REVIEW PLAN April 2019

Project Name: Folly Beach, South Carolina Study (Charleston County, SC)
P2 Number: 477186

Decision Document Type: Feasibility Report

Project Type: Flood Risk Management

District: Charleston District; however, the Wilmington District will complete this study. **District Contact:** Chief, Programs Management Section,

Major Subordinate Command (MSC): South Atlantic Division MSC Contact: Senior Plan Formulator,

Review Management Organization (RMO): PCX-CSRM RMO Contact: Planning Program Manager

Key Review Plan Dates

Date of RMO Endorsement of Review Plan: 18 March 2019 Date of MSC Approval of Review Plan: 13 May 2019 Date of IEPR Exclusion Approval: 13 May 2019 Has the Review Plan changed since PCX Endorsement? No Date of Last Review Plan Revision: None Date of Review Plan Web Posting: Pending Date of Congressional Notifications: Pending

Milestone Schedule

	Scheduled	Actual	Complete
Feasiblity Cost Sharing Agreemen	<u>nt:</u> 12 Oct 2018	12 Oct 2018	Yes
Alternatives Milestone:	11 Jan 2019	11 Jan 2019	Yes
Tentatively Selected Plan:	12 Nov 2019	(enter date)	No
Release Draft Report to Public:	20 Dec 2019	(enter date)	No
Agency Decision Milestone:	13 Apr 2020	(enter date)	No
Final Report Transmittal:	12 Apr 2020	(enter date)	No
Senior Leaders Briefing:	17 Aug 2021	(enter date)	No
Chief's Report or Director's Repo	<u>rt:</u> 12 Oct 2021	(enter date)	No

Project Fact Sheet April 2019

Project Name: Folly Beach, South Carolina Study (Charleston County, SC)

Location: Folly Beach, Charleston County, South Carolina

Authority: Section 216 of the Flood Control Act of 1970, the Water Resources Development Act of 1986, the Energy and Water Development Act of 1992, and the Bipartisan Budget Act of 2018.

Sponsor: City of Folly Beach, SC

Type of Study: Coastal Storm Risk Management Feasibility Study

SMART Planning Status: 3x3x3 compliant

Project Area: Folly Beach is located about 12 miles south of Charleston, South Carolina on Folly Island. Kiawah Island is to the south of Folly Island and Morris Island is to the north. The south end of Folly Island and Kiawah Island are separated by Stono Inlet. The north end and northwestern portion of Folly Island are bound by Lighthouse Creek and Folly River, respectively. The southeastern face of Folly Island is exposed to the Atlantic Ocean. Folly Island is 6.1 miles in length, of which 5.34 miles is now included in the Federal project.

Problem Statement: Folly Beach suffers from the effects of storm surge and constant wave action that causes damage to structures and risks to life and property.

Federal Interest: The feasibility study will attempt to select a plan to provide storm damage reduction benefits to the project area for another 50 years. The estimated total cost of the project is probably greater than \$200,000,000.

Risk Identification: Potential risks to be considered in the study are: 1. The Coastal Barrier Resources Act of 1982 (CBRA) was enacted to prohibit most new federal expenditures and federal financial assistance within a John H. Chafee Coastal Barrier Resources System (CBRS) unit that is designated under CRBA to remove certain actions and programs of the Federal government that subsidized and encourage development on coastal barriers. The Act has an exemption for continued maintenance of established navigation channels. The sand from a nearby navigaton channel within a CBRS unit has been used beneficially, in the past, on Folly Beach. Discussions are still underway with the vertical team and the U.S. Fish and Wildlife Service on the appropriateness of the beneficial use of the material outside of the CBRS unit. A plan involving beach renourishment will require a large amount of beach compatible sand, likely more than is available from the navigation channel itself. Costs to construct the project will rise steeply if sand must be taken from an off-shore site. 2. Additional real estate may be required thus incurring an additional cost to the project and result in a negative effect to the Benefit-Cost Ratio and economic justification. 3. There is potential for adverse impacts if the Future Without Project (FWOP) condition (i.e., the No Action Plan) is selected, as severe storm impacts to property could occur.



1. FACTORS AFFECTING THE LEVELS OF REVIEW

Scope of Review.

- <u>Will the study likely be challenging?</u> This study consists of providing continued storm damage reduction to the City of Folly Beach within an existing Federal CSRM project. Accordingly, the project does not have any significant technical, institutional, or social challenges.
- Provide a preliminary assessment of where the project risks are likely to occur and assess the magnitude of those risks.

Project risks associated with the feasibility study are fairly low (refer to the Risk Identification section on the Project Fact Sheet above). All technical areas have methods to identify and mitigate inherit risks: cost risk have been mitigated through contingencies coordinated with the Cost MCX; environmental risks have been reduced through the incorporation of avoidance and minimization measures embedded within the project's acquisition approach and construction assumptions; and additional investigations conducted during preconstruction engineering and design (PED) will reduce risks associated with confirmation and update of sediment characteristics. The major risks in the project include the potential for adverse impacts if the Future Without Project (FWOP) condition (i.e. the No Action Plan) is selected, as severe storm impacts to property could occur. None of the above risks pose a significant threat to human life or the environment, either now or in the future. The PDT will manage risks throughout the study, and operate within policy and guidance.

• <u>Is the project likely to be justified by life safety or is the study or project likely to involve significant life safety issues?</u>

The project will not be justified by life/safety and does not involve significant threat to human life/safety assurance. No life/safety issues are anticipated as CSRM projects primarily reduce risk to loss of property and infrastructure. Life safety in CSRM projects occurs as a result of evacuation.

- <u>Has the Governor of an affected state requested a peer review by independent experts?</u> The Governor of South Carolina has not requested a peer review by independent experts.
- Will the project likely involve significant public dispute as to the project's size, nature, or effects?

The project may be publicly controversial, in that some of the general citizentry do not believe a berm, or berm and dune complex, will provide adequate risk reduction.

- <u>Is the project/study likely to involve significant public dispute as to the economic or environmental cost or benefit of the project?</u> There is no significant public dispute as to the economic or environmental cost or benefit of the project. Cost considerations are very straightforward and based on standard estimating techniques.
- <u>Is the information in the decision document or anticipated project design likely to be based</u> on novel methods, involve innovative materials or techniques, present complex challenges for

interpretation, contain precedent-setting methods or models, or present conclusions that are likely to change prevailing practices?

The project does not contain influential scientific information and will not include any highly influential scientific assessments. The study is a typical CSRM reevaluation report involving traditional storm damage reduction measures and traditional implementation processes. Therefore, it is anticipated that there is a minimal risk involved with the project. The final feasibility report and supporting documentation will contain standard engineering, economic, and environmental analyses and information. Novel methods will not be utilized and methods, models or conclusions will not be precedent setting or likely to change policy decisions.

- Does the project design require redundancy, resiliency, and/or robustness, unique construction sequencing, or a reduced or overlapping design/construction schedule? The proposed CSRM project does not require any special mesures to provide redundancy, resiliency and/or robustness. Careful consideration will be required relative to sequencing if construction requires multiple contract actions. At this time, the project design is not anticipated to require redundancy, resiliency, and/or robustness, unique construction sequencing, or a reduced or overlapping design construction schedule. Project is resilient in that it can be adapted by easily engineered means to provide a greater level of risk management in accommodating change. For instance, the project could be engineered for a dune raise to accommodate unexpected, higher levels of sea level rise.
- <u>Is the estimated total cost of the project greater than \$200 million?</u> The estimated total cost of the project is probably greater than \$200,000,000.
- <u>Will an Environmental Impact Statement be prepared as part of the study?</u> The study does not include an Environmental Impact Statement (EIS). Prior studies on Folly Beach did not require an EIS. Presently no actions are being considered that would have sufficient impact to require preparation of an EIS. Continuing construction impacts will be similar to those completed in the past, for which an Environmental Assessment was prepared.
- Is the project expected to have more than negligible adverse impacts on scarce or unique tribal, cultural, or historic resources? The project is not expected to have more than negligible adverse impacts on scarce or unique tribal, cultural or historic resources.
- <u>Is the project expected to have substantial adverse impacts on fish and wildlife species and their habitat prior to the implementation of mitigation measures?</u> The project is not expected to have substantial adverse impacts on fish and wildlife species owing to the reduced study area and proactive avoidance and minimization measures incorporated into project implementation.
- <u>Is the project expected to have, before mitigation measures, more than a negligible adverse</u> <u>impact on an endangered or threatened species or their designated critical habitat?</u> The project is not expected to have more than a negligible adverse impact on an endangered or threatened species or its designated critical habitat. To the extent practicable, environmental concerns can be addressed through mitigation measures of avoidance, minimization, or compensation, and through public education and outreach efforts. An

Environmental Assessment (EA) will be completed to document the environmental effects of the proposed plan.

2. REVIEW EXECUTION PLAN

This section describes each level of review to be conducted. Based upon the factors discussed in Section 1, this study will undergo the following types of reviews:

District Quality Control. All decision documents (including data, analyses, environmental compliance documents, etc.) undergo DQC. This internal review process covers basic science and engineering work products. It fulfils the project quality requirements of the Project Management Plan.

<u>Agency Technical Review</u>. ATR is performed by a qualified team from outside the home district that is not involved in the day-to-day production of the project/product. These teams will be comprised of certified USACE personnel. The ATR team lead will be from outside the home MSC. If significant life safety issues are involved in a study or project a safety assurance review should be conducted during ATR.

Independent External Peer Review. Type I IEPR <u>may be required</u> for decision documents under certain circumstances. This is the most independent level of review, and is applied in cases that meet criteria where the risk and magnitude of the project are such that a critical examination by a qualified team outside of USACE is warranted. A risk-informed decision is made as to whether Type I IEPR is appropriate.

Cost Engineering Review. All decision documents shall be coordinated with the Cost Engineering Mandatory Center of Expertise (MCX). The MCX will assist in determining the expertise needed on the ATR and IEPR teams. The MCX will provide the Cost Engineering certification. The RMO is responsible for coordinating with the MCX for the reviews. These reviews typically occur as part of ATR.

<u>Model Review and Approval/Certification</u>. EC 1105-2-412 mandates the use of certified or approved models for all planning work to ensure the models are technically and theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions.

Policy and Legal Review. All decision documents will be reviewed for compliance with law and policy. ER 1105-2-100, Appendix H provides guidance on policy and legal compliance reviews. These reviews culminate in determinations that report recommendations and the supporting analyses and coordination comply with law and policy, and warrant approval or further recommendation to higher authority by the home MSC Commander. These reviews are not further detailed in this section of the Review Plan.

Table 1 provides the schedules and costs for reviews. The specific expertise required for the teams are identified in later subsections covering each review. These subsections also identify requirements, special reporting provisions, and sources of more information.

Table 1:	Levels	of Revie	w
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Product to Undergo Review	Review Level	Start Date	End Date	Cost	Complete
Draft Feasibility Report	District Quality Control	11/25/19	12/3/19	\$20,000	No
	Agency Technical Review	12/23/19	1/30/20	\$50,960 ¹	No
	Type I IEPR ²	TBD	TBD	N/A	N/A
	Policy and Legal Review	2/28/20	3/27/20	N/A	No
	Public & Agency Review	12/19/19	1/27/20	N/A	No
ADM Milestone Submittals	District Quality Control	2/28/20	3/27/20	\$5,000	No
Final Feasibility Report	District Quality Control	12/9/20	12/16/20	\$10,000	No
and EA	Agency Technical Review	12/18/20	12/30/20	\$41,600 ³	No
	Type I IEPR ²	TBD	TBD	N/A	N/A
	Policy and Legal Review	12/18/20	12/30/20	N/A	No
In-kind Products ⁴	N/A	N/A	N/A	N/A	N/A

¹Estimated cost for Draft and Final Report ATRs does not include the cost of ATR Team Lead participation in milestone meetings or other engagement/coordination beyond that directly related with those ATRs. The estimated cost for ATR of the Draft Report is based upon the following assumptions:

- ATR Team Lead 32 hours, \$130/hour
- ATR Team 9 technical disciplines, 40 hours/discipline, average \$130/hour
- ²PDT is requesting exclusion from Type I IEPR with District transmittal of this review plam.

³The estimated cost for ATR of the Final Report is based upon the following assumptions:

- ATR Team Lead 32 hours, \$130/hour
- ATR Team 9 technical disciplines, 32 hours/discipline- average, average \$130/hour

⁴ Products and analyses provided by non-Federal sponsors as in-kind services are subject to DQC, ATR, and IEPR. No in-kind products or analyses will be developed by the non-Federal sponsor.

a. DISTRICT QUALITY CONTROL

The home district shall manage DQC and will appoint a DQC Lead to manage the local review (see EC 1165-2-217, section 8.a.1). The DQC Lead should prepare a DQC Plan and provide it to the RMO and MSC prior to starting DQC reviews. Table 2 identifies the required expertise for the DQC team.

DQC Team Disciplines	Expertise Required		
DQC Lead	A senior professional with extensive experience preparing Civil		
	Works decision documents and conducting DQC. The lead may		
	also serve as a reviewer for a specific discipline (such as planning,		
	economics, environmental resources, etc.).		
Planning	A senior water resources planner with experience in CSRM		
	feasibility studies.		
Economics	The reviewer must be certified to perform DQC and shall have		
	knowledge of the principles and guidelines of economic analysis as		
	it relates to models for CSRM projects in the Corps of Engineers		
	including CSRM and recreation benefits.		
Environmental Resources	A senior environmental specialist with experience in drafting		
	planning documents and navigating the NEPA process.		
Coastal Engineer	Senior coastal engineer with experience in CSRM models.		
Engineering – Geotechnical	Senior geotechnical engineer with experience in feasibility studies,		
	especially CSRM projects.		
Cost Engineering	The cost engineer shall be an expert in CSRM beach		
	renourishment projects, and have experience working cost		
	estimates through ATR via the Cost Center of Expertise.		
Real Estate	The reviewer must be experienced in CSRM studies.		

Table 2: Required DQC Expertise

Documentation of DQC. Quality Control should be performed continuously throughout the study. A specific certification of DQC completion is required at the draft and final report stages. Documentation of DQC should follow the District Quality Manual and the MSC Quality Management Plan. An example DQC Certification statement is provided in EC 1165-2-217, on page 19 (see Figure F).

Documentation of completed DQC should be provided to the MSC, RMO and ATR Team leader prior to initiating an ATR. The ATR team will examine DQC records and comment in the ATR report on the adequacy of the DQC effort. Missing or inadequate DQC documentation can result in delays to the start of other reviews (see EC 1165-2-217, section 9).

b. AGENCY TECHNICAL REVIEW

The ATR will assess whether the analyses are technically correct and comply with guidance, and that documents explain the analyses and results in a clear manner. An RMO manages ATR. The review is conducted by an ATR Team whose members are certified to perform reviews. Lists of certified reviewers are maintained by the various technical Communities of Practice (see EC 1165-2-217, section 9(h)(1)). Table 3 identifies the disciplines and required expertise for this ATR Team.

ATR Team Disciplines	Expertise Required
ATR Lead	The ATR lead will be a senior professional with extensive
	experience in preparing Civil Works decision documents and
	conducting ATR. The lead should also have the necessary skills
	and experience to lead a virtual team through the ATR process.
	The ATR lead may also serve as a reviewer for a specific discipline
	(such as planning, economics, or environmental resources).
Plan Formulator	The Planning reviewer must be certified to perform ATR and will
	be a senior coastal study planner with experience in CSRM
	projects.
Economics	The reviewer must be certified to perform ATR and shall have
	extensive knowledge of the principles and guidelines of economic
	analysis, and familiarity with the use of the BeachFx model for
	CSRM projects in the Corps of Engineers including recreation
	benefits.
Coastal Engineer	The reviewer will have a minimum of 5 years of Coastal
	Engineering experience. The engineer must be familiar with
	running BeachFx and how the information is used by the
	economists and the biologists in their assessments.
Environmental Resources	The reviewer must be certified to perform ATR and shall be an
	expert in the NEPA process. The reviewer shall be familiar with
	the impacts from CSRM beach nourishment projects and have an
	understanding of CBRA of 1982.
Engineering – Geotechnical	The reviewer will have a minimum of 5 years of Geotechnical
	experience. The engineer must be familiar with sediment sampling
	practices and how the information is used to formulate CSRM
	projects.
Cost Engineering	The cost engineer shall be an expert in CSRM beach
	renourishment projects. The Cost Engineering reviewer must be
	from the Civil Works Cost Engineering and Agency Technical
	Review Mandatory Center of Expertise with Technical Expertise
	(Cost MCX/TCX) in Walla Walla District, or must be on the Cost
	MCX/TCX approved list of delegated Cost ATR reviewers.
Real Estate	The reviewer shall have experience with the easement requirements
	on CSRM projects. The Real Estate reviewer must have expertise
	in the real estate planning process for cost shared and full federal
	civil works projects, relocations, report preparation and acquisition
	of real estate interests. The reviewer should have a full working

Table 3:	Required ATR Te	am Expertise
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	knowledge of EC 405-2-12, Real Estate Planning and Acquisition		
	Responsibilities for Civil Works Projects, the portions of ER 405-		
	2-12 that are currently applicable, and Public Law 91-646. The		
	reviewer should be able to identify areas of the REP that are not in		
	compliance with the guidance set forth in EC405-2-12 and should		
	make recommendation for bringing the report into compliance. All		
	estates suggested for use should be termed sufficient to allow		
	project construction, and the real estate cost estimate should be		
	validated as being adequate to allow for real estate acquisition.		
Climate Preparedness and	A member of the Climate Preparedness and Resiliency Community		
Resilience CoP Reviewer	of Practice (CoP) will participate in the ATR review.		
Risk and Uncertainty	The reviewer will be a subject matter expert in multi-discipline		
	flood risk analysis to ensure consistent and appropriate		
	identification, analysis, and written communication of risk and		
	uncertainty. This reviewer may also serve as a reviewer in a specific		
	discipline.		

Documentation of ATR. DrChecks will be used to document all ATR comments, responses and resolutions. Comments should be limited to those needed to ensure product adequacy. If a concern cannot be resolved by the ATR team and PDT, it will be elevated to the vertical team for resolution using the EC 1165-2-217 issue resolution process. Concerns can be closed in DrChecks by noting the concern has been elevated for resolution. The ATR Lead will prepare a Statement of Technical Review (see EC 1165-2-217, Section 9), for the draft and final reports, certifying that review issues have been resolved or elevated. ATR may be certified when all concerns are resolved or referred to the vertical team and the ATR documentation is complete.

c. INDEPENDENT EXTERNAL PEER REVIEW

(i) Type I IEPR.

Decision on Type I IEPR. This study is currently not excluded from IEPR. Based on project facts listed under Section 1 above, this project contains one mandatory trigger described in EC 1165-2-217, 11.d. The total project cost is likely not less than \$200 million. However, there is a potential for projects costing over \$200 million to be excluded from Type I IEPR if an exclusion is granted. Per Memorandum, CECW-P, Subject: Revised Delegation of Authority in Section 2014(a)(5)(A) of the Water Resources Development Act of 2007 (WRDA 2007), as amended (33 U.S.C. 2343), dated 07 JUN 2018, the MSC Commander has been delegated authority to approve the IEPR Exclusion based upon a risk-informed decision and recommendation. A waiver to forgo Type I IEPR is being requested concurrently with this review plan since no other mandatory conditions listed in this section are met: the project does not include an EIS, the various aspects of the problems or opportunities being addressed are not complex, and there is no controversy surrounding the study. Additionally, there is no public safety component of the project, do not expect the governor to request IEPR, and do not expect the DCW or the Chief of Engineers to determine this project is controversial due to significant public dispute over the size, nature, or effects of the project or the economic or environmental costs or benefits of the project.

(ii) Type II IEPR.

The second kind of IEPR is Type II IEPR. These Safety Assurance Reviews are managed outside of the USACE and are conducted on design and construction for hurricane, storm and flood risk management projects or other projects where existing and potential hazards pose a significant threat to human life. A Type II IEPR Panel will be convened to review the design and construction activities before construction begins, and until construction activities are completed, and periodically thereafter on a regular schedule.

Decision on Type II IEPR. Based on the project as currently envisioned, the District Chief of Engineering, as the Engineer-In-Responsible-Charge, does not recommend a Type II IEPR Safety Assurance Review of this project at this time. A risk-informed decision concerning the timing and the appropriate level of reviews for the project implementation phase will be prepared and submitted for approval in an updated Review Plan prior to initiation of the design/implementation phase of this project.

d. MODEL CERTIFICATION OR APPROVAL

EC 1105-2-412 mandates the use of certified or approved models for all planning activities to ensure the models are technically and theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions. Planning models are any models and analytical tools used to define water resources management problems and opportunities, to formulate potential alternatives to address the problems and take advantage of the opportunities, to evaluate potential effects of alternatives and to support decision making. The use of a certified/approved planning model does not constitute technical review of a planning product. The selection and application of the model and the input and output data is the responsibility of the users and is subject to DQC, ATR, and IEPR. All planning and engineering model products will be reviewed and DQC performed by district or regional staff who are not involved in the production of those products. All work sourced to non-District staff will be reviewed and quality control/quality assurance provided by either District team members or Center of Expertise staff, also not involved in the producing outputs. The study currently has an assigned Center of Expertise Point-of-Contact.

Model Name	Brief Model Description and	Certification
and Version	How It Will Be Used in the Study	/ Approval
Beach -fx	A comprehensive innovative analytical framework for more	Certified
	accurately evaluating the physical performance and	
	economic benefits and costs of shore protection project.	
Study Specific	Breakdown BeachFx outputs for benefits calculations.	Request
Spreadsheets		approval for
for Benefits		use through
Analysis		PCX

 Table 5: Planning Models. The following models may be used to develop the decision document:

EC 1105-2-412 does not cover engineering models used in planning. The responsible use of wellknown and proven USACE developed and commercial engineering software will continue. The professional practice of documenting the application of the software and modeling results will be followed. The USACE Scientific and Engineering Technology Initiative has identified many engineering models as preferred or acceptable for use in studies. These models should be used when 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.

Model Name and	Brief Model Description and	Approval
version	How It will be Used in the Study	Status
MII	Used to estimate costs of alternatives and TSP	Enterprise
Crystal Ball	Used to account for risk and uncertainty of	Enterprise
	alternatives and the TSP	
CEDEP	Corps-proprietary, Excel add-on for Cost	CEDEP
	Engineering; used	
GENEralized Model for	Simulates the long-term platform evolution of the	Enterprise
SImulating Shoreline	beach in response to imposed wave conditions,	
Change (GENESIS)	coastal structures, and other engineering activity	
	(e.g., beach nourishment).	
SBEACH	A numerical simulation model for predicting	Enterprise
	beach, berm, and dune erosion due to storm	
	waves and water levels.	

Table 6: Engineering Models. These models may be used to develop the decision document:

e. POLICY AND LEGAL REVIEW

Policy and legal compliance reviews for draft and final planning decision documents are delegated to the MSC (see Director's Policy Memorandum 2018-05, paragraph 9).

(i) Policy Review.

The policy review team is identified through the collaboration of the MSC Chief of Planning and Policy and the HQUSACE Chief of the Office of Water Project Review. The team is identified in Attachment 1 of this Review Plan. The makeup of the Policy Review team will be drawn from Headquarters (HQUSACE), the MSC, the Planning Centers of Expertise, and other review resources as needed.

- The Policy Review Team will be invited to participate in key meetings during the development of decision documents as well as SMART Planning Milestone meetings. These engagements may include In-Progress Reviews, Issue Resolution Conferences or other vertical team meetings plus the milestone events.
- The input from the Policy Review team should be documented in a Memorandum for the Record (MFR) produced for each engagement with the team. The MFR should be distributed to all meeting participants.

• In addition, teams may choose to capture some of the policy review input in a risk register if appropriate. These items should be highlighted at future meetings until the issues are resolved. Any key decisions on how to address risk or other considerations should be documented in an MFR.

(ii) Legal Review.

Representatives from the Office of Counsel will be assigned to participate in reviews. Members may participate from the District, MSC and HQUSACE. The MSC Chief of Planning and Policy will coordinate membership and participation with the office chiefs.

- In some cases legal review input may be captured in the MFR for the particular meeting or milestone. In other cases, a separate legal memorandum may be used to document the input from the Office of Counsel.
- Each participating Office of Counsel will determine how to document legal review input.

PROJECT DELIVERY TEAM				
Name	Office	Position	Phone Number	
	CESAW-PM-DG	Project Manager		
	CESAW-ECP-P	Planning Lead		
	CESAW-ECP-PS	Economics		
	CESAW-ECP-EC	Coastal Engineer		
	CESAW-ECP-PE	Environmental		
	CESAS-RE-HA	Real Estate		
	CESAW-ECP-EG	Geotechnical		
		Engineer		
	CESAW-ECP-ET	Cost Engineer		
	CESAW-OC	Counsel		

ATTACHMENT 1: TEAM ROSTERS

DISTRICT QUALITY CONTROL TEAM				
Name	Office	Position	Phone Number	
	CESAW-ECP-PS	Plan Formulation		
	CESAJ-PD-D	Economics		
	CESAW-ECP-EC	Coastal (Hydraulic)		
		Engineering		
	CESAW-ECP-PE	Environmental		
	CESAS-RE-A	Real Estate		
1	CESAW-ECP-ET	Cost Engineering		
	CESAW-ECP-EG	Geotechnical		
		Engineering		
	CESAC-PM-PL	Environmental		

AGENCY TECHNICAL REVIEW TEAM				
Name	Office	Position	Phone Number	
TBD				

VERTICAL TEAM					
Name	Office	Position	Phone Number		
	CECW-P	Acting Chief, Planning and Policy Division			
	CECW-SAD	SAD-RIT			
	CESAD-PDP	Acting Chief, Planning and Policy Division			
	CENAD-PD-X	PCX-CSRM			
	CECW-PC	Acting Chief OWPR			

POLICY REVIEW TEAM						
Name		Office	Position	Phone Number		
		CESAD-PDH	Review Manager			
		CECW-PC	Economics			
		CESAD-PDP	Environmental			
		CESAD-PDP	Plan Formulation			
		CESAD-RBT	Engineering and			
			Construction			
		CESAJ-EN-WC	Climate Change			
		CESAD-PDR	Real Estate			
		CESAD-OC	Counsel			