

# Addendum to the Final Independent External Peer Review Report for the Charleston Peninsula Coastal Flood Risk Management Study, South Carolina

Prepared by  
Battelle Memorial Institute

Prepared for  
Department of the Army  
U.S. Army Corps of Engineers  
Coastal Storm Risk Management Planning Center of Expertise  
Baltimore District

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## LIST OF ACRONYMS

<b>DrChecks</b>	Design Review and Checking System
<b>EA</b>	Environmental Assessment
<b>EC</b>	Engineer Circular
<b>FR</b>	Feasibility Report
<b>FRM</b>	Flood Risk Management
<b>IEPR</b>	Independent External Peer Review
<b>NEPA</b>	National Environmental Policy Act
<b>TSP</b>	Tentatively Selected Plan
<b>USACE</b>	United States Army Corps of Engineers

## 1. INTRODUCTION

This document is an addendum to the Final Independent External Peer Review (IEPR) Report for the Charleston Peninsula Coastal Flood Risk Management (FRM) Study, South Carolina (hereinafter: Charleston Peninsula Coastal FRM Study IEPR) submitted on June 18, 2020, by Battelle. It was prepared to document activities associated with the IEPR Panel's review of the public comments on the Charleston Peninsula Coastal FRM Study.

This addendum contains two additional Final Panel Comments (presented in Section 3) and briefly details the IEPR process that determined the need for, and led to the generation of, these comments. The Final Panel Comments in this addendum are numbered 15 and 16, continuing the Final Panel Comment numbering presented in the Charleston Peninsula Coastal FRM Study Final IEPR Report, which stopped at Final Panel Comment 14.

## 2. METHODS

This section summarizes the activities associated with the review of the public and agency comments conducted for this project.

Battelle received electronic versions of the public and agency comments from the U.S. Army Corps of Engineers (USACE) on June 25, 2020. USACE supplied an Excel spreadsheet containing 358 public comments submitted through USACE's on-line system, 75 individual emails submitted by the general public, and 9 emails submitted by agencies.

In accordance with procedures described in the Department of the Army, USACE, Engineer Circular (EC) *Review Policy for Civil Works* (EC 1165-2-217)<sup>1</sup>, Battelle focused the IEPR Panel's public comment review on assessing scientific and technical issues pertaining to the assumptions, data, methods, and models used in the project.

Each panel member was asked to independently determine whether the public comments contained any additional scientific or technical concerns about the project that were not previously identified, and that should be addressed by USACE in the Charleston Peninsula Coastal FRM Study project documents. The Panel was charged with focusing on discipline-specific scientific and technical issues and not policy-related comments, per EC 1165-2-217.

Comments submitted by state and Federal agencies were provided to the Panel "For Information Only." Battelle understands that under the National Environmental Policy Act (NEPA), USACE must address state and Federal agency comments as part of the consultation process; therefore, issues brought up by these agencies, and USACE's subsequent responses, were considered policy-related.

The Charleston Peninsula Coastal FRM Study IEPR panel members received the public and agency comments from Battelle on June 25, 2020. The panel members reviewed comment letters from state and

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<sup>1</sup> USACE (2018). Water Resources Policies and Authorities: Review Policy for Civil Works. Engineer Circular (EC) 1165-2-217. Department of the Army, U.S. Army Corps of Engineers, Washington, D.C. February 20.

Federal agencies as well as emails, letters, and comment cards from a variety of companies, non-profit organizations, and members of the general public.

The panel members were required to answer one charge question about the public comments:

**1. Do the public comments raise any additional discipline-specific technical concerns with regard to the overall report?**

The panel members submitted responses to this charge question, and Battelle reviewed those responses to identify any issues, areas of potential conflict, and other overall impressions. Each panel member's individual comments were shared with the full Panel. Battelle then discussed and confirmed via email and teleconference whether any of their identified issues should be carried forward as Final Panel Comments.

Based on the Panel's review, most of the public comments fell into the category of general support or opposition or were discussed in previous Final Panel Comments submitted in the Charleston Peninsula Coastal FRM Study Final IEPR Report. The Panel did not repeat those concerns in this addendum. All other concerns raised by agencies and other stakeholders were deemed by Battelle and the Panel to be related to policy and therefore outside the purview of the Panel's review.

By the end of the discussion, the panel members identified two issues within the public comments that needed additional clarifying information in order to strengthen the Charleston Peninsula Coastal FRM Study; these two issues are presented in the Final Panel Comments (Section 3).

All panel members reviewed and provided input on the issues discussed in Final Panel Comments 15 and 16. Battelle prepared this addendum and conducted a final review and edit of the Final Panel Comments for clarity and consistency. There was no direct communication between the Panel and USACE during the review and preparation of the Final Panel Comments.

Battelle will enter Final Panel Comments 15 and 16 into USACE's Design Review and Checking System (DrChecks), a Web-based software system for documenting and sharing comments on reports and design documents, so that USACE can review and respond to them. USACE will provide an Evaluator Response to the Final Panel Comments, and the Panel will respond via BackCheck Response to the Evaluator Responses. The USACE and Panel responses will be documented in DrChecks.<sup>2</sup> Battelle will provide USACE and the Panel with a pdf printout of all DrChecks entries, through comment closeout, as a final deliverable and record of the results of the IEPR and the public and agency comment review.

### **3. FINAL PANEL COMMENTS**

This section presents the full text of Final Panel Comments 15 and 16 prepared by the Charleston Peninsula Coastal FRM Study IEPR panel members.

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<sup>2</sup> Battelle is scoped with uploading the Panel's BackCheck Responses in DrChecks on behalf of the Panel.

## Final Panel Comment 15

**The Draft Feasibility Report/Environmental Assessment (FR/EA) does not provide sufficient information to understand how the viewshed will be affected by the construction of the wave attenuation structure and the storm surge wall.**

### Basis for Comment

The public comments reflect concern about the potential for adverse visual impacts from construction of the storm surge wall and wave attenuating structure. Section ES.6 of the Draft FR/EA identifies Visual Impacts as one of three issues of known controversy and acknowledges that the Tentatively Selected Plan (TSP) would change views of the water from land and also of the cityscape from the water. However, in the Summary of Potential Effects in the Draft Finding of No Significant Impact, the potential effect to visual and aesthetics is determined to be “insignificant.” Appendix F includes a Preliminary Visual Assessment and indicates that a detailed Visual Resources Assessment Procedure “...should be developed and implemented concurrent with the continued preparation of the Feasibility Report” (page 36), and would include, but not be limited to, “...selected viewpoint simulations, visual impacts assessment, visual resource planning objectives, constraints, and planning and design criteria, etc...” (page 51). However, that scope of work is not listed in the Draft FR/EA Feasibility Level Design Tasks (Section 8.10.1) or in the Preconstruction Engineering and Design Tasks (Section 8.10.2).

### Significance – Medium/Low

Results of the detailed visual assessment are not likely to change the TSP, but the results could influence the final alignment and height of protection recommended.

### Recommendation for Resolution

1. Perform the detailed Visual Resources Assessment Procedure as soon as feasible so that the visual and aesthetics effects can be considered in the evaluation of the TSP.

## Final Panel Comment 16

**Numerous public comments questioned how USACE integrated the results of other local agency and stakeholder studies in the project development process.**

### Basis for Comment

Public commenters questioned why the Draft FR/EA contained no documented evidence of coordination with a relevant local planning process. Specific local planning documents mentioned included the Flooding and Sea Level Rise Strategy 2019 and Dutch Dialogues Charleston 2019. The Draft FR/EA (Section 5.0) notes several meetings with agencies and local stakeholders, but does not include details or discussion of how these separate local planning processes and studies may or may not have been integrated into the USACE's project planning process.

Tidal protection is not one of the stated goals for the proposed project, but is a related local concern identified in the public commentary as being a focus of local planning efforts. There may be physical overlap of barriers and operational interdependence of closure structures between the USACE TSP and locally sponsored tidal flood protection projects, particularly in low-lying areas (e.g., marshes and tidal creeks) where the TSP includes combo-wall barriers, sluice gates, and miter gates.

### Significance – Medium/Low

The lack of documentation of discussions between the USACE and local planning efforts affects the clarity or completeness of the Draft FR/EA. The frequency of anticipated flood gate closures may have an influence on the selection of the TSP through the marshes and tidal creeks.

### Recommendations for Resolution

1. Provide a brief discussion of how local planning and reports informed the project planning process. If USACE deemed the results of other local agency and stakeholder studies to be inapplicable to the project planning process, provide the rationale for why this was so.
2. Evaluate the anticipated frequency and impacts of sluice gate and miter gate closures. This evaluation should consider the operation of the locally sponsored tidal protection system and the influence of relative sea level rise.

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***BATTELLE***

**It can be done**