



## DEPARTMENT OF THE ARMY

MISSISSIPPI VALLEY DIVISION, CORPS OF ENGINEERS

P.O. BOX 80

VICKSBURG, MISSISSIPPI 39181-0080

REPLY TO  
ATTENTION

CEMVD-PD-KM

29 May 2009

MEMORANDUM FOR Commander, Vicksburg District

SUBJECT: Review Plan, Yazoo River Basin, Mississippi,  
Tributaries Reformulation Study

1. References:

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

b. Multiple 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. EC 1105-2-110, Review of Decision Documents,  
22 Aug 2008

e. Memorandum, CESPDPDS-P, 14 May 2009, subject: Yazoo  
Basin Review Plan concurrence memo (encl 1).

2. I hereby approve the subject review plan (encl 2) and concur in the recommendation that agency technical review and independent external peer review of this project are required by EC 1105-2-410. The proposed review plan was coordinated with, and concurred in by, the Flood Risk Management National Planning Center of Expertise (FRM-PCX). The review plan complies with all applicable policy and provides an adequate agency technical review of the plan formulation, engineering and environmental analyses, and other aspects of the plan development. Non-substantive changes to this review plan do not require further approval.

3. Post the review plan to your web page, provide the FRM-PCX a link for posting on its web page, and furnish a copy of the final approved review plan to the FRM-PCX. In accordance with reference 1.c. above, before posting to your web page, remove the names of Corps/Army employees.

CEMVD-PD-KM

SUBJECT: Review Plan, Yazoo River Basin, Mississippi,  
Tributaries Reformulation Study

4. My point of contact for this review plan is [REDACTED]  
[REDACTED], CEMVD-PD-KM, [REDACTED]

//signed//

Encls

[REDACTED]  
Brigadier General, USA  
Commanding

14 May 2009

MEMORANDUM FOR [REDACTED] and [REDACTED] Vicksburg District

SUBJECT: Yazoo River Basin, Mississippi, Tributaries Reformulation Study Review Plan

1. The Flood Risk Management Planning Center of Expertise (FRM-PCX) has reviewed the Review Plan (RP) for the subject study and concurs that the RP satisfies peer review policy requirements outlined in Engineering Circular (EC) 1105-2-410 Review of Decision Documents, dated 22 August 2008.
2. The review was performed by [REDACTED] Sacramento District. The RP checklist documenting the review is attached.
3. The FRM-PCX recommends the RP for approval by the MSC Commander. Upon approval of the RP, please provide a copy of the approved RP, a copy of the MSC Commander approval memorandum, and the link to where the RP is posted on the District website to [REDACTED] Program Manager for the FRM-PCX ([REDACTED]) and [REDACTED] lead Regional Technical Specialist for the FRM-PCX ([REDACTED]).
4. Thank you for the opportunity to assist in the preparation of the RP. Please coordinate the Agency Technical Review (ATR), Independent External Peer Review (IEPR), and Model Certification efforts outlined in the RP with me.

Encl

[REDACTED]  
[REDACTED]  
Program Manager, FRM-PCX

Encl

REVIEW PLAN  
YAZOO RIVER BASIN, MISSISSIPPI  
TRIBUTARIES REFORMULATION STUDY

(Project Photo Option)

APRIL 2009

PREPARED BY:  
U.S. ARMY CORPS OF ENGINEERS  
VICKSBURG DISTRICT

REVIEW PLAN  
YAZOO RIVER BASIN, MISSISSIPPI  
TRIBUTARIES REFORMULATION STUDY

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REVIEW PLAN  
YAZOO RIVER BASIN, MISSISSIPPI  
TRIBUTARIES REFORMULATION STUDY

PURPOSE AND REQUIREMENTS

PURPOSE

1. This document outlines the Review Plan for the Yazoo River Basin, Mississippi, Tributaries Reformulation Study Project Management Plan (PMP). Engineer Circular (EC) 1105-2-408, "Peer Review of Decision Documents," 31 May 2005, established procedures to ensure the quality and credibility of U.S. Army Corps of Engineers Decision Documents by adjusting and supplementing the review process and required that documents have a Peer Review Plan. That EC applies to all feasibility studies and reports and any other reports that lead to Decision Documents that require authorization by Congress. This Decision Document will not require congressional authorization.
2. A subsequent circular, EC 1105-2-410, "Review of Decision Documents," 22 August 2008, revises the technical and overall quality control review processes for Decision Documents. It formally distinguishes between technical review performed by in-District (District Quality Control (DQC)) and out-of-District resources (formerly Independent Technical Review (ITR) now Agency Technical Review (ATR)). It also reaffirms the requirement for Independent External Peer Review (IEPR); this is the most independent level of review and is applied in cases that meet certain criteria where the risk and magnitude of a proposed project are such that a critical examination by a qualified team outside the Corps is warranted.

REQUIREMENTS

3. The EC 1105-2-410 outlines the requirement of the three review approaches (DQC, ATR, and IEPR). The EC 1105-2-408 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 PCX. The Yazoo River Basin Tributaries Reformulation Study will investigate Flood Risk Management (FRM) issues in the study area. The FRM-PCX is considered to be the primary PCX for coordination.



a. District Quality Control. The DQC is the review of basic science and engineering work products focused on fulfilling the project quality requirements defined in the Yazoo River Basin Tributaries PMP for the study (to which this Review Plan will ultimately be appended). It is managed in the Vicksburg District and may be conducted by in-house staff as long as the reviewers are not doing the work involved in the study, including contracted work that is being reviewed. Basic quality control tools include a Quality Management Plan (QMP) providing for seamless review, quality checks and reviews, supervisory reviews, Project Delivery Team (PDT) reviews, etc. Additionally, the PDT is responsible for a complete reading of the report to assure the overall integrity of the report, technical appendixes, and the recommendations before the approval by the District Commander. For the Yazoo River Basin Tributaries Reformulation Study, non-PDT members and/or supervisory staff will conduct this review for major draft and final products. The Mississippi Valley Division (CEMVD)/Vicksburg District (CEMVK) are directly responsible for the QM and QC respectively and to conduct and document this fundamental level of review. A Quality Control Plan (QCP) is included in the PMP for the study and addresses DQC by CEMVD/CEMVK; DQC is not addressed further in this Review Plan. The DQC is required for this study.

b. Agency Technical Review. The EC 1105-2-410 recharacterized ATR (which replaces the level of review formerly known as ITR) into an indepth review, managed within the Corps, and conducted by a qualified team outside the home District that is not involved in the day-to-day production of a project/product. The purpose of this review is to ensure the proper application of clearly established criteria, regulations, laws, codes, principles, and professional practices. The ATR team reviews the various work products and assures that all the parts fit together in a coherent whole. The ATR teams will be comprised of senior Corps personnel (Regional Technical Specialists (RTS), etc.) and may be supplemented by outside experts as appropriate. To assure independence, the leader of the ATR team shall be from outside CEMVD. The EC 1105-2-408 requires that DrChecks (<https://www.projnet.org/projnet/>) be used to document all ATR comments, responses, and associated resolution accomplished. This Review Plan outlines the proposed approach to meeting this requirement for the study. The ATR is required for this study.

c. Independent External Peer Review. The EC 1105-2-410 recharacterized the external peer review process that was originally added to the existing Corps review process via EC 1105-2-408. The IEPR is the most independent level of review and is applied in cases that meet certain criteria where the risk and magnitude of the proposed project are such that a critical examination by a qualified team outside the Corps is warranted. The IEPR is managed by an outside eligible organization (OEO) that is described in the Internal Review Code Section 501(c) (3); exempted from Federal tax under Section 501(a) of the Internal Revenue Code of 1986; independent; free from conflicts of interest; does not carry out or advocate for or against Federal water resources projects; and has experience in establishing and administering IEPR panels. The scope of review will address all the underlying planning, engineering, including safety assurance, economics, and environmental analyses performed, not just one

aspect of the project. The IEPR will be on the technical aspects of the project while the ATR will be responsible for the agency and Administration's policy review. The IEPR is required for this study (see pages 10-11 for reasoning).

d. Policy and Legal Compliance Review. In addition to the technical reviews, Decision Documents will be reviewed throughout the study process for their compliance with law and policy. These reviews culminate in Washington-level determinations that the recommendations in the reports and the supporting analyses and coordination comply with law and policy and warrant approval or further recommendation to higher authority by the Chief of Engineers. Guidance for policy and legal compliance reviews is addressed further in Appendix H, ER 1105-2-100. Technical reviews described in EC 1105-2-410 are to augment and complement the policy review processes by addressing compliance with published Army policies pertinent to planning products, particularly policies on analytical methods and the presentation of findings in Decision Documents. The DQC and ATR efforts are to include the necessary expertise to address compliance with published planning policy. Counsel will generally not participate on ATR teams, but may at the discretion of the District or as directed by higher authority. When policy and/or legal concerns arise during DQC or ATR efforts that are not readily and mutually resolved by the PDT and the reviewers, the District will seek issue resolution support from CEMVD and HQUSACE in accordance with the procedures outlined in Appendix H, ER 1105-2-100. Legal reviews will be conducted concurrent with ATR of the preliminary, draft, and final feasibility report and Environmental Impact Statement (EIS).

e. Planning Center of Expertise (PCX) Coordination. The ECs 1105-2-408 and 1105-2-410 outline PCX coordination in conjunction with preparation of the Review Plan. This Review Plan is being coordinated with the PCX for FRM within the South Pacific Division (CESPD) with [REDACTED] serving as the Program Manager. The FRM-PCX is responsible for the accomplishment of ATR for the Yazoo River Basin Tributaries study. The DQC is the responsibility of CEMVD. The FRM-PCX may conduct the review or manage the ATR and IEPR reviews to be conducted by others.

f. Review Plan Approval and Posting. In order to ensure the Review Plan is in compliance with the principles of EC 1105-2-410 and CEMVD's QMP, the Review Plan must be approved by the Commander of CEMVD. Once the Review Plan is approved, CEMVD will post it to its District public website and notify CEMVD and the FRM-PCX, CESPD.

g. Safety Assurance Review.

(1) In accordance with Section 2035 of the Water Resources Development Act (WRDA) of 2007, EC 1105-2-410 requires that all projects addressing flooding or storm damage reduction undergo a safety assurance review during design and construction. Safety assurance factors must be considered in all reviews for those studies. Implementation guidance for Section 2035 is under development. When guidance is issued, the study will address its requirements for addressing safety assurance factors, which at a minimum will be included in the draft report and appendixes for public review. Prior to preconstruction engineering and design (PED) of the project identified for construction, a PMP will be developed that will include safety assurance review. Safety assurance review will also be accomplished during construction.

(2) The threat level to human life is low to moderate. The current design for the tributaries allows for local flooding of low-lying areas and roadways to include homes and farmland. Unsafe driving conditions due to dangerous roads and the potential for bridge failures during high water periods exists.

## STUDY INFORMATION

### DECISION DOCUMENT

4. The purpose of the Yazoo River Basin Tributaries Reformulation Study Decision Document will be to evaluate authorized projects and select alternatives for optimizing urban and agricultural flood protection in an environmentally acceptable manner. Economic, environmental, and engineering analyses will be performed during the study to determine if a feasible plan of action is available for each of the five tributary basins involved in the study. Primarily, alternatives may consist of channel improvements and levee items. The overall Reformulation Study covers the remaining authorized unconstructed features of the Yazoo Basin, which is being accomplished in four phases. The first two phases of the Yazoo Basin Reformulation Study, Upper Steele Bayou and Upper Yazoo Projects are complete.. The projects are now under construction. The third phase, the Yazoo Backwater, has been terminated due to the Section 404(c) veto from the Environmental Protection Agency (EPA). The fourth and final phase is the Tributaries study which resumed in FY 08.

### GENERAL SITE DESCRIPTION

5. The project includes tributaries and streams originating in the hills and extending to the delta, as well as those with the entire drainage area in the delta. Work on hill streams is closely coordinated with the National Resources Conservation Service and Delta Headwaters Project

which involve construction of floodwater and sediment-retarding structures and levees and channels. Work on the remaining Yazoo Tributaries subbasins includes channelization, levee construction and channel enlargement, associated water control structures, bank stabilization and grade control measures, and environmental design features.

## STUDY SCOPE

6. Authorized project works on the tributary streams include 160 miles of channel improvement and 28 miles of levees. The preliminary estimated total project cost is \$9 million.

## PROBLEMS AND OPPORTUNITIES

7. Several tributary stream channels are insufficient to convey floodflows and have local levee systems that are inadequate to contain the larger runoffs from the hills.

8. The predominant emphasis of the Yazoo River Basin Tributaries study is FRM. The implementation of weirs/grade control structures, floodwater-retarding structures, farm conservation measures, and ground/surface water imports provides the opportunity to enhance the environment and improve local drainage for existing conditions and increases in future conditions with development.

## POTENTIAL METHODS

9. Potential FRM measures range from adding, modifying, and/or reregulating storage on major tributaries and new transitory storage within the flood plains to increasing conveyance through raising levees, widening channels and floodway areas, dredging, and constructing/modifying weirs and bypasses. Nonstructural flood plain management measures would also be considered.

## AGENCY TECHNICAL REVIEW PLAN

### GENERAL

10. An ATR leader shall be designated by the PCX for the ATR process. The proposed ATR leader for this project is to be determined, but will have expertise in project planning. The ATR leader is responsible for providing information necessary for setting up the review; communicating with the PDT; providing a summary of critical review comments; and collecting grammatical and editorial comments from the ATR team (ATRT), ensuring that the ATRT has adequate funding to perform the review, facilitating the resolution of the comments, and

certifying that the ATR has been conducted and resolved in accordance with policy. The ATR will be conducted for project planning, environmental compliance, economics, hydrology and reservoir operations, hydraulic design, civil design, geotechnical engineering, cost engineering, real estate, and cultural resources. Reviews of more specific disciplines may be identified, if necessary.

## AGENCY TECHNICAL REVIEW TEAM

11. The ATRT will be comprised of individuals who 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 and, wherever possible, reside outside the MSC. In general, review team members will each have a minimum of 10 years experience and education in their respective discipline. A statement of qualifications is required for each discipline prior to acceptance as a review team member and for any subsequent changes. It is anticipated that the team will consist of approximately 13 reviewers. The ATRT members will be identified at the time the review is conducted and will be presented in Appendix B. General descriptions of ATR disciplines are as follows:

a. Hydrology and hydraulics. Team member will be an expert in the field of urban hydrology and hydraulics, have a thorough understanding of the dynamics of the both open channel flow systems, enclosed systems, application of detention/retention basins; effects of Best Management Practices (BMP) and low impact development on hydrology; approaches that can benefit water quality, application of levees and floodwalls in an urban environment with space constraints, nonstructural measures especially as related to multipurpose alternatives including ecosystem restoration; nonstructural solutions involving flood warning systems; and nonstructural alternatives related to floodproofing. The team member will have an understanding of computer modeling techniques that will be used for this project (HEC-HMS and HEC-RAS). A certified flood plain manager is recommended, but not required.

b. Structural. Team member will have a thorough understanding of nonstructural measures, levee, floodwall, and retaining wall design and structures typically associated with levees (pump stations, gate well structures, utility penetrations, stoplog and sandbag gaps, and other closure structures). A certified professional engineer is recommended, but not required.

c. Mechanical. Team member shall be experienced with Civil Works levee pump station and closure structure design. Engineering disciplines other than mechanical may be acceptable for review of this area of work subject to meeting the experience requirement stated above.

d. Electrical. Team member shall be experienced with Civil Works levee pump station and electrical utilities design.

e. Geotechnical. Team member will be experienced in levee and floodwall design, postconstruction evaluation, and rehabilitation. A certified professional engineer is recommended.

f. Economics. Team member will be experienced in Civil Works and related flood risk reduction projects and have a thorough understanding of HEC-FDA.

g. Planning. Team member will be experienced with the Civil Works process; watershed levee projects; current flood damage reduction planning and policy guidance; and plan formulation for multipurpose projects, specifically integrating measures for FRM, ecosystem restoration, recreation, watersheds, and planning in a collaborative environment.

h. Environmental. Team member will be experienced in the National Environmental Policy Act (NEPA) process and analysis and have a biological or environmental background that is familiar with the project area.

i. Cultural resources. Team member will be experienced in cultural resources and tribal issues, regulations, and laws.

j. Cost estimating. Team member will be familiar with cost estimating for similar Civil Works projects using MCACES. Team member will be a Certified Cost Technician, Certified Cost Consultant, or Certified Cost Engineer.

k. Real estate. Team member will be experienced in Federal Civil Work real estate laws, policies, and guidance. Members shall have experience working with respective sponsor real estate issues.

12. Other disciplines/functions involved in the project included as needed with similar general experience and educational requirements.

## COMMUNICATION

13. The communication plan for the ATR is as follows:

a. The team will use DrChecks to document the ATR process. The lead planner or project manager will facilitate the creation of a project portfolio in the system to allow access by all PDT and ATRT members. An electronic version of the document, appendixes, and any significant

and relevant public comments shall be posted in MS Office compatible format at the following website <ftp://ftp.usace.army.mil/pub/> at least 1 business day prior to the start of the comment period.

b. The PDT shall send the ATR leader one hardcopy (with color pages, as applicable) and members shall download and print individual documents and appendixes, as necessary.

c. The PDT shall host an ATR kickoff meeting virtually or onsite to orient the ATRT during the first week of the comment period. If funds are not available for an onsite meeting, the PDT shall coordinate a virtual presentation meeting or at a minimum provide a presentation about the project, including photographs of the site.

d. The ATR leader shall ensure all responses have been entered into DrChecks and conduct a briefing to summarize comment responses to highlight any areas of disagreement.

e. A revised electronic version of the report and appendixes, with comments incorporated, shall be posted at the website <ftp://ftp.usace.army.mil/pub/> for use during back checking of the comments.

f. The PDT members shall contact ATRT members or ATR leader, as appropriate, to seek clarification of a comment's intent or provide clarification of information in the report. Discussions shall occur outside DrChecks, but a summary of discussions may be provided in the system.

g. Reviewers will be encouraged to contact PDT members directly via e-mail or telephone for clarification. DrChecks shall not be used to post questions needed for clarification.

h. The ATRT, PDT, and the Vertical Team shall conduct an After Action Review (AAR) no later than 2 weeks after the policy guidance memorandum is received from HQUSACE for the for the Alternative Formulation Briefing (AFB) and draft reports.

## FUNDING

14. The PDT District shall provide labor funding by cross charge labor codes. Funding for travel, if needed, will be provided. The lead planner will work with the ATR leader to ensure that adequate funding is available and commensurate with the level of review needed. The

current cost estimate for each review is \$50,000 (AFB, Draft Report, and Final Report). Any funding shortages will be negotiated on a case-by-case basis and in advance of a negative charge occurring.

15. The ATR leader shall provide organization codes for each team member and to the Program Analyst for the study, [REDACTED] (telephone [REDACTED]) for creation of labor codes.

16. Reviewers shall monitor individual labor code balances and alert the ATR leader to any possible funding shortages.

#### TIMING AND SCHEDULE

17. Throughout the development of this document, the PDT will conduct seamless review to ensure planning quality.

18. The ATR will be conducted on the feasibility scoping meeting documentation and assumptions; the Alternative Formulation Briefing documentation; the draft reformulation study; and if changes are made to the draft report, those changes will be reviewed in the final reformulation report.

19. 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 ATR. Writer/editor services will be performed on the draft prior to ATR as well.

20. The ATR process for this document will follow the following timeline. All products produced for these milestones will be reviewed.

#### ATR TIMELINE

Task	Date (Week)
ATR of FSM	October 2010
ATR of Draft AFB Documentation Begins	December 2010
Completion of Draft Report	February 2012
Completion of ATR Draft Report	March 2012
Public Review of Draft Report	June 2012
Certification of ATR	July 2012
Final Report	October 2012



## REVIEW

### 21. ATRT responsibilities are as follows:

a. Reviewers shall review conference material and 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 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 who 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 of this type should be submitted to the ATR leader via electronic mail using tracked changes feature in the MS Office compatible document or as a hardcopy markup. The ATR leader shall provide these comments to the lead planner.

d. Review comments shall contain these principal elements:

(1) A clear statement of the concern.

(2) The basis for the concern, such as law, policy, or guidance.

(3) Significance for the concern.

(4) 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 ATR leader and/or the lead planner first.

### 22. The PDT responsibilities are as follows:

a. The PDT shall review comments provided by the ATRT in DrChecks and provide responses to each comment using "Concur, Nonconcur, or "For Information." Concur responses shall state what action was taken and provide revised text from the report, if applicable. Nonconcur responses shall state the basis for the disagreement or clarification of the concern and suggest actions to negotiate the closure of the comment.

b. The PDT members shall discuss any nonconcur responses prior to submission with the PDT and ATRT leader.

## RESOLUTION

23. 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.

24. A reviewer may close a comment if the comment is addressed and resolved by the response or if the reviewer determines that the comment was not a valid technical comment as a result of a rebuttal, clarification, additional information, or because the comment was advisory, primarily based on individual judgment, opinion, or editorial. If reviewer and responder cannot resolve a comment, it should be brought to the attention of the ATR leader and, if not resolved by the ATR leader, it should be brought to the attention of the planning chief who will need to sign the certification. The ATRT members shall keep the ATR leader informed of problematic comments. The Vertical Team will be informed of any policy variations or other issues that may cause concern during HQUSACE review.

## CERTIFICATION

25. ATR certification is required for the AFB, draft report, and final report (see Appendix A for ATR certification statement). A summary report of all comments and responses will follow this statement and accompany the report throughout the report approval process.

## INDEPENDENT EXTERNAL PEER REVIEW PLAN

26. This Decision Document will present the details of a reevaluation study undertaken to evaluate structural and nonstructural FRM and ER measures to address problems in the study area. The EC 1105-2-410 states thresholds that trigger an IEPR: "In cases where there are public safety concerns, a high level of complexity, novel or precedent-setting approaches; where the project is controversial, has significant interagency interest, has a total project cost greater than \$45 million, or has significant economic, environmental and social effects to the nation, IEPR will be conducted."

27. This study is not expected to contain influential scientific information nor be a highly influential scientific assessment. This study area is not highly urbanized and consequently, there are no significant public safety concerns. It is anticipated that while this study will be

challenging and beneficial, it will not be novel, controversial, or precedent setting nor have significant national importance. The subject matter covered in the decision document is anticipated to be complex. The project has the potential to generate considerable interagency interest and/or important economic environment or social effects. For these reasons, an IEPR will be conducted. Disciplines that are anticipated to undergo IEPR are listed in Appendix B with experience and qualifications equal or above the ATR member requirements.

## PROJECT MAGNITUDE

28. The magnitude of this project is determined as low. While the hydrology of the study area is considered complex, the project is not particularly complex and involves flood risk reduction measures, along with restoration of wetland and aquatic habitat through the implementation of standard concepts. The project will likely have positive long-term cumulative effects.

## PROJECT RISK

29. This project is considered low risk overall. The potential for failure is considered to be low. Stream modification for FRM and restoration of wetland areas are straightforward concepts with numerous successful applications. The potential for controversy regarding project implementation does not exist because the recommended plan will take into account the public concerns. A socioeconomic 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.

## COMMUNICATION AND DOCUMENTATION

30. The communication plan for the IEPR is as follows:

a. The panel will use DrChecks to document the IEPR process. The lead planner will facilitate the creation of a project portfolio in the system to allow access by all PDT and a qualified Outside Eligible Organization (OEO). An electronic version of the document, appendixes, and any significant and relevant public comments shall be posted in MS Office compatible format at <ftp://ftp.usace.army.mil/pub/> at least 1 business day prior to the start of the comment period.

b. The OEO will compile the comments of the IEPR panelists, enter them into DrChecks, and forward the comments to CEMVK. CEMVK will consult the PDT and outside sources as necessary to develop a proposed response to each panel comment. CEMVK will enter the

proposed response to DrChecks and then return the proposed response to the panel. The panel will reply to the proposed response through the OEO, again using DrChecks. This final panel reply may or may not concur with CEMVK's proposed response, and the panel's final response will indicate concurrence or briefly explain what issue is blocking concurrence. There will be no final closeout iteration. CEMVK will consult the Vertical Team and outside resources to prepare an agency response to each comment. The initial panel comments, CEMVK's proposed response, the panel's reply to CEMVK's proposed response, and the final agency response will all be traced and archived in DrChecks for the administrative record. However, only the initial panel comments and the final agency response will be posted. This process will continue to be refined as experience shows need for changes. This is specifically in accordance with EC 1105-2-410, "Review of Decision Documents," 22 August 2008.

c. The PDT shall send the IEPR panel leader one hardcopy (with color pages, as applicable) of the draft report and appendixes and NEPA document for each IEPR panel member.

d. The lead planner shall inform the IEPR panel when all responses have been entered into DrChecks and conduct a briefing to summarize comment responses to highlight any areas of disagreement.

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

f. PDT shall contact the OEO for the IEPR panel as appropriate to seek clarification of a comment's intent or provide clarification of information in the report. Discussions shall occur outside DrChecks, but a summary of discussions may be provided in the system.

g. The IEPR panel shall produce a final Review Report to be provided to the PDT not later than 60 days after the close of the public review of the draft report. This report shall be scoped as part of the effort to engage the IEPR panel. CEMVK will draft a response report to the IEPR final report and process it through the Vertical Team for discussion at the Civil Works Review Board (CWRB). Following directions at CWRB and upon satisfactorily resolving any relevant follow-on actions, the Corps will finalize its response to the IEPR Review Report and will post both the Review Report and the Corps final responses to the public website.

## FUNDING

31. The FRM-PCX will identify someone independent from the PDT to scope the IEPR and develop an Independent Government Estimate. CEMVK will provide funding to the IEPR panel. The current total cost estimate for the review is \$100,000 (AFB and Draft Report).

## TIMING

32. The IEPR will be conducted on the AFB documentation and the draft reformulation study.
33. The IEPR process for this document will begin around November 2012.

## MODEL CERTIFICATION

34. For the purposes of this Review Plan section, planning models are defined as any models and analytical tools that planners use to define water resources management problems and opportunities, formulate potential alternatives to address the problems and take advantage of the opportunities, evaluate potential effects of alternatives, and support decisionmaking. It includes all models used for planning, regardless of their scope or source, as specified as follows:

Hydraulic and hydrologic models expected to be used include (1) HEC-RAS and (2) HEC-HMS. These models were developed by the Hydraulic Engineering Center for use in water resource investigations. Economic models likely to be used include (1) HEC/FDA, (2) CACFDAS, and (3) Excel spreadsheets to factor in risk and uncertainty. Certification approval is still required for any models proposed for use in this study.

## PUBLIC REVIEW

35. The public will have opportunities to participate in this study. The earliest opportunity will be as part of the NEPA public scoping process during the first year of the study. Public review of the draft reformulation report will occur after issuance of the AFB policy guidance memorandum 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 be available to the review teams during review of the final report. One or more public workshops will be held during the public review period. Comments received during the public comment period for the draft report could be provided to the ATRT before review of the final Decision Document. The public review of necessary state or Federal permits will also take place during this period. 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. 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. A plan for public participation will be developed early in the study which might identify informal, as well as additional formal, forums for participation in the study.

## STUDY TEAMS AND PLANNING CENTERS OF EXPERTISE COORDINATION

### PROJECT DELIVERY TEAM

36. The PDT is comprised of those individuals directly involved in the development of the Decision Document. Individual contact information and disciplines are presented in Appendix B.

### VERTICAL TEAM

37. The Vertical Team includes District management, District Support Team (DST), and Regional Integration Team staff, as well as members of the Planning of Community of Practice (PCoP). Specific points of contact for the Vertical Team can be found in Appendix B.

### PLANNING CENTERS OF EXPERTISE

38. The appropriate PCX for this document is the National Flood Risk Management Center of Expertise located at CESPD. This Review Plan will be submitted to the FRM-PCX Program Manager for review and comment. Since it was determined this project will generate considerable interagency interest and/or important economic environmental or social effects, an IEPR will be required. For ATR, the PCX is requested to nominate the ATR team as discussed in paragraph 11 above. The approved Review Plan will be posted to the District's public website for public comment and consideration of public comments.

### REVIEW PLAN POINTS OF CONTACT

39. The points of contact for questions and comments to this Review Plan are as follows:

CEMVK	(telephone
CEMVD	(telephone
FRM-PCX (CESPD)	(telephone

## APPROVALS

40. The PDT will carry out the Review Plan as described. The lead planner will submit the Review Plan to the FRM-PCX for review and recommendation for approval. After FRM-PCX review and recommendation, the PDT District Planning, Programs, and Project Management Chief will forward the Review Plan to the Commander of CEMVD for approval. Formal coordination with FRM-PCX will occur through the PDT CEMVK Planning, Programs, and Project Management Chief. The Decision Document will receive final approval from the Commander of CEMVK.

APPENDIX A  
STATEMENT OF TECHNICAL REVIEW



REVIEW PLAN  
YAZOO RIVER BASIN, MISSISSIPPI  
TRIBUTARIES REFORMULATION STUDY

APPENDIX A  
STATEMENT OF TECHNICAL REVIEW

The Vicksburg District has completed the feasibility report and appendixes of the Yazoo River Basin Tributaries Reformulation Study. Notice is hereby given that an agency 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 agency 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 customers' needs consistent with law and existing Corps policy. The ATR was accomplished by an agency team composed of staff from multiple Districts. All comments resulting from the ATR have been resolved.

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NAME (TBD)  
Yazoo River Basin Tributaries  
Reformulation Study  
Agency Technical Review Leader

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Date

## CERTIFICATION OF AGENCY TECHNICAL REVIEW

A summary of all comments and responses is 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 agency technical review of the project have been fully resolved.

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NAME

Chief, Planning, Programs, and  
Project Management Division

---

Date

APPENDIX B  
REVIEW PLAN TEAMS

REVIEW PLAN  
YAZOO RIVER BASIN, MISSISSIPPI  
TRIBUTARIES REFORMULATION STUDY

APPENDIX B  
REVIEW PLAN TEAMS

PRODUCT DELIVERY TEAM

Name	Discipline	Telephone	E-Mail
	Project Manager		
	Civil Design		
	Environmental Analysis		
	Hydrology/Hydraulic Design		
	Economics		
	Cost Engineering		
	Real Estate/Lands		
	Cultural Resources		
	Mechanical Engineering		
	Electrical Engineering		
	Structural Engineering		
	Geotechnical Engineering		

AGENCY TECHNICAL REVIEW TEAM

Name	Discipline	Telephone	E-Mail
TBD	ATR Leader/Plan		
TBD	Civil Design		
TBD	Environmental Resources		
TBD	Hydrology		
TBD	Hydraulics Design		
TBD	Economics		
TBD	Cost Engineering a/		
TBD	Real Estate/Lands		
TBD	Cultural Resources		
TBD	Mechanical Engineering		
TBD	Electrical Engineering		
TBD	Structural Engineering		
TBD	Geotechnical Engineering		

a/ The Cost Engineering team member nomination will be coordinated with the NWW Cost Engineering Directory of Expertise (DX) as required. That DX will determine if the cost estimate will need to be reviewed by DX staff.

**INDEPENDENT EXTERNAL PEER REVIEW PANEL**

Name	Discipline	Telephone	E-Mail
TBD	Hydrology		
TBD	Hydraulic Design		
TBD	Geotechnical		
TBD	Economics		

**VERTICAL TEAM**

Name	Discipline	Telephone	E-Mail
[REDACTED]	District Support Team Lead	[REDACTED]	[REDACTED]
	Regional Integration Team		

**PLANNING CENTER OF EXPERTISE  
FLOOD RISK MANAGEMENT**

Name	Discipline	Telephone	E-Mail
[REDACTED]	Program Manager, PCX Flood Risk Management	[REDACTED]	[REDACTED]

a/ Primary PCX is FRM.

APPENDIX C  
ACRONYMS AND ABBREVIATIONS

REVIEW PLAN  
YAZOO RIVER BASIN, MISSISSIPPI  
TRIBUTARIES REFORMULATION STUDY

APPENDIX C  
ACRONYMS AND ABBREVIATIONS

Term	Definition	Term	Definition
AAR	After Action Review	IEPR	Independent External Peer Review
AFB	Alternative Formulation Briefing	ITR	Independent Technical Review
ASA(CW)	Assistant Secretary of the Army for Civil Works	MSC	Major Subordinate Command
ATR	Agency Technical Review	NED	National Economic Development
ATRT	Agency Technical Review Team	NER	National Ecosystem Restoration
CACFDAS	Computerized Agricultural Crop Flood Damage Assessment System	NEPA	National Environmental Policy Act
CEMVD	U.S. Army Corps of Engineers, Mississippi Valley Division	O&M	Operation and maintenance
CEMVK	U.S. Army Corps of Engineers, Vicksburg District	OMB	Office and Management and Budget
CESPD	U.S. Army Corps of Engineers, South Pacific Division	OMRR&R	Operation, Maintenance, Repair, Replacement and Rehabilitation
CWRB	Civil Works Review Board	OEO	Outside Eligible Organization
DQC	District Quality Control	PCoP	Planning of Community of Practice
DST	District Support Team	PCX	Planning Centers of Expertise
DX	Directory of Expertise	PDT	Project Delivery Team
EA	Environmental Assessment	PAC	Post Authorization Change
EC	Engineer Circular	PED	Planning engineering and design
EDR	Engineer Documentation Report	PL	Public Law
EIR	Environmental Impact Report	PMP	Project Management Plan
EIS	Environmental Impact Statement	PPA	Project Partnership Agreement
EO	Executive Order	QMP	Quality Management Plan
EPA	Environmental Protection Agency	QA	Quality Assurance
ER	Ecosystem Restoration	QC	Quality Control
FDR	Flood Damage Reduction	RD	Reclamation District
FEMA	Federal Emergency Management Agency	RED	Regional Economic Development
FRM	Flood Risk Management	RTS	Regional Technical Specialists
GRR	General Reevaluation Report	WRCB	Water Resources Control Board
HQUSACE	Headquarters, U.S. Army Corps of Engineers	WRDA	Water Resources Development Act