



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

REPLY TO
ATTENTION OF:

15 APR 2008

CEMVD-PD-SP

MEMORANDUM FOR Commander, Rock Island District

SUBJECT: Senachwine Creek Critical Restoration Project, Section 519, Peer Review Plan (PRP)

1. References:

a. EC 1105-2-408, 31 May 2005, Peer Review of Decision documents.

b. Memorandum, CECW-CP, 30 March 2007, subject: Peer Review Process.

c. Supplement to memorandum, CEMVD-PD-N, 30 March 2007, subject: Peer Review Process.

d. Memorandum, CEMVD-PD-N, 20 February 2008, subject: Senachwine Creek Critical Restoration Project, Ecosystem Planning Center of Expertise Recommendation for Approval of Peer Review Plan (encl).

2. I hereby approve subject PRP and concur in the recommendation that external peer review of this project is not required for the following reasons: (1) implementation costs will not exceed \$45 million, (2) the project is not novel, controversial, or precedent-setting, and (3) the project will not have significant interagency interest or adverse impacts on cultural, economic, and environmental resources. 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. Non-substantive changes to this PRP do not require further approval.

CEMVD-PD-SP

15 APR 2008

SUBJECT: Senachwine Creek Critical Restoration Project, Section 519, Peer Review Plan (PRP)

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.b. above.

4. The MVD point of contact is Mr. Terry Smith, CEMVD-PD-SP, (601) 634-5840.

Encl



MICHAEL J. WALSH
Brigadier General, USA
Commanding



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REPLY TO
ATTENTION OF:

CEMVD-PD-N

20 February 2008

MEMORANDUM FOR Commander, Mississippi Valley Division
ATTN: (Charles Barton, MVD-PD-SP)

SUBJECT: Senachwine Creek Critical Restoration Project, 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-CP 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 (EPR) is not required for this project because the implementation costs are not likely to be more than \$45 million, the project is not novel, controversial, or precedent-setting, and will not have a significant interagency interest or significant adverse impacts on cultural, economic, and environmental resources. 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 MVD.

Rayford Wilbanks
Director, National Ecosystem Planning
Center of Expertise

CF:

CEMVD-RB-T (D. Vigh)
CEMVD-PD-SP (T. Smith)
CEMVR-PM-F (B. Thompson)
CEMVR-PM-F (C. Knollenberg)

PEER REVIEW PLAN

**SENACHWINE CREEK
CRITICAL RESTORATION PROJECT
PROJECT IMPLEMENTATION REPORT WITH
INTEGRATED ENVIRONMENTAL ASSESSMENT**

1. Purpose and Requirements.

a. This document outlines the peer review plan for Senachwine Creek Critical Restoration Project Implementation Report (PIR) with Integrated Environmental Assessment (EA) and Appendices. EC 1105-2-408 dated 31 May 2005 “Peer Review of Decision Documents” 1) establishes procedures to ensure the quality and credibility of Corps decision documents by adjusting and supplementing the review process and 2) requires that documents have a peer review plan. The Circular applies to all feasibility studies and reports and any other reports that lead to decision documents that require authorization by Congress. The feasibility level reports (PIRs) in this program will lead to Congressional Authorization and are therefore covered by the Circular.

b. The Circular outlines the requirement of the two review approaches (independent technical review (ITR) and external peer review (EPR)) and provides guidance on Corps Planning Centers of Expertise (PCX) involvement in the approaches. This document addresses review of the decision document as it pertains to both approaches and planning coordination with the appropriate Center.

(1) ITR. Districts are responsible for reviewing the technical aspects of the decision documents through the ITR approach. ITR is a critical examination by a qualified person or team that was not involved in the day-to-day technical work that supports the decision document. ITR is intended to confirm that such work was done in accordance with clearly established professional principles, practices, codes, and criteria. In addition to technical review, documents should also be reviewed for their compliance with laws and policy. The Circular also requires that DrChecks (<https://www.projnet.org/projnet/>) be used to document all ITR comments, responses, and associated resolution accomplished.

(2) EPR. The Circular added external peer review to the existing Corps review process. This approach does not replace the standard ITR process. The external peer review approach applies in special cases where the magnitude and risk of the project are such that a critical examination by a qualified person outside the Corps is necessary. EPR can also be used where the information is based on novel methods, presents complex interpretation challenges, contains precedent-setting methods or models, or is likely to affect policy decisions that have a significant impact. The degree of independence required for technical review increases as the project magnitude and project risk increase.

(a) Projects with low magnitude and low risk may use a routine ITR.

(b) Projects with either high magnitude/low risk or low magnitude/high risk would require both Corps and outside reviewers on the ITR team to address the portions of the project that cause the project to rate high on the magnitude or risk scale.

(c) Projects with high magnitude and high risk require a routine ITR as well as an EPR.

(3) PCX Coordination. The Circular outlines PCX coordination in conjunction with preparation of the review plan. Districts should prepare the plans in coordination with the appropriate PCX. The Corps PCX are responsible for the accomplishment and quality of ITR and EPR for decision documents covered by the Circular. Centers may conduct the review or manage the review to be conducted by others. Reviews will be assigned to the appropriate Center based

on business programs. The Circular outlines alternative procedures to apply to decision documents. Each Center is required to post review plans to its website every three months as well as links to any reports that have been made public. The Office of Water Project Review will consolidate the lists of all review plans and establish a mechanism for soliciting public feedback on the review plans.

2. **Project Description.**

a. Decision Document. The purpose of the decision document entitled Senachwine Creek Critical Restoration Project Implementation Report (PIR) with Integrated Environmental Assessment (EA) and Appendices is to present the results of a feasibility study undertaken to restore the Senachwine Creek Watershed. The Senachwine Creek Critical Restoration Project is a component of Illinois River Basin Restoration. Illinois River Basin Restoration was authorized by Section 519 of the Water Resources Development Act of 2000. The feasibility phase of this project is cost shared 65/35 with the project sponsor, the Illinois Department of Natural Resources. This report provides planning, engineering, and implementation details of the recommended restoration plan to allow final design and construction to proceed subsequent to the approval of the plan.

b. General Site Description. Senachwine Creek is located in central Illinois in western Marshall County, northeastern Peoria County and a small portion of the eastern Stark County. The watershed size is approximately 57,300 acres in size (89.5 square miles). Senachwine Creek originates near Camp Grove, Illinois where it flows for approximately 29 miles and outlets into the Illinois River at Chillicothe, Illinois.

c. Project Scope. The proposed project area is the entire watershed. The preliminary estimated total project cost is \$5 million.

d. Problems and Opportunities. The Senachwine Creek Watershed is rich in aquatic and terrestrial habitats. However, excessive agricultural development in the watershed has caused increased stream bank and bed erosion and stream fragmentation. This instability is threatening high quality riparian and aquatic habitats within the watershed by increased mass wasting of land adjacent to the stream and increased turbidity in the stream. Systemically, excessive sediment delivery from Senachwine Creek to the Illinois River is degrading floodplain and backwater habitats in the vicinity of the confluence with the Illinois River. Opportunities exist to 1) restore natural stream channel patterns and riparian corridor integrity, 2) improve the sustainability of quality in-stream and riparian habitats and functions, 3) restore natural stream corridor equilibrium, 4) reduce non-point source pollution through additional upland treatments, and 5) restore historically significant wetlands.

e. Potential Methods. Goals for achieving the project goals and objectives to achieve them are listed below:

Objectives for Goal 1: Reduction of sediment delivery to the Illinois River

1. Stream Restoration Alternatives-Stabilize stream channel bed and banks
2. Re-meander stream segments
3. Upland Treatments

Objectives for Goal 2: Naturalize and enhance floodplain and riparian areas

1. Stream Restoration Alternatives-Stabilize stream channel bed and banks

2. Restore Riparian Corridors
3. Increase connectivity of riparian corridors

Objectives for Goal 3: Enhance aquatic resources

1. Stream Restoration Alternatives-Stabilize stream channel bed and banks
2. Restore riffle and pool habitat
3. Reduce invasive species
4. Wetland Restoration

Objectives for Goal 4: Naturalize hydrologic regimes

1. Increase infiltration and stream base flows
2. Reduce 2-5 year flow events

It is anticipated that the Qualitative Habitat Evaluation Index (QHEI) model will be utilized to evaluate the project alternatives. PCX will need to determine if model certification is required.

f. Product Delivery Team. The product delivery team (PDT) is comprised of those individuals directly involved in the development of the decision document. Contact information and disciplines are listed below.

First	Last	Discipline	Phone	Email
NAMES REMOVED		Study Manager/planning	309-794-5447	Removed
		Environmental engineering/Civil design	309-794-5202	Removed
		Biology/NEPA	309-794-5286	Removed
		Hydraulics/hydrology	309-794-5289	Removed
		Socio-economics	309-794-5309	Removed
		Cost engineering	309-794-5265	Removed
		Real Estate/lands	309-794-5955	Removed
		Cultural resources	309-794-5185	Removed
		Geotechnical engineering	309-794-5247	Removed

g. Vertical Team. The Vertical Team includes District management, District Support Team (DST) and Regional Integration Team (RIT) staff as well as members of the Planning of Community of Practice (PCoP). The District program manager is NAME REMOVED, CEMVR-PM-F, at 309-794-5256. DST manager for this project is NAME REMOVED, CEMVD-PD-SP at 601-634-5840. The RIT manager is NAME REMOVED at 202-761-4515. The PCoP contact is NAME REMOVED, CEMVD-PD-N at 601-634-5827.

3. ITR Plan. As outlined above in paragraph 1.b. (1), the District is responsible for ensuring adequate technical review of decision documents. The responsible PDT District of this decision document is Rock Island (MVR). It is recommended that individuals from multiple districts (Huntington (LRH), St. Louis (MVS), Nashville (LRN), St. Paul (MVP), Kansas City (NWK)) serve as the review team.

a. General. An ITR Manager shall be designated for the ITR process. The proposed ITR Manager for this project is NAME REMOVED (LRH). The ITR Manager is responsible for providing information necessary for setting up the review, communicating with the Study Manager, providing a summary of critical review comments, collecting grammatical and editorial comments from the ITR team (ITRT), ensuring that the ITRT has adequate funding to perform the review, facilitating the resolution of the comments, and certifying that the ITR has been conducted and resolved in accordance with policy.

b. Team. The ITRT will be comprised of individuals that have not been involved in the development of the decision document and will be chosen based on expertise, experience, and/or skills. The members will roughly mirror the composition of the PDT. It is anticipated that the team will consist 9-11 reviewers. The ITRT members and their areas of expertise are:

First	Last	Discipline	Phone	Email
NAMES REMOVED		ITR Manager/plan formulation (LRH)	816-389-3138	REMOVED
		Civil design (LRN)	615-736-7863	REMOVED
		Biology/NEPA (MVS)	314-331-8462	REMOVED
		Hydraulics/hydrology (MVP)	651-290-5634	REMOVED
		Socio-economics	TBD	REMOVED
		Cost engineering*	TBD	REMOVED
		Real estate/Lands	TBD	REMOVED
		Cultural resources (NWK)	816-389-3138	REMOVED
		Geotechnical engineering (MVP)	651-290-5656	REMOVED

The remaining ITR team members will be identified by ITR manager at the earliest possible date.

*The cost engineering team member nomination will be coordinated with the NWW Cost Estimating Directory of Expertise as required. The Directory will decide if the cost estimate will need to be reviewed by Directory Staff.

c. Communication. The communication plan for the ITR is as follows:

(1) The team will use DrChecks to document the ITR process. The Study Manager will facilitate the creation of a project portfolio in the system to allow access by all PDT and ITRT members. An electronic version of the document, appendices, and any significant and relevant public comments shall be posted in Word format at: <ftp://ftp.usace.army.mil/pub/> at least one business day prior to the start of the comment period.

(2) The PDT shall send the ITR manager one hard copy (with color pages as applicable) of the document and appendices for each ITRT member such that the copies are received at least one business day prior to the start of the comment period.

(3) The PDT shall host an ITR kick-off meeting virtually to orient the ITRT during the first week of the comment period. If funds are not available for an on-site meeting, the PDT shall provide a presentation about the project, including photos of the site, for the team.

(4) The Study Manager shall inform the ITR manager when all responses have been entered into DrChecks and conduct a briefing to summarize comment responses to highlight any areas of disagreement.

(5). A revised electronic version of the report and appendices with comments incorporated shall be posted at <ftp://ftp.usace.army.mil/pub/> for use during back checking of the comments.

(6) Team members shall contact ITRT members or leader as appropriate to seek clarification of a comment's intent or provide clarification of information in the report. Discussions shall occur outside of DrChecks but a summary of discussions may be provided in the system.

(7) Reviewers will be encouraged to contact PDT members directly via email or phone to clarify any confusion. DrChecks shall not be used to post questions needed for clarification.

(8) The ITRT, PDT, and vertical team shall conduct an after action review (AAR) no later than two weeks after the policy guidance memo is received from HQUSACE for the for the AFB and draft reports.

d. Funding.

(1) The PDT district shall provide labor funding by cross charge labor codes. Funding for travel, if needed, will be provided through government order. The Study Manager will work with the ITR manager to ensure that adequate funding is available and is commensurate with the level of review needed. The current cost estimate for this review is \$20,000. Any funding shortages will be negotiated on a case by case basis and in advance of a negative charge occurring.

(2) The team leader shall provide organization codes for each team members and a responsible financial point of contact (CEFMS responsible employee) for creation of labor codes.

(3) Reviewers shall monitor individual labor code balances and alert the ITRT Study Manager to any possible funding shortages.

e. Timing and Schedule.

(1) Throughout the development of this document, the team will hold planning charrettes to ensure planning quality. Senior staff and subject matter experts from the PDT District and members of the vertical team (DST, Planning CoP, and RIT as needed) will attend the charrettes and provide comments on the product to date.

(2) The ITR will begin once a recommended plan has been selected, the preliminary design is complete, and the environmental assessment has been performed.

(3) The PDT will hold a “page-turn” session to review the draft report to ensure consistency across the disciplines and resolve any issues prior to the start of ITR. Writer/editor services will be performed on the draft prior to ITR as well.

(4) The ITR process for this document will follow the timeline below. Actual dates will be scheduled once the period draws closer. It is estimated that review of the AFB pre-conference document will be begin in the 4th Quarter of FY 2008.

Task	Date
ITR of Draft Report Comment Period	Begin Week 1
Kickoff meeting	Week 1
ITR Comments	Due Week 4
PDT Responses	Due Week 6
Responses Backcheck	Week 8
Alternative Formulation Briefing (AFB)	Week 14
AFB Policy Memo Issued	Week 18
ITR Interim Certification	Week 18
Draft Report Complete	Week 20
ITR After Action Review	NLT Week 20
Public Review of Draft Report	Begin Week 25
ITR Certification/Completion	Week 32
Final Report	Completed Week 40

f. Review.

(1) ITR Team responsibilities are as follows:

(a) Reviewers shall review the draft report to confirm that work was done in accordance with established professional principles, practices, codes, and criteria and for compliance with laws and policy. Comments on the report shall be submitted into DrChecks.

(b) Reviewers shall pay particular attention to one’s discipline but may also comment on other aspects as appropriate. Reviewers that do not have any significant comments pertaining to their assigned discipline shall provide a comment stating this.

(c) Grammatical and editorial comments shall not be submitted into DrChecks. Comments should be submitted to ITR manager via electronic mail using tracked changes feature in the Word document or as a hard copy mark-up. The ITR manager shall provide these comments to the Study Manager.

(d) Review comments shall contain these principal elements:

- A clear statement of the concern

- The basis for the concern, such as law, policy, or guidance
- Significance for the concern
- Specific actions needed to resolve the comment

(e) The “Critical” comment flag in DrChecks shall not be used unless the comment is discussed with the ITR manager and/or the Study Manager first

(2) PDT Team responsibilities are as follows:

(a) The team shall review comments provided by the ITRT in DrChecks and provide responses to each comment using “*Concur*”, “*Non-Concur*”, or “*For Information Only*”. *Concur* responses shall state what action was taken and provide revised text from the report if applicable. *Non-Concur* responses shall state the basis for the disagreement or clarification of the concern and suggest actions to negotiate the closure of the comment.

(b) Team members shall contact the PDT and ITRT managers to discuss any “non-concur” responses prior to submission.

g. Resolution.

(1) Reviewers shall back check PDT responses to the review comments and either close the comment or attempt to resolve any disagreements. Conference calls shall be used to resolve any conflicting comments and responses.

(2) Reviewers may “agree to disagree” with any comment response and close the comment with a detailed explanation. If reviewer and responder cannot resolve a comment, it should be brought to the attention of the ITR manager and, if not resolved by the ITR manager, it should be brought to the attention of the planning chief who will need to sign the certification. ITRT members shall keep the ITR manager of problematic comments. The vertical team will be informed of any policy variations or other issues that may cause concern during Headquarter review.

h. Certification. To fully document the ITR process, a statement of technical review will be prepared. Certification by the ITR manager and the Study Manager will occur once issues raised by the reviewers have been addressed to the review team’s satisfaction and the final report is ready for submission for HQ review. Indication of this concurrence will be documented by the signing of a certification statement (Appendix A). A summary report of all comments and responses will follow the statement and accompany the report throughout the report approval process. An interim certification will be provided by the ITR team lead to indicate concurrence with the report to date until the final certification is performed when the report is considered final.

i. Alternative Formulation Briefing (AFB). The AFB for this project will occur after the majority of the ITR comments have been resolved. It is possible that the briefing will result in additional technical or policy comments from high level reviewers for

resolution. The resolution of significant policy comments may result in major changes to the document. Therefore, the ITR team lead will perform a brief review of the report to ensure that technical issues are resolved.

4. EPR Plan.

a. This decision document will present the details of a feasibility study undertaken to restore the Senachwine Creek Watershed as described in paragraph 2 above. This critical restoration project is part of a larger program aimed at restoration of the Illinois River Basin. This project does not meet the EPR standards outlined in the Circular.

(1) Project Magnitude. The magnitude of this project is determined as low. The cost of the project will not exceed \$5 million. It is assumed that the amount of benefits accrued by the project will be worth the cost because. The scale of the project is limited because the project construction footprint will be limited to approximately 100 acres. The project is not considered complex and involves restoration of aquatic habitat through the implementation of standard concepts. The project will have positive long term and cumulative effects. It is anticipated that the report will not present influential scientific information or influential scientific assessments, thus only an ITR is anticipated to be required.

(2) Project Risk. This project is considered low risk overall. The potential for failure is low because restoration of tributary streams is a straight forward concept with numerous successful national applications. The potential for controversy regarding project implementation is low because the recommended plan will take into account the public concerns. A socio-economic analysis will be prepared and at least one public meeting will be held. The uncertainty of success of the project is low because the methods used for evaluating the project are standard and the concept of implementing proposed project features is not innovative. The ecosystem has not reached an irreversible state so it is likely that a restoration effort of the magnitude proposed will be successful.

(3) Vertical Team Consensus. Ms. Susan Smith of Mississippi Valley Division representing the vertical team concurred (personal communication dated 28 September 2007) that the subject matter covered in the decision document is NOT novel, controversial, or precedent-setting, and the project will not have significant interagency interest or significant economic, environmental or social effects.

(4) Therefore, a separate EPR will not be conducted on the decision document and external members will not be part of the ITR team. The ITR, Public and Agency Review will serve as the main review approaches.

5. Public and Agency Review.

a. Public review of the draft report will occur after issuance of the AFB policy guidance memo and concurrence by HQUSACE that the document is ready for public release. As

such, public comments other than those provided at any public meetings held during the planning process will not be available to the review team.

b. Public review of the draft report will begin approximately one month after the completion of the ITR process and policy guidance memo. The period will last 30 days as required.

c. The public review of necessary State or Federal permits will also take place during this period.

d. A formal State and Agency review will occur concurrently with the public review. However, it is anticipated that intensive coordination with these agencies will have occurred concurrent with the planning process.

e. Upon completion of the review period, comments will be consolidated in a matrix and addressed, if needed. A comment resolution meeting will take place if needed to decide upon the best resolution of comments. A summary of the comments and resolutions will be included in the document.

6. PCX coordination. The appropriate PCX for this document is the National Ecosystem Planning Center of Expertise located at MVD. This review plan was submitted through the PDT District (MVR) Planning Chief, to the PCX Director and Deputies for approval. Because it was determined that this project is low magnitude and low risk, an EPR will not be required. As such, the PCX will not be asked to manage the review, but is requested to review and comment on the sufficiency of the ITR team proposed in paragraph 3.b. above. The approved review plan will be posted to the PCX website. Any public comments on the review plan will be collected by the Office of Water Project Review (OWPR) and provided to the PDT District for resolution and incorporation if needed.

7. 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. Signatures by the individuals below indicate approval of the plan as proposed.

**APPENDIX A
STATEMENT OF TECHNICAL REVIEW**

**COMPLETION OF INDEPENDENT TECHNICAL REVIEW
SENACHWINE CREEK WATERSHED CRITICAL RESTORATION PROJECT
PROJECT IMPLEMENTATION REPORT
WITH INTEGRATED ENVIRONMENTAL ASSESSMENT
AND APPENDICES**

Rock Island District has completed the project implementation report (feasibility report) with integrated environmental assessment and appendices of the Senachwine Creek Critical Restoration Project. Notice is hereby given that an independent technical review, that is appropriate to the level of risk and complexity inherent in the project, has been conducted as defined in the Review Plan. During the independent technical review, 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 result, including whether the product meets the customer's needs consistent with law and existing Corps policy. The independent technical review was accomplished by an independent team composed of staff from multiple districts. All comments resulting from ITR have been resolved.

NAME REMOVED
Team Leader, Senachwine Creek Project
Independent Technical Review Team

Date

NAME REMOVED
Study Manager, Senachwine Creek Project

Date

CERTIFICATION OF INDEPENDENT TECHNICAL REVIEW

A summary of all comments and responses are attached. Significant concerns and the explanation of the resolution are as follows:

(Describe the major technical concerns, possible impact and resolution)

As noted above, all concerns resulting from the independent technical review of the project have been fully resolved.

NAME
Chief, Planning and Policy Branch
Rock Island District

Date