DEPARTMENT OF THE ARMY
SOUTH PACIFIC DIVISION, CORPS OF ENGINEERS
1455 MARKET STREET
SAN FRANCISCO, CALIFORNIA 94103-1399

14 Dec 2012

REPLY TO
ATTENTION OF

CESPD-PDS

MEMORANDUM FOR Commander, Los Angeles District, ATTN: CESPL-PM-N. Ms. Susan Ming

Subject: California Coastal Sediment Master Plan Feasibility Study, Review Plan Approval

1. The California Coastal Sediment Master Plan Feasibility Study, Review Plan that is enclosed is in accordance with Engineering Circular (EC) 1165-2-209, Review of Decision Documents, dated 31 Jan 2012. The South Pacific Division, Planning and Policy Division, Regional Business Technical Division, and Los Angeles District Support Team have reviewed the Review Plan that has been submitted. The South Pacific Division approves the California Coastal Sediment Master Plan Feasibility Study, Review Plan.

2. With MSC approval the Review Plan 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 Plan excludes independent external peer review.

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

4. Point of contact for this action is Ms. Anne Sturm, CESPD-PDS, 415-503-6587, anne.k.sturm@usace.army.mil.

Building Strong From New Mexico All The Way To The Pacific!

MICHAEL C. WEHR
BG, EN
Commanding

Encls
1. Review Plan
2. PCX memo

REVIEW PLAN

California Coastal Sediment Master Plan
Feasibility Study

U.S. Army Corps of Engineers
Los Angeles District

November 2012

MSC Approval Date: Pending
Last Revision Date: None

US Army Corps
of Engineers

REVIEW PLAN

California Coastal Sediment Master Plan
Feasibility Study

TABLE OF CONTENTS

1. PURPOSE AND REQUIREMENTS 1
2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION 1
3. STUDY INFORMATION 1
4. DISTRICT QUALITY CONTROL (DQC) 6
5. AGENCY TECHNICAL REVIEW (ATR) 7
6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR) 9
7. POLICY AND LEGAL COMPLIANCE REVIEW 10
8. COST ENGINEERING DIRECTORY OF EXPERTISE (DX) REVIEW AND CERTIFICATION 10
9. MODEL CERTIFICATION AND APPROVAL 10
10. REVIEW SCHEDULES AND COSTS 11
11. PUBLIC PARTICIPATION 12
12. REVIEW PLAN APPROVAL AND UPDATES 12
13. REVIEW PLAN POINTS OF CONTACT 12

ATTACHMENT 1: TEAM ROSTERS 14
ATTACHMENT 2: REVIEW PLAN REVISIONS 15
ATTACHMENT 3: ACRONYMS AND ABBREVIATIONS 16

1. PURPOSE AND REQUIREMENTS

a. **Purpose.** This Review Plan defines the scope and level of peer review for the *California Coastal Sediment Master Plan Feasibility Study*, in accordance with Engineering Circular 1165-2-209, *Water Resources Policies and Authorities: Civil Works Review Policy* (31 January 2010). This Review Plan is a stand-alone component of the *California Coastal Sediment Master Plan Feasibility Study Project Management Plan* (PMP), which was last updated in August 2005.

b. **References**

(1) Engineering Circular (EC) 1165-2-209, Civil Works Review Policy, 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) California Sediment Master Plan Project Management Plan, August 2005
(6) South Pacific Division Quality Management Plan (CESPD R) 1110-1-8, 30 Dec 2002

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. However, the RMO for the peer review effort described in this Review Plan is the South Pacific Division (SPD), as ATR and IEPR are not needed. The Coastal Storm Damage Reduction Planning Center of Expertise (PCX-CSDR) will provide support as needed.

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.

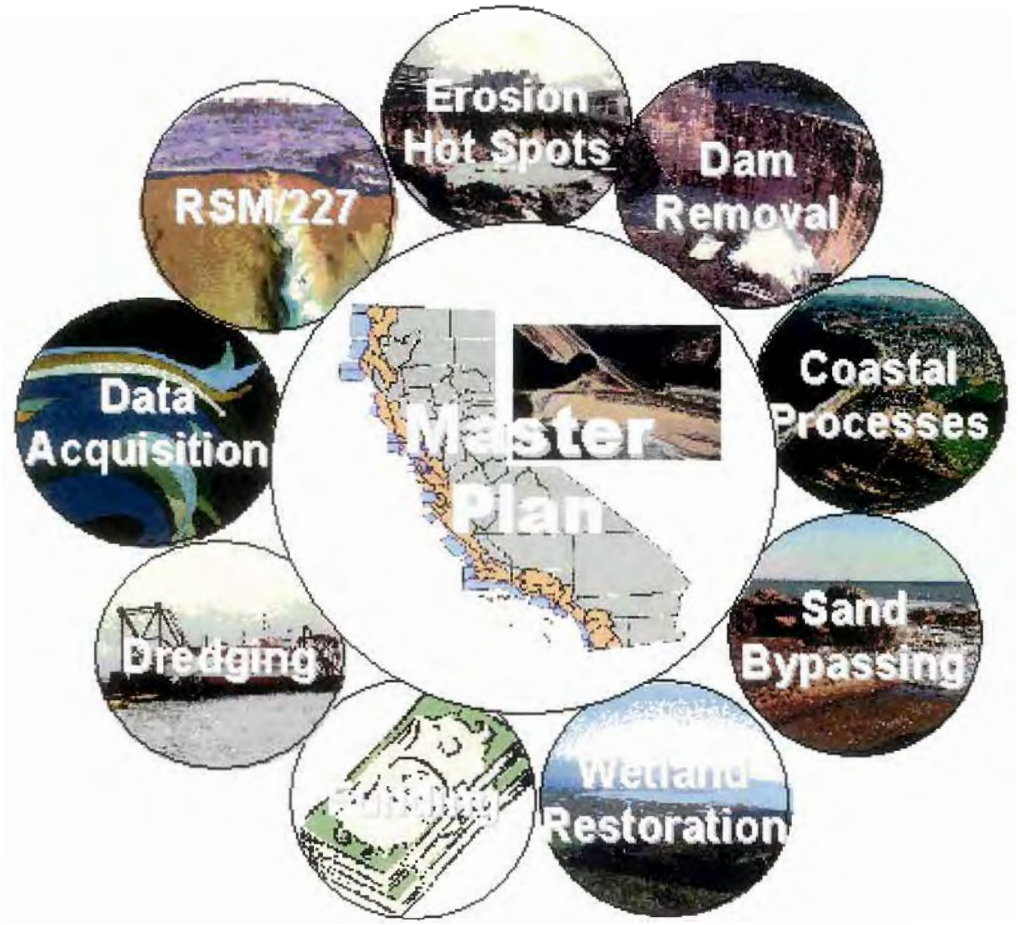
3. STUDY INFORMATION

a. **Decision Document.** The purpose of the *California Coastal Sediment Master Plan* is to provide framework for storm damage reduction, environmental restoration, navigation, recreation, and related purposes along the California coast. The Master Plan will consolidate information on the historic, present, and project future conditions related to coastal resources along the California coast; develop and analyze coastal processes; and provide a framework for the State of California

and other interests managing the coastal resources along California. This could include identifying problems, needs and opportunities; developing localized and regional solutions; prioritizing solutions; and developing common databases.

Feasibility reports and EIS/EIRs are decision documents. That is, they are documents prepared for the purpose of obtaining Congressional authorization. All USACE decision documents are subject to review. At this time, it is not anticipated that the Master Plan will result in a decision document that will require Congressional authorization.

b. **Study/Project Description.** The Master Plan study area encompasses the entire California coastline (see figure below), including the nearshore ocean environment and the coastal watersheds. The purpose of the study is to develop a comprehensive plan, for the management, restoration, protection, and preservation of the sediment resources along the coast of California. Ultimately, the Master Plan will provide analyses that will enable Federal, state, and local entities to assess and prioritize regionally based projects for potential investment of program funds. The study will evaluate alternatives for reducing damages from coastal storms; increasing the natural sediment supply to the coast through dam removal and other means; restoring aquatic ecosystems; and identifying potential sources of sediment, such as material dredged from ports and harbors. Some of these alternatives may lie outside the Federal interest. There is no single recommended plan; however, the Master Plan will provide Federal and non-Federal entities with an adaptive, programmatic road map to plan and program potential future coastal resources projects. The Master Plan will allow these entities to develop water resources projects within a system-oriented context where data can be easily shared and technical expertise and tools can be efficiently directed to solve coastal resources problems on a regional basis.



Because of the large geographic area (1100-miles of California coastline) covered by the Master Plan, a Geographic Information System (GIS) based application and database will be required to manage the voluminous data to be collected. The Master Plan GIS applications along with the economic analysis contained within the Master Plan will provide the backbone for running physical and economic optimization decision support tools to assist Federal, State, and local decision makers in identifying, ranking, and selecting projects for investment that would yield potentially significant regional benefits, relative to the costs.

The intent of the Master Plan is to minimize the number of discrete water resources projects by regionalizing solutions that holistically address individual problem areas. Any subsequent regionalized projects recommended in the Master Plan will be considered in collaboration with other Federal and non-Federal agencies, including USEPA, California State Resources Agency, NOAA, regional & local governments, and USGS. The Master Plan does not include any Preconstruction Engineering and Design (PED) or Construction Activities.

c. **Factors Affecting the Scope and Level of Review.** The decision documents prepared for the *California Coastal Sediment Master Plan Feasibility Study* will *not* be subject to the following types of review: District Quality Control (DQC), Agency Technical Review (ATR), Independent External Peer Review (IEPR), public review, state and agency review, nor Washington-level Policy and Compliance Reviews.

ATR is an in-depth review that ensures the proper application of clearly established criteria, regulations, laws, codes, principles, and professional practices. ATR also assures that all work products coherently fit together. ATR is usually managed within USACE and conducted by a qualified team from outside of the home district. The lead Corps Planning Center of Expertise (PCX) for the study, the Coastal Storm Damage Reduction PCX (PCX-CSDR), usually identifies the ATR team leader and members, however, the RMO (SPD) for this Review Plan would manage ATR in this case. ATR teams are comprised of senior USACE personnel (Regional Technical Specialists (RTS), etc.), and may be supplemented by outside experts as appropriate. The ATR team leader is employed outside of SPD. Candidates may be nominated by the home district.

IEPR addresses all planning, engineering, economics, and environmental analyses in the feasibility study. This review evaluates the assumptions that support the analyses, as well as the soundness of models, surveys, investigations, and methods. IEPR is typically coordinated through the PCX-CSDR; however, the RMO for this Review Plan is SPD. The SPD would select an outside eligible organization (OEO) to manage the IEPR. The OEO will assemble a panel of independent experts to conduct IEPR.

IEPR 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. The criteria for application of IEPR are:

(1) The total project cost exceeds $45 million
(2) There is a significant threat to human life
(3) It is requested by a State Governor of an affected state
(4) It is requested by the head of a Federal or state agency charged with reviewing the project if he/she determines the project is likely to have a significant adverse impact on resources under the jurisdiction of his/her agency after implementation of proposed mitigation (the Chief has the discretion to add IEPR under this circumstance)

(5) There is significant public dispute regarding the size, nature, effects of the project
(6) There is significant public dispute regarding the economic or environmental cost or benefit of the project
(7) Cases where information is based on novel methods, presents complex challenges for interpretation, contains precedent-setting methods or models, or presents conclusions that are likely to change prevailing practices
(8) Any other circumstance where the Chief of Engineers determines IEPR is warranted.

IEPR may be appropriate for feasibility studies; reevaluation studies; reports or project studies requiring a Chiefs Report, authorization by Congress, or an EIS; and large programmatic efforts and their component projects. IEPR is managed by an outside eligible organization (OEO) that is described in Internal Revenue Code Section 501(c) (3), is exempt from Federal tax under section 501(a), of the Internal Revenue Code of 1986; is independent; is free from conflicts of interest; does not carry out or advocate for or against Federal water resources projects; and has experience in establishing and administering IEPR panels. The scope of review will address all the underlying planning, engineering, including safety assurance, economics, and environmental analyses performed, not just one aspect of the project. The Master Plan does not meet any of the above criteria for IEPR, thus, it will not be conducted for this study.

Safety Assurance Review (SAR), in accordance with Section 2034 and 2035 of WRDA 2007, EC 11052-410, and pending additional guidance, requires that all projects addressing flooding or storm damage reduction undergo a SAR during design and construction. Safety assurance factors (significant threat to human life, project cost thresholds, etc) must be considered in the planning and studies phases and in all reviews for those studies. Updated guidance on the civil works review process including implementation guidance for Section 2034 and 2035 is under development.

The SAR would focus on the quality of the surveys and investigations, quality of in-kind-contributions and whether it is certifiable for credit in accordance with EC 1165-2-208, the range of alternatives considered, the models used to assess hazards, the level of uncertainty in assessments, and whether the quality and quantity of engineering per ER 1110-2-1150 are sufficient to ensure public welfare, safety, and health. The purpose of the Safety Assurance Review is to ensure that good science, sound engineering, and public health, safety, and welfare are the most important factors that determine a project's fate. The IEPR for the feasibility report would address SAR of engineering items and assumptions in the report. The Review Plan would be revised, if required, to comply with current Corps guidance on SAR. Because the Master Plan does not involve any PED or Construction Activities, SAR is not needed.

Release of a feasibility draft document for public review would occur after issuance of the Alternative Formulation Briefing (AFB) policy guidance memo and concurrence by HQUSACE. Because the Master Plan does not include a typical draft report, and only technical reports and Regional Sediment Management Plans (RSMPs), no typical public review, as required by the National Environmental Policy Act (NEPA), nor AFB Conference will be held. Various public stakeholder meetings have been, and will be, held for the development of individual RSMPs to gain stakeholder input, and also for other efforts such as the development of a Biological Impacts and Analysis Report in order to determine how best to develop the report. ATR and IEPR reviewers would typically be provided with all public comments. Public review typically occurs after the completion of the ATR process and issuance of the HQUSACE policy guidance memo. The public review period lasts 45 days per NEPA, however, does not apply to this Study.

A formal State and Agency review usually occurs after the release of the final report is approved by the Civil Works Review Board. However, intensive coordination with these agencies will occur concurrently with the planning process. Upon completion of the review period, comments are consolidated in a matrix and addressed, if needed. A summary of the comments and resolutions is included in the document. However, State and Agency Review does not apply to the Master Plan.

Washington-level Policy and Compliance Reviews determine whether 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 Chief of Engineers. Washington-level policy and compliance review is completed before the draft feasibility report and EIS/EIR are released for public review and again before the Chief of Engineers signs his report. The review is conducted by personnel working for USACE headquarters (HQUSACE). Guidance for policy and legal compliance reviews is addressed further in Appendix H, ER 1105-2-100. The technical review efforts addressed in this Circular are to augment and complement the policy review processes by addressing compliance with published Army policies pertinent to planning products, particularly policies on analytical methods and the presentation of findings in decision documents. DQC and ATR efforts are to include the necessary expertise to address compliance with published planning policy. However, Washington-level Policy and Compliance Review does not apply to the Master Plan.

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:

- Coastal Sediment Management Workgroup (CSMW) website update and maintenance
- Public Outreach
- Online Searchable Bibliography References Database Update
- "Economic Costs of Sea Level Rise"
- "The Economics of Regional Sediment Management"
- San Diego County RSMP
- Orange County RSMP
- Los Angeles County R5MP
- Ventura & Santa Barbara Counties RSMP
- San Luis Obispo County RSMP
- Southern Monterey Bay RSMP
- Southern Monterey Bay Mitigated Neg. Declaration
- Northern Monterey Bay RSMP
- San Francisco Coastline RSMP
- San Francisco Bay R5MP
- Northern CA RSMP
- Humboldt Bay RSMP
- Marin/Sonoma RSMP
- "Mud Budget"
- "Cumulative Loss of Sand Due to Dams"
- "Sand Compatibility and Opportunistic Use Program (SCOUP)"
- "Identification of Opportunistic Sand Sources"
- "Inventory of Offshore Sand Sources"
- "Regional Sediment Budgets"

- "Beach Restoration Regulatory Guide"
- "Biological Impacts and Analysis Report"
- Project Management Tasks

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. The Master Plan has not conducted DQC Review of work products, thus certification and documentation of DQC Review has not been done. However, work products, including RSMPs, are reviewed by the PDT to ensure adequacy for meeting Contracting Scope of Work (SOW) Requirements.

a. **Documentation of DQC.** DQC is the review of basic science and engineering work products focused on fulfilling the project quality requirements defined in the PMP Quality Control Plan. DQC would be managed in the Los Angeles District (SPL). DQC applies the tools outlined in the quality management plans for SPL and the South Pacific Division (SPD), the district's Major Subordinate Command (MSC). Basic quality control tools include a Quality Management Plan 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.

   Procedures for DQC for the *California Coastal Sediment Master Plan Feasibility Study* are outlined in the:

   - *South Pacific Division Quality Management Plan*, CESPD R 1110-1-8 (December 30, 2002):
     - Appendix C, *Quality Management of Planning Products* (September 20, 2004);
   - *Los Angeles District Quality Management Plan*, CESPL OM 1105-1-2, (January 25, 2000):
     - Appendix A, *Planning Subplan* (January 25, 2000); and
   - "Quality Control Plan", in *California Coastal Sediment Master Plan Feasibility Study Project Management Plan* (August 2005).

   The quality control objectives for the study include ensuring 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 future with and without-project 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.

As stated, typical DQC Review is not done for the Master Plan, however, the lead planner and project manager, as well as the non-federal project manager(s), are responsible for DQC review of work products. Additionally, the Architect-Engineer (A-E) is responsible for ensuring the quality of the work products submitted to the PDT for each individual Master Plan task. In general, DQC review is primarily achieved through specifications in SOW's for each task. The costs of DQC review of individual work products are included in either the contract award or the federal and non-federal labor funds estimated for completion of each individual task.

b. **Products to Undergo DQC.** All Master Plan efforts are DQC reviewed by the lead planner, the project manager, and the non-federal project manager(s).

c. **Required DQC Expertise.** Expertise is occasionally required to DQC review work products. For example, RSMPs and environmental documents are reviewed by SPL environmental staff, coastal engineering staff, regulatory staff, and/or other disciplines as needed.

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 ATR team would conduct ATR in two stages: seamless single discipline review and product review.

Seamless Single Discipline Review is the on-going review of interim work products. As these work products are completed, and before they are shared with other members of the PDT or integrated into the overall study, PDT members should contact their ATR team counterparts for review. ATR team members provide immediate review consistent with the scope and complexity of the products. Interim work products may be reviewed once or iteratively.

The ATR of cost estimates, construction schedules, and contingencies for the feasibility report would be coordinated with the Cost Engineering Directory of Expertise (DX) in Walla Walla District (NWW), Northwest Division (NWD).

Seamless Single Discipline Review is not included in the Master Plan.

Product Review is the review of the draft and final feasibility report, technical appendices, and EIS/EIR. Recommendations and comments would be provided by the ATR team. ATR of these

products would occur before they are released for public comment and review. Product Review is not included in the Master Plan.

b. **Required ATR Team Expertise.** Due to the Master not conducting ATR, no team members have been required.

c. **Documentation of ATR.** DrChecks review software would 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.

As stated above, due to ATR not being conducted for the Master Plan, Dr. Checks has not been utilized.

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.** The final decision as to whether to conduct IEPR or to request a waiver from the Chief of Engineers rests with the SPD Commander. The vertical team (Los Angeles District, SPD, PCX-CSDR, and Headquarters staff involved in the study) will advise the SPD Commander that IEPR is not appropriate for the *California Coastal Sediment Master Plan Feasibility Study*. IEPR is required when at least one or more of the eight "trigger factors" in Appendix D of the USACE's Water Resources Policies and Authorities Report EC 1105-2-410 are present. In addition, IEPR is required for any project in which the Chief of Engineers determines that circumstances warrant IEPR.

IEPR is not deemed necessary, at this time, for the *California Coastal Sediment Master Plan Feasibility Study* because none of the triggers will be reached by this study. The Master Plan is a management study and will not result in a Decision Document to be transmitted to Congress. Additionally, the Master Plan, at this time, will not include an EIS/EIR.

b. **Products to Undergo Type I IEPR.** Not Applicable.

c. **Required Type I IEPR Panel Expertise.** Not Applicable.

d. **Documentation of Type I IEPR.** Not Applicable.

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. As stated, Policy and Legal Compliance Review is not included in the Master Plan.

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. The Master Plan has not coordinated with the DX, thus cost engineering reviewing and certification is not needed.

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).

Model certification has not been needed for Master Plan efforts.

a. **Planning Models.** The following planning models are anticipated to be used in the development of the decision document:

Model Name and Version	Brief Description of the Model and How It Will Be Applied in the Study	Certification / Approval Status
No Planning models have been developed for the Master Plan	N/A	N/A

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

Model Name and Version	Brief Description of the Model and How It Will Be Applied in the Study	Approval Status
No Engineering models have been developed for the Master Plan	N/A	N/A

10. REVIEW SCHEDULES AND COSTS

The anticipated tasks, timing, sequence, and costs for the review of the *California Coastal Sediment Master Plan Feasibility Study* are included in P2 under project number 104561. The schedule will be updated as the study progresses.

a. **ATR Schedule and Cost.**

Review Milestone	ATR Team Involvement	Scheduled/Actual Date
N/A	N/A	N/A

b. **Type I IEPR Schedule and Cost.** The budgeted total costs for IEPR are as follows:

Review Milestone	ATR Team Involvement	Scheduled/Actual Date
N/A	N/A	N/A

Activity	Budget
Independent External Peer Review of Draft Report	$0
PDT Responses to IEPR of Draft Report	$0
Sponsor Responses to IEPR of Draft Report	$0

c. **Model Certification/Approval Schedule and Cost.** Not Applicable.

d. **Coordination with Planning Centers of Expertise.** The *California Coastal Sediment Master Plan Feasibility Study* is a watershed-type study focused on coastal issues; therefore, the lead Planning Center of Expertise (PCX) for the study is the Coastal Storm Damage Reduction PCX (PCX-CSDR).

Costs for PCX coordination and review for the study have not been budgeted at this time; however, a large contingency ($2.3M) is included in the study costs. As the study progresses, the appropriate amount of funding will be determined. Due to the SPD being the RMO for this Review Plan, coordination with the PCX-CSDR will be done only on an as needed basis. A sample budget for potential support from the PCX-CSDR can be found below:

Activity	Budget
PCX Coordination & Review	$10,000

If additional project purposes are identified later, the Los Angeles District will initiate coordination with the appropriate PCX.

11. PUBLIC PARTICIPATION

The Los Angeles District and local sponsor, the California Department of Boating and Waterways (DBW), will work together to ensure that all interested organizations and members of the public are kept informed of the study progress and results. Individuals and organizations will be notified in advance of the release of key documents and public meetings.

This Review Plan for the *California Coastal Sediment Master Plan Feasibility Study* will be posted on the Los Angeles District's public webpage for the study:

http://www.spl.usace.army.mil/cms/index.php?option=com_content&task=view&id=61&Itemid=71

The public will be able to submit their comments on the Review Plan via the webpage.

12. REVIEW PLAN APPROVAL AND UPDATES

The Los Angeles District 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:

Los Angeles District:

Susie Ming, Project Manager, (213) 452-3789
Heather Schlosser, Lead Planner, (213) 452-3810

South Pacific Division (RMO):

Paul Bowers, 5PD-CW RIT, (415) 503-6556

ATTACHMENT 1: TEAM ROSTERS

The following table lists the PDT Members:

Name	Title
Kim Sterrett	Project Manager, CA Dept. of Boating and Waterways
Chris Potter	Project Manager, CA Natural Resources Agency
Susie Ming	Project Manager, USACE, SPL
Clif Davenport	Project Manager, CA Geological Survey
Heather Schlosser	Lead Planner, USACE, SPL
John Dingler	Planner, USACE, SPN
Nate West	Planner, USACE, SPL

ATTACHMENT 2: REVIEW PLAN REVISIONS

Revision Date	Description of Change	Page / Paragraph Number
6 Nov. 2012	Update of Review Plan to EC209 Template Format	All

ATTACHMENT 3: ACRONYMS AND ABBREVIATIONS

Term	Definition	Term	Definition
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/MSC	The District or MSC 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	SOW	Scope of Work
MSC	Major Subordinate Command	USACE	U.S. Army Corps of Engineers
		WRDA	Water Resources Development Act

DEPARTMENT OF THE ARMY
NORTH ATLANTIC DIVISION, CORPS OF ENGINEERS
FORT HAMILTON MILITARY COMMUNITY
BROOKLYN, NY 11252-6700

REPLY TO
ATTENTION OF

CEPCX-CSDR

14 November 2012

MEMORANDUM FOR: Chief, CESPL-PD-WS, Attention: Mr. Nathaniel West

SUBJECT: California Coastal Sediment Master Plan Feasibility Study

1. The National Planning Center of Expertise for Coastal Storm Damage Reduction (PCX-CSDR) has reviewed the Review Plan (RP) for the subject study and concurs that the RP complies with current peer review policy requirements contained in EC 1165-2-209, entitled "Civil Works Review Policy".

2. The review was performed by Mr. Larry Cocchieri, Deputy, PCX-CSDR.

3. PCX-CSDR has no objection to RP approval by the Commander, South Pacific Division. Upon approval of the RP, please provide a copy of the approved RP, a copy of the SPD Commander approval memorandum and the link to where the RP is posted on the SPL or SPD website to Mr. Cocchieri.

4. Thank you for the opportunity to assist in the preparation of the RP. PCX-CSDR is prepared to support the subject study and will continue to coordinate with the PDT as needed. For further information, please contact me at 347-370-4571.

LARRY COCCHIERI
Deputy, National Planning Center of
Expertise for Coastal Storm Damage
Reduction

ENCL 2