

**Peer Review Plan
Savannah Harbor Expansion Project
Savannah, Georgia**

A. Introduction: The Savannah Harbor Deep Draft Navigation Project (SHEP) is located in Savannah, Georgia, and is currently maintained at a depth of 42 feet. The United States Congress conditionally authorized deepening the channel to a maximum of 48 feet contingent upon the completion of a General Reevaluation Report (GRR) and Tier II Environmental Impact Statement (EIS), a final mitigation plan, and an incremental analysis of the channel depths from 42 to 48 feet. This Peer Review Plan was developed in accordance with technical and policy requirements of the United States Army Corps of Engineers (Corps). The plan meets the guidance provided in the Water Resources Development Act of 2007, Engineering Regulation (ER) 1105-2-100, Engineer Circular (EC) 1105-2-408, CECW-CP Memorandum dated 8 November 2006, and CECW-CP Memorandum, Subject: Peer Review Process dated 30 March 2006.

B. Peer Review: As outlined in Engineer Circular (EC) 1105-2-408, an Independent Technical Review (ITR) will be conducted by the National Deep Draft Navigation Planning Center of Expertise (DDNPCX) on all aspects of the study. In accordance with law delineated in WRDA 2007, the entire study including the Draft General Reevaluation Report and Draft Environmental Impact Statement, and the associated models will undergo an External Peer Review (EPR) by an independent panel of experts.

C. Peer Review Schedule: ITR and EPR will occur based on the schedule provided below. The schedule includes the date for signing the Record of Decision (ROD) to note when the study report will be ready to be sent to Congress. This schedule is current as of 1/24/08:

Study Element	Type of Review	Date(s)
Environmental Fluid Dynamics Code (EFDC) & Water Quality Analysis Simulation Program (WASP) Models	ITR	9/1/05 – 1/31/06
EFDC & WASP Models Accepted by Agencies	EPR	5/15/06
Applied Technology and Management (ATM) and United States Fish and Wildlife Service (USFWS) Marsh Succession Models	ITR	2/7/06 – 2/15/07
ATM and USFWS Marsh Succession Models	EPR	4/27/07 - 5/10/07
Aquifer Effects Evaluation	ITR	5/20/05 – 8/12/05
Aquifer Effects Evaluation	EPR	1/9/06 – 2/12/07
Cadmium Risk Assessment Sampling Plan	Agency	9/14/06 – 10/4/06
Cadmium Risk Assessment Draft Report	ERDC	5/7/07 – 8/3/07
Cadmium Risk Assessment Draft Report	Agency	8/28/07 – 10/7/07

Economic Analysis – Commodity Forecast	ITR	5/19/05 – 10/4/06
Economic Analysis – Fleet Forecast	ITR	6/3/05 – 8/12/05
Economic Analysis – NED Benefits Model	ITR	2/7/06 – 5/1/06
Economic Analysis – Port Capacity Analysis	ITR	12/1/05 – 12/7/05
Economic Analysis – Multiport Analysis	ITR	4/15/06 – 5/30/06
Economic Analysis – Regional Port Analysis	ITR	8/2/06 – 1/3/07
Economic Analysis – Liquefied Natural Gas (LNG) Benefits	ITR	9/11/06 – 9/29/06
Economic Analysis – Operational Changes Update	ITR	1/16/07 – 2/28/07
Economic Analysis – Data Inputs	ITR	2/18/07 – 3/1/07
Cultural Resources – Early Man Studies	SHPO	5/21/07 – 7/4/07
Mitigation Plan	Agency	7/7/08 – 8/5/08
Review of AFB Materials	ITR	5/15/08 – 5/28/08
Review of Draft GRR/EIS	ITR	09/4/08 – 12/17/08
Review of Draft GRR/EIS	EPR	9/4/08 – 12/17/08
Review of Draft GRR/EIS	Agency	7/7/08 – 8/5/08
Review of Draft GRR/EIS	Public	9/4/08 – 11/2/08
Public Meeting	Public	9/19/08 – 9/23/08
Civil Works Review Board (CWRB)	RIT	1/2/09 – 1/11/09
Record of Decision (ROD)	HQUSACE	5/26/09 – 6/24/09

D. Peer Review Process: Independent objective peer review is regarded as a critical element in ensuring the reliability of scientific analysis. The external peer review for the EDFC and WASP models, the Marsh Succession modeling, and the Floridian Aquifer Analysis were conducted using the standard Corps review process. This review process involved a critical examination by qualified persons that are not involved in the day-to-day technical work that supports the decision documents.

E. Number of Reviewers: There will be approximately 12 individuals reviewing 10 disciplines comprising the ITR of the complete study report. There will be 6-8 experts reviewing the key study elements during the EPR of the overall study report.

F. ITR Process. The DDNPCX will form the ITR team and appoint an ITR team leader to manage and direct the ITR. The study will be fully reviewed by qualified persons not involved in the day-to-day development of a technical studies, ensuring the continued independence of reviewers. The review will ensure compliance with established policy, principles and procedures, using clearly justified and valid assumptions. Study methods and procedures will be reviewed to determine the appropriateness, correctness, and reasonableness of results.

Reviewers comments/concerns will be placed on Dr. Checks. Appropriate individuals from the PDT will read the comments and provide responses in Dr. Checks. Where the PDT member concurs with a comment, they will provide a copy of any additional information or wording to be included in the document. Where they do not concur, they will provide an explanation of why they do not concur. A reasonable attempt will be made to resolve any outstanding issues. The SHEP PM (Project Manager) will immediately initiate the dispute resolution process described in the PMP. Once all issues are resolved, the ITR team members will sign the Certification of Technical Review and the Office of Counsel will sign the Certification of Legal Review and return it to the ITR team leader. The disciplines involved in the ITR will include:

(1) Plan Formulation (one individual) – The plan formulation reviewer will have recent experience in conducting the plan formulation process for a deep draft navigation study, including identifying goals and objectives, recognizing planning constraints, distinguishing project alternatives, screening and evaluating project alternatives and selecting a recommended plan.

(2) Economics (one individual) – the economics reviewers will have a solid understanding of Corps deep draft navigation economic analysis, including familiarity with commodity forecasting, fleet forecasting, multiport and regional analysis, economic modeling, and analysis of risk and uncertainty.

(3) Coastal Environment (one individual) – The reviewer will have a comprehensive understanding of coastal ecosystems and the influence of channel deepening and disposal of dredged material on native plants and species.

(4) Hydraulics and Hydrology (two individuals) – The reviewers will have systematic knowledge of Corps guidance related to engineering requirements for deep draft navigation studies. They will have extensive knowledge of the various data and models employed to design a deep draft channel, including hydrodynamic modeling, coastal and bank erosion analysis, ship simulation, ship wake erosion and channel design.

(5) Cost Engineering (two individuals) – These reviewers will be associated with the Cost Estimating Center of Expertise in Walla Walla, Washington. They will be familiar with Corps requirements for cost engineering including the development of economic and financial costs, and the preparation of the MII Cost Estimate.

(6) Geotech (one individual) – This reviewer will have an understanding of the behavior of aquifers, soils, as well as the analysis and disposal of dredged material.

(7) Operations (one individual) – The reviewers will have an understanding of dredging operations and placement of dredged material for new construction as well as maintenance.

(8) The Savannah District Office of Counsel will perform a legal review of the project documents and then sign a legal certification if the project documents are legally sufficient.

The ITR Team will be comprised the following:

Discipline	Organization
Plan Formulation	CESWG-PE-PL
Environmental	CESAM-PD-EC
Economics	CEIWR-GW

Cost Engineering DX, Walla Wa	CENWW-EC-X
Cost Engineering DX, Walla Wa	CELRH-EC-TC
Geotechnical	CESAM-EN-GG
Geologist	CESAM-EN-GG
Engineering Design	CESAM-EN-GG
Hydraulics And Hydrology	CESAM-EN-HH
Real Estate	CESAM-OC
Operations	CESAM-OP-TN

G. EPR Process. The DDNPCX will also manage the EPR process. The Center will engage Battelle Memorial Institute (Battelle) to conduct the EPR, and assess the output of the review panel for the GRR/EIS. A detailed work plan will be developed and used to describe, in detail, the process that will be used to identify and select the EPR panel, conduct the review, and prepare the EPR report. Battelle will select the reviewers who will be recognized national experts in their disciplines drawn from academia, as well as other federal and state agencies. These reviewers may not be current employees of the Corps, but must be familiar with Corps policies and guidance.

Potential candidates for the EPR panel will be recruited, screened for availability, interest, and technical experience in defined areas of expertise. Ultimately, 6-8 experts will be selected for the final EPR panel using predetermined criteria related to technical expertise and credentials, relevance to the major sections of the GRR/EIS, and overall balance. Reviewers will be provided with paper and/or electronic copies of the document(s) to be reviewed and allowed sufficient time to read them thoroughly. Reviewers will provide written comment, however, individual review comments will not be publicly attributed to a specific reviewer. Battelle will read all documents provided by the review panel and assess for them for pertinence, validity and applicability before releasing them to the DDNPCX.

Appropriate individuals from the PDT will read the comments and provide written responses. Where they concur with a comment, they will provide a copy of any additional information or wording to be included in the document. Where they do not concur, they will provide an explanation of why they do not concur. A reasonable attempt will be made to resolve any outstanding issues. The functional chief responsible for preparing the report is ultimately responsible for making a final decision. The review documentation will be maintained by the PM. The implementation schedule for the EPR is provided below:

ACTIVITY	START	FINISH
1. Develop Statement of Work, Schedule, Milestones and Deliverables, and Independent Government Estimate (Budget) for contract with Battelle Memorial Institute.	3 Mar 08	30 Jun 08
2. Request Scientific Services Task Order through the US Army Research Office (ARO) Scientific Services Program (SSP).	30 Jun 08	11 Jul 08
3. Prepare Determinations And Signatures Document.	11 Jul 08	25 Jul 08
4. Prepare Work Plan for EPR.	25 Jul 08	29 Aug 08

5. Battelle receives Draft GRR/EIS and Appendices.	29 Aug 08	4 Sep 08
6. Select EPR Team	4 Sep 08	3 Oct 08
7. Develop and Finalize Charge to External Peer Reviewers.	3 Oct 08	27 Oct 08
8. Conduct Peer Review.	27 Oct 08	26 Nov 08
9. Hold Consensus Meeting	26 Nov 08	3 Dec 08
10. Finalize Comments into four (4) part comment: 1). Clear Statement, 2). Basis For Comment, 3). Significance, and 4). Path Forward to Resolve comment.	3 Dec 08	10 Dec 08
11. Receive EPR Report.	10 Dec 08	17 Dec 08
12. Hold Civil Works Review Board (CWRB).	15 Feb 09	15 Feb 09

H. Public Comment: Public involvement will be continual throughout the study process using a stakeholder evaluation group. A schedule of public review is provided as follows:

Public Review Element	Date(s)
Public NEPA Scoping Meeting	21 Feb 02 – 23 Feb 02
Lead/Cooperating Agency review of public comment documents	4 Sep 08 – 2 Nov 08
Public Review of the GRR/EIS	4 Sep 08 – 2 Nov 08
Public Meeting	19 Sep 08 – 23 Sep 08
Resolution of Public Review Comments	3 Nov 08 – 2 Dec 08

I. Dissemination of Public Comments: Minutes of the Stakeholder Evaluation Group meetings and the Public Involvement meetings are disseminated to the general public via postings on a public website.

J. Public Input to the Peer Review Process: This Peer Review Plan will be posted on the Savannah District website.