Mississippi Coastal Improvements Program, Hancock, Harrison, and Jackson Counties, Mississippi

Comprehensive Plan and Integrated Programmatic Environmental Impact Statement Mississippi

DRAFT PEER REVIEW PLAN

30 January 2008





ACRONYMS & ABBREVIATIONS

AFB – Alternative Formulation Briefing

CESAM – US Army Corps of Engineers, South Atlantic Division, Mobile District

CWRB – Civil Works Review Board

EIS – Environmental Impact Statement

EPR – External Peer Review

FCSA – Feasibility Cost Sharing Agreement

FEIS – Final Environmental Impact Statement

FSM – Feasibility Scoping Meeting

GI – General Investigations

HQ – Headquarters

ITR – Independent Technical Review

LOI – Letter of Intent

NEPA – National Environmental Policy Act

OVEST -- Office of the Chief of Engineers Value Engineering Study Team

PCX-CSDR - National Planning Center of Expertise for Coastal Storm Damage Reduction

PDT – Project Delivery Team

PMP – Project Management Plan

PRP - Peer Review Plan

P&S – Plans & Specifications

SAD – South Atlantic Division

Walla Walla DX - Walla Walla District Directorate of Expertise for Civil Works Cost Engineering

1. Introduction

This Peer Review Plan (PRP) is a collaborative product of the project delivery team (PDT), the National Planning Center of Expertise for Coastal Storm Damage Reduction (PCX-CSDR) and the Walla Walla District Directorate of Expertise for Civil Works Cost Engineering (Walla Walla DX). The PCX-CSDR shall manage the PRP. Each of the following paragraphs (2a. through 2j.) correspond to the guidance provided in paragraphs 6.a. through j. of Engineering Circular 1105-2-408, Planning - Peer Review of Decision Documents, 31 MAY 2005.

2. The Peer Review Plan

a. Title, Subject, and Purpose of the Decision Document. The Comprehensive Plan and Integrated Programmatic Environmental Impact Statement shall be the decision document. The Coastal Mississippi Study was authorized by the Department of Defense Appropriations Act, 2006 (P.L. 109-148) 30 December 2005, which states: "For an additional amount for "investigations" to expedite studies of flood and storm damage reduction related to the consequences of hurricanes in the Gulf of Mexico and Atlantic Ocean in 2005, \$37,300,000 to remain available until expended: Provided, that using \$10,000,000 of the funds provided, the Secretary shall conduct an analysis and design for comprehensive improvements or modifications to existing improvements in the coastal area of Mississippi in the interest of hurricane and storm damage reduction, prevention of saltwater intrusion, preservation of fish and wildlife, prevention of erosion, and other related water resource purposes at full Federal expense; Provided further, that the Secretary shall recommend a cost-effective project, but shall not perform an incremental benefit-cost analysis to identify the recommended project, and shall not make project recommendations based upon maximizing net national economic development benefits; Provided further, that interim recommendations for near term improvements shall be provided within 6 months of enactment of this act with final recommendations within 24 months of this enactment."

This mission required that the Corps provide a report to Congress by 30 June, 2006, which recommended "near-term" improvements (this requirement has been fulfilled and Congress has provided funding to implement the near-term measures) and "final recommendations" regarding "an analysis and design for comprehensive improvements or modifications to existing improvements", to be provided to Congress by December 31, 2007. Based on this language, Congress initiated the Mississippi Coastal Improvements Program in January 2006.

The draft Comprehensive Plan report serves to immediately address critical needs in the areas of future hurricane damage reduction, barrier islands and coastal wetlands restoration and preservation of fish and wildlife resources that use them, and reduction of

erosion and saltwater intrusion. The draft Comprehensive Plan also provides vital information that local and state government and the public need in their decision-making process leading to finalization of larger plans to complete the process of addressing the difficult problem of long-term storm damage reduction and assurance of public safety.

The plan developed by the study team, resource agencies and public includes a range of immediately-implementable cost-effective opportunities to provide for risk reduction related to future storm events, for restoration of ecosystems of regional and national significance, and for further study to finalize remaining elements of the plan. These opportunities run the gamut from risk reduction education, storm warning and evacuation, floodplain management, and code modifications, to barrier island restoration, coastal wetland and forest rejuvenation, structural levee systems, and nonstructural floodproofing acquisition and relocation. Projects would be recommended for construction, advanced engineering and design, and or additional study. In addition two pilot projects are developed to show innovative technologies of floodproofing and floodplain management. The estimated range of implementation costs varies significantly between project elements from as low as \$500,000 to over \$500 million per project element. Alternatives under consideration are listed below.

Element Name
Construction
Comprehensive Barrier Island Restoration
High Risk Homeowner Assistance and Relocation
Coastal Wetland and Forest Restoration
Turkey Creek
Dantzler
Bayou Cumbest
Admiral Island
Franklin Creek
Deer Island
Moss Point Municipal Complex Relocation
Waveland Floodproofing Pilot
Mississippi Sound Subaquatic Vegetation Pilot
Mainland Beach and Dune Restoration
Forrest Heights Levee
Advanced Engineering & Design
Freshwater Diversion at Violet, LA
Feasibility Studies
Freshwater Diversion, Escatawpa River, MS
Other Coastal Wetland and Forest Restoration
Levee Projects
Belle Fontaine, Gulf Park Estates, Gautier, Ocean Springs, Pearlington, Pascagoula/Moss Point, Bay St. Louis
Long-term Homeowner Assistance and Relocation

Key PDT member roles are shown in the table below.

ROLE	ORGANIZATION
Program Manager	CESAM-PD-E
Project Manager	CESAM-PM-C
Project Manager/ Lead Planner	CESAM-PM-C
Plan Formulator Leader	CESAD-PDS-P
Environmental Team Lead	CESAM-PD-EC
Environmental Specialist	CESAM-PD-EC
Cultural Resources	CESAM-PD-EI
Engineering Team Lead	CESAM-EN-G
Coastal/H&H	CESAM-EN-H
Geotechnical	CESAM-EN-G
Cost Engineering	CESAM-EN-C
Economics Team Lead	CESAM-PD-FE
Nonstructural	CENWO-ED-H
Nonstructural	CELRH-PM-PD-F
Nonstructural	CELRH-PM-PD-S
Real Estate	CESAS-RE-RP
Real Estate	CESAS-RE-RP

The PDT also includes the non-Federal Sponsor, stakeholders, and resource agencies.

For more information regarding the PRP, the program manager for this study may be contacted as follows:

MsCIP Program Manager

US Army Corps of Engineers – Mobile District CESAM-PD-E P.O. Box 2288

Mobile, AL 36628-0011

Independent Technical Review Team Leaders

ITR is being led by PCX-CSDR, with participation by Walla Walla DX.

PCX Manager

National Planning Center of Expertise for Coastal Storm Damage Reduction PCX-CSDR US Army Corps of Engineers – North Atlantic Division CENAD-PSD-P

https://rbc.nado.ds.usace.army.mil/Hurricane%20and%20Storm%20Damage/HSDP-PCX%20Web%20Page.htm

Phone: (718) 765-7070

ITR Manager

US Army Corps of Engineers – Philadelphia District CENAP-PL-PC

Phone: (215) 656-6579

DX Manager

Walla Walla District Directorate of Expertise for Civil Works Cost Engineering CENWW-EC-X

Phone: 509-527-7332

EPR Manager

US Army Corps of Engineers – Baltimore District

CENAB-PP-C

Phone: 410-962-0876

b. External Peer Review. EC 1105-2-408 provides the process for deciding whether or not to employ external peer review. The following is an excerpt of EC section 9.a:

Decision documents covered by this Circular will undergo EPR if there is a vertical team consensus (involving district, major subordinate command and Headquarters members) that the covered subject matter (including data, use of models, assumptions, and other scientific and engineering information) is novel, is controversial, is precedent setting, has significant interagency interest, or has significant economic, environmental and social effects to the nation. Decision documents covered by this Circular that do not meet the standard shall undergo ITR as described in paragraph 8, above.

Please see the External Peer Review Decision Checklist below (1 - 5).

1. Novel subject matter? Yes, this is a unique emergency response to a hurricane disaster.

- 2. Controversial subject matter? Yes, this is a unique study involving a mix of structural, nonstructural, and ecosystem restoration measures that may impact several communities along coastal Mississippi.
- 3. Precedent setting? Yes, the public law that authorized and funded this study includes exceptions to Corps policy.
- 4. Unusually significant interagency interest? Yes, this is a unique study requiring close coordination with other agencies.
- 5. Unusually significant economic, environmental, and social effects to the nation? The anticipated costs and effects are unusual and exceed \$40 million, the threshold amount suggested for recommendation of an EPR.

Decision: New methodologies have been developed for the analysis and preparation of the Integrated Comprehensive Report and EIS. Similarly, the data collected and associated analyses are considered scientifically influential. Considering this, and due to the estimated initial project cost projected to exceed \$40 million, CESAM/CESAD and HQ have determined that EPR will be accomplished for the Draft Comprehensive Report and Integrated EIS to meet the requirements of EC 1105-2-408.

c. Anticipated Peer Review Schedule.

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REVIEW PHASE	COMPLET	ION DATE
ITR of Draft Report and EIS	August	2007
HQ Review of Draft Report and EIS	February	2008
EPR for Draft Report & EIS	March	2008
Draft Report & EIS / NEPA Public Review	April	2008
Civil Works Review Board	June	2008
Final EIS / NEPA Public Review	August	2008
(MSC Commanders Public Notice)	August	2008

d. External Peer Review and Procedure. The PCX-CSDR is managing the External Peer Review process.

The PCX-CSDR will contract with Battelle to manage the EPR process. Battelle shall recruit 20 potential peer review panelists who would be available for the entire review period, be a subject matter expert in their field, be unbiased, not be employed by USACE, and have no conflict of interest with the MsCIP project. From this list, approximately 10 peer reviewers shall be selected to perform the EPR.

e. Public Comment on Decision Document. As each is completed, the Draft and the Final Integrated Comprehensive Feasibility Report and EIS will be disseminated to resource agencies, interest groups, and the public as part of the National Environmental Policy Act (NEPA) environmental compliance review. Public entities and private

individuals may also review and comment on draft documents as members of the PDT. Resources agencies were sent copies of the Progress Report along with an invitation to attend a Federal Principals Briefing held in January 2008.

- **f. Provision of Public Comments to Reviewers.** All significant and relevant public comments will be provided as part of the review package to Peer Reviewers as they are available and may include but not be limited to: scoping letters, meeting minutes, other received letters, and emails.
- **g. Anticipated Number of Reviewers.** Approximately 25 reviewers will be utilized by PCX-CSDR for ITR. Approximately 10 individuals will be required by PCX-CSDR for EPR.
- **h. Primary Review Disciplines and Expertise.** The PCX-CSDR has determined that the following primary review disciplines are required for the peer review of the Mississippi Coastal Improvements Program Study. Additional disciplines are included in Attachment 2.

PRIMARY REVIEW DISCIPLINES FOR ITR/EPR
Plan Formulation
Environmental / NEPA Compliance
Cultural Resources
Socioeconomics
Risk Analysis
Coastal Engineering / Hydrology & Hydraulics
Geotechnical Engineering
Cost Estimating
Real Estate
Geology and geomorphology
Floodplain management

i. Selection of External Peer Reviewers. The PCX-CSDR and associated Vertical Team have determined that approximately 10 external peer reviewers are required in the following disciplines.

EXTERNAL PEER REVIEW TEAM BY DISCIPLINE			
Discipline	Reviewer	Affiliation	
Coastal environmental	TBD	TBD	
science/wetland ecology			
Socio-economics	TBD	TBD	
Hydrology and hydraulics	TBD	TBD	
Geology and geomorphology	TBD	TBD	
Engineering	TBD	TBD	
Meteorology and hurricane	TBD	TBD	
expertise			

Water resources decision	TBD	TBD
analysis		
Water quality	TBD	TBD
Risk assessment	TBD	TBD
Modeling	TBD	TBD
Real estate	TBD	TBD
Floodplain management	TBD	TBD

j. Public Review. The public will have opportunities to review the Integrated Report/EIS as required by the NEPA compliance process. The public will also have access to the PCX-CSDR documentation on the ITR and EPR.

k. Miscellaneous Items.

- (1) **DrChecks**. A complete record of all comments and responses will be maintained throughout the study. A software program useful to coordinate various document comments and responses electronically, DrChecks, was used to conduct the ITR of the Draft Report / Integrated EIS. For the Draft Report / Integrated EIS backchecks were made via compilation of comments received in DrChecks and responses and actions taken were documented in an Excel worksheet. DrChecks is not required for EPR or Public Review.
- (2) **Model Certification.** All models developed or modified during for use in this study will be subjected to ITR and will be certified or approved as required by Engineer Circular (EC) 1105-2-407, U.S. Army Corps of Engineers. *Planning Models Improvement Program: Model Certification*.

ATTACHMENT 1

PEER REVIEW PLAN

PEER REVIEW PLAN			
FEASIBILITY PHASE			
Study Product or Milestone	Review by		
Feasibility Scoping Meeting	(not part of this study)		
Alternative Formulation Briefing	(not part of this study)		
Draft Report & Integrated EIS	PDT, Supervisors, ITR Team, EPR Team, OC, Public, State and Federal Agencies		
Risk Analysis Cost Engineering Policy	Walla Walla DX Walla Walla DX HQ, SAD		
CWRB Review Package	PDT, Supervisors		
Final Report & Integrated EIS	CWRB		
Final Report & Integrated EIS	Agencies, Public & Private Entities		
Chief of Engineers Report	$HQ \rightarrow ASA(CW) \rightarrow OMB \rightarrow Congress$		

ATTACHMENT 2

ITR APPROVAL REQUEST

Establishment of ITR responsibility has been an evolving process. Skilled and experienced personnel who have not been associated with the development of the MsCIP products have been previously requested by the Mobile District to serve as ITR members. PCX-CSDR led the ITR for the MsCIP Comprehensive Plan and Integrated EIS Study Package. EPR members will be determined by the Vertical Team and PCX-CSDR.

Tentative ITR members are shown below:

- Project Management
- External Peer Review
- Engineering Management
- Coastal and Hydraulic Design
- Hydrodynamic Modeling
- Coastal and Hydraulics Risks / Statistics
- Structural Design
- Electrical Design
- Mechanical Design
- Civil Engineering
- Interior Drainage, Pump Stations
- Hydrology
- Cost Engineering
- Geodesy and Topography
- Geology and Geotechnical
- Geotechnical and Structures Risk / Statistics
- Innovative Science and Engineering Technologies
- Spatial Analysis and GIS
- Environmental Compliance
- Cultural Resources
- Biological Resources
- Environmental Design and Evaluation
- Economics
- Plan Formulation
- Releas Estate
- O&M Consistency
- Information Management, Access, and GIS
- Regional Sediment Management
- Risk Informed Decision Making
- Constructability