REVIEW PLAN (RP)
FOR THE
CARPINTERIA SHORELINE
FEASIBILITY STUDY

April 2008
1. **Introduction**

The purpose of this Peer Review Plan (PRP) is to assign the appropriate level and review independence, establish the procedures, and assign responsibilities for conducting the Independent Technical Reviews (ITR's) and External Peer Review of all applicable decision documents to ensure the quality and credibility of all decision documents developed during the investigation. The PRP is a stand alone document that is part of the greater Project Management Plan (PMP) for the project. This plan is compliant with EC 1105-2-408 *Peer Review of Decision Documents*, 31 May 2005. This PRP is located on the U.S. Army Corps of Engineers Planning Community of Practice Peer Review web page: [http://www.usace.army.mil/cw/cecw-cp/peer/peer_rev.html](http://www.usace.army.mil/cw/cecw-cp/peer/peer_rev.html)

**Project Description**

The City of Carpinteria, which was incorporated in 1965, is located on the Santa Barbara County Coast some 80 miles upcoast of Los Angeles, 15 miles upcoast of Ventura, and 12 miles downcoast of Santa Barbara. Carpinteria covers some 3 square-miles, with a 1,735 miles shoreline situated along the Santa Barbara Channel. With a population of about 15,949, the City is the centerpiece of the 13 square-miles Carpinteria Valley. Population growth rates have slowed in Santa Barbara County since 1990. The population growth in the City of Carpinteria averaged 1.1% per year from 1994 to 1999, when it was estimated to be 14,950. The Valley, with a population of more than 19,000, features a mild climate, scenic environment and proximity to major urban centers.

Carpinteria is home to a popular surfing area, Rincon Point, and two well-used swimming beaches – Carpinteria City Beach and Carpinteria State Beach. The 1,500 feet long City Beach is narrow, covering an area of approximately 52,625 square-yards. City officials have estimated the total annual beach visitation at more than 550,000 – some 250,000 during the summer season and more than 300,000 during the remainder of the year.

The coastal setting and favorable climate of the beaches along the Santa Barbara Channel have influenced the development of the shoreline areas of Santa Barbara and Ventura Counties. Since the early 1930s, population has steadily increased in the Santa Barbara–Ventura/Oxnard metroplex to the point today where the area has become considerably urbanized.

Storm induced waves have become a serious threat over the past several years to coastal infrastructure. Benefits for the study are predicated on avoided costs to protect the coastal property through beach nourishment.

2. **Quality Control and Independent Technical Review of Decision Documents**

All Corps feasibility-level decision documents requiring authorization by the U.S. Congress will be subject to Quality Control. Quality Control is accomplished through a Quality Control Plan that incorporates Independent Technical Review (ITR), as set forth in the South Pacific Division Quality Management Plan (CESPD) R 1110-1-8, 30 December 2002, and Appendix C of CESPD R 1110-1-8, Quality Management of Planning Products, revised 20 September 2004. The ITR shall consist of Single Discipline Seamless Review (Peer Review) and Multi-discipline Product Review. See CESPD R1110-1-18 for a full description of the requirements for these reviews.
Quality Control objectives include confirming that feasibility phase products and analyses:

- Meet customer (Federal and non-Federal sponsor) requirements;
- Comply with applicable laws, regulations, policies, and sound technical practices of the disciplines involved;
- Are of adequate scope and level of detail;
- Are consistent, logical, accurate, and comprehensive;
- Are based on convincing and consistent assumptions, especially those related to the probable/most likely with and without-project future conditions;
- Adequately describe the problems and opportunities, planning objectives and constraints, existing conditions, future without-project conditions, and future with-project conditions to support recommendations;
- Tell a coherent planning story; and
- Address outstanding action items from milestone conferences, issue resolution conferences, and other reviews.

3. Single Discipline Seamless Review (Peer Review)

Single Discipline Seamless Review (Peer Review) shall be accomplished prior to the release of study sub-products to other members of the Product Delivery Team (PDT) or their integration into the overall study. PDT members shall consult with their ITR team counterparts at appropriate points throughout the project delivery effort to discuss major assumptions and functional decisions, analytical approaches, and major calculations to preclude significant comments from occurring during multi-discipline product review. The PDT members should initiate these counterpart discussions. This type of review does not require a formal comment-response-back-check process, as is required during the multi-discipline product review.

However, the conclusions/agreements reached will be documented, with copies retained by each participant and distributed to the leaders of the ITR team and the project delivery team. This documentation will become part of the project technical review file. Products subject to Seamless Review include (but are not limited to) the following:

- Topographic Mapping Products
- Preliminary Mapping
- Preliminary Designs
- Geotechnical Boring Analyses
- Economic Analyses
- Habitat Evaluation Procedures (HEP) Analysis results
- Environmental Setting Reports
- Hazardous, Toxic and Radiological Waste (HTRW) Assessment
- Historic Properties Survey Report
- Preliminary Cost Estimates

The (PDT) for the Carpinteria Shoreline Study is presented in Table 1. The Project Manager is the primary point of contact at Los Angeles District for more information about this project and the PRP.
Table 1: Project Delivery Team

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Office/Agency *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager</td>
<td>CESPL-PM-C</td>
</tr>
<tr>
<td>Budget / Programs Analyst</td>
<td>CESPL-PM</td>
</tr>
<tr>
<td>Plan Formulation</td>
<td>CESPL-PD-WS</td>
</tr>
<tr>
<td>Report Formatting/Editing</td>
<td>CESPL-PD-WS</td>
</tr>
<tr>
<td>Environmental Coordinator</td>
<td>CESPL-PD-R</td>
</tr>
<tr>
<td>Fish &amp; Wildlife</td>
<td>CESPL-PD-RL</td>
</tr>
<tr>
<td>Cultural Resources</td>
<td>CESPL-PD-RL</td>
</tr>
<tr>
<td>Biological Analysis</td>
<td>CESPL-PD-RL</td>
</tr>
<tr>
<td>Coastal Engineering</td>
<td>CESPL-ED-DC</td>
</tr>
<tr>
<td>Survey/ CADD</td>
<td>CESPL-ED-</td>
</tr>
<tr>
<td>Mapping/GIS</td>
<td>CESPL-ED-</td>
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<tr>
<td>Geotechnical</td>
<td>CESPL-ED-GG</td>
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<tr>
<td>Soils</td>
<td>CESPL-ED-GD</td>
</tr>
<tr>
<td>Economic Evaluation</td>
<td>CESPL-PD</td>
</tr>
<tr>
<td>Cost Engineering</td>
<td>CESPL-ED-DS</td>
</tr>
<tr>
<td>Real Estate</td>
<td>CESPL-RE</td>
</tr>
<tr>
<td>Public Affairs Office</td>
<td>CESPL-PA</td>
</tr>
<tr>
<td>Office of Counsel</td>
<td>CESPL-OC</td>
</tr>
<tr>
<td>Sponsor PM</td>
<td></td>
</tr>
</tbody>
</table>

*The acronym CESPL refers to Corps of Engineers Los Angeles District. Letters following CESPL refer to specific Corps of Engineers offices within the District.

4. Multi-discipline Product Review

Multi-discipline product review shall be accomplished prior to the mandatory South Pacific Division milestone conferences, the Feasibility Scoping Meeting (F3) and Alternatives Review Conference (F4); U.S. Army Corps of Engineers Headquarters (HQUSACE) Issue Resolution Conferences IRC’s), the Alternative Formulation Briefing (F4A) and the Feasibility Review Conference (F7); any other IRC’s held during the feasibility phase; and release of the draft and final documents. These products shall be essentially completed before review is undertaken and the branch and section chiefs shall be responsible for accuracy of the computations through design checks, supervisory review and other internal procedures, prior to ITR. Products subject to multi-discipline review include (but are not limited to) the following:

- F3 Milestone Documentation
  - Main F3 Report
  - Without Project Condition Hydrology and Hydraulics Report
  - Without Project Condition Geotechnical Report
  - Without Project Condition Economics Report
  - Without Project Environmental / Biological Report

- F4 (Alternatives Review) Milestone Documentation
  - Main F4 Report
  - Preliminary Draft Environmental Impact Statement/ Environmental Impact Report (EIS/EIR) Note: EIR required for California only.
  - Preliminary Draft Engineering Appendix
5. Products Developed Under Contract

The contractor shall be responsible for quality control through ITR for products developed under contract. ITR of consultant deliverables does not need to be performed by the Corps ITR team. Each contract scope of work shall include specific provisions requiring independent review of contractor work products, including submittal of a quality control plan and full documentation of issue identification and resolution, along with certifications as set forth in Appendix C of CESPD R 1110-1-8. Quality assurance of the contractor’s quality control process shall be the responsibility of the ITR team.

6. Documentation and Certification

Conclusions and agreements reached during the ITR process shall be documented per the requirements set forth in CESPD R 1110-1-8. Documentation shall be prepared for all ITR efforts (seamless reviews, multi-discipline product reviews, and contractor reviews). The documentation shall become part of the project technical review file. The use of the comment tracking system, DrChecks, is mandatory for decision documents requiring Congressional authorization.
ITR documentation for pre-conference materials for the IRC’s (AFB, FRC, etc.) and the draft and final feasibility reports shall be accompanied by a certification indicating that the ITR process has been completed and that all issues have been resolved. Both the District Commander and the Chief of Planning Branch shall sign the certification for the final feasibility report, following the example included in Appendix I of CESPD R 1110-1-8. The planning function chief shall certify other submittals and the certification may be included within the transmittal letter for the product and review documentation. Documentation and certification of legal review will accompany reports submitted to Corps Headquarters for policy compliance review.

All contractor products shall be accompanied by a certification indicating that an ITR process has been completed and that all issues have been resolved. The certification format shall follow the example included in Appendix I of CESPD R 1110-1-8.

The Chief of the Hydrology and Hydraulics Branch shall certify the without-project hydrology prior to the F3 milestone. This certification shall be included in the review documentation.

The cover memorandum to the MCACES cost estimate that is submitted with a final feasibility report shall include a certification statement by the Chief of Engineering Branch that the estimate has been prepared in accordance with current guidance, that the estimate has undergone an ITR and that all issues that may have been identified in the independent technical review have been resolved.

7. Review Schedule

ITR’s will be conducted for all major feasibility phase documents and major engineering and scientific documents products. The vertical team (i.e., South Pacific Division and HQUSACE) will be involved in the ITR. A review schedule is located in P2, under project number 104592 and will be updated as the study progresses.

8. Public Review Opportunities

The public will be invited to comment directly to the PDT through public scoping meetings and public review periods programmed into the feasibility schedule. Documents for review will be made available on the Los Angeles District public web page http://www.spl.usace.army.mil/.

9. Availability of Public Comments to ITR Team

Significant and relevant public comments from the NEPA workshops and public scoping meeting(s) will be made available to the ITR team to ensure that public comments have been considered in the development of the draft and final FR/EIS. However, the draft FR/EIS will be independently reviewed prior to the conclusion of the public comment period, and, therefore, these comments will not be available to the ITR members. In the event that the final FR/EIS is significantly revised from the draft, another ITR will be scheduled and public comments on the draft will be available to the reviewers.

10. Anticipated Number of Reviewers

The current ITR plan may include at least eight (8) independent technical reviewers. This number is based on the disciplines required to develop the feasibility products and the draft and final FR/EIS.
The disciplines and expertise required for the ITR team are presented in Table 2.

**TABLE 2: PROPOSED INDEPENDENT TECHNICAL REVIEW TEAM**

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Office/Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITR Team Leader</td>
<td>TBA</td>
</tr>
<tr>
<td>Plan Formulation</td>
<td>CENAD</td>
</tr>
<tr>
<td>Environmental</td>
<td>CESPN-ET-PA</td>
</tr>
<tr>
<td>Geotechnical</td>
<td>TBA</td>
</tr>
<tr>
<td>Economics</td>
<td>TBA</td>
</tr>
<tr>
<td>Coastal Engineering</td>
<td>CESPN-ET-EW</td>
</tr>
<tr>
<td>Cost Engineering</td>
<td>CENWW</td>
</tr>
<tr>
<td>Real Estate</td>
<td>CESPN-PM-B</td>
</tr>
<tr>
<td>Non-Federal Sponsor</td>
<td>City of Carpinteria</td>
</tr>
</tbody>
</table>

This information will be updated as needed as the report nears completion.

The ITR Team will be selected on the basis of having the proper knowledge, skills, and experience necessary to perform the task and their lack of affiliation with the development of the feasibility report, EIS, and associated appendices. Other ITR members from disciplines such as Economics, Environmental, Cost Engineering, Flood Risk Management, and Plan Formulation will be coordinated through the Planning Center of Expertise (PCX) and funding their participation may include travel to the Los Angeles District for review conferences. All ITR’s will be completed through DrChecks, to the satisfaction of the PCX, where comments and comment resolution are captured.

Technical review will use appropriate analytical methods for each technical area. Technical review will rely on periodic technical review team meetings to discuss critical plan formulation or other project decisions, and on the review of the written feasibility report documentation and files. Independent technical review will ensure that:

- The F3 report and EIS are consistent with current criteria, procedures and policy,
- Clearly justified and valid assumptions that are in accordance with established guidance and policy have been utilized, with any deviations clearly identified and properly approved,
- Concepts, features, analytical methods, analyses, and details are appropriate, fully coordinated, and correct,
- Problems/issues are properly defined and scoped, and
- Conclusions and recommendations are reasonable and justified.

### 11. Primary Disciplines and Expertise Needed for the ITR

ITR Team Leaders will be assigned in coordination with the applicable lead PCX identified in Table 3 below.
TABLE 3 PLANNING CENTERS OF EXPERTISE

<table>
<thead>
<tr>
<th>National Center</th>
<th>Director</th>
<th>Technical Point of Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inland Navigation</strong></td>
<td>Great Lakes and Ohio River Division</td>
<td>Huntington District</td>
</tr>
<tr>
<td></td>
<td>Cincinnati, Ohio</td>
<td>Huntington, West Virginia and Great Lakes and Ohio River Division</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cincinnati, Ohio</td>
</tr>
<tr>
<td><strong>Deep Draft Navigation</strong></td>
<td>South Atlantic Division</td>
<td>Mobile District</td>
</tr>
<tr>
<td></td>
<td>Atlanta, Georgia</td>
<td>Mobile, Alabama</td>
</tr>
<tr>
<td><strong>Flood Damage Reduction</strong></td>
<td>South Pacific Division</td>
<td>South Pacific Division</td>
</tr>
<tr>
<td></td>
<td>San Francisco, California</td>
<td>San Francisco, California</td>
</tr>
<tr>
<td><strong>Coastal Storm Damage Reduction</strong></td>
<td>North Atlantic Division</td>
<td>North Atlantic Division</td>
</tr>
<tr>
<td></td>
<td>New York, New York</td>
<td>New York, New York</td>
</tr>
<tr>
<td><strong>Ecosystem Restoration</strong></td>
<td>Mississippi Valley Division</td>
<td>Mississippi Valley Division</td>
</tr>
<tr>
<td></td>
<td>Vicksburg, Mississippi</td>
<td>Vicksburg, Mississippi</td>
</tr>
<tr>
<td><strong>Water Management and Reallocation</strong></td>
<td>Southwestern Division</td>
<td>Southwestern Division</td>
</tr>
<tr>
<td></td>
<td>Dallas, Texas</td>
<td>Dallas, Texas</td>
</tr>
</tbody>
</table>

The Walla Walla District (CENWW-EC-X) has been designated as the Center of Expertise for Civil Works Cost Engineering. The ITR Team will coordinate cost review with the Walla Walla District.

12. **External Peer Review**

All U.S. Army Corps of Engineers feasibility-level decision documents requiring authorization by the U.S. Congress must consider External Peer Review (EPR) in conjunction with the Corps’ existing review process in order to comply with the Final Information Quality Bulletin for Peer Review issued by the Office of Management and Budget (OMB). EPR will be conducted in special cases where the risk and magnitude of a proposed project are such that an external critical examination is warranted. The decision to conduct an EPR will be a collaborative process involving the District, Major Subordinate Command, PCX, and HQUSACE.

EPR should be conducted by appropriate subject matter experts who are external to the Corps and not integrally involved in the production of the technical product under review. Draft Peer Review Plans are being developed and coordinated with the appropriate Corps PCX which may be found at [http://www.usace.army.mil/cw/cecw-cp/pcx/plan_cx.html](http://www.usace.army.mil/cw/cecw-cp/pcx/plan_cx.html), and posted for public comment.

EC 1105-2-408 provides the process for deciding whether or not to employ EPR. The following is an excerpt of EC 1105-2-408, 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 previous paragraphs.

13. **External Peer Reviewers**

The relevant PCX and the associated vertical team shall make the final determination for the discipline type and number needed of reviewers as well as which if any External Peer Reviewers are needed. For this feasibility study, this decision is the responsibility of the Coastal Storm Damage Reduction -PCX and the Los Angeles District.

14. **Public Selection of Peer Reviewers**

The vertical team and designated PCX shall determine if Peer Reviewers will be nominated by the public, including scientific or professional societies and the public will have opportunities to review the Feasibility Report/EIS as required by the NEPA compliance process. If additional project purposes are identified at a later date, the Los Angeles District will initiate coordination with the vertical team and PCX and the decision for EPR will be made at that time.

15. **Project Significance**

The Feasibility Report (FR) and Environmental Impact Statement (EIS) are not likely to develop or contain influential scientific information and as such is not expected to be an influential scientific assessment. Therefore, the feasibility phase documents (i.e., the without-project report, the with-project reports, and the Draft and Final FR/EIS) and major engineering products will only be reviewed by an ITR team selected by the appropriate Planning Center of Expertise (PCX). Model certification is not required at this time on this project, if a model is used on this project it will be reviewed in accordance with EC 1105-2-407, *Planning Models Improvement Program*, 31 May 2005.

**The EPR Decision:** For this study, it has been determined that EPR is not required and that ITR by a U.S. Army Corps of Engineers team external to the Los Angeles District will not be sufficient to comply with the spirit of EC 1105-2-408. It is not anticipated that any new methodologies will be used in the analysis and preparation of the FR/EIS, and that any of the data collected or analyzed would not be considered influential scientific data. Please see the EPR Decision Checklist below:

1. Novel subject matter? No
2. Controversial subject matter? No
3. Precedent setting? No
4. Unusually significant interagency interest? No
5. Unusually significant economic, environmental, and social effects to the nation? No

6. Implementation costs ($45,000,000) trigger EPR? No
CESPD-PDC

MEMORANDUM FOR Commander, Los Angeles District, ATTN: CESPL-PD-WA,
Mr. Eduardo Demesa

Subject: Los Angeles District Review Plan Approvals

1. The Review Plans submitted are in accordance with Engineering Circular (EC) 1105-2-410, Review of Decision Documents, dated 22 August 2008, and the South Pacific Division, Planning and Policy Division and Los Angeles District Support Team have reviewed the Review Plans that have been submitted. The South Pacific Division approves the following Review Plans:

a. Santa Cruz River (Tres Rios Del Norte), Pima County, Arizona, Ecosystem Restoration Feasibility Study. National Ecosystem Planning Center of Expertise (ECO-PCX), Mississippi Valley Division, has reviewed the Review Plan (RP) and concurs that the RP satisfies peer review policy requirements outlined in the above referenced EC. ECO-PCX concurs contingent on model certification of the Arizona Riverine Functional Assessment Tool will be required.

b. Little Colorado River at Winslow, Navajo County, Arizona, Flood Risk Management Feasibility Study. The National Flood Risk Management Planning Center of Expertise (FRM-PCX), South Pacific Division, has reviewed the Review Plan (RP) and concurs that the RP satisfies peer review policy requirements outlined in the above referenced EC.

c. Agua Fria - Trilby Wash, Maricopa County, Arizona, Flood Risk Management And Ecosystem Restoration Feasibility Study. The National Flood Risk Management Planning Center of Expertise (FRM-PCX), South Pacific Division, has reviewed the Review Plan (RP) and concurs that the RP satisfies peer review policy requirements outlined in the above referenced EC.

d. Aliso Creek Mainstem, California, Ecosystem Restoration Feasibility Study. National Ecosystem Planning Center of Expertise (ECO-PCX), Mississippi Valley Division, has reviewed the Review Plan (RP) and concurs that the RP satisfies peer review policy requirements outlined in the above referenced EC. The ECO-PCX concurs contingent on model certification of the Combined Habitat Assessment Protocols (CHAP) will be required.

e. San Diego County, California, Shoreline Protection (Oceanside) Feasibility Study. National Coastal Storm Damage Reduction (CSDR-PCX), North Atlantic Division, has review the Review Plan (RP) and concurs that the RP satisfies peer review policy requirements outlined in the above referenced EC. CSDR-PCX does recommend that additional funding be allocated to IEPF, as the budget in the RP would not be sufficient to address this peer review activity.
f. Carpinteria, California, Storm Damage and Shoreline Protection Feasibility Study. National Coastal Storm Damage Reduction (CSDR-PCX), North Atlantic Division, has review the Review Plan (RP) and concurs that the RP satisfies peer review policy requirements outlined in the above referenced EC. CSDR-PCX does recommend that additional funding be allocated to IEPR, as the budget in the RP would not be sufficient to address this peer review activity.
g. San Clemente, California, Storm Damage and Shoreline Protection Feasibility Study. National Coastal Storm Damage Reduction (CSDR-PCX), North Atlantic Division, has review the Review Plan (RP) and concurs that the RP satisfies peer review policy requirements outlined in the above referenced EC. CSDR-PCX does recommend that additional funding be allocated to IEPR, as the budget in the RP would not be sufficient to address this peer review activity.
h. Pismo Beach, California, Continuing Authorities Program (CAP) 103 Study. National Coastal Storm Damage Reduction (CSDR-PCX), North Atlantic Division, has review the Review Plan (RP) and concurs that the RP satisfies peer review policy requirements outlined in the above referenced EC.

2. With this MSC approval the Review Plans will be made available for public comment via the internet and the comments received will be incorporated into future revisions of the Review Plans. The Review Plans have been coordinated with the applicable Planning Centers of Expertise (PCX).

3. The Review Plans above include independent external peer review.

4. I hereby approve the above Review Plans, which are subject to change as study circumstances require. This is consistent with study development under the Project Management Business Process. Subsequent revisions to these Review Plans after public comment or during project execution will require new written approval from this office.

[Signature]
JANICE L. DOMBI
Colonel, EN
Commanding