

# **REVIEW PLAN**

## **GULF INTRACOASTAL WATERWAY PORT O'CONNOR TO CORPUS CHRISTI, TEXAS SECTION 216 DRAFT FEASIBILITY STUDY**

**U.S. Army Corps of Engineers  
Galveston District**

**MSC Approval Date: July, 2009  
Last Revision Date: November, 2012**



**US Army Corps  
of Engineers ®**

**REVIEW PLAN**

**GIWW Port O’Connor to Corpus Christi, Texas  
Section 216 Feasibility Study**

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## 1. PURPOSE AND REQUIREMENTS

a. **Purpose.** This Review Plan defines the scope and level of peer review for the Port O'Connor to Corpus Christi, Texas, Section 216 Feasibility Report and Environmental Assessment. The Review Plan was approved in July 2009 but did not receive funds to complete the report preparation and review. The project has been funded and the review plan is being resubmitted to include changes in review requirements, references and template.

### b. References

- (1) Engineering Circular (EC) 1165-2-209, Civil Works Review Policy, Change#1 31 Jan 2010
- (2) EC 1105-2-412, Assuring Quality of Planning Models, 31 Mar 2011
- (3) Engineering 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) Port O'Connor to Corpus Christi Bay (Section 216) Feasibility Project Management Plan

c. **Requirements.** This review plan was developed in accordance with EC 1165-2-209, which establishes an accountable, comprehensive, life-cycle review strategy for Civil Works products by providing 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/Quality Assurance (DQC), Agency Technical Review (ATR), Independent External Peer Review (IEPR), and Policy and Legal Compliance Review. In addition to these levels of review, decision documents are subject to cost engineering review and certification (per EC 1165-2-209) and planning model certification/approval (per EC 1105-2-412).

## 2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

The RMO is responsible for managing the overall peer review effort described in this Review Plan. The RMO for decision documents is typically either a Planning Center of Expertise (PCX) or the Risk Management Center (RMC), depending on the primary purpose of the decision document. The RMO for the peer review effort described in this Review Plan is U.S Army Corps of Engineers (USACE) Planning Center of Expertise for Inland Navigation located in the Great Lakes and Ohio River Division, Huntington District.

The RMO will coordinate with the Cost Engineering Directory of Expertise (DX) to ensure the appropriate expertise is included on the review teams to assess the adequacy of cost estimates, construction schedules and contingencies.

## 3. STUDY INFORMATION

a. **Decision Document.** The Gulf Intracoastal Waterway (GIWW), Port O'Connor to Corpus Christi, Texas, Section 216 will result in a Draft Feasibility Report decision document that will require Congressional authorization. The study is being conducted under Section 216 authority of the 1970 Flood Control Act. This authority provides for review of completed USACE projects that may have changed because of physical or economic reasons. This single purpose (navigation efficiency) Feasibility Study examines two proposed actions: 1) the relocation of an existing authorized mooring

basin currently located in the vicinity of Port O'Connor, Texas; and 2) the realignment of the authorized route of the (GIWW) across Corpus Christi Bay. Study documents will also include an Environmental Assessment (EA). At this time, approval authority for the report is the Chief of Engineers through a Chief's Report to seek authorization from Congress.

**b. Study/Project Description.**

**Project Background**

The GIWW is part of the Nation's inland waterway system and stretches from Brownsville, Texas, along the entire Gulf of Mexico to St. Marks, Florida. The Port O'Connor to Corpus Christi (POCC) reach extends from Port O'Connor to the John F. Kennedy Causeway at Corpus Christi Bay, Texas and consists of a 12-foot deep by 125-foot wide channel spanning portions of Matagorda, Calhoun, Refugio, San Patricio, and Nueces counties (Figure 1). The problems identified within the POCC reach and addressed within this study involve long-term dredged material disposal and navigation problems.

The study was undertaken to evaluate operational needs that directly affect the GIWW to allow for a more effective, safe, and efficient waterway. It addresses the feasibility of implementing channel improvements to the existing GIWW system and environmental considerations in the Port O'Connor to Corpus Christi reach.

The draft report addresses two components: 1) the relocation of a mooring basin in the vicinity of Port O'Connor to replace an existing authorized basin that has been removed due to vessel traffic and being located in a highly congested area; and 2) realignment of the authorized GIWW route or construction of an alternative GIWW route to improve navigational efficiency in the vicinity of Corpus Christi Bay. The proposed Corpus Christi Bay reroute would realign the GIWW similar to its alignment prior to 1976 when the current route was constructed. The 1976 reroute was thought to improve efficiency by creating a more direct route, but has instead created a high-shoaling area where the GIWW and Corpus Christi Ship Channel intersect.

An economics analysis of the proposed GIWW realignment / alternate route alternatives performed in March of 2011 failed to identify an alternative with a benefit-cost ratio of at least 1.0 or greater. Therefore the draft Feasibility Report includes the proposed GIWW realignment / reroute for documentation purposes. It is anticipated that only the relocation of the Port O'Connor mooring basin will be tentatively recommended for construction in the draft Feasibility Report. Relocation of the mooring basin will involve unavoidable impacts to approximately two acres of sea grasses. These impacts are proposed to be mitigated by construction of an off-set breakwater at the Texas Parks and Wildlife Mad Island Marsh Wildlife Management Area. The breakwater will protect existing marsh from erosion while creating additional emergent salt marsh.

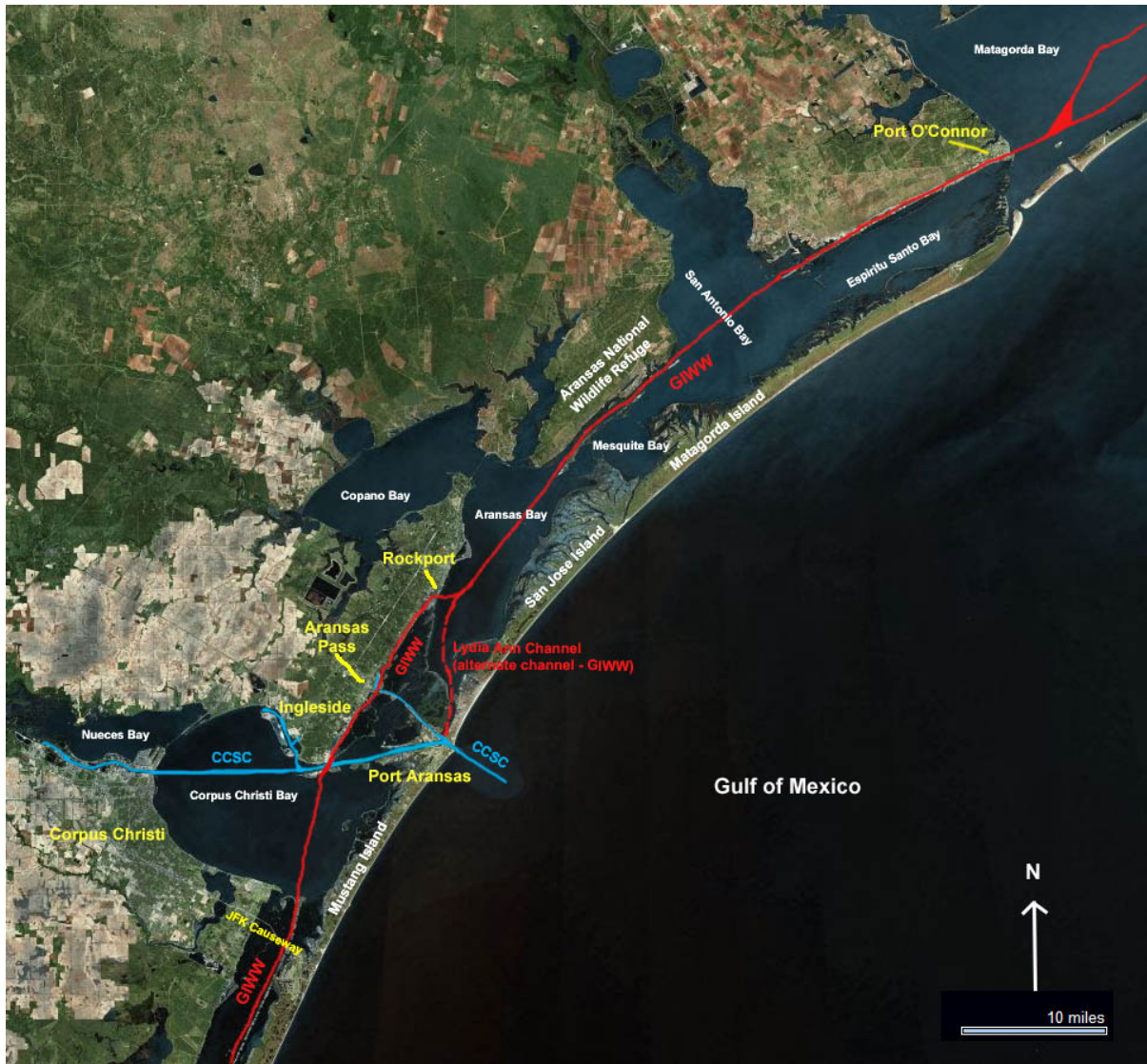


Figure 1 – GIWW Port O’Connor to Corpus Christi and vicinity map

**c. Factors Affecting the Scope and Level of Review.**

It is anticipated that the draft feasibility report will recommend relocation of an existing mooring basin. The currently authorized location of the mooring basin is adjacent to urban areas of Port O’Connor and in an area that has undergone development since its construction. It is anticipated that the draft Feasibility Report will not recommend construction of an alternate route or reroute of the GIWW across Corpus Christi Bay due to the economic analysis prepared March 2012. Current cost estimates for construction of the relocated mooring basin and associated mitigation is approximately \$5 million. Risk associated with the draft Feasibility Report is primarily associated with the calculation of project benefits and costs.

- d. **In-Kind Contributions.** Products and analyses provided by non-Federal sponsors as in-kind services are subject to DQC, ATR, and IEPR. The in-kind products and analyses to be provided by the non-Federal sponsor include: **Not Applicable**

#### 4. DISTRICT QUALITY CONTROL (DQC)

All decision documents (including supporting data, analyses, environmental compliance documents, etc.) shall undergo DQC. 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). The home district shall manage DQC. Documentation of DQC activities is required and should be in accordance with the Quality Manual of the District and the home MSC.

- a. **Documentation of DQC.** DQC is the review of basic science and engineering work products focused on fulfilling the project quality requirements. It is managed by the Galveston District and may be conducted by staff in the home district as long as they are not doing the work involved in the study, including contracted work that is being reviewed. Basic quality control tools include a Quality Management Plan (QMP) providing for seamless review, quality checks and reviews, supervisory reviews, Project Delivery Team (PDT) reviews, etc. Additionally, the PDT is responsible for a complete reading of the report to assure the overall integrity of the report, technical appendices and the recommendations before approval by the District Commander. For the GIWW Port O'Connor to Corpus Christi Section 216 study, non-PDT members and/or supervisory staff will conduct this review for major draft and final products. It is expected that the Major Subordinate Command (MSC)/District QMP addresses the conduct and documentation of this fundamental level of review.

#### 5. AGENCY TECHNICAL REVIEW (ATR)

ATR is mandatory for all decision documents (including supporting data, analyses, environmental compliance documents, etc.). The objective of ATR is to ensure consistency with established criteria, guidance, procedures, and policy. 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 is managed within USACE by the designated RMO and is conducted by a qualified team from outside the home district that is not involved in the day-to-day production of the project/product. ATR teams will be comprised of senior USACE personnel and may be supplemented by outside experts as appropriate. The ATR team lead will be from outside the home MSC.

- a. **Products to Undergo ATR.** The product to undergo ATR will be the draft Feasibility Report and Environmental Assessment. ATR is required for this study and will focus on the following:
  - (1) Review of the planning study process,
  - (2) Review of the economics analysis
  - (3) Review of anticipated environmental impacts and proposed mitigation
  - (4) Completeness of study and support documentation

**b. Required ATR Team Expertise.**

ATR Team Members/Disciplines	Expertise Required
ATR Lead	The ATR lead should 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, environmental resources, etc).
Planning	The Planning reviewer should be a senior water resources planner with experience in inland navigation.
Economics	The Economics reviewer should be an economist with experience in inland navigation.
Environmental Resources	The Environmental Resources reviewer should be a reviewer with experience in coastal restoration projects and resources.
Cost Engineering/Estimating	The Cost Engineering / Estimating reviewer should be a reviewer with experience in inland navigation.
Real Estate	The reviewer should have knowledge in reviewing RE Plans for deep draft navigation decision documents (e.g. LERRDs, navigation servitude, facility relocations and placement areas). The reviewer should be selected from the RE CoP approved list of RE ATR reviewers for future reviews.

**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 in order 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 the district, RMO, MSC, 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 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 verbatim 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. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)**

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 1165-2-209, 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 1165-2-209.
- 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. The reviews shall consider the adequacy, appropriateness, and acceptability of the design and construction activities in assuring public health safety and welfare.

**a. Decision on IEPR.**

Due consideration was given to Paragraph 15 of EC 1165-2-209 as well as Appendix D of the same EC. The scope of the draft Feasibility Report and study are of limited nature and address relocation of an already authorized mooring basin. Project cost is currently estimated to be approximately \$5 million, which is far below the \$45,000,000 IEPR threshold. The draft report recommends an activity for which there is ample experience within the USACE and industry to treat the activity as being routine and there is no significant threat to human life and safety. We do not anticipate that other criteria, such as public safety concerns, significant controversy, a high level of complexity, significant economic, environmental and social effects to the nation, innovative solutions, or life safety issues will trigger the requirement for IEPR. TYPE I IEPR is currently anticipated at this time for the subject feasibility report, however, the determination on the need for an IEPR will be further evaluated as the study progresses and as additional information and results of analyses becomes available.

**Mandatory IEPR Triggers** - EC 1165-2-209 identifies four mandatory triggers for Type I IEPRs:

- (a) Project is a significant threat to human life.
- (b) Where the estimated total cost of the project, including mitigation costs, is greater than \$45 million.
- (c) Where the Governor of an affected State requests a peer review by independent experts.
- (d) Where the Director of Civil Works (DCW) or the Chief of Engineers (CE) determines that the project study is controversial due to significant public dispute over either the size, nature, or effects of the project or the economic or environmental costs or benefits of the project.

The estimated total cost of the project is less than the \$45 million trigger. A peer review has not been requested by a Governor of an affected State. This project has not resulted in disputes over the size, nature, or effects of the project. Thus, the DCW and CE have not determined that the study is controversial. In summary, none of the mandatory IEPR triggers are met.

**b. Products to Undergo Type I IEPR.** The IEPR panel will review the entire draft report, including environmental documentation and all technical appendices.

**c. Required Type I IEPR Panel Expertise.** IEPR panels will be made up of recognized independent experts from outside of USACE, with disciplines appropriate for the type of review being conducted. The PCX will contract with Battelle to manage the review. About four IEPR panel members will be selected by Battelle using the National Academy of Science's policy for selecting reviewers. Candidates can be nominated by USACE, public, or scientific or professional societies. A pool of potential reviewers will be evaluated by USACE to ensure no conflict of interest. Since this feasibility study is a deep draft navigation study, anticipated disciplines of IEPR reviewers are engineering (coastal), economics, and environmental. The IEPR panel review will be federally funded, including the costs associated with obtaining the IEPR panel contract. Responding to IEPR comments will be cost shared with the local sponsor.

IEPR Panel Members/Disciplines	Expertise Required
Economics	The Economics Panel Member should have experience in water resource economic evaluation or review, working directly for or with USACE, and have experience with Deep-Draft Navigation projects. The reviewer should also have experience reviewing federal water resource economic documents justifying construction efforts, an understanding of social well-being and regional economic development, and an understanding of traditional natural economic development benefits.
Environmental (Ecology)	The Ecology Panel Member should have experience in describing and evaluating the complex relationships and dynamics of coastal ecosystems and experience assessing the consequences of altering environmental conditions.
Environmental (NEPA Impact Assessment)	The NEPA Impact Assessment Panel Member should have experience in evaluating and conducting NEPA impact assessments, conducting cumulative effects analyses, as well as experience with complex multi-objective public. The reviewer should work projects with competing trade-offs and have experience in determining the scope and appropriate methodologies for impact assessment and analyses for a variety of projects with high public and interagency interest. The reviewer should also have experience determining the scope and appropriate methodologies for impact assessment and analyses for projects having impacts to nearby sensitive habitats.
Coastal Engineering	The coastal engineering reviewer should have extensive experience in estuarine systems and be familiar with USACE applications of standard coastal engineering processes.

**d. Documentation of Type I IEPR.** The IEPR panel will be selected and managed by an Outside Eligible Organization (OEO) per EC 1165-2-209, Appendix D. Panel comments will be compiled by the OEO and should address the adequacy and acceptability of the economic, engineering and environmental methods, models, and analyses used. IEPR comments should generally include the same four key parts as described for ATR comments in Section 4.d above. The OEO will prepare a final Review Report that will accompany the publication of the final decision document and shall:

- 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; and
- Include a verbatim 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.

The final Review Report will be submitted by the OEO no later than 60 days following the close of the public comment period for the draft decision document. USACE shall consider all recommendations contained in the Review Report and prepare a written response for all recommendations adopted or not adopted. The final decision document will summarize the Review Report and USACE response. The Review Report and USACE response will be made available to the public, including through electronic means on the internet.

## **7. 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 home MSC 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 DIRECTORY OF EXPERTISE (DX) REVIEW AND CERTIFICATION**

All decision documents shall be coordinated with the Cost Engineering 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. Given the small scope/scale nature of the project, coordination with Walla Walla resulted in a determination that the DX review of the Cost Engineering documents will occur concurrent with the ATR review.

## **9. MODEL CERTIFICATION AND 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, for the purposes of the EC, are defined as any models and analytical tools that planners use 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 the planning product. 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).

EC 1105-2-412 does not cover engineering models used in planning. The 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:

<b>Model Name and Version</b>	<b>Brief Description of the Model and How It Will Be Applied in the Study</b>	<b>Certification / Approval Status</b>
HEP HSI	Habitat Evaluation Procedures (HEP) will be used to quantify, to the extent possible, potential outputs of proposed marsh creation. Quantification of benefits will be expressed in terms of Habitat Units (HUs). Habitat Suitability Index (HSI) models for juvenile spotted seatrout, brown shrimp, and great egret will be used. All U.S. Fish and Wildlife Service HSI models were approved by HQ for use (Policy Guidance on Certification of Ecosystem Output Models, 8/13/2008, Recommendation 3) and require no further approval or certification. The selection and application of these models require ATR review."	Certified
Study Specific Economic Spreadsheet Model	The draft Feasibility Report presents an economic analysis to support the relocation of the mooring basin and dropping the GIWW alternate / reroute across Corpus Christi Bay. The Inland Navigation Planning Center of Expertise (PCX) will conduct a Level 2 review of the model for the following reasons: 1) Review is for a routine and non-complex model that has a minor impact on project decision-making; and 2) The model platform is Microsoft Excel and the PCX has in-house expertise to review it appropriately.	Level 3 Review of Regional / Local Model (Approval for Single Use is Pending)

b. **Engineering Models.** The following engineering models are anticipated to be used in the development of the decision document:

<b>Model Name and Version</b>	<b>Brief Description of the Model and How It Will Be Applied in the Study</b>	<b>Approval Status</b>
Mii - cost estimating models	Cost Engineering's model for developing cost.	Cost Engineering Approved Model
Crystal Ball Risk Based Analysis	Cost Engineering's model for determining risk in cost estimating.	Cost Engineering Approved Model

## 10. REVIEW SCHEDULES AND COSTS

### c. ATR Schedule and Cost.

Estimated schedule for ATR of the draft Feasibility Report and EA

ATR Review of Draft Reports	27 Aug - 12 Oct 2012
ATR Certification of Draft Report	24 Oct 2012
AFB	11 Feb 2013
Public Review of Draft Reports	TBD
ATR Back Check/Certification of Final Report	TBD

The cost is expected to be \$25K including the participation of the ATR Lead in milestone conferences and the Civil Works Review Board (CWRB) meeting to address the ATR process and any significant and/or unresolved ATR concerns.

**d. Type I IEPR Schedule and Cost.** TBD

**e. Model Certification/Approval Schedule and Cost.** As part of the Feasibility Report, the District is performing a Level 2 (Benefit Update) Economic Update to support the relocation of the previously authorized mooring basin. The estimated cost for this update is \$25K.

## **11. PUBLIC PARTICIPATION**

Public participation includes a public review and comment period for the Draft Feasibility Report and Environmental Assessment after the AFB. Significant public comments will be provided to the ATR reviewers prior to ATR certification. It is anticipated that the request for IEPR exclusion will be granted. Therefore the public will not be asked to nominate potential external peer reviewers. This can be reevaluated if the situation changes.

## **12. REVIEW PLAN APPROVAL AND UPDATES**

The GIWW Port O'Connor to Corpus Christi, Texas, Section 216 Study Review Plan was approved by the Southwestern Division Commander in July 2009. The Review Plan is being resubmitted to incorporate use of the review plan template, new guidance references, and the reduction in project scope (no longer pursuing a reroute or alternate route for the GIWW at Corpus Christi Bay.

The Southwestern Division Commander is responsible for approving this Review Plan. The Commander's approval reflects vertical team input (involving district, MSC, RMO, and HQUSACE members) as to the appropriate scope and level of review for the decision document. Like the PMP, the Review Plan is a living document and may change as the study progresses. The home district is responsible for keeping the Review Plan up to date. Minor changes to the review plan since the last MSC Commander approval are documented in Attachment 3. Significant changes to the Review Plan (such as changes to the scope and/or level of review) should be re-approved by the MSC Commander following the process used for initially approving the plan. The latest version of the Review Plan, along with the Commanders' approval memorandum, should be posted on the Home District's webpage. The latest Review Plan should also be provided to the RMO and home MSC.

**13. REVIEW PLAN POINTS OF CONTACT**

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

	Chief, Planning Section	
	Planning Lead	
	ATR Team Lead	

**Planning Center of Expertise for Inland Navigation**

NAME	TITLE/ORG.	PHONE	EMAIL
	Technical Director, PCXIN		
	PCXIN Peer Review Account Manager		

**ATTACHMENT 1: TEAM ROSTERS**

**PDT Roster**

NAME	TITLE/ORG.	PHONE	EMAIL
	Project Manager CESWG-PM-J		
	Planning Lead CESWG-PE-PL		
	Environmental Lead CESWG-PE-PR		
	Economist CESWL-PE		
	Cost Engineer's CESWG-EC-PS		
	Real Estate CESWG-RE		

**DQC Roster**

NAME	TITLE/ORG.	PHONE	EMAIL
	Chief, Planning Section		
	Chief, Environmental Section		
	Chief, Geotechnical & Structures Section		
	Chief, General Engineering Section		
	Real Estate, Technical Services Branch		
	Chief, H&H – Water Management Branch		
	Chief, Professional Services		

**ATR Roster**

NAME	ATR Discipline/ORG.	PHONE	EMAIL
	ATR Lead		
	Costs/Walla Walla		
	Costs/Walla Walla		
	Environmental/CEMVN-PDE-D		
	RE / CELRB-RE		
	Economics / CEMVN-PDE-D		
	Engineering / CELRN-EC-CD-S		

**Vertical Team POC's**

NAME	TITLE/ORG.	PHONE	EMAIL
	MSC PLANNING COORDINATOR FOR SWG		
	CHIEF, SWD PLANNING DIVISION		
	REGIONAL INTEGRATION TEAM		



**ATTACHMENT 2: SAMPLE STATEMENT OF TECHNICAL REVIEW FOR DECISION DOCUMENTS**

**COMPLETION OF AGENCY 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’s Review Plan to comply with the requirements of EC 1165-2-209. 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 the comments have been closed in DrChecks<sup>sm</sup>.

*SIGNATURE*

---

Name  
ATR Team Leader  
Office Symbol/Company

\_\_\_\_\_  
Date

*SIGNATURE*

---

Name  
Project Manager  
Office Symbol

\_\_\_\_\_  
Date

*SIGNATURE*

---

Name  
Architect Engineer Project Manager<sup>1</sup>  
Company, location

\_\_\_\_\_  
Date

*SIGNATURE*

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Name  
Review Management Office Representative  
Office Symbol

\_\_\_\_\_  
Date

**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*

---

*Name*

Chief, Engineering Division

*Office Symbol*

\_\_\_\_\_  
Date

*SIGNATURE*

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*Name*

Chief, Planning Division

*Office Symbol*

\_\_\_\_\_  
Date

<sup>1</sup> Only needed if some portion of the ATR was contracted

**ATTACHMENT 3: REVIEW PLAN REVISIONS**

<b>Revision Date</b>	<b>Description of Change</b>	<b>Page / Paragraph Number</b>
March 2009	Approved Review Plan	
May 2012	Revision of Approved Review Plan to incorporate new review plan template, changes in guidance references, dropping the Corpus Christi Bay GIWW alternate or reroute proposal.	throughout document
Sep 2012	added DQC Roster; added ATR team members	attachment 1 – Team Rosters

**ATTACHMENT 4: ACRONYMS AND ABBREVIATIONS**

<b>Term</b>	<b>Definition</b>	<b>Term</b>	<b>Definition</b>
AFB	Alternative Formulation Briefing	NED	National Economic Development
ASA(CW)	Assistant Secretary of the Army for Civil Works	NER	National Ecosystem Restoration
ATR	Agency Technical Review	NEPA	National Environmental Policy Act
CSDR	Coastal Storm Damage Reduction	O&M	Operation and maintenance
DPR	Detailed Project Report	OMB	Office and Management and Budget
DQC	District Quality Control/Quality Assurance	OMRR&R	Operation, Maintenance, Repair, Replacement and Rehabilitation
DX	Directory of Expertise	OEO	Outside Eligible Organization
EA	Environmental Assessment	OSE	Other Social Effects
EC	Engineer Circular	PCX	Planning Center of Expertise
EIS	Environmental Impact Statement	PDT	Project Delivery Team
EO	Executive Order	PAC	Post Authorization Change
ER	Ecosystem Restoration	PMP	Project Management Plan
FDR	Flood Damage Reduction	PL	Public Law
FEMA	Federal Emergency Management Agency	QMP	Quality Management Plan
FRM	Flood Risk Management	QA	Quality Assurance
FSM	Feasibility Scoping Meeting	QC	Quality Control
GRR	General Reevaluation Report	RED	Regional Economic Development
Home District/MSD	The District or MSD responsible for the preparation of the decision document	RMC	Risk Management Center
HQUSACE	Headquarters, U.S. Army Corps of Engineers	RMO	Review Management Organization
IEPR	Independent External Peer Review	RTS	Regional Technical Specialist
ITR	Independent Technical Review	SAR	Safety Assurance Review
LRR	Limited Reevaluation Report	USACE	U.S. Army Corps of Engineers
MSC	Major Subordinate Command	WRDA	Water Resources Development Act