



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

REPLY TO
ATTENTION OF:

13 DEC 2012

CEMVD-PD-N

MEMORANDUM FOR Commander, New Orleans District
(ATTN: CEMVN-PM-B)

SUBJECT: Review Plan for Louisiana Coastal Area, Convent/
Blind River Pre-Construction Engineering and Design

1. References:

- a. Memorandum, CEMVN-PM-12, 12 December 2012, SAB
(encl 1).
- b. Memorandum, CEIWR-RMC, 11 December 2012, subject:
Risk Management Center Endorsement - Louisiana Coastal Area
Convent/Blind River, LA Review Plan (encl 2).
- c. Engineering Circular (EC) 1165-2-209, Change 1, Civil
Works Review Policy, dated 31 January 2012.

2. The subject RP provided under reference 1.a. was reviewed by the Mississippi Valley Division staff, which concurred with the RP. The RP provides for an adequate level of peer review and complies with current peer review policy requirements outlined in EC 1165-2-209.

3. I hereby approve this RP, which is subject to change as circumstances require, consistent with the Project Management Business Process. Subsequent revisions to this RP or its execution will require new written approval from this office.

4. The RP is to be posted to the District website.

5. The POC for this action is Mr. Jim Wojtala, CEMVD-PD-N, at (601) 634-5931.

A handwritten signature in black ink, appearing to read "Edward E. Belk, Jr.", written in a cursive style.

EDWARD E. BELK, JR., P.E., SES
Director of Programs

2 Encls

CF:

CECW-MVD (J. Redican)

REVIEW PLAN

Louisiana Coastal Area Small Diversion at Convent/Blind River
St. James Parish, Louisiana

Preconstruction Engineering and Design

Mississippi Valley Division – New Orleans District

MSC Approval Date: 12 December 2012

Last Revision Date: 12 December 2012



**US Army Corps
of Engineers®**

REVIEW PLAN

Louisiana Coastal Area Small Diversion at Convent/Blind River - St. James Parish, Louisiana
Preconstruction Engineering and Design Phase

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1. PURPOSE AND REQUIREMENTS

a. **Purpose.** This Review Plan defines the scope and level of peer review for the Louisiana Coastal Area (LCA) **Small Diversion at Convent/Blind River** (P2 project #136171) ecosystem restoration project. This Review Plan applies to carry-over tasks from the feasibility study, and preconstruction engineering and design (PED) activities.

b. References

- (1) Engineering Circular (EC) 1165-2-209, Civil Works Review Policy, 31 Jan 2010
- (2) EC 1105-2-412, Assuring Quality of Planning Models, 31 Mar 2011
- (3) Engineering Regulation (ER) 1110-1-12, Quality Management, 30 Sep 2006
- (4) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007
- (5) ER 415-1-11, Biddability, Constructability, Operability, and Environmental Review, 1 September 1994
- (6) LCA Small Diversion at Convent/Blind River Project Management Plan, 24 Aug 2011
- (7) Mississippi Valley Division Regional Planning and Environment Division South Quality Management Plan, undated
- (8) ER 1110-2-1150, Engineering and Design of Civil Works Projects
- (9) DIVR 1110-1-13, Cofferdams for Construction Affecting Levees
- (10) DIVR 1110-1-403, Mississippi Valley Division/Mississippi River Commission Policy on River Diversions, 23 Mar 2011

c. **Requirements.** This review plan was developed in accordance with EC 1165-2-209, which establishes an accountable, comprehensive, life-cycle review strategy for Civil Works products by providing a seamless process for review of all Civil Works projects from initial planning through design, construction, and operation, maintenance, repair, replacement and rehabilitation (OMRR&R). The EC outlines five general levels of review: District Quality Control/Quality Assurance (DQC); Agency Technical Review (ATR); Independent External Peer Review (IEPR); Biddability, Constructability, Operability, and Environmental (BCOE) Review; and Policy and Legal Compliance Review. In addition to these levels of review, decision documents are subject to cost engineering review and certification (per EC 1165-2-209) and planning model certification/approval (per EC 1105-2-412).

2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

The RMO is responsible for managing the overall peer review effort described in this Review Plan. The RMO for decision documents is typically either a Planning Center of Expertise (PCX) or the Risk Management Center (RMC), depending on the primary purpose of the decision document. The RMO for the peer review effort described in this Review Plan is the Mississippi Valley Division (MVD) with support on project levee features that require Safety Assurance Review (SAR) from the RMC.

The PED phase will involve creating designs for modifying the Mississippi River levee to insert and construct a diversion structure. Therefore, the RMC will need to perform a SAR even though MVD is the RMO that will be reviewing this project.

3. STUDY INFORMATION

- a. **Implementation Document.** The LCA Small Diversion at Convent/Blind River ecosystem restoration project is located approximately equidistant between Baton Rouge and New Orleans, Louisiana near the community of Romeville in St. James Parish, Louisiana.

The work described in this Review Plan is for the **diversion structure only**. A separate Review Plan, or a revision to this Review Plan, will be completed at a later date describing the review process for other project features. The implementation documents for the PED phase of the diversion structure include a modeling report, geotechnical (soils) reports, design documentation report (DDR), and plans and specifications (P&S).

- b. **Project Description.** The Water Resources Development Act of 2007, Section 7006(e)(3)(B) calls for the Secretary to carry out the project in accordance with the plans and subject to the conditions recommended in a final report of the Chief of Engineers if a favorable report of the Chief was completed by 31 December 2010. The Chief's Report for the Small Diversion at Convent-Blind River study was signed on 31 Dec 2010. A PMP for PED of the diversion structure between the USACE and the Louisiana Coastal Protection and Restoration Authority Board (CPRAB) was signed on 24 Aug 2011. The PMP is currently being revised to include cost and schedule for all project features at the request of CPRAB.

The recommended project consists of a structure in the Mississippi River levee and outfall channel to divert water, sediments, and nutrients for habitat creation and nourishment. The project is located within the Maurepas Swamp, one of the largest remaining cypress swamps in coastal Louisiana (Figure 1). The recommended plan, which is also the national ecosystem restoration plan, will reintroduce the natural periodic, nearly annual flooding by the Mississippi River to the Maurepas Swamp and Blind River that was cut off by construction of the Mississippi River and Tributaries (MR&T) flood control system.

The plan consists of a 3,000 cubic feet per second (cfs) capacity gated box culvert diversion on the Mississippi River with a delivery channel to be constructed in the vicinity of Romeville, Louisiana. The recommended plan has six major components: a diversion structure, a transmission canal, control structures of various sizes, approximately 30 berm gaps, cross culverts at four locations along U.S. Highway 61, and instrumentation to monitor and control the diversion flow rate and the water surface elevations in the diversion, transmission, and distribution system in the swamp (Figure 1). The work described in this Review Plan is for the **diversion structure only**. The project will restore freshwater, nutrients, and sediment input from the Mississippi River. It will promote water distribution in the swamp, facilitate swamp building, and establish hydrologic period fluctuation in the swamp, improving fish and wildlife habitat. The project will improve habitat function by 6,421 average annualized habitat units (AAHU) over a total of 21,369 acres of bald cypress-tupelo swamp. The recommended plan would improve habitat for many fish and wildlife species including migratory birds, bald eagles, alligators, gulf sturgeon, and the manatee. The project meets the LCA program and project objectives and is within the scope of the authorization.

The plan is within the scope and cost of the current authorization. The total fully funded cost of construction is \$123.140 million, which is under the cost authorized by WRDA 2007. The cost of the diversion structure is approximately \$6.31 million.

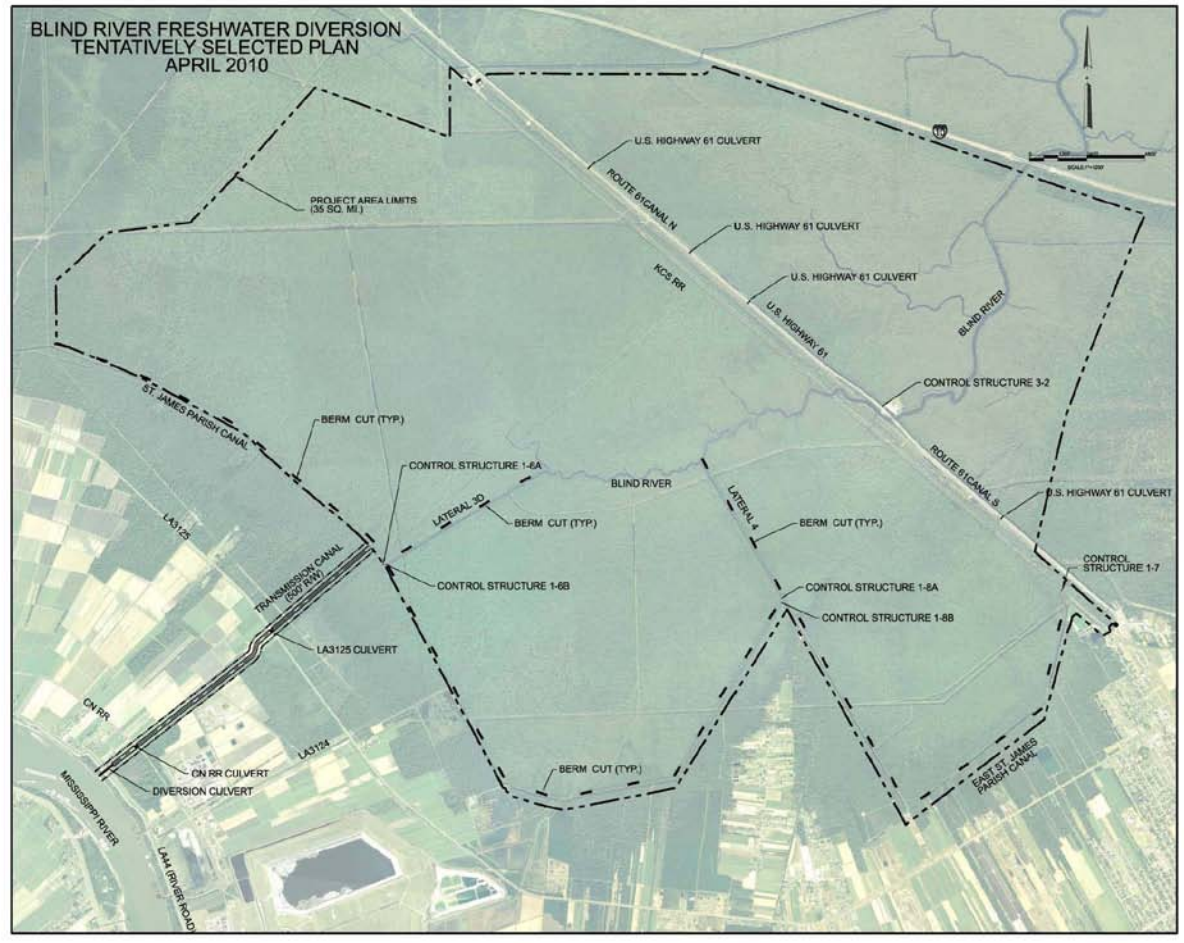


Figure 1: Convent/Blind River Plan Design Features, St. James Parish, Louisiana.
Note: The diversion structure is located on the Mississippi River.

c. Factors Affecting the Scope and Level of Review:

- 1. Human Life/Safety Assurance** – As with most ecosystem restoration projects, there is little risk to life safety inherent with the project. Steps to maintain a minimum level of safety must be implemented during construction of the diversion structure to ensure the integrity of the Mississippi River levee. Risk of project failure after project implementation is expected to be minimal.

- d. In-Kind Contributions.** Products and analyses provided by non-Federal sponsors as in-kind services are subject to DQC, ATR, IEPR, and BCOE. No in-kind products and analyses are to be provided by the non-Federal sponsor in the PED phase. CPRAB has expressed that it prefers to allow the CEMVN to lead all analyses and design. Per the terms of the cost-share agreement the CPRAB will be responsible for 35% of PED and construction costs.

4. DISTRICT QUALITY CONTROL (DQC)

All implementation documents (including supporting data, analyses, environmental compliance documents, etc.) shall undergo DQC. DQC is an internal review process of basic science and engineering work products focused on fulfilling the project quality requirements defined in the PMP. The home district shall manage DQC. Documentation of DQC activities is required and should be in accordance with the Quality Manual of the District and the home MSC in accordance with District Quality Management Plans.

- a. Documentation of DQC.** DQC is the review of work products focused on fulfilling the quality requirements defined in the Quality Management Plan (QMP) portion of the PMP. The Plan Formulator is responsible for ensuring that the QMP includes the necessary procedures to achieve a quality product. Additionally, PDT members are responsible for delivering a quality project and monitoring the quality of their own work.

In accordance with District Quality Management Plans, internal reviews or design checks will constitute quality control for each deliverable product. It is the responsibility of each product development team member, their supervisors, and the project manager to ensure that every product receives an internal quality control review. It is the responsibility of the supervisor or section chief for each team member to ensure that a qualified DQC reviewer that has not been involved with the preparation of the technical product under review is selected and conducts a review of their product prior to delivery to the project manager, or prior to completion. In accordance with District QMP procedures, the management of the review process will be coordinated by a designated Quality Control Review Leader (QCRL). The QCRL will compile all technical, grammatical, and editorial comments and will ensure DQC standards are met prior to submission of the implementation document to the Vertical Team. Dr. Checks will be used to document all DQC comments, responses, and associated resolution accomplished throughout the review process. Once the DQC process is complete, a Certificate of Quality Control Review will be provided to the ATR team lead.

- b. Products to Undergo DQC.** Products developed during PED that will undergo DQC review include a modeling report, geotechnical (soils) report, DDR, and P&S. DQC reviews will be performed at the 95% level of design for all products.

5. AGENCY TECHNICAL REVIEW (ATR)

The objective of ATR is to ensure consistency with established criteria, guidance, procedures, and policy. The ATR will assess whether the analyses presented are technically correct and comply with published USACE guidance, and that the document explains the analyses and results in a reasonably clear manner for the public and decision makers. ATR is managed within USACE by the designated RMO and is conducted by a qualified team from outside the home district that is not involved in the day-to-day production of the project/product. ATR teams will be comprised of senior USACE personnel and may be supplemented by outside experts as appropriate. The ATR team lead will be from outside the home MSC.

a. Products to Undergo ATR. Products developed during PED that will undergo ATR include a modeling report, geotechnical (soils) report, DDR, and P&S. ATR will be performed at the 95% level of design for all products except P&S, which will have ATR performed at the 65% level with final ATR certification at the 95% level.

b. Required ATR Team Expertise.

ATR Team Members/Disciplines	Expertise Required
ATR Lead	The ATR lead should be a senior professional with extensive experience in preparing Civil Works implementation documents and conducting ATR. The lead should also have the necessary skills and experience to lead a virtual team through the ATR process. The ATR lead may also serve as a reviewer for a specific discipline (such as economics, environmental resources, etc).
Environmental Resources	Reviewer must be experienced with National Environmental Policy Act (NEPA) compliance and have a biological or environmental background that is familiar with coastal areas. Additionally, the reviewer must have experience with urban projects and impacts, evaluation of social impacts associated with ecosystem restoration projects, and public coordination.
Hydrology/Hydraulic Engineering	The hydraulic engineering reviewer should be experienced in the field of hydraulics and have a thorough understanding of HEC-RAS computer modeling techniques. Experience with water control structures is needed.
Geotechnical Engineering	Team member has a thorough understanding of soils and soils analysis. Experience needs to include geotechnical evaluation of water control structures and needs to encompass static and dynamic slope stability evaluation; evaluation of the seepage through earthen embankments and under seepage through the foundation of the water control structures, including levee embankments, floodwalls, channels closure structures and other pertinent features; and settlement evaluations.
Civil Engineering	Team member has experience in channel design, levee design, and utility and pipeline relocations.
Structural Engineering	Team member has expertise in design of water control structures.
Electrical and Mechanical	Experience needs to include engineering and design of features such as water control structures, related systems and components

Engineering	
Construction/Operations	Reviewer must be familiar with standard operating procedures for construction sequencing, especially regarding the Mississippi River and its levee.
Real Estate	Team member must be experienced in civil work real estate laws, policies and guidance and experience working with sponsor real estate issues and coastal property rights. The non-federal sponsor has selected to acquire fee (excluding minerals) for the transmission channel rather than a channel easement to maintain control over access and maintenance of the project area during and after construction of the improvements.

c. **Documentation of ATR.** DrChecks review software will be used to document all ATR comments, responses and associated resolutions accomplished throughout the review process. Comments should be limited to those that are required to ensure adequacy of the product. The four key parts of a quality review comment will normally include:

- (1) The review concern – identify the product’s information deficiency or incorrect application of policy, guidance, or procedures;
- (2) The basis for the concern – cite the appropriate law, policy, guidance, or procedure that has not be properly followed;
- (3) The significance of the concern – indicate the importance of the concern with regard to its potential impact on the plan selection, recommended plan components, efficiency (cost), effectiveness (function/outputs), implementation responsibilities, safety, Federal interest, or public acceptability; and
- (4) The probable specific action needed to resolve the concern – identify the action(s) that the reporting officers must take to resolve the concern.

In some situations, especially addressing incomplete or unclear information, comments may seek clarification in order to then assess whether further specific concerns may exist.

The ATR documentation in DrChecks will include the text of each ATR concern, the PDT response, a brief summary of the pertinent points in any discussion, including any vertical team coordination (the vertical team includes the district, RMO, MSC, and HQUSACE), and the agreed upon resolution. If an ATR concern cannot be satisfactorily resolved between the ATR team and the PDT, it will be elevated to the vertical team for further resolution in accordance with the policy issue resolution process described in either ER 1110-1-12 or ER 1105-2-100, Appendix H, as appropriate. Unresolved concerns can be closed in DrChecks with a notation that the concern has been elevated to the vertical team for resolution.

At the conclusion of each ATR effort, the ATR team will prepare a Review Report summarizing the review. Review Reports will be considered an integral part of the ATR documentation and shall:

- Identify the document(s) reviewed and the purpose of the review;
- Disclose the names of the reviewers, their organizational affiliations, and include a short paragraph on both the credentials and relevant experiences of each reviewer;
- Include the charge to the reviewers;
- Describe the nature of their review and their findings and conclusions;

- Identify and summarize each unresolved issue (if any); and
- Include a verbatim copy of each reviewer's comments (either with or without specific attributions), or represent the views of the group as a whole, including any disparate and dissenting views.

ATR may be certified when all ATR concerns are either resolved or referred to the vertical team for resolution and the ATR documentation is complete. The ATR Lead will prepare a Statement of Technical Review certifying that the issues raised by the ATR team have been resolved (or elevated to the vertical team). A Statement of Technical Review should be completed, based on work reviewed to date, for the AFB, draft report, and final report. A sample Statement of Technical Review is included in Attachment 2.

6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)

IEPR may be required for decision documents under certain circumstances. 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 of USACE is warranted. A risk-informed decision, as described in EC 1165-2-209, is made as to whether IEPR is appropriate. IEPR panels will consist of independent, recognized experts from outside of the USACE in the appropriate disciplines, representing a balance of areas of expertise suitable for the review being conducted. Review panel members will be selected using the National Academy of Science Policy that sets the standard for independence in the review process. There are two types of IEPR:

- **Type I IEPR.** Type I IEPR reviews are managed outside the USACE and are conducted on project 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. Type I IEPR will cover the entire decision document or action and will address all underlying engineering, economics, and environmental work, not just one aspect of the study. For decision documents where a Type II IEPR (Safety Assurance Review) is anticipated during project implementation, safety assurance shall also be addressed during the Type I IEPR per EC 1165-2-209. Type I IEPR for the feasibility study was completed in June 2010.
 - **Type II IEPR.** Type II IEPR, or Safety Assurance Review (SAR), are managed outside the USACE and are conducted on design and construction activities for hurricane, storm, and flood risk management projects or other projects where existing and potential hazards pose a significant threat to human life. Type II IEPR panels will conduct reviews of the design and construction activities prior to initiation of physical construction and, until construction activities are completed, periodically thereafter on a regular schedule. The reviews shall consider the adequacy, appropriateness, and acceptability of the design and construction activities in assuring public health safety and welfare.
- a. Decision on IEPR.** Since project design and construction will require significant work in and around the Mississippi River risk reduction levee, Type II IEPR/Safety Assurance Review will be required. In order to insure public health, safety, and welfare, an external panel will review the design and

construction activities prior to the initiation of physical construction and periodically thereafter. MVD will coordinate this effort with the RMC at the appropriate time in the PED process.

- b. Products to Undergo Type II IEPR.** Products developed during PED that will undergo IEPR include a modeling report, geotechnical (soils) report, DDR, and P&S. IEPR will be performed at the 95% level of design for all products.
- c. Required Type II IEPR Panel Expertise.** The SAR activities will be coordinated with the Louisiana Water Resources Council (LWRC) in accordance with Section 7009 of the Water Resources Development Act of 2007. Areas of expertise required to properly review implementation document deliverables and construction products will mimic those outlined for the ATR teams. However, the LWRC is an independent council whose policies and procedures are not fully developed. As the RMO, MVD will lead the effort to coordinate with the RMC and the LWRC to ensure the SAR is satisfactorily completed. Currently, the LWRC is comprised of five members with backgrounds in civil works planning, economics, hydrology/hydraulics, civil engineering/construction, and environmental/ecology.

IEPR Panel Members/Disciplines	Expertise Required
Hydrology/Hydraulic Engineering	The hydraulic engineering reviewer should be experienced in the field of hydraulics and have a thorough understanding of HEC-RAS computer modeling techniques. Experience with water control structures is needed.
Geotechnical Engineering	The Geotechnical Engineering Independent Expert should be a registered professional engineer from academia, a public agency, or an Architect- Engineer or consulting firm with experience in conducting and evaluating geotechnical and geologic analyses for water control structures, levees and channels. Experience needs to include geotechnical evaluation of water control structures. Experience needs to encompass static and dynamic slope stability evaluations; evaluation of the seepage through earthen embankments and under seepage through the foundation of the water control structures, including levee embankments, floodwalls, closure structures and other pertinent features; and settlement evaluations.
Civil Engineering	The Civil Engineering Independent Expert should be a registered professional engineer from academia, a public agency, or an Architect- Engineer or consulting firm with experience in levee design and construction, channel design and construction, and utility and pipeline relocations
Structural Engineering	The Structural Engineering Independent Expert should be a registered professional engineer from academia, a public agency, or an Architect-Engineer or consulting firm with 15 years experience in conducting and evaluating structural analyses for water control structures.
Construction/Operations	Reviewer must be familiar with standard operating procedures for construction sequencing, especially regarding the Mississippi River and its levee.

d. Documentation of Type I IEPR. The IEPR panel will be selected and managed by an Outside Eligible Organization (OEO) per EC 1165-2-209, Appendix D. Panel comments will be compiled by the OEO and should address the adequacy and acceptability of the economic, engineering, and environmental methods, models, and analyses used. IEPR comments should generally include the same four key parts as described for ATR comments in Section 4.d above. The OEO will prepare a final Review Report that will accompany the publication of the final decision document and shall:

- Disclose the names of the reviewers, their organizational affiliations, and include a short paragraph on both the credentials and relevant experiences of each reviewer;
- Include the charge to the reviewers;
- Describe the nature of their review and their findings and conclusions; and
- Include a verbatim copy of each reviewer's comments (either with or without specific attributions), or represent the views of the group as a whole, including any disparate and dissenting views.

The final Review Report will be submitted by the OEO no later than 60 days following the close of the public comment period for the draft decision document. USACE shall consider all recommendations contained in the Review Report and prepare a written response for all recommendations adopted or not adopted. The final decision document will summarize the Review Report and USACE response. The Review Report and USACE response will be made available to the public, including through electronic means on the internet.

7. BIDDABILITY, CONSTRUCTABILITY, OPERABILITY, AND ENVIRONMENTAL (BCOE) REVIEW

BCOE review ensures the biddability, constructability, operability, and environmental aspects of a project are considered during design, and that a high degree of review is integrated into the construction procurement documents for all projects. Biddability, constructability, operability, and the environment must be emphasized throughout the planning and design process to ensure efficient construction that is environmentally sound, to minimize cost and time growth, to avoid unnecessary changes and claims, as well as to ensure safe efficient operations by the user. ER 415-1-11 establishes protocols for carrying forth BCOE review. BCOE reviewers are those involved in the planning and bidding of a construction contract, and construction of the project.

- a. Documentation of BCOE.** Dr. Checks will be used to document all BCOE comments, responses, and associated resolution accomplished throughout the review process.
- b. Products to Undergo BCOE.** The 95% level of design P&S developed during PED will undergo BCOE review.

8. POLICY AND LEGAL COMPLIANCE REVIEW

All decision documents will be reviewed throughout the study process for their compliance with law and policy. Guidance for policy and legal compliance reviews is addressed in Appendix H, ER 1105-2-100. These reviews culminate in 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 home MSC Commander. DQC and ATR augment and complement the policy review processes by addressing compliance with pertinent published Army

policies, particularly policies on analytical methods and the presentation of findings in decision documents.

9. MODEL CERTIFICATION AND 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, for the purposes of the EC, are defined as any models and analytical tools that planners use 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 the planning product. 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, ATR, and IEPR.

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 and the professional practice of documenting the application of the software and modeling results will be followed. As part of the USACE Scientific and Engineering Technology (SET) Initiative, many engineering models have been identified as preferred or acceptable for use on USACE studies, and these models should be used whenever 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, ATR, and IEPR.

- a. **Planning Models.** No planning models will be used in the PED phase.
- b. **Engineering Models.** The following engineering model is anticipated to be used in the development of the implementation documents:

Model Name and Version	Brief Description of the Model and How It Will Be Applied in the Study	Approval Status
HEC-RAS 4.0	The Hydrologic Engineering Center’s River Analysis System (HEC-RAS) is a one-dimensional model for steady flow, unsteady flow, sediment transport/mobile bed computations, and water temperature modeling (http://www.hec.usace.army.mil/software/hec-ras/). The model will be used for unsteady flow analysis of the study area.	Supported by the Coastal & Hydraulics Laboratory.

10. REVIEW SCHEDULES AND COSTS

- a. **Review Schedule and Cost.** Initial schedule and budget estimates to carry out Review Plan tasks are detailed below.

Work Product	DQC	ATR	Type II IEPR	BCOE
Modeling Report	May 2013	June 2013	July 2013	N/A
Geotechnical (Soils) Report	May 2013	June 2013	July 2013	N/A
DDR	May 2013	June 2013	July 2013	N/A
P&S	April 2014	Sep 2013 (65%), April – May 2014 (95%)	May – August 2014	June – July 2014

- MVN DQC: \$20,000
- ATR: \$40,600
- IEPR Type II: \$150,000
- BCOE: \$10,000

11. PUBLIC PARTICIPATION

Several public meetings were held during the feasibility phase and PDT members often met with stakeholders to discuss the project. Continued interaction with the public is necessary to ensure a transparent PED process, especially for diversions where the potential for controversy is significant. The PDT will follow a stakeholder update process that other LCA projects are utilizing whereby important project updates are presented to stakeholders as they are developed. Informal meetings with interested parties will occur as they are requested or needed.

12. REVIEW PLAN APPROVAL AND UPDATES

The Mississippi Valley Division Commander is responsible for approving this Review Plan. The Commander's approval reflects vertical team input (involving district, MSC, RMO, and HQUSACE members) as to the appropriate scope and level of review for the decision document. Like the PMP, the Review Plan is a living document and may change as the study progresses. The home district is responsible for keeping the Review Plan up to date. Minor changes to the review plan since the last MSC Commander approval are documented in Attachment 3. Significant changes to the Review Plan (such as changes to the scope and/or level of review) should be re-approved by the MSC Commander following the process used for initially approving the plan. The latest version of the Review Plan, along with the Commanders' approval memorandum, will be posted on the Home District's webpage (<http://www.mvn.usace.army.mil>). The latest Review Plan should also be provided to the RMO and home MSC.

13. REVIEW PLAN POINTS OF CONTACT

Public questions and/or comments on this review plan can be directed to the following points of contact:

- Danielle Tommaso – Planner, (504) 862-1967, danielle.m.tommaso@usace.army.mil
- Annette Chioma – Project Manager (504) 862-2283, annette.chioma@usace.army.mil
- Tom Bishop – CEIWR-RMC (RMO), 303-963-4556, thomas.w.bishop@usace.army.mil

ATTACHMENT 1: TEAM ROSTERS

District PDT			
Discipline	Name	Phone	Email
Senior Program Manager	Darrel Broussard	504-862-2702	Darrel.M.Broussard@usace.army.mil
Project Manager	Annette Chioma	504-862-2283	Annette.Chioma@usace.army.mil
Senior Project Planner	Tim Axtman	504-862-1921	Timothy.J.Axtman@usace.army.mil
Project Planner	Danielle Tommaso	504-862-1967	Danielle.M.Tommaso@usace.army.mil
Project Scheduler	William Fernandez	504-862-2246	William.A.Fernandez@usace.army.mil
Project Analyst	JoAnn Nelsen	504-862-2703	Joann.Nelsen@usace.army.mil
Project Engineer FTL	Pam Deloach	504-862-2621	Pamela.A.Deloach@usace.army.mil
Hydraulic Engineer	Paul Bellocq	504-862-2482	Paul.M.Bellocq@usace.army.mil
Waterways Engineer	George Krausser	504-862-1712	George.T.Krausser@usace.army.mil
Structural Engineer	Charles Brandstetter	504-862-2501	Charles.P.Brandstetter@usace.army.mil
Geotechnical Engineer	Kelly Danton	504-862-1031	Kelly.M.Lefort@usace.army.mil
Relocations	Gaynell Morrison	504-862-2034	Gaynell.S.Morrison@usace.army.mil
Environmental Manager	William Klein	504-862-2540	William.P.Klein@usace.army.mil
Cultural Resources	Paul Hughbanks	504-862-1100	Paul.J.Hughbanks@usace.army.mil
Aesthetics	Kelly Mccaffrey	504-862-2552	Kelly.P.Mccaffrey@usace.army.mil
HTRW	Christopher Brown	504-862-2508	Christopher.Brown@usace.army.mil
Recreation	Andrew Perez	504-862-1442	Andrew.R.Perez@usace.army.mil
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DQC Team (TBD)			
Discipline	Name	Phone	Email

ATR Team (TBD)			
Discipline	Name	Phone	Email

ATR Team (TBD)

Discipline	Name	Phone	Email

RMO Team (TBD)

Discipline	Name	Phone	Email
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ATTACHMENT 2: SAMPLE STATEMENT OF TECHNICAL REVIEW FOR DECISION DOCUMENTS

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the **Plans and Specifications for Small Diversion at Convent/Blind River, St. James Parish, Louisiana**. The ATR was conducted as defined in the project’s Review Plan to comply with the requirements of EC 1165-2-209. During the ATR, 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 results, including whether the product meets the customer’s needs consistent with law and existing US Army Corps of Engineers policy. The ATR also assessed the District Quality Control (DQC) documentation and made the determination that the DQC activities employed appear to be appropriate and effective. All comments resulting from the ATR have been resolved and the comments have been closed in DrChecks.

SIGNATURE

Name
ATR Team Leader
Office Symbol/Company

Date

SIGNATURE

Name
Project Manager
Office Symbol

Date

SIGNATURE

Name
Architect Engineer Project Manager¹
Company, location

Date

SIGNATURE

Name
Review Management Office Representative
Office Symbol

Date

CERTIFICATION OF AGENCY TECHNICAL REVIEW

Significant concerns and the explanation of the resolution are as follows: *Describe the major technical concerns and their resolution.*

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

SIGNATURE

Name

Chief, Engineering Division

Office Symbol

Date

SIGNATURE

Name

Chief, Planning Division

Office Symbol

Date

¹ Only needed if some portion of the ATR was contracted

ATTACHMENT 3: REVIEW PLAN REVISIONS

Revision Date	Description of Change	Page / Paragraph Number

ATTACHMENT 4: ACRONYMS AND ABBREVIATIONS

AAHU: Average annualized habitat units
ATR: Agency Technical Review
BCOE: Biddability, Constructability, Operability, and Environmental
cfs: Cubic feet per second
CPRAB: Louisiana Coastal Protection and Restoration Authority Board
DDR: Design documentation reports
DQC: District Quality Control
EC: Engineering Circular
ER: Engineering Regulation
HEC-RAS: Hydrologic Engineering Center's River Analysis System
IEPR: Independent External Peer Review
LCA: Louisiana Coastal Area
MR&T Mississippi River and Tributaries flood control system
MVD: Mississippi Valley Division
NEPA: National Environmental Policy Act
O&M: Operation and maintenance
OMRR&R: Operation, maintenance, repair, replacement, and rehabilitation
P&S: Plans and specifications
PED: Preconstruction engineering and design
QCRL: Quality Control Review Leader
RMC: Risk Management Center
RMO: Review Management Organization
SET: USACE Scientific and Engineering Technology Initiative
USACE: U.S. Army Corps of Engineers
WRDA: Water Resources Development Act