



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

CEMVD-DE

MEMORANDUM FOR Commander, New Orleans District

SUBJECT: Louisiana Coastal Area (LCA), Beneficial Use of Dredged Material (BUDMAT)
Program Houma Navigation Canal (HNC) Project, Terrebonne Parish, Louisiana – Review Plan
(RP)

1. References:


- a. Memorandum, CEMVN-DE, 23 February 2018, subject as above (encl 1).
- b. Memorandum, CEMVD-RB-T, 1 March 2018, subject as above (encl 2).
- c. EC 1165-2-217, Civil Works Review Policy, 20 February 2018.

2. The enclosed Review Plan (RP) is an implementation document review plan to construct platforms suitable for salt marsh restoration and development in the vicinity of the Terrebonne Bay Reach in Terrebonne Parish, Louisiana. It has been prepared in accordance with EC 1165-2-217. The RP has been coordinated between the Business Technical Division and the Program Support Team.

3. I hereby approve this RP as revised, which is subject to change as circumstances require, consistent with study development under the Project Management Business Process. Substantive revisions to this RP or its execution will require new written approval from this office. Non-substantive changes to this RP do not require further approval. Within 10 days of execution, the district should post the approved RP to its web site.

4. The MVD point of contact for this action is Ms. Tarmiko Graham, CEMVD-PDM,
(601) 631-5540.

2 Encls


RICHARD G. KAISER
Major General, USA
Commanding





REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, NEW ORLEANS DISTRICT
7400 LEAKE AVENUE
NEW ORLEANS, LOUISIANA 70118

CEMVN-DE

23 Feb 18

MEMORANDUM FOR Commander, Mississippi Valley Division (CEMVN-DST/
Mr. Brian Chewning)

SUBJECT: Louisiana Coastal Area (LCA), Beneficial Use of Dredged Material
(BUDMAT) Program Houma Navigation Canal (HNC) Project, Terrebonne Parish,
Louisiana – Review Plan (RP)

1. CEMVN herein submits the subject, project specific Review Plan (RP) (Encl 1) and RP checklist (Encl 2) in accordance with MVD guidance for review and approval.
2. The enclosed RP replaces the original programmatic RP, approved on 06 August 2016, and included in the Project Management Plan. In October 2017, MVD requested to replace the programmatic RP with a project specific RP.
3. The RP and RP Checklist are based on the MVD Model Review Plan for Section 14, 107, 111, 204, 206, 208, or 1135 Projects or Programs directed by guidance to follow Continuing Authority Program processes, which includes LCA BUDMAT.
4. As indicated in the previously approved RP, Type I Independent External Peer Review (IEPR) (Encl 3) is not required for this project based on the requirements outlined in EC-1165-2-214 a. The project does not pose a significant threat to human life. The estimated cost for construction is less than \$45 million. The determination that a Type II IEPR is not required remains unchanged.
5. I recommend that this RP be approved. It has been endorsed and reviewed in accordance with EC 1165-2-214. The POC for this study is Mr. Troy Constance, Division Chief for Regional Planning and Environment Division South (504) 862-2742.

3 Encls



MICHAEL N. CLANCY
Colonel, EN
Commanding

REVIEW PLAN

**Louisiana Coastal Area
Beneficial Use of Dredged Material Program
Houma Navigation Canal Project
Terrebonne Parish, Louisiana**

New Orleans District
February 2018

**MSC Approval Date:
Last Revision Date:**

ENDORSED
BY:

[Redacted Signature]

for MICHAEL A. TURNER, P.E.
USACE, Mississippi Valley Division

13 MAR 2018
DATE

APPROVED
BY:

[Redacted Signature]

RICHARD G. KAISER
Major General, U.S. Army
Commander

April 13, 2018
DATE



US Army Corps
of Engineers®

REVIEW PLAN

Louisiana Coastal Area Beneficial Use of Dredged Material Program Houma Navigation Canal Project Terrebonne Parish, Louisiana

TABLE OF CONTENTS

1.	PURPOSE AND REQUIREMENTS	1
2.	REVIEW MANAGEMENT ORGANIZATION COORDINATION	4
3.	PROJECT INFORMATION	4
4.	DISTRICT QUALITY CONTROL	5
5.	AGENCY TECHNICAL REVIEW	7
7.	INDEPENDENT EXTERNAL PEER REVIEW	11
8.	POLICY AND LEGAL COMPLIANCE REVIEW	12
9.	COST ENGINEERING REVIEW AND CERTIFICATION	13
10.	MODEL CERTIFICATION AND APPROVAL	13
11.	REVIEW SCHEDULES AND COSTS	14
12.	PUBLIC PARTICIPATION	15
13.	REVIEW PLAN APPROVAL AND UPDATES	15
14.	REVIEW PLAN POINTS OF CONTACT	16
	ATTACHMENT 1: TEAM ROSTER	17
	ATTACHMENT 2a: STATEMENT OF DISTRICT QUALITY CONTROL	20
	ATTACHMENT 2b: STATEMENT OF TECHNICAL REVIEW	21
	ATTACHMENT 3: REVIEW PLAN REVISIONS	23

8/22/21 CJP



1. PURPOSE AND REQUIREMENTS

a. Purpose. This Review Plan (Plan) describes the scope and level of peer review for the Louisiana Coastal Area (LCA), Beneficial Use of Dredged Material (BUDMAT), Program, for the Houma Navigation Canal Project (Project) proposed to be constructed in Terrebonne Parish, Louisiana. The Plan is a component of the Project Management Plan (PMP) with anticipated review products to include, but not be limited to, the Mississippi Valley Division (MVD) Decision Milestone Briefing (MDM) Submittal Package; Draft Integrated Design And Implementation Report (DIR) and Environmental Assessment (EA) #533, Final Integrated DIR and EA #533, along with supporting technical documents if significant comments are received during the public comment period; and Plans and Specifications (P&S), along with documents that support the bid package, to include the Engineering Consideration and Instructions.

The 2004 Louisiana Coastal Area Ecosystem Restoration Study Report and Programmatic Environmental Impact Statement ("2004 LCA Study") was developed to identify cost effective, near-term restoration features to reverse the degradation trend of the coastal ecosystem of Louisiana. The Near-Term Plan that resulted from the 2004 LCA Study focused on restoration strategies that would reintroduce historical flows of river water, nutrients, and sediments; restore hydrology to minimize saltwater intrusion and maintain structural integrity of coastal ecosystems. The Report of the Chief of Engineers dated 31 January 2005 ("2005 Chief's Report") recommended implementation of the LCA BUDMAT Program through a one-step planning and design procedure modeled upon the process for projects implemented under Section 204 of the Water Resources Development Act of 1992 (PL 102-580) pursuant to the Continuing Authorities Program (CAP 204) for the protection, restoration, and creation of aquatic and ecologically related habitats in connection with O&M dredging of an authorized navigation project, using procedures appropriate for the scope and complexity of the project to allow for the appropriate level of planning and design for the project.

Title VII of the Water Resources Development Act of 2007 ("WRDA 2007") (PL 110-114) authorized an ecosystem restoration program for the Louisiana Coastal Area substantially in accordance with the Near-Term Plan identified in the 2005 Chief's Report. The 2005 Chief's Report (page 4) describes the beneficial use of dredged material program as follows:

"6. Beneficial Use of Dredged Material Program. The reporting officers recommend a program to place dredged material to build and nourish vital coastal wetlands. At October 2004 price levels, the estimated cost of the Beneficial Use of Dredged Material program is \$100,000,000."

Title VII, Section 7006(d) of WRDA 2007 provides as follows:

SEC. 7006. CONSTRUCTION.

"(d) BENEFICIAL USE OF DREDGED MATERIAL.—

(1) In general.—The Secretary, substantially in accordance with the restoration plan, shall implement in the coastal Louisiana ecosystem a program for the beneficial use of material dredged from federally maintained waterways at a total cost of \$100,000,000."

The LCA restoration plan referenced in Title VII, Section 7006(d) (1) above was also authorized by WRDA 2007 in Title VII, Section 7003 which contains the following language:

SEC. 7003. LOUISIANA COASTAL AREA.

“(a) In General.—The Secretary may carry out a program for ecosystem restoration, Louisiana Coastal Area, Louisiana, substantially in accordance with the report of the Chief of Engineers, dated January 31, 2005.”

CECW-P Memorandum dated 19 December 2008, SUBJECT: Implementation Guidance for Section 7006(d) of the Water Resources Development Act of 2007 –Louisiana Coastal Area – Construction, recognized the recommendation of the 2005 Chief's Report that the LCA BUDMAT Program be cost shared in accordance with Section 204 of the Water Resources Development Act of 1992. Section 204 of the Water Resources Development Act of 1992 (PL 102-580), was later modified by Section 2037 of WRDA 2007, requiring all work under the LCA Program be cost shared at 65% Federal and 35% non-Federal. In 2014, the cost share requirements of Section 2037 of WRDA 2007, were amended by Section 1030(d) of the Water Resources Reform and Development Act of 2014 (WRRDA 2014) to provide that the WRDA 2007 cost sharing amendment does not apply to any beneficial use of dredged material project authorized in WRDA 2007 if a report of the Chief of Engineers for the project was completed prior to the date of enactment of WRDA 2007. For those projects (specifically including the Louisiana Coastal Area Beneficial Use of Dredged Material, Louisiana, authorized by Section 7006(d) of WRDA 2007), the cost sharing for the beneficial use of dredged material is now 75% Federal and 25% non-Federal. (See Implementation Guidance for Section 1030(d) of the Water Resources Reform and Development Act dated 3 Dec. 2014.)

Thereafter, the Louisiana Coastal Area, Louisiana, Beneficial Use of Dredged Material Program, January 2010, Final Programmatic Study Report and Programmatic Environmental Impact Statement (2010 Report), a component of the 2004 LCA Study, was approved by the Director of Civil Works on 12 March 2010, and the ASA (CW) signed a Record of Decision dated 13 August 2010. By Memorandum of the same date (13 August 2010), the ASA (CW) delegated approval authority to the MVD Commander, subject to a per-project limit on the Federal investment of \$15 million. The 2010 Report recommended an implementation plan for the LCA Program to beneficially use material dredged from Federally maintained waterways. The authorized LCA Plan included \$100 million in programmatic authority to allow for the extra cost needed for beneficial use of dredged material over a 10-year period. Funds from the BUDMAT Program are to be used for disposal activities associated with individual cost-shared ecosystem restoration beneficial use projects that are above and beyond disposal activities covered under the USACE O&M maintenance dredging Federal standard. The Federal standard for dredged material disposal is the least costly alternative, consistent with sound engineering and scientific practices that meet applicable Federal environmental statutes. The 2010 Report provided that approximately 15 percent of the \$100 million recommended for the BUDMAT Program, i.e., \$15 million, be used for planning, engineering, and design activities, and real estate acquisition for beneficial use projects implemented under the BUDMAT Program, with the remaining \$85 million to be used for placement of dredged material within the beneficial use disposal sites.

Simplified evaluation procedures are allowed for low risk/low cost projects and when the consequences of failure are minimal and do not pose a threat to human life or safety. Alternative plans for BUDMAT Projects are developed with the level of detail necessary to select a justified, acceptable, and implementable plan that is consistent with Federal law and policy and, to the extent that the project authorization, law and policy permit, consistent with the goals of the Non-Federal Sponsor.

REVIEW PLAN

LCA BUDMAT Program, Houma Navigation Canal Project Terrebonne Parish, La

Benefit and cost, risk and uncertainty, cost effectiveness, and incremental cost analyses are undertaken using procedures that are most appropriate for the scope and complexity of this Project. The 2004 LCA Study and the 2010 Report identified broadly recognized specific needs within the Louisiana coastal area. In this Project Area, the specific needs are sustaining the complex of degraded marsh habitat in order to restore or preserve critical geomorphic features, prevent future land loss, and reduce impacts to remaining coastal habitat and critical infrastructure.

b. Applicability. This Plan is based on the MVD Model Review Plan for CAP Section 14, 107, 111, 204, 206, 208, or 1135 Projects or Programs directed by guidance and/or policy to follow CAP processes, which is applicable to projects that do not require Independent External Peer Review (IEPR), as defined by the mandatory Type I IEPR triggers contained in Engineer Circular (EC) 1165-2-217, "Civil Works Review", dated 15 Dec 2012.

c. References

- (1) Engineer Circular (EC) 1165-2-217, Civil Works Review Policy, 15 Dec 2012;
- (2) EC 1105-2-412, Assuring Quality of Planning Models, 31 Mar 2011;
- (3) Engineer 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) Louisiana Coastal Area (LCA), Louisiana Ecosystem Restoration Beneficial Use of Dredged Material (BUDMAT) Program, Programmatic Feasibility Study, Peer Review Plan, March 2008;
- (6) ER 415-1-11, Engineering and Construction, BIDDABILITY, CONSTRUCTABILITY, OPERABILITY, ENVIRONMENTAL AND SUSTAINABILITY (BCOES) REVIEWS, January 2013;
- (7) ER 1130-2-50 Project Operations – Navigation and Dredging Operations and Maintenance Policies, December 1996
- (8) ER 1110-2-8162, Incorporating Sea Level Change In Civil Works Programs, 13 December 2013
- (9) ETL 1100-2-1, Procedures to Evaluate Sea Level Changes: Impacts, Responses, Adaptation, 30 June 2014
- (10) Louisiana Coastal Area Beneficial Use of Dredged Material Program Houma Navigation Canal Project, Terrebonne Parish, Louisiana Project Management Plan, August 2016.

d. Requirements. This Plan was developed in accordance with the requirements of EC 1165-2-217, which establishes an accountable, comprehensive, life-cycle review strategy for Civil Works products. It provides 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 four general levels of review: District Quality Control (DQC), Agency Technical Review (ATR), Independent External Peer Review (IEPR), and Policy and Legal Compliance Review. In addition to these reviews, decision documents are subject to cost engineering review and certification (per EC 1165-2-217) and planning model certification/approval (per EC 1105-2-412).

2. REVIEW MANAGEMENT ORGANIZATION COORDINATION

The Review Management Organization (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 this Plan is MVD. The RMO Senior Reviewer will endorse this Review Plan, and the MVD Commander will approve the Plan. A copy of the approved Review Plan (and any updates) will be provided to the Ecosystem Planning Center of Expertise (ECO-PCX) to keep the ECO-PCX apprised of requirements and review schedules. The RMO will coordinate with the Cost Engineering Directory of Expertise (DX) to ensure the appropriate expertise is included on review teams to assess the adequacy of cost estimates, construction schedules and contingencies.

3. PROJECT INFORMATION

a. **Decision and Implementation Documents.** A legally sufficient and policy compliant Final Integrated Design and Implementation Report (DIR) and Environmental Assessment (EA) #533 (Final Integrated DIR and EA #533) has been prepared and submitted by the New Orleans District (MVN) to MVD for approval. Once approved, the Final Integrated DIR and EA will serve as the decision document for the Project. (See ER 1105-2-100, Appendix F, Amendment #2). The approval level of the Final Integrated DIR and EA #533 is MVD. The Final Integrated DIR and EA #533 does not contain influential scientific information; is not a highly influential scientific assessment and is not highly controversial. No public dispute is expected. In addition, the information in the Final Integrated DIR and EA #533 is not be based on novel methods. P&S will also be prepared for implementation of the Project and will be approved by the District Commander.

b. **Project Title and Description.** The name of the Project is the "Louisiana Coastal Area (LCA), Beneficial Use of Dredged Material (BUDMAT), Program, Houma Navigation Canal Project". The Project is proposed to be constructed in Terrebonne Parish, Louisiana. The LCA BUDMAT Program is intended to beneficially use dredged material from federally authorized and maintained navigation channels which routinely receive funding for O&M dredging to implement beneficial use projects beyond what could be accomplished within the Federal Standard. The HNC federal navigation project is the source of dredge material for this project. The Federal Standard for the HNC federal navigation project is to place dredged material unconfined in the open water disposal area adjacent to, and west of, the HNC, and unconfined at the Bay Welsh beneficial use disposal site. Dredged material for this Project was considered to be sourced from maintenance dredging of the HNC federal navigation project (from HNC Channel Mile 12 to Mile 0.0).

The Recommended Plan, as described in the Final Integrated DIR and EA #533, consists of the removal of dredged material during the routine operations and maintenance dredging of the HNC federal navigation project to construct platforms suitable for salt marsh restoration and development in the vicinity of the Terrebonne Bay Reach in Terrebonne Parish, LA. This Alternative includes placing the dredged material into the designated Marsh Restoration Site to restore coastal marsh. The proposed Marsh Restoration Site is approximately 49.8 acres of open water located in the vicinity of HNC Channel Mile 12. A cutterhead dredge would dredge the material from approximate HNC Channel Miles 8.5 to 5.5. The dredged material would be discharged into the Marsh Restoration Site via a long distance pipeline from the cutterhead dredge. An access channel would be excavated, as

REVIEW PLAN

LCA BUDMAT Program, Houma Navigation Canal Project Terrebonne Parish, La

needed, using a mechanical dredge to allow construction equipment to access the Marsh Restoration Site. In order to prevent erosion from the Marsh Restoration Site and to avoid impacts to oyster leases outside of the Marsh Restoration Site, earthen retention dikes, deflection dikes, and an earthen weir will be constructed using dredged material sourced from within the Marsh Restoration Site. There is a potential for the overflow of some fine, suspended sediment from a weir to be constructed on the north east side of the Marsh Restoration Site into an overflow area, measuring approximate 47.3 acres, potentially providing for additional marsh nourishment.

The Non-Federal Sponsor (NFS) for this Project is the Coastal Protection and Restoration Authority Board of Louisiana (CPRAB).

c. Factors Affecting the Scope and level of Review. Due to the location of the project, risk of significant threat to human life and/or safety is not paramount. An EIS is not anticipated, as the Project is not likely to have significant economic, environmental, or social effects to the nation or to have more than negligible adverse impacts on scarce or unique cultural, historic, or tribal resources. The Project is not likely to have substantial adverse impacts on fish and wildlife species or their habitat and is not likely to have more than negligible adverse impacts on species listed as endangered or threatened, or to the designated critical habitat of such species, under the Endangered Species Act, prior to implementation of mitigation. An EA is expected to be sufficient for this project. No significant interagency interests are anticipated.

The decision and implementation documents are not likely to contain influential scientific information or be a highly influential scientific assessment. It is not likely to be highly controversial; no public dispute is expected. Information in the documents will not be based on novel methods.

d. In-Kind Contributions. Products and analyses provided by the Non-Federal Sponsor as in-kind services are subject to DQC and ATR, similar to any products developed by USACE. The Non-Federal Sponsor has received approval for in-kind contributions which are summarized in the Integral Determination Report (IDR) approved by MVD on 20 October, 2016 and which are also summarized in the August 2016 Project Management Plan (PMP) approved by the District Commander. The cost estimates identified for each in-kind activity below are estimates reflected in these documents. Any scope and/or cost changes identified by the PDT will be documented according to the Change Management Plan for the Project. Significant changes to the PMP which require an amendment to the Model Project Partnership Agreement may also require the submittal and approval of an amended Integral Determination Report if the revisions to the PMP involve significant changes to the proposed in-kind contributions performed or provided by the Non-Federal Sponsor.

4. DISTRICT QUALITY CONTROL

All decision 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 Project Management Plan (PMP). Regional Planning and Environment Division South (RPEDS) shall manage DQC of decision documents in accordance with the MVD and New Orleans District (MVN) Quality Management Plan. MVN Engineering Division shall manage DQC of the implementation document. Non-PDT technical level personnel and /or senior leaders not directly involved in the preparation of

REVIEW PLAN

LCA BUDMAT Program, Houma Navigation Canal Project Terrebonne Parish, La

the decision or implementation document for the Project, will be assigned to carry out DQC. DQC has been performed on the Draft and Final Integrated DIR and EA #533 (decision document) and supporting information (including but not limited to the engineering appendix, environmental assessment, real estate plan, cost estimates, and plan formulation methodology). DQC will also be conducted on the implementation documents. Each of these products will undergo review by senior level staff within the appropriate technical division. DQC will be documented using DrChecks.

a. **Documentation of DQC.** DrChecks review software will be used to document all DQC 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. Upon completion of the DQC, a DQC certification memorandum will be signed by the lead DQC reviewer and the Project Manager, to denote completion and resolution of all comments.

b. **Products to Undergo DQC.** DQC will be conducted on the draft and final decision and implementation documents and supporting information (including but not limited to the engineering appendix, environmental assessment, real estate plan, cost estimates, and plan formulation methodology). DQC will also be conducted on the P&S. Each of these products will undergo review by senior level staff within the appropriate technical division.

c. **Required DQC Expertise.** Technical level personnel and /or senior leaders not directly involved in the preparation of the decision and implementation documents for this project, will be assigned to carry out DQC. DQC reviewers should not be part of the Project Delivery Team (PDT).

REVIEW PLAN

LCA BUDMAT Program, Houma Navigation Canal Project Terrebonne Parish, La

DQC Review for Decision Documents

DQC Team Members/Disciplines	Expertise Required
Plan Formulation	The planning reviewer should be a senior water resources planner with experience in ecosystem restoration projects development and review.
Economics	The economic reviewer should be a senior economist with experience in ecosystem restoration projects, and application of the IWR model
Environmental & Cultural Resources	Team members should be familiar with the NEPA and HTRW process for similar studies and projects. Experience should include knowledge of small flood risk management studies, HTRW, Cultural Resources, and Ecosystem Restoration. The team member should be a subject matter expert on application and documentation of the NEPA process.
Engineering	Team members should be familiar with engineering practices and principles from the disciplines of Civil, Geotechnical, Hydrology and Hydraulics, Engineering and other key engineering disciplines related to preparation of the decision document
Cost Engineering	Cost DX Pre-Certified Professional with experience preparing cost estimates for small CAP Section 204 beneficial use project. Team members should be familiar with cost estimating for similar projects using MCACES or MII.
Real Estate	Team members should be experienced in Federal civil works real estate laws, policies and guidance as they pertain to Section 204 Projects. RE ATR reviewed will be a senior RE professional selected from the Nationally approved RE ATR list.

DQC Review for Implementation Documents

DQC Team Members/Disciplines	Expertise Required
Geotechnical Engineering	Responsible for reviewing the geotechnical design, existing soil conditions and ensure that the Project meets USACE Standards. The reviewer will have experience in dredging and ecosystem restoration projects.
Civil Engineering	Responsible for reviewing site features and utilities to ensure minimal impacts to the flood protection system. The reviewer will have experience in dredging and ecosystem restoration projects.
Cost Engineering	Cost DX Pre-Certified Professional with experience preparing cost estimates for small CAP Section 204 beneficial use project. Team member should be familiar with cost estimating for similar projects using MCACES or MII.

5. AGENCY TECHNICAL REVIEW

ATR is mandatory for all decision and implementation documents (including supporting data, analyses, environmental compliance documents, etc.), however additional ATRs may be performed if deemed warranted. RPEDS shall manage ATR of the decision document, and MVN Engineering Division shall manage ATR of the implementation document. The ATR will assess whether the

REVIEW PLAN

LCA BUDMAT Program, Houma Navigation Canal Project Terrebonne Parish, La

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 will normally be performed on the MDM documentation and certified prior to the MDM. ATR is managed within USACE by the designated RMO and is conducted by a qualified team from outside MVN that is not involved in the day-to-day production of the project/product. ATR teams will be comprised of senior USACE personnel. For LCA BUDMAT projects, the RMO is MVD. An exception has been made that allows the ATR team lead to be from inside the MSC, but the individual must be independent of the BUDMAT program.

a. Products to Undergo ATR. The Integrated DIR and EA, P&S, and additional decision support documentation (i.e., economic analysis, engineering, analysis, etc.) will undergo ATR.

b. Required ATR Team Expertise.

ATR for Decision Documents	
ATR Team Members/Disciplines	<i>Expertise Required</i>
ATR Lead	The ATR Lead should be a senior professional with experience in preparing Section 204 decision documents and conducting ATR. The lead should also have the necessary skills and experience to lead a virtual team through the ATR process. Typically, the ATR lead will also serve as a reviewer for a specific discipline (such as planning, economics, environmental resources, etc.).
Plan Formulation	The Planning reviewer should be a senior water resources planner with experience in Section 204 project development and review.
Economics	The economic reviewer should be a senior economist with experience in Section 204 project development and review.
Environmental & Cultural Resources	Team members should be familiar with the NEPA and HTRW process for similar studies and projects. Experience should include knowledge of small flood risk management studies, HTRW, Cultural Resources, and Ecosystem Restoration. The team member should be a subject matter expert on application and documentation of the NEPA process.
Civil Engineering	The Civil Engineering reviewer should be a senior engineer with experience in Section 204 project development and review.
Cost Engineering	Cost DX Pre-Certified Professional with experience preparing cost estimates for small CAP Section 204 beneficial use project. Team member should be familiar with cost estimating for similar projects using MCACES or MII.
Real Estate	Team members should be experienced in Federal civil works real estate laws, policies and guidance as they pertain to Section 204 Projects. RE ATR reviewed will be a senior RE professional selected from the Nationally approved RE ATR list.

ATR for Implementation Documents

ATR Team Members/Disciplines	<i>Expertise Required</i>
ATR Lead	The ATR lead should also have the necessary skills and experience to lead a virtual team through the ATR process. Typically, the ATR lead will also serve as a reviewer for a specific discipline (such as engineering).
Civil Engineering	The Civil Engineering reviewer should be a senior engineer with experience in preparing P&S for ecosystem restoration projects.
Cost Engineering	Cost DX Pre-Certified Professional with experience preparing cost estimates for small CAP Section 204 beneficial use project. Team member should be familiar with cost estimating for similar projects using MCACES or MII.
Real Estate	Team member should be experienced in Federal civil works real estate laws, policies and guidance as they pertain to Section 204 Projects. RE ATR reviewed will be a senior RE professional selected from the Nationally approved RE ATR list.

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 been 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 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 MVN, MVD, 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 1165-2-217, 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 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. BIDDABILITY, CONSTRUCTABILITY, OPERABILITY, ENVIRONMENTAL AND SUSTAINABILITY (BCOES) REVIEWS

BCOES reviews will be conducted on all implementation documents to ensure accomplishment of the following aspects of the report.

a. *Biddability* is defined as the clarity of the acquisition documents, the soundness of the government's evaluation and selection criteria for negotiated acquisitions, and the ease of bidders or proposers to understand the government's requirements, allowing the submission of a competitive bid or proposal that is responsive to the government's requirements.

b. *Constructability* is defined as the ease of constructing a specified or designed project according to the government's requirements, including the proposed construction duration, and the ease of understanding and administering the contract documents during their execution.

c. *Operability* is defined as the ability to efficiently operate and maintain a facility or facilities over their life cycle when the facility or facilities are built according to the project's P&S.

d. *Environmental* is defined as the ability to best achieve stewardship of air, water, land, animals, plants, and other natural resources when constructing and operating the project, and complying with the Environmental Impact Statement or Assessment or other environmental-related project requirements. The USACE Environmental Operating Principles (EOPs) in ER 200-1-5 provide direction on achieving synergy between the environment and the execution of projects. The Environmental part of a BCOES review shall address all EOPs including compliance with all applicable local, state, and Federal environmental requirements.

e. *Sustainability* is defined as using methods, systems, and materials that optimize incorporation of a site's natural land, water, and energy resources as integral aspects of the development and minimize or avoid harm to the air, water, land, energy, human ecology and

REVIEW PLAN

LCA BUDMAT Program, Houma Navigation Canal Project Terrebonne Parish, La

Nonrenewable resources on- and off-site of the project.

MVN Engineering Division shall manage DQC of implementation documents. The BCOE review will be performed in accordance with ER 415-1-11. The P&S and Engineering Considerations and Instructions (ECIs) will be included in the BCOE. All comments and comment resolutions will be performed and documented in DrChecks as per ER 1110-1-8159. The BCOE review will occur at the 95% P&S submittal level after all ATR comments are resolved and the ATR is completed and certified.

BCOE Team Members/Disciplines	Expertise Required
Environmental & Cultural Resources	Team members should be familiar with the NEPA and HTRW process for similar studies and projects. Experience should include knowledge of small flood risk management studies, HTRW, Cultural Resources, and Ecosystem Restoration. The team member should be a subject matter expert on application and documentation of the NEPA process.
Construction	The Construction Division team member should be a senior level civil engineer with experience in the operations & maintenance of navigation projects and construction of Ecosystem Restoration Projects. The team member will hold a degree in Civil Engineering.
Operations	The Operations Division team member should be a senior level civil engineer with experience in the operations & maintenance of navigation projects. The team member will hold a degree in Civil Engineering.
Real Estate	The Real Estate team member should be a senior-level realty specialist with experience in identifying right-of-way requirements for project purposes, estates, process for obtaining approval of non-standard estate approval, validating real estate requirements for project purposes, basic requirements for management outgrant and consent actions, experience in reviewing P&S, and critical thinking skills.
Contracting	The Contracting Office team member shall be a senior level reviewer with experience in advertising, awarding, and administering contracts for dredging of navigation canals.

7. INDEPENDENT EXTERNAL PEER REVIEW

Independent External Peer Review (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 1165-2-217, 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. 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

REVIEW PLAN

LCA BUDMAT Program, Houma Navigation Canal Project Terrebonne Parish, La

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. 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 project. 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 1165-2-217.

- 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. Reviews shall consider the adequacy, appropriateness, and acceptability of the design and construction activities in assuring public health safety and welfare.

a. **Decision on IEPRs.** Type I and Type II IEPRs are not required for this Project.

Based on the requirements outlined in EC-1165-2-217, a Type I IEPR is not required for this project. The Project does not pose a significant threat to human life. The estimated cost for construction is less than \$45 million. The Project is not likely to have significant economic, environmental, or social effects to the nation or to have more than negligible adverse impacts on scarce or unique cultural, historic, or tribal resources. The Project is not likely to have substantial adverse impacts on fish and wildlife species or their habitat and is not likely to have more than negligible adverse impacts on species listed as endangered or threatened, or to the designated critical habitat of such species, under the Endangered Species Act, prior to implementation of mitigation. An EA is expected to be sufficient for this Project. No significant interagency interests are anticipated.

The MVN Chief of Engineering has assessed the Project to determine whether there is a need for a Type II IEPR. Based on the criteria as outlined in EX-1165-2-217 Appendix E the Chief of Engineering determined that a Type II IEPR is not required. Documentation of this risk-informed decision is set forth in the Memorandum of the MVN Chief of Engineering dated January 2018. The Project consists of dredging material from the navigation channel and placing it for beneficial use for marsh creation or restoration, this does not pose a significant threat to human life. The procedures used for dredging and placement of the material does not involve the use of innovative materials or techniques. The Project does not require redundancy, resiliency, or robustness. The Project follows a design, bid, build process and does have a unique construction sequence over overlapping design and construction schedule.

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

REVIEW PLAN

LCA BUDMAT Program, Houma Navigation Canal Project Terrebonne Parish, La

supporting analyses and coordination comply with law and policy, and warrant approval or further recommendation to higher authority by the MVD 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. COST ENGINEERING REVIEW AND CERTIFICATION

All decision documents shall be coordinated with the Cost Engineering Directory of Expertise (DX), located in the Walla Walla District. The DX will assist in determining the expertise needed on the ATR team and Type I IEPR team (if required) and in the development of the review charge(s). The DX will also provide the Cost Engineering DX certification. The RMO is responsible for coordination with the Cost Engineering DX.

10. MODEL CERTIFICATION AND APPROVAL

Approval of planning models under EC 1105-2-412 is not required for CAP projects and based on the LCA BUDMAT Program authority, approval of the planning models are not required for this Project. (See 2005 Chief's Report which states that projects implemented under the LCA BUDMAT Program are to follow the planning and implementation guidance established for Section 204 of the Water Resources Development Act of 1992, Continuing Authorities Program beneficial use projects.) The MVD Commander remains responsible for assuring the quality of the analyses used in these projects. ATR will be used to ensure that models and analyses are compliant with Corps policy, theoretically sound, computationally accurate, transparent, described to address any limitations of the model or its use, and documented in study reports.

EC 1105-2-412 does not cover engineering models used in planning. 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 Corps 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 (if required).

- a. **Planning Models.** The following planning models are anticipated to be used in the development of the decision document:

Model Name and Version	Brief Description of the Model and How It Will Be Applied in the Study	Certified for Use?
Wetland Value Assessment Methodology – Coastal Marsh Community Model	A Wetland Value Assessment (WVA) is a quantitative, habitat-based assessment developed to estimate anticipated environmental impacts and benefits to wetlands. The WVA is a modification of the U.S. Fish and Wildlife Service's	Provisional certification is available through November 2018.

REVIEW PLAN**LCA BUDMAT Program,
Houma Navigation Canal Project
Terrebonne Parish, La**

	(USFWS) Habitat Evaluation Procedure (HEP) which is widely used by the USFWS and other agencies to evaluate the impacts of development projects on fish and wildlife resources. While the HEP utilizes species-specific models, the WVA utilizes a community-level approach. WVA methodology relies on the use of the Coastal Marsh Community Models, which were developed by the Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA) Environmental Working Group to determine the suitability of marsh and open water habitats in the Louisiana coastal zone. Three community-level, mathematical models were developed specifically for each marsh type in coastal Louisiana. The model will be used to evaluate data to determine baseline habitat conditions and predict habitat conditions for future with-project and future without-project scenarios.	
IWR Planning Suite, Cost Effectiveness/Incremental Cost Analysis Software, (CE/ICA)	The Cost Effectiveness/Incremental Cost Analysis Software (CE/ICA) is used to evaluate alternative plans, determine which plans are cost effective, and to identify a National Ecosystem Restoration (NER) Plan. The model will be used to evaluate the project-specific alternatives developed as part of this beneficial use project.	Yes

b. Engineering Models. There are no Engineering Models planned for use with this effort.

11. REVIEW SCHEDULES AND COSTS**a. DQC and ATR Schedule and Cost**

Task	Start Date	Completion Date	Cost
Draft Integrated DIR and EA DQC	25-Sept-17	04-Oct-17	\$5,000
EA Public Review	01-Nov-17	01-Dec-17	\$10,000
ATR Review	30-Oct-17	18-Dec-17	\$10,000
MSC Review	01-Nov-17	06-Dec-17	\$5,000

REVIEW PLAN

LCA BUDMAT Program, Houma Navigation Canal Project Terrebonne Parish, La

Final DIR Targeted ATR/DQC *	Not Required	Not Required	\$10,000
P&S DQC Review *	TBD	TBD	TBD
P&S ATR *	TBD	TBD	TBD
P&S BCOE Review *	TBD	TBD	TBD

Note: All dates and costs are tentative and/or contingent upon funding. This section will be updated as necessary.

**Implementation review dates will be added once the dates are identified.*

- b. Model Certification/Approval Schedule.** The relevant WVA model has been certified through November 2018.

12. PUBLIC PARTICIPATION

To ensure that the peer review approach is responsive to the wide array of stakeholders and customers, both within and outside the Federal Government, this Plan shall be published on MVN's public Internet site following approval by MVD. In all posted documents, the lists of the names of USACE reviewers shall not be displayed. PCX, MSC and HQ postings will link to MVN's website. MVN shall establish a mechanism on the MVN website for allowing the public to comment on the adequacy of this Plan, and MVN shall consider all public comments received on the Plan. Whenever feasible and appropriate, MVN shall make the draft decision document available to the public for comment at the same time it is submitted for review (or during the review process) and sponsor a public meeting where oral presentations on scientific issues can be made to the reviewers by interested members of the public. The RMO shall, whenever practical, provide reviewers with access to public comments that address significant scientific or technical issues. There is not a formal comment period or and there is no set timeframe for the opportunity for public comment. If and when comments are received, the Project Delivery Team (PDT) will review and determine whether consider them and decide if revisions to the Review Plan are necessary.

The applicable requirements of the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321 et seq.) and other environmental regulations necessary to ensure environmental compliance for the Project were coordinated with appropriate federal, state, and local agencies and businesses, organizations, and individuals through the distribution of the Draft DIR and EA #533 on 1 November 2017 for public review and comment. No comments were received by MVN during the public review period. MVN has assessed the potential environmental impacts of the Project and determined that the Project would have beneficial environmental effects through the restoration of wetland habitats. Based on the review of agency and other comments received following the publication and distribution of the Draft DIR and EA #533, and the inclusion of numerous environmental design commitments, the District Engineer determined that the Project would have no significant impact on the human environment and that an Environmental Impact Statement was not required. A Finding of No Significant Impact (FONSI) containing environmental design commitment, and the FONSI was executed by the MVN District Commander.

13. REVIEW PLAN APPROVAL AND UPDATES

REVIEW PLAN

LCA BUDMAT Program, Houma Navigation Canal Project Terrebonne Parish, La

The MVD Division Commander is responsible for approving this Plan and ensuring that use of the MVD Model Review Plan is appropriate for the specific project covered by the Plan. The Plan is a living document and may change as the Project progresses. MVN is responsible for keeping the Plan up to date to reflect the proper scale and scope of anticipated reviews. Minor changes to the Plan since the last MVD approval are documented in Attachment 2. Significant changes to the Plan (such as changes to the scope and/or level of review) should be reapproved by MVD following the process used for initially approving the Plan. Significant changes may result in MVD determining that use of the MVD Model Review Plan is no longer appropriate. In these cases, a project specific Review Plan will be prepared and approved in accordance with EC 1165-2-217. The latest version of the Plan, along with the MVD approval memorandum, will be posted on the MVN's webpage.

14. REVIEW PLAN POINTS OF CONTACT

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

- Jennifer Vititoe, Plan Formulator, 504-862-2913, MVN
- Daimia Jackson, Project Manager, 504-862-2446, MVN
- Matthew Mallard, CAP Program Manager, 601-634-5869, MVD

REVIEW PLAN

LCA BUDMAT Program, Houma Navigation Canal Project Terrebonne Parish, La

ATTACHMENT 1: TEAM ROSTER

LCA BUDMAT, at Houma Navigation Canal Terrebonne Parish, Louisiana PDT Members (updated as necessary)			
Name	Functional Area/Discipline	Phone	Email
Darrel Broussard	Sr. Program Manager	504-862-2702	Darrel.M.Broussard@usace.army.mil
Daimia Jackson	Project Manager	504-862-2446	Daimia.L.Jackson@usace.army.mil
Cherie Price	Sr. Plan Formulator	504-862-2737	Cherie.R.Price@usace.army.mil
Jennifer Vititoe	Plan Formulator	504-862-1252	Jennifer.M.Vititoe@usace.army.mil
JoAnn Nelsen	Project Analyst	504-862-2703	JoAnn.J.Nelsen@usace.army.mil
Walter Teckemeyer	Project Engineer FTL	504-862-2611	Walter.F.Teckemeyer@usace.army.mil
Whitney Hickerson	Hydraulic Engineer	504-862-2607	Whitney.J.Hickerson@usace.army.mil
Keith O'Cain	Sr. Waterways Engineer	504-862-2746	Keith.J.O'cain@usace.army.mil
Jason Binet	Waterways Engineer	504-862-2127	Jason.A.Binet@usace.army.mil
John Petitbon	Sr. Cost Engineer	504-862-2732	John.B.Petitbon@usace.army.mil
Eric Salamone	Cost Engineer	504-862-1676	Benjamin.E.Salamone@usace.army.mil
Bich Quach	Geotechnical Engineer	504-862-1504	Bich.N.Quach@usace.army.mil
Richard Butler	Sr. Relocations Engineer	504-862-2999	Richard.A.Butler@usace.army.mil
Shirley Rambeaux	Relocations Engineer	504-862-2949	Shirley.Rambeaux@usace.army.mil
Kevin Harper	Senior Environmental	504-862-1151	Marshall.K.Harper@usace.army.mil
Patricia Naquin	Environmental FTL	504-862-1544	Patricia.Leroux@usace.army.mil
Jason Emery	Cultural Resources	504-862-2364	Jason.A.Emery@usace.army.mil
Joe Musso	HTRW	504-862-2280	Joseph.R.Musso@usace.army.mil
Andrew Perez	Recreation	504-862-1442	Andrew.R.Perez@usace.army.mil
Matthew Napolitano	Economics	504-862-2445	Matthew.P.Napolitano@usace.army.mil
Joey Marceaux	Senior Real Estate-Planning	504-862-1175	Huey.J.Marceaux@usace.army.mil
Pamela Fischer	Real Estate	504-862-1157	Pamela.Fischer@usace.army.mil
Connie Rodgers	Real Estate	504-862-1582	Connie.B.Rodgers@usace.army.mil
Eileen Darby	Contracting	504-862-1996	Eileen.M.Darby@usace.army.mil
Ray Newman	Operations Manager	504-862-2971	@usace.army.mil
Ed Creef	Operations	504-862-2521	Edward.D.Creef@usace.army.mil
Jeffrey Corbino	Operations	504-862-1958	Jeffrey.M.Corbino@usace.army.mil
Daimon Mcnew	Construction	504-862-2523	Daimon.M.Mcnew@usace.army.mil
Karen Roselli	Office of Counsel – Project Authority	504-862-2137	Karen.E.Roselli@usace.army.mil
Sandra Sears	Office of Counsel – NEPA	504-862-1787	Sandra.L.Sears@usace.army.mil
William Klein	Adaptive Management	504-862-2540	William.P.Klein.Jr@usace.army.mil
Catherine Breaux	USFWS	504-862-2689	Catherine_Breaux@fws.gov
Twyla Cheatwood	NOAA Fisheries	225-389-0508	Twyla.Cheatwood@noaa.gov

REVIEW PLAN**LCA BUDMAT Program,
Houma Navigation Canal Project
Terrebonne Parish, La**

LCA BUDMAT, at Houma Navigation Canal Terrebonne Parish, Louisiana DQC Members of the Decision Documents (updated as necessary)			
Name	Functional Area/Discipline	Phone	Email
Cherie Price	Plan Formulator/Regional Technical Specialist	(504)-862-2737	Cherie.R.Price@usace.army.mil
Mark Haab	Senior Economist	(504) 862-2497	Mark.E.Haab@usace.army.mil
William Klein	Environmental Planner	(504) 862-2540	William.P.Klein@usace.army.mil
Joey Marceaux	Real Estate/Appraiser	(504) 862-1175	Huey.J.Marceaux@usace.army.mil
Rick Broussard	Civil Engineer	(504) 862-2402	Richard.W.Broussard@usace.army.mil
Jennifer Stephens	Geologist	(504) 862-2972	Jennifer.W.Stephens@usace.army.mil

LCA BUDMAT, at Houma Navigation Canal Terrebonne Parish, Louisiana ATR Members of the Decision Documents (updated as necessary)			
Name	Section	Phone	Email
Andrew MacInnes	ATR Lead and Plan Formulation Reviewer	(504) 862-1062	andrew.d.macinnes@usace.army.mil
Kimberly Rightler	Environmental	(917) 790-8722	Kimberly.A.Rightler@usace.army.mil
Ganiyat 'Faye' Leffler	Civil Engineering	(312) 846-5419	Ganiyat.F.Leffler@usace.army.mil
Vongmony Var	Economics	(251) 694-3866	Vongmony.Var@usace.army.mil
Richard Miller	Real Estate	(unavailable)	Richard.W.Miller@usace.army.mil
William Bolte	Cost Engineering	(509) 527-7585	william.g.bolte@usace.army.mil

LCA BUDMAT, at Houma Navigation Canal Terrebonne Parish, Louisiana DQC Members of Implementation Documents (updated as necessary)			
Name	Functional Area/Discipline	Phone	Email

REVIEW PLAN

**LCA BUDMAT Program,
Houma Navigation Canal Project
Terrebonne Parish, La**

LCA BUDMAT, at Houma Navigation Canal Terrebonne Parish, Louisiana ATR Members of the Implementation Document (updated as necessary)			
<u>Name</u>	<u>Section</u>	<u>Phone</u>	<u>Email</u>

REVIEW PLAN

LCA BUDMAT Program Houma Navigation Canal Project Terrebonne Parish, La

ATTACHMENT 2a: STATEMENT OF DISTRICT QUALITY CONTROL

District Quality Control (DQC) Review has been completed for the <type of product> for <project name and location>. DQC was conducted as defined in the project Review Plan to comply with the requirements of EC 1165-2-217. During the DQC, 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. All comments resulting from the DQC have been resolved and closed in DrCheckssm.

SIGNATURE

Name

DQC Team Leader

Office Symbol/ Company

Date

SIGNATURE

Name

Project Manager

Office Symbol

Date

CERTIFICATION OF DISTRICT QUALITY CONTROL

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 DQC of the project have been fully resolved.

SIGNATURE

Name

Chief, Engineering Division

Office Symbol

Date

SIGNATURE

Name

Chief, Planning Division

Office Symbol

Date

REVIEW PLAN

LCA BUDMAT Program
Houma Navigation Canal Project
Terrebonne Parish, La

ATTACHMENT 2b: STATEMENT OF TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the <type of product> for <project name and location>. The ATR was conducted as defined in the project Review Plan to comply with the requirements of EC 1165-2-217. 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 closed in DrCheckssm.

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



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, NEW ORLEANS DISTRICT
7400 LEAKE AVENUE
NEW ORLEANS, LOUISIANA 70118

23 Feb 18

CEMVN-DE

MEMORANDUM FOR Commander, Mississippi Valley Division (CEMVN-DST/
Mr. Brian Chewning)

SUBJECT: Louisiana Coastal Area (LCA), Beneficial Use of Dredged Material
(BUDMAT) Program Houma Navigation Canal (HNC) Project, Terrebonne Parish,
Louisiana – Review Plan (RP)

1. CEMVN herein submits the subject, project specific Review Plan (RP) (Encl 1) and RP checklist (Encl 2) in accordance with MVD guidance for review and approval.
2. The enclosed RP replaces the original programmatic RP, approved on 06 August 2016, and included in the Project Management Plan. In October 2017, MVD requested to replace the programmatic RP with a project specific RP.
3. The RP and RP Checklist are based on the MVD Model Review Plan for Section 14, 107, 111, 204, 206, 208, or 1135 Projects or Programs directed by guidance to follow Continuing Authority Program processes, which includes LCA BUDMAT.
4. As indicated in the previously approved RP, Type I Independent External Peer Review (IEPR) (Encl 3) is not required for this project based on the requirements outlined in EC-1165-2-214 a. The project does not pose a significant threat to human life. The estimated cost for construction is less than \$45 million. The determination that a Type II IEPR is not required remains unchanged.
5. I recommend that this RP be approved. It has been endorsed and reviewed in accordance with EC 1165-2-214. The POC for this study is Mr. Troy Constance, Division Chief for Regional Planning and Environment Division South (504) 862-2742.

3 Encls

[REDACTED]
MICHAEL N. CLANCY
Colonel, EN
Commanding

ENCL 1

MVD CAP Review Plan Checklist

Date: 23 February 2018
Originating District: MVN
Project/Study Title: Houma Navigation Canal, Houma, LA
P2# and AMSCO#: 457205; 13573
District POC: Jennifer Vititoe and Daimia Jackson
MSC Reviewer: Coreey Lawton
CAP Authority:
Other Program Directed to follow CAP Processes: LCA BUDMAT Program

Please fill out this checklist and submit with the draft Review Plan when coordinating with the MSC. Any evaluation boxes checked "No" may indicate the project may not be able to use the MVD Model Review Plan. Further explanation may be needed or a project specific review plan may be required. Additional coordination and issue resolution may be required prior to MSC approval of the Review Plan. Checklist may be limited to Section I or Section II or Both, depending on content of review plan (or subsequent amendments).

Section I - Decision Documents

REQUIREMENT	EVALUATION
1. Is the Review Plan (RP) for a Continuing Authorities Project? Or Other Program Directed to follow CAP Processes?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
a. Does it include a cover page identifying it as following the Model RP and listing the project/study title, originating district or office, and date of the plan?	a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
b. Does it include a table of contents?	b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
c. Is the purpose of the RP clearly stated?	c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
d. Does it reference the Project Management Plan (PMP) of which the RP is a component?	d. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
e. Does it succinctly describe the levels of review: District Quality Control (DQC), Agency Technical Review (ATR), and Independent External Peer Review (IEPR) if applicable for Sec 103 or Sec 205?	e. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
f. Does it include a paragraph stating the title, subject, and purpose of the decision document to be reviewed?	f. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
g. Does it list the names and disciplines of the Project Delivery Team (PDT)?*	g. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<i>*Note: It is highly recommended to put all team member names and contact information in an appendix for easy updating as team members change or the RP is updated.</i>	
Comments:	

REVIEW PLAN
Louisiana Coastal Area, Beneficial Use of Dredge Material Program,
Houma Navigation Canal Project

2. Is the RP detailed enough to assess the necessary level and focus of the reviews?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
3. Does the RP define the appropriate level of review for the project/study?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<p>a. Does it state that DQC will be managed by the home district in accordance with the MVD and district Quality Management Plans?</p> <p>b. Does it state that ATR will be managed by MVD?</p> <p>c. Does it state whether IEPR will be performed? For Sec 103 and Sec 205, see additional questions in 5. below.</p> <p>Comments:</p>	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
4. Does the RP explain how ATR will be accomplished?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<p>a. Does it identify the anticipated number of reviewers?</p> <p>b. Does it provide a succinct description of the primary disciplines or expertise needed for the review (not simply a list of disciplines)?</p> <p>c. Does it indicate that ATR team members will be from outside the home district?</p> <p>d. Does it indicate where the ATR team leader will be from?</p> <p>e. If the reviewers are listed by name, does the RP describe the qualifications and years of relevant experience of the ATR team members?*</p> <p><i>*Note: It is highly recommended to put all team member names and contact information in an appendix for easy updating as team members change or the RP is updated.</i></p> <p>Comments: <u>Once reviewers are identified, the appendix will be updated to include names, contact information, qualifications, years of experience, etc.</u></p>	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>d. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>e. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
5. For Sec 103 and Sec 205 projects, does the RP explain how IEPR will be accomplished?	Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/>
<p>a. Is an exclusion being requested, requiring CG approval?</p> <p>b. Does it provide a defensible rationale for the decision on IEPR?</p> <p>c. If IEPR is required, does it state that IEPR will be managed by an Outside Eligible Organization, external to the Corps of Engineers?</p> <p>d. If IEPR is required, does the RP indicate which PCX will manage the IEPR and whether any coordination with the PCX has occurred?</p> <p>Comments: <u>In accordance with Director of Civil Works' Policy Memorandum #1, 19 January 2011, and MVD Review Procedures for CAP Memorandum, dated 5 April 2011, CAP Section 204 projects are excluded from Type I IEPR.</u></p>	<p>a. Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>c. Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>d. Yes <input type="checkbox"/> No <input type="checkbox"/></p>
6. Does the RP address review of sponsor in-kind contributions?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

REVIEW PLAN
Louisiana Coastal Area, Beneficial Use of Dredge Material Program,
Houma Navigation Canal Project

7. Does the RP address how the review will be documented?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<p>a. Does the RP address the requirement to document ATR and IEPR comments using Dr Checks?</p> <p>b. Does the RP explain how the IEPR will be documented in a Review Report?</p> <p>c. Does the RP document how written responses to the IEPR Review Report will be prepared?</p> <p>c. Does the RP detail how the district will disseminate the final IEPR Review Report, USACE response, and all other materials related to the IEPR on the internet and include them in the applicable decision document?</p> <p>Comments: <u>In accordance with Director of Civil Works' Policy Memorandum #1, 19 January 2011, and MVD Review Procedures for CAP Memorandum, dated 5 April 2011, CAP Section 204 projects are excluded from Type I IEPR.</u></p>	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p> <p>c. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p> <p>d. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p>
8. Does the RP address Policy Compliance and Legal Review?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
9. Does the RP present the tasks, timing and sequence (including deferrals), and costs of reviews?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<p>a. Does it provide a schedule for ATR including review of the Alternative Formulation Briefing (AFB) materials and final report?</p> <p>b. Does it present the timing and sequencing for IEPR?</p> <p>c. Does it include cost estimates for the reviews?</p>	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p> <p>c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p>10. Does the RP indicate the study will address Safety Assurance factors? Factors to be considered include:</p> <ul style="list-style-type: none"> ● Where failure leads to significant threat to human life ● Novel methods\complexity\ precedent-setting models\policy changing conclusions ● Innovative materials or techniques ● Design lacks redundancy, resiliency of robustness ● Unique construction sequence or acquisition plans ● Reduced\overlapping design construction schedule 	<p>Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p> <p>Comments: <u>RP documents the Safety Assurance factors are not anticipated to be encountered based on the simplistic nature of the project.</u></p>
11. Does the RP address opportunities for public participation?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
12. Does the RP indicate ATR of cost estimates will be conducted by pre-certified district cost personnel who will coordinate with the Walla Walla Cost DX?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
13. Has the approval memorandum been prepared and does it accompany the RP?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

REVIEW PLAN
Louisiana Coastal Area, Beneficial Use of Dredge Material Program,
Houma Navigation Canal Project

Section II - Implementation Documents

Please fill out this checklist and submit with the draft Review Plan or subsequent Review Plan amendments when coordinating with the MSC. For DQC, the District is the RMO; for ATR and Type II IEPR, MVD is the RMO. Any evaluation boxes checked "No" indicate the RP possibly may not comply with MVD Model Review Plan and should be explained. Additional coordination and issue resolution may be required prior to MVD approval of the Review Plan.

REQUIREMENT	EVALUATION
1. Are the implementation documents/products described in the review or subsequent amendments?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. Does the RP contain documentation of risk-informed decisions on which levels of review are appropriate?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
3. Does the RP present the tasks, timing, and sequence of the reviews (including deferrals)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
a. Does it provide an overall review schedule that shows timing and sequence of all reviews?	a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
b. Does the review plan establish a milestone schedule aligned with the critical features of the project design and construction?	b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
4. Does the RP address engineering model review requirements?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
a. Does it list the models and data anticipated to be used in developing recommendations?	a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
b. Does the RP identify any areas of risk and uncertainty associated with the use of the proposed models?	b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
c. Does it indicate the certification/approval status of those models and if review of any model(s) will be needed?	c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
d. If needed, does the RP propose the appropriate level of review for the model(s) and how it will be accomplished?	d. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	<i>Comments: Due to the simplicity of Section 204 projects, no engineering models are anticipated to be used. Therefore there are no areas of risk and uncertainty associated nor will any model certifications/approvals be needed.</i>

REVIEW PLAN
Louisiana Coastal Area, Beneficial Use of Dredge Material Program,
Houma Navigation Canal Project

5. Does the RP explain how and when there will be opportunities for the public to comment on the study or project to be reviewed?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
6. Does the RP address expected in-kind contributions to be provided by the sponsor?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
If expected in-kind contributions are to be provided by the sponsor, does the RP list the expected in-kind contributions to be provided by the sponsor?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
7. Does the RP explain how the reviews will be documented?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
a. Does the RP address the requirement to document ATR comments using Dr Checks and Type II IEPR published comments and responses pertaining to the design and construction activities summarized in a report reviewed and approved by the MSC and posted on the home district website?	a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
b. Does the RP explain how the Type II IEPR will be documented in a Review Report?	b. Yes <input type="checkbox"/> No <input type="checkbox"/>
c. Does the RP document how written responses to the Type II IEPR Review Report will be prepared?	c. Yes <input type="checkbox"/> No <input type="checkbox"/>
d. Does the RP detail how the district/MVD will disseminate the final Type II IEPR Review Report, USACE response, and all other materials related to the Type II IEPR on the internet?	d. Yes <input type="checkbox"/> No <input type="checkbox"/> <i>Comments: Type II IEPR is not applicable</i>
8. Has the approval memorandum been prepared and does it accompany the RP?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, NEW ORLEANS DISTRICT
7400 LEAKE AVE
NEW ORLEANS LA 70118-3651

14 DEC 2017

CEMVN-ED

MEMORANDUM FOR Commander, Mississippi Valley Division (CEMVD-PD-L/
Ms. Julie Leblanc)

SUBJECT: Determination for Type II Independent External Peer Review (IEPR) for the Louisiana Coastal Area (LCA) Beneficial Use of Dredged Material (BUDMAT) Program Projects

1. The purpose of this memo is to document the determination that a Type II IEPR is not required for projects under the LCA BUDMAT Program. This determination was made in accordance with the requirements of EC 1165-2-214, "Water Resources Policies and Authorities, CIVIL WORKS REVIEW". Appendix E, dated 15 December 2012, and was coordinated with the Risk Management Center. This determination serves as the standard for all projects under the LCA BUDMAT program (unless specific project conditions warrant additional consideration for a Type II IEPR).
2. Projects under the LCA BUDMAT Program consist of the beneficial use of dredged material from Federally Maintained Waterways to selected sites for Ecosystem Restoration. Under the LCA BUDMAT program, the Decision and Implementation Documents are completed in the form of a Design Implementation Report (DIR) and Plans and Specifications (P&S). The Type II IEPR applies to the implementation documents (i.e., P&S). For each LCA BUDMAT project, a review plan will be submitted for the decision and implementation documents. The review plan will describe various reviews for the proposed project (including Type I and Type II IEPRs).
3. Since LCA BUDMAT projects consists of dredging material from a Federal authorized and maintained navigation channel and placing the material for Ecosystem restoration, the project does not pose a significant threat to human life (public safety). The methods and procedures used for dredging and placement are performed routinely for maintenance of navigation channels and do not include the use of innovative materials or techniques. The projects do not require redundancy, resiliency or robustness. In addition, the projects follow a traditional design, bid, build process and do not include a unique construction sequence or overlapping design and construction schedule (such as with Design-Build or Early Contractor Involvement). Therefore, based on these requirements as outlined in EC 1165-2-214, the determination was made that a Type II IEPR is not required.

CEMVN-ED

SUBJECT: Determination for Type II Independent External Peer Review (IEPR) for the Louisiana Coastal Area (LCA) Beneficial Use of Dredged Material (BUDMAT) Program Projects

4. Point of contact for this action is Mr. Walter Teckemeyer at 504-862-2611.



JEAN S. VOSSEN
Chief, Engineering Division



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

REPLY TO
ATTENTION OF:


CEMVD-RB-T

01 March 2018

MEMORANDUM FOR CEMVD-PDM (Crorey Lawton)

SUBJECT: Louisiana Coastal Area (LCA); Beneficial Use of Dredged Material (BUDMAT) Program Houma Navigation Canal (HNC) Project, Terrebonne Parish, Louisiana - Review Plan (RP)

1. Reference memorandum, CEMVN-DE, subject as above.
2. RB-T has reviewed the subject review plan and all of our comments have been satisfactorily addressed. This office concurs with the recommendation for approval.
3. RB-T POC is Scott Stewart, 601-634-5883.


for MICHAEL A. TURNER
Chief, Business Technical
Division

ENCL 2

