REVIEW PLAN

Louisiana Coastal Area
Beneficial Use of Dredged Material Program
At Barataria Bay Waterway
Jefferson Parish, Louisiana

New Orleans District
December 2017

MSC Approval Date:
Last Revision Date:

ENDORSED
BY:

[redacted]

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

19 Dec 2017
DATE

APPROVED
BY:

[redacted]

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

29 January 2018
DATE

US Army Corps
of Engineers ®

MVN/ Encl 5

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1. PURPOSE AND REQUIREMENTS

a. Purpose. This Review Plan (Plan) defines the scope and level of peer review for the Louisiana Coastal Area, Beneficial Use of Dredged Material (BUDMAT), Program at Barataria Bay Waterway (BBWW) located in Jefferson Parish, La Project. The Plan is part of the Project Management Plan with anticipated review products to include, but not be limited to, the Mississippi Valley Division (MVD) Decision Milestone Briefing (MDM) Submittal Package; Draft Design And Implementation Report (DIR) and Environmental Assessment (EA), Final Integrated DIR and EA, 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.

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 (LCA), 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.

b. Applicability. This Plan is based on the MVD Model Review Plan for Section 14, 107, 111, 204, 206, 208, or 1135 Projects or Programs directed by guidance 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 EC 1165-2-214, Civil Works Review Policy.

c. References

(1) Engineer Circular (EC) 1165-2-214, 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, ENVORNMENTAL AND SUSTAINABILITY (BCOES) REVIEWS, January 2013
(7) Barataria Bay Waterway Project Management Plan; the latest draft is September 2017.

d. Requirements. This Plan was developed under EC 1165-2-214, 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 1165-2-214) 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 Plan. The RMO for this peer review effort is directed by guidance to be the same as the RMO for Section 204 projects; MVD. 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.** An integrated DIR and EA will be prepared as the decision document for the LCA BUDMAT at Barataria Bay Waterway Project in accordance with ER 1105-2-100, Appendix F, Amendment #2. The approval level of the decision document (if policy compliant) is MVD. An Environmental Assessment (EA) will be prepared along with the decision document. Plans and Specifications (P&S) will also be prepared for implementation of the Project and will undergo ATR.

b. **Study/Project Description.** The Barataria Bay Waterway traverses an area of Southeastern Louisiana in Jefferson parish consisting of developed areas, intact wetland habitat, but perhaps most notably, open water with interspersed highly degraded coastal marsh habitat, finally passing barrier islands separating Barataria Bay from the open waters of the Gulf of Mexico. The proposed BUDMAT Project will be located within a reasonable and or affordable distance (above the federal standard) in relation to operation and maintenance dredging of the federal Barataria Bay Waterway navigation project. Wetland losses, or the degradation of wetlands into open water, in this area are the result of subsidence, altered hydrologic flows, lack of sediment reintroduction from historical flooding of the Mississippi River (and its distributaries) into Barataria Bay. Wetland habitat loss is a significant issue along the entire Louisiana coast.

The non-Federal sponsor for the Project is Jefferson Parish, La.

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 DIR is 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 decision document will not be based on novel methods.

d. **In-Kind Contributions.** Products and analyses provided by non-Federal sponsors as in-kind services are subject to DQC and ATR, similar to any products developed by USACE. It is expected in-kind products/analyses would be provided by the non-Federal sponsor. However, the specific in-kind products/analyses to be provided by the non-Federal sponsor have not been determined. When those items are determined, this Plan will be updated accordingly.

4. DISTRICT QUALITY CONTROL

All decision and implementation documents (including supporting data, analyses, environmental compliance documents, etc.) shall undergo DQC prior to ATR. 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 the decision document for the Project, will be assigned to carry out DQC. DQC will be conducted on the MDM draft 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 P&S. 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).

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

One 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 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 DIR, 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	*Expertise Required*
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	*Expertise Required*
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 plans and specifications 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 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 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 1165-2-214, 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 plans and specifications.

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 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 plans and specifications, 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 1165-2-214, 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 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 1165-2-214.

- 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-1165-2-214, 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 DIR is 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 decision document will not be based on novel methods.

Based on the requirements outlined in EC-1165-2-214 Appendix E a Type II IEPR is not required for this project. 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 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.

8. 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.

9. MODEL CERTIFICATION AND APPROVAL

Approval of planning models under EC 1105-2-412 is not required for CAP projects. (BUDMAT projects follow CAP guidelines, although they are not directly addressed in EC 1105-2-214, Appendix G.) 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	Provisional certification is available through November 2018.

	the U.S. Fish and Wildlife Service's (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.

10. REVIEW SCHEDULES AND COSTS

a. DQC and ATR Schedule and Cost

Task	Start Date	Completion Date	Cost
Draft EA DQC	24-Aug-18	31-Aug-18	$5,000
Draft DIR DQC	18-May-18	23-May-18	$10,000
EA Public Review	14-Oct-18	13-Nov-18	$10,000
Concurrent ATR/MSC Review	27-Nov-18	11-Dec-18	$10,000

Final DIR Targeted ATR/DQC *	TBD as needed	TBD as needed	$10,000
P&S DQC Review *			
P&S ATR *			
P&S BCOE Review *			

*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.

11. PUBLIC PARTICIPATION

State and Federal resource agencies may be invited to participate in the study covered by this Plan as partner agencies or as technical members of the PDT, as appropriate. Preparation of the Environmental Assessment (EA) and draft Finding of No Significant Impact (FONSI) will be coordinated with appropriate Congressional, Federal, state, and local interests, as well as other interested parties. The interested parties letters and Notice of Availability for the EA and draft FONSI will be mailed out for a 30 day comment period. Final copies of the EA and FONSI will be sent via email, if requested. The Review Plan will be posted on MVN's public website. Decisions on requests to hold public meetings or hearings will be made on a case-by-case basis.

12. REVIEW PLAN APPROVAL AND UPDATES

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 study progresses. MVN is responsible for keeping the Plan up to date. 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 1165-2-214. The latest version of the Plan, along with the MVD approval memorandum, will be posted on the MVN's webpage.

13. REVIEW PLAN POINTS OF CONTACT

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

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

ATTACHMENT 1: TEAM ROSTER

LCA BUDMAT, at Barataria Bay Waterway Jefferson 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
Marsha Raus	Sr. Plan Formulator	901-544-3455	Marsha.L.Raus@usace.army.mil
Louise Williams	Plan Formulator	504-862-2913	Louise.C.Williams@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
Paul Oakland	Relocations Engineer	504-862-2949	Paul.R.Oakland@usace.army.mil
Kevin Harper	Senior Environmental	504-862-1151	Marshall.K.Harper@usace.army.mil
Daniel Meden	Environmental FTL	504-862-1014	DanielC.Meden@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
Todd Klock	Senior Real Estate-Acquisition	504-862-1920	Todd.M.Klock@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 – Policy	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

LCA BUDMAT, at Barataria Bay Waterway Jefferson Parish, La DQC Members (updated as necessary)			
Name	**Functional Area/Discipline**	**Phone**	**Email**
Marsha Raus	Plan Formulator/Regional Technical Specialist	(901) 544-3455	Marsha.L.Raus@usace.army.mil
Mark Haab	Senior Economist	(504) 862-2497	Mark.E.Haab@usace.army.mil
Mark Lahare	Environmental Planner	(504) 862-1344	Mark.H.Lahare@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 Barataria Bay Waterway Jefferson Parish, La ATR Members (updated as necessary)			
Name	**Section**	**Phone**	**Email**

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 1165-2-214. 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 DrChecks[sm].

SIGNATURE _____ _____

Name Date
DQC Team Leader
Office Symbol/Company

SIGNATURE _____ _____

Name Date
Project Manager
Office Symbol

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 Date
Chief, Engineering Division
Office Symbol

SIGNATURE _____ _____

Name Date
Chief, Planning Division
Office Symbol

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 1165-2-214. 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 DrChecks[sm].

SIGNATURE _____ Date _____

Name
ATR Team Leader
Office Symbol/Company

SIGNATURE _____ Date _____

Name
Project Manager
Office Symbol

SIGNATURE _____ Date _____

Name
Architect Engineer Project Manager[1]
Company, location

SIGNATURE _____ Date _____

Name
Review Management Office Representative
Office Symbol

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 _____ Date _____

Name
Chief, Engineering Division
Office Symbol

SIGNATURE _____ Date _____

Name
Chief, Planning Division
Office Symbol

[1] Only needed if some portion of the ATR was contracted

ATTACHMENT 3: REVIEW PLAN REVISIONS

Revision Date	Description of Change	Page / Paragraph Number

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.

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

[redacted]

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

18 December 2017

MEMORANDUM FOR CEMVD-PD-M (Julie LeBlanc)

SUBJECT: Request for Approval of the Review Plan for the Louisiana Coastal Area (LCA) Beneficial Use of Dredged Material (BUDMAT) Program at Barataria Bay Waterway at Jefferson Parish, Louisiana

1. Reference memorandum, CEMVN-PM-BC, Subject: Request for Approval of the Integral Determination and Review Plan for the Louisiana Coastal Area (LCA) Beneficial Use of Dredged Material (BUDMAT) Program at Barataria Bay Waterway at Jefferson Parish, Louisiana, dated 30 Oct 2017.

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 Jennifer Chambers, 601-634-7162.

[redacted]
Chief, Business Technical
Division

Encl 2