigned to participate in reviews. Members may participate from the District, MSC and HQUSACE. The MSC Chief of Planning and Policy will coordinate membership and participation with the office chiefs.

- o In some cases legal review input may be captured in the MFR for the particular meeting or milestone. In other cases, a separate legal memorandum may be used to document the input from the Office of Counsel.
- o Each participating Office of Counsel will determine how to document legal review input.

ATTACHMENT 1: TEAM ROSTERS

PROJECT DELIVERY TEAM			
Name	Office	Position	Phone Number
Lisa Baron	CENAN-PP-C	Project Manager	917-790-8306
Maya Dehner	CENAN-PL-F	Project Planner	917-790-8630
Matthew Voisine	CENAN-PL-E	Project Biologist	917-790-8718
Carissa Scarpa	CENAN-PL-E	Project Archaeologist	917-790-8612
Catherine Alcoba	CENAN-PL-E	Project Biologist	917-790-8216
Steven Weinberg	CENAN-EN-MC	Chief, Civil Works Section	917-790-8391
Michael Morgan	CENAN-EN-H	EN Team Leader	917-790-8269
Gail Woolley	CENAN-EN-H	Project Engineer	917-790-8246
Carlos Gonzalez	CENAN-RE	Real Estate Specialist	917-790-8465
Ellen Simon	CENAN-OC	Office of Counsel	917-790-8158
Cynthia Zhang	CENAN-EN-C	Cost Engineer	917-790-8006

DISTRICT QUALITY CONTROL TEAM (Philadelphia District)			
Name	Office	Position/Team Discipline	Phone Number
Brian Bogle	CENAP-PL-PC	DQC Lead/ Plan Formulation	215-656-6585
Robert Selsor	CENAP-PL-D	Economics	215-656-6569
Mary (Beth) Brandreth or Barbara Conlin	CENAP-PL-E	Environmental	215-656-6558
Nicole (Nikki) Minnichbach	CENAP-PL-E	Cultural Resources	215-656-6556
Laura Bittner	CENAP-EC-EH	Hydrology & Hydraulics	409-766-6688
Gizella Geissele	CENAP-EC-EC	Civil Engineering	215-656-6655
William (Bill) Welk	CENAP-EC-EE	Cost Engineering	215-656-6636
Craig Homesley	CENAB-REC	Real Estate	410-962-4944

AGENCY TECHNICAL REVIEW TEAM			
Name	Office	Position	Phone Number
Andrew MacInnes	CEMVN-PD-PER	ATR Lead/Plan Formulation Reviewer	504-862-1062
Joe Hoke	CESAS	H&H	912-652-5516
Chris Bouquot	CEMVN-PDE-FRC	Economics	901-544-4313
TBD	TBD	Cultural	---

AGENCY TECHNICAL REVIEW TEAM			
Name	Office	Position	Phone Number
Erica Stephens	CEMVR-EC-DN	Civil Engineering/ HIRW	309-794-5925
Paula Johnson-Muic	CESWD-PDR	Real Estate	469-487-7031
Nathaniel Richards	CEMVP-RPEDN- PD-F	Environmental	309-794-5286
William Bolte	CENWW-ECE	Cost DX	509-527.7585
Hans 'Rod' Moritz	CENWP-EC-HD	Climate Preparedness and Resilience CoP Certified Reviewer	503-808-4864
TBD	TBD	Risk and Uncertainty Analysis	---

VERTICAL TEAM			
Name	Office	Position	Phone Number
Thomas J. Hodson	Plan Formulation, NAN	Chief	917-790-8602
Peter Wepler	Environmental Analysis, NAN	Chief	917-790-8634
Bob Gerrits	Engineering Management, NAN	Chief	917-790-8288
Paul Tumminello	Civil Works Program and Project Management Branch, NAN	Chief	917-790-8208
Chip Hall	CELRN Planning Branch	ECO-PCX Lead	615-736-7666
Hank Gruber	CENAD Planning CoP Team Lead	MSC Lead	347-370-4566
Rena Weichenberg	CENAD Environmental Team Lead	MSC	347-370-4568
Catherine Shuman	NAD-RIT	HQ RIT Lead	202-761-1379

POLICY REVIEW TEAM			
Name	Office	Position	Phone Number
Leigh Skaggs	CECW-PC	Social Scientist/ Plan Formulation	904-251-4769
Patsy Falcigno	CECC-NAD	Assistant Division Counsel	646-510-1856
Joseph Thomas Topi	CENWD-PDD	Division Economist	503-808-3856
TBD	TBD	Real Estate	---

POLICY REVIEW TEAM			
Name	Office	Position	Phone Number
Jason Engle	CESAJ-EN-WC	Supervisory Hydraulic Engineer/Engineering/Climate CoP Policy Review	904-232-2230
Ralph LaMoglia	CENAD-RB-T	Engineering	347-370-4599
Rena Weichenberg	CENAD-PD-PP	Planning Program Manager Environmental	347-370-4568



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

CEMVD-PD (ECO-PCX)

13 February 2019

MEMORANDUM FOR Commander, New York District
ATTN: Clifford S. Jones III, CENAN-PL

SUBJECT: Hudson River Habitat Restoration Feasibility Study, New York State, Review Plan Endorsement

1. References

- a. Engineer Circular (EC) 1165-2-217 Review Policy for Civil Works, 20 Feb 2018.
- b. Engineer Regulation 1110-2-12, Quality Management, 30 Sept 2006.
- c. Type I Independent External Peer Review Standard Operating Procedure, Aug. 2016.
- d. U.S. Army Corps of Engineers, Memorandum for Major Subordinate Commanders, Subject - Revised Delegation of Authority in Section 2034(a)(5)(A), of the Water Resources Development Act of 2007 (WRDA 2007), as amended (33 U.S.C. 2343), 23 May 2018.
- e. Draft Review Plan, Hudson River Habitat Restoration, New York State.

2. The enclosed Review Plan complies with all applicable policy and provides for adequate District Quality Control and Agency Technical Review for the plan formulation, engineering, and environmental analyses, and other aspects of plan development. The National Ecosystem Restoration Planning Center of Expertise (ECO-PCX) recommends the North Atlantic Division approve the Review Plan following the provisions of EC 1165-2-217 (Reference 1.a.).
3. The Review Plan uses criteria in EC 1165-2-217 to assess the risk of excluding the study from Type I Independent External Peer Review (IEPR). A risk assessment shows that the study does not meet the criteria for mandatory IEPR. The ECO-PCX concurs with the New York District's plan to seek an exclusion to performing Type I IEPR. The ECO-PCX concurs with the District's risk assessment in the draft Review Plan. The procedures outlined in References 1.c. and 1.d. should be followed to seek approval of the request to exclude the study from Type I IEPR. Please include the ECO-PCX on all vertical team coordination related to the exclusion request.
4. The ECO-PCX recommends approval of the Review Plan by the Major Subordinate Command. Upon approval, please provide the ECO-PCX with a copy of the Review Plan and the approval memorandum, and the link to where the plan is posted on the District website. If revisions are made to the plan, due to changes in project scope, or Corps policy, a revised Review Plan should be provided to the ECO-PCX for review. Non-substantive changes do not require further ECO-PCX review but should be documented in an updated Review Plan and provided to the ECO-PCX and other members of the vertical team.

5. Thank you for the opportunity to assist in the preparation of the Review Plan. If you have any questions about the plan of other aspects of review requirements please contact Mr. Chip Hall, the ECO-PCX Account Manager for the North Atlantic Division. We look forward to continuing to work with the team as the study progresses.

MACINNES.ANDREW.D
OUGLAS.1368729082

Digitally signed by
MACINNES.ANDREW.D.OUGLAS.1368729082
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI,
ou=USA, cn=MACINNES.ANDREW.D.OUGLAS.1368729082
Date: 2019.02.14 11:22:12 -0600

Enclosure

Andrew D. MacInnes
Operating Director (Acting),
National Ecosystem Restoration
Planning Center of Expertise

CF:
CENAD-PD-P (Gruber, Weichenberg)
CECW-NAD (Shuman)
CENAN-PP-C (Baron)
CENAN-PL-E (Weppler)
CEMVD-PD (Young, Mallard)
CELRN-PM-P (Hall)