



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

CESPD-PDC

31 March 2010

MEMORANDUM FOR Commander, Sacramento District ATTN: CESPK-PD,
Ms. Katie Huff

Subject: Review Plan Approval for the San Lorenzo River Project, Santa Cruz California,
Post Authorization Change Report

1. Reference: CESPK-DE Memorandum for the Commander South Pacific Division, dated 15 December 2010, Subject: Request for Approval of Review Plan for the San Lorenzo River Project, Santa Cruz California, Post Authorization Change Report
2. The attached Review Plan for the San Lorenzo Project, Santa Cruz California, Post Authorization Change (PAC) Report has been prepared in accordance with EC 1105-2-410.
3. The Review Plan will be made available for public comment, and the comments received will be incorporated into future revisions of the Review Plan. The Review Plan was coordinated with the Flood Risk Management Planning Center of Expertise (PCX) of the South Pacific Division.
4. The Review Plan does not include independent external peer review. Agency Technical Review is found to be sufficient because the purpose of the PAC is a financial determination for Sponsor reimbursement.
5. I hereby approve this 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 this Review Plan or its execution will require new written approval from this office.

FOR THE COMMANDER:

Encl


CHRISTINE ALTENDORF, PhD., P.E.
Director, Programs



DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
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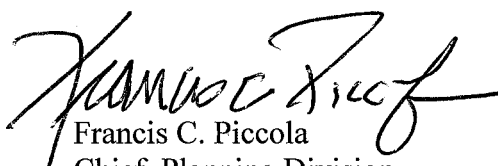
CESPK-PD-W

MEMORANDUM FOR: Commander, South Pacific Division (ATTN: CESPD-PD-C,
Berresford)

SUBJECT: Request for Approval of Review Plan for the San Lorenzo River Project, Santa Cruz
California, Post Authorization Change Report

1. In accordance with EC 1105-2-410, Review of Decision Documents, dated 22 August 2008, the subject Review Plan is provided for approval by the Commander, South Pacific Division (Enclosure 1). This is the first submittal of a Review Plan for the subject study.
2. This Review Plan is in compliance with the EC and has been coordinated with the applicable Planning Center of Expertise (PCX). The PCX for Flood Risk Management is designated as the lead PCX. The PCX concurrence memorandum is provided as Enclosure 2.
3. Please address any questions about this Review Plan to Mr. Andrew Muha (916) 557-6756, who is the project planner. Upon approval of this Review Plan, please provide notification to this office so we can post it to the Sacramento District public website. Upon posting of the approved Review Plan, the District will notify the vertical team. I appreciate your quick attention to this matter.

Sincerely,


Francis C. Piccola
Chief, Planning Division
Sacramento District

Encls

REVIEW PLAN

**SAN LORENZO RIVER PROJECT, SANTA CRUZ, CALIFORNIA
POST AUTHORIZATION CHANGE REPORT**

SACRAMENTO DISTRICT

December 2009

Revision 1 – N/A
FRM-PCX Review

**SAN LORENZO RIVER PROJECT, SANTA CRUZ, CALIFORNIA
POST AUTHORIZATION CHANGE REPORT**

SACRAMENTO DISTRICT

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REVIEW PLAN

SAN LORENZO RIVER PROJECT, SANTA CRUZ, CALIFORNIA POST AUTHORIZATION CHANGE REPORT

SACRAMENTO DISTRICT

1. PURPOSE AND REQUIREMENTS

A. Purpose. This document outlines the Review Plan (RP) for the San Lorenzo River Project, Santa Cruz, California, Post Authorization Change (PAC) Report. The PAC document is a Crediting Report and is anticipated to serve as the decision document to the U.S. Army Corps of Engineers (USACE) South Pacific Division (SPD) and Headquarters (HQ). This PAC report provides supporting documentation for potential approval of crediting for construction features at the subject project and to serve as a basis for amending the Project Cooperation Agreement to add the authorized credit to the project.

Engineering Circular (EC) *Review of Decision Documents*, EC 1105-2-410, dated 22 August 2008, defines the technical and overall quality control review processes for decision documents. It formally distinguishes between technical review performed in-district (District Quality Control, "DQC") and out-of-district resources (formerly Independent Technical Review, "ITR," now Agency Technical Review, "ATR"). It also reaffirms the requirement for Independent External Peer Review (IEPR); this is the most independent level of review and is applied in cases that meet certain criteria where the risk and magnitude of a proposed project are such that a critical examination by a qualified team outside of the USACE is warranted.

B. Requirements. EC 1105-2-410 outlines the requirement of the three review approaches (DQC, ATR, and IEPR). The San Lorenzo River Project, Santa Cruz, California, PAC Report documents the construction of a project feature by a non-Federal interest to an existing Federal project. The non-Federal interest, the City of Santa Cruz has requested credit for construction of the project feature. Since the project was a Flood Risk Management (FRM) project, the FRM-PCX is considered to be the primary PCX for coordination.

(1) District Quality Control. DQC is the review of basic science and engineering work products focused on fulfilling the project quality requirements defined in the San Lorenzo River Project, Santa Cruz, California, PAC Quality Control Plan (CQP). It is managed in the Sacramento District and may be conducted by in-house staff as long as the reviewers are not doing the work involved in the study, including contracted work that is being reviewed. Basic quality control tools include a QMP providing for quality checks and reviews. For the San Lorenzo River Project, Santa Cruz, California, the PAC was prepared by employees for the local interest in coordination with members of the SPK Project Delivery Team. In-house planning and/or supervisory staff have and/or will conduct this review for the final products. The Major Subordinate Command (MSC)/District are directly responsible for the QM and QC respectively, and to conduct and document this fundamental level of review.

(2) Agency Technical Review. EC 1105-2-410 recharacterized ATR (which replaces the level of review formerly known as Independent Technical Review) is an in-depth review, managed within USACE, and conducted by a qualified team outside of the home district that is

not involved in the day-to-day production of a project/product. The purpose of this review is to ensure the proper application of clearly established criteria, regulations, laws, codes, principles and professional practices. The ATR team reviews the various work products and assures that all the parts fit together in a coherent whole. ATR teams will be comprised of senior USACE personnel (Regional Technical Specialists (RTS), etc.) and may be supplemented by outside experts as appropriate. To assure independence, the leader of the ATR team shall be from outside the home MSC. EC 1105-2-410 requires that DrChecks <https://www.projnet.org/projnet/> be used to document all ATR comments, responses, and associated resolution accomplished. This Review Plan outlines the proposed approach to meeting this requirement for the San Lorenzo River Project, Santa Cruz, California, PAC Report.

(3) Independent External Peer Review. EC 1105-2-410 recharacterized the external peer review process that was originally added to the existing Corps review process via EC 1105-2-408. 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. IEPR is managed by an outside eligible organization (OEO) that is described in the Internal Review Code Section 501(c) (3), is exempted 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. Because the project feature has been constructed and the amount of credit requested for this project feature, approximately \$2,000,000, is below the project cost threshold that would require an IEPR, no IEPR will be conducted on this PAC report.

(4) Policy and Legal Compliance Review. In addition to the technical reviews, decision documents will be reviewed throughout the study process for their compliance with law and policy. These reviews culminate in Washington-level 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 Chief of Engineers. Guidance for policy and legal compliance reviews is addressed further in Appendix H, ER 1105-2-100. Technical review described in EC 105-2-410 are to augment and complement the policy review processes by addressing compliance with published Army polices pertinent to planning products, particularly polices 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. Counsel will generally not participate on ATR teams, but may at the discretion of the district or as directed by higher authority. When policy and/or legal concerns arise during DQC or ATR efforts that are not readily and mutually resolved by the PDT and the reviewers, the District will seek issue resolution support from the MSC and HQUSACE in accordance with the procedures outlined in Appendix H ER 1105-2-100. IEPR teams are not expected to be knowledgeable of Army and administration polices, nor are they expected to address such concerns. An IEPR team should be given the flexibility to bring important issues to the attention of decision makers. Legal reviews will be conducted concurrent with ATR of the preliminary, draft and final feasibility report and environmental impact statement.

(5) Planning Center of Expertise (PCX) Coordination. EC 1105-2-410 outlines PCX coordination in conjunction with preparation of the RP. This RP is being coordinated with the FRM-PCX . The FRM-PCX is responsible for the accomplishment and quality of ATR of the PAC Report. The DQC is the responsibility of the MSC/District.

(6) Review Plan Approval and Posting. In order to ensure the RP is in compliance with the principles of EC 1105-2-410 and the MSC's QMP, the Review Plan must be approved by the

applicable MSC, in this case the Commander, SPD. Once the RP is approved, the Sacramento District will post it to its district public website and notify SPD and the FRM-PCX.

(7) Safety Assurance Review. In accordance with Section 2035 of WRDA 2007, EC 11052-410 requires that all projects addressing flooding or storm damage reduction undergo a safety assurance review during design and construction. Safety assurance factors must be considered in all reviews for those studies. Implementation guidance for Section 2035 is under development. Safety assurance review is not required for the San Lorenzo River PAC because the project has already been constructed and the relevant action covered by the PAC is a credit or reimbursement.

2. PROJECT DESCRIPTION

A. Decision Document. The purpose of the PAC document is to provide the required information regarding the credit authorized by Congress in 2009 and to serve as a basis for amending the Project Partnership Agreement (PPA), formerly known as the Project Cooperation Agreement (PCA), to add the authorized credit to the project as directed in the Omnibus Appropriations Act, Energy and Water Development and Related Agencies Appropriations, for FY 2009, Section 110 of Conference Report 108-357, dated January 6, 2009, the San Lorenzo River Flood Control Project. Section 110 of the Energy and Water Development Appropriations Act for FY 2009 was enacted to clarify previous crediting authorization contained in Section 144 of the Energy and Water Development Appropriations Act for FY 2004 to specify that the proposed credit was for the Soquel Bridge component of the project. This clarification allows crediting for a project component which was deemed “inactive” in a previous PPA amendment which was predicated on the timing of the bridge construction in terms of the execution of the PPA. The credit involves the local share of the Soquel Bridge construction cost.

The decision before the Corps is to ensure that the proposed credit/reimbursement costs were relevant to the project and were creditable tasks incurred by the non-federal sponsor. Additionally the PAC report will support a PPA amendment for the project.

B. General Site Description. The project is located in the City of Santa Cruz, California and consists of the construction of modifications to the Soquel Avenue Bridge. The modification of the bridge was a portion of the authorized San Lorenzo River project which included levee modifications and channel dredging to provide flood risk management to the City of Santa Cruz.

C. Project Scope. The PAC will describe the action taken by the local interest to construct the authorized modifications to the Soquel Avenue Bridge. Modifications to the Soquel Avenue Bridge were a portion of the authorized San Lorenzo River Project and were identified as a relocation for the project. Due to the availability of Federal Highway Administration (FHA) funding for the bridge modifications, the City of Santa Cruz cost shared the work with the FHA. The City of Santa Cruz is now seeking credit for their portion of the cost to modify the bridge.

D. Problems and Opportunities. There are no flood risk management problems or opportunities under consideration as part of the PAC Report.

E. Potential Methods. Local interests have already constructed the modifications to the Soquel Avenue Bridge which was a portion of the authorized San Lorenzo River Project and are seeking credit for their portion of the construction cost. The potential method is to amend the PCA as a vehicle for reimbursement for the non-Federal sponsor.

F. Product Delivery Team. The PDT members that prepared the PAC are employed by the City of Santa Cruz. Upon USACE's requirement for a PAC Report, an in-house planner was identified to assist with the final PAC Report. Individual contact information and disciplines are presented in appendix B.

G. Vertical Team. The Vertical Team includes District management, District Support Team (DST) and Regional Integration Team (RIT) staff as well as members of the Planning of Community of Practice (PCoP). Specific points of contact for the Vertical Team can be found in appendix B.

H. Model Certification. The use of certified or approved models for all planning activities is required by EC 1105-2-407. This policy is applicable to all planning models currently in use, models under development and new models. The appropriate PCX will be responsible for model certification/approval. The goal of certification/approval is to establish that planning products are theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions. The use of a certified or approved model does not constitute technical review of the planning product. Independent review of the selection and application of the model and the input data and results is still required through conduct of DQC, ATR, and, if appropriate, IEPR. Independent review is applicable to all models, not just planning models.

For the purposes of this RP section, planning models 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. It includes all models used for planning, regardless of their scope or source.

No planning models were used as part of this PAC document.

3. AGENCY TECHNICAL REVIEW PLAN

For feasibility studies, ATR is managed by the PCX. For this PAC document the FRM-PCX will identify individuals to perform ATR. Sacramento District can provide suggestions on possible reviewers.

A. General. An ATR Manager shall be designated for the ATR process. The proposed ATR Manager for this project is to be determined, but will have expertise in project planning. The ATR Manager is responsible for providing information necessary for setting up the review, communicating with the Study Manager, providing a summary of critical review comments, collecting grammatical and editorial comments from the ATR team (ATRT), ensuring that the ATRT has adequate funding to perform the review, facilitating the resolution of the comments, and certifying that the ATR has been conducted and resolved in accordance with policy. ATR will be conducted for project planning and cost engineering; reviews of more specific disciplines may be identified if necessary.

B. ATR Team (ATRT). The ATRT will be comprised of individuals that have not been involved in the development of the decision document and will be chosen based on expertise, experience, and/or skills. The members will roughly mirror the composition of the PDT and wherever possible, reside outside of the South Pacific Division region. It is anticipated that the team will consist of 1-2 reviewers. The ATRT members will be identified at the time the review

is conducted and will be presented in Appendix B. One of the respective ATRT members should have the following expertise/experience:

- **Project Planning:** Team member will be experienced with the civil works process, watershed level projects, current flood damage reduction planning and policy guidance, and have experience in plan formulation for multipurpose projects.

C. Communication. The communication plan for the ATR is as follows:

(1) For the PAC planning policy review and Cost Engineering the reviewers will use DrChecks to document the ATR process. The planner will facilitate the creation of a project portfolio in the system to allow access by the reviewers.

(2) The planner shall send the ATR manager/planning reviewer one hard copy (with color pages as applicable) of the document and appendices one business day prior to the start of the comment period.

(3) The Study Manager shall inform the ATR manager when all responses have been entered into DrChecks and conduct a briefing to summarize comment responses to highlight any areas of disagreement.

(5) A revised electronic version of the report and appendices with comments incorporated shall be provided to the ATR manager/planning reviewer for use during back checking of the comments.

(6) Team members shall contact ATRT members or leader as appropriate to seek clarification of a comment's intent or provide clarification of information in the report.

(7) Reviewers will be encouraged to contact PDT members directly via email or phone to clarify any confusion. DrChecks shall not be used to post questions needed for clarification.

D. Funding

(1) The PDT district shall provide labor funding by cross charge labor codes. The planner will work with the ATR manager to ensure that adequate funding is available and is commensurate with the level of review needed. The current cost estimate for this review is \$2,000. Any funding shortages will be negotiated on a case by case basis and in advance of a negative charge occurring. Labor codes are currently in place.

(2) Reviewers shall monitor individual labor code balances and alert the ATRT Study Manager to any possible funding shortages.

E. Timing and Schedule

Pending approval of this Review Plan by SPD, ATR of the PAC report is anticipated to be conducted in September 2009.

F. Review

(1) ATRT responsibilities are as follows:

- (a) The planning reviewer will pay particular attention to the PAC Report, but may

also comment on other aspects as appropriate. All other reviews have been closed unless it is determined that they need to be opened.

(b) Grammatical and editorial comments shall not be submitted into DrChecks. Comments should be submitted to the ATR manager via electronic mail using tracked changes feature in the Word document or as a hard copy mark-up. The ATR manager shall provide these comments to the Study Manager.

(c) Review comments shall contain these principal elements:

- 1 a clear statement of the concern
- 2 the basis for the concern, such as law, policy, or guidance
- 3 significance for the concern
- 4 specific actions needed to resolve the comment

(d) The “Critical” comment flag in DrChecks shall not be used unless the comment is discussed with the ATR manager and/or the Study Manager first.

(2) PDT Team responsibilities are as follows:

(a) The team shall review comments provided by the ATRT in DrChecks and provide responses to each comment using “*Concur*”, “*Non-Concur*”, or “*For Information Only*”. *Concur* responses shall state what action was taken and provide revised text from the report if applicable. *Non-Concur* responses shall state the basis for the disagreement or clarification of the concern and suggest actions to negotiate the closure of the comment.

(b) Team members shall contact the PDT and ATRT managers to discuss any “Non-Concur” responses prior to submission.

G. Resolution

(1) Reviewers shall back check PDT responses to the review comments and either close the comment or attempt to resolve any disagreements.

(2) Reviewers may “agree to disagree” with any comment response and close the comment with a detailed explanation. If reviewer and responder cannot resolve a comment, it should be brought to the attention of the ATR manager and, if not resolved by the ATR Manager, it should be brought to the attention of the planning chief who will need to sign the certification. ATRT members shall keep the ATR manager informed of problematic comments. The vertical team will be informed of any policy variations or other issues that may cause concern during SPD review.

H. Certification

To fully document the ATR process, a statement of technical review will be prepared. Certification by the ATR Manager and the Study Manager will occur once issues raised by the reviewers have been addressed to the review team’s satisfaction and the final report is ready for submission for HQ review. Indication of this concurrence will be documented by the signing of a certification statement (Appendix A). A summary report of all comments and responses will follow the statement and accompany the report throughout the report approval process. An interim certification will be provided by the ATR team lead to indicate concurrence with the report to date until the final certification is performed when the report is considered final.

4. INDEPENDENT EXTERNAL PEER REVIEW PLAN

This decision document will present the details of a Crediting Report that presents the modification and construction costs of a bridge that is a feature of the San Lorenzo River project for reimbursement and support a PPA amendment. EC 1105-2-408 set forth and EC 1105-2-410 reaffirmed thresholds that trigger IEPR: “In cases where there are public safety concerns, a high level of complexity, novel or precedent-setting approaches; where the project is controversial, has significant interagency interest, has a total project cost greater than \$45 million, or has significant economic, environmental and social effects to the nation, IEPR will be conducted.” This study is not expected to contain influential scientific information nor be a highly influential scientific assessment. This project is not considered to be controversial because the bridge modification has already been completed and through the environmental and public review process. The cost of the project feature is low at approximately \$2,000,000. For these reasons, IEPR is not required.

A. Project Magnitude. For reasons described in the preceding paragraphs, the magnitude of this project is determined as low.

B. Project Risk. This project is considered to have low overall risk. The potential for failure is low because the bridge was constructed under guidance from the USACE.

C. Vertical Team Consensus. This Review Plan will serve as the coordination document to obtain vertical team consensus. MSC approval of the plan will indicate vertical team consensus.

D. Products for Review. N/A

E. Communication and Documentation. N/A

F. Funding. N/A

5. PUBLIC AND AGENCY REVIEW

The public and agencies had various opportunities to review this proposed project when the Feasibility Study and NEPA/CEQA documents underwent review in 1994. No major comments were received.

6. PLANNING CENTERS OF EXPERTISE COORDINATION

The appropriate PCX for this document is the National Flood Risk Management Center of Expertise located at SPD. This Review Plan will be submitted to SPD to determine if they concur with the approach set forth in this Review Plan, then coordinated with the PCX for FRM Director for review and comment. The approved Review Plan will be posted to the Sacramento District's public website.

7. APPROVALS

The PDT will carry out the Review Plan as described. The planner will submit the plan to the PDT District Planning Chief for approval. Formal coordination with PCX for FRM will occur

through the PDT District Planning Chief.

8. POINTS OF CONTACT

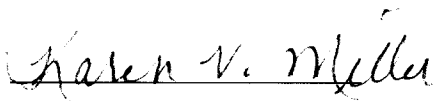
Questions about this Review Plan may be directed to Mr. Andrew T. Muha, Sacramento District Project Delivery Team Planning contact, at (916) 557-6756, or andrew.t.muha@usace.army.mil, or to Mr. Eric Thaut, Program Manager for the Planning Center of Expertise for Flood Risk Management, at (415) 503-6852, or eric.w.thaut@usace.army.mil.

REVIEW PLAN
SAN LORENZO RIVER PROJECT, SANTA CRUZ, CALIFORNIA
POST AUTHORIZATION CHANGE REPORT
SACRAMENTO DISTRICT

APPENDIX A
STATEMENT OF TECHNICAL REVIEW

COMPLETION OF AGENCY TECHNICAL REVIEW
SAN LORENZO RIVER PROJECT, SANTA CRUZ, CALIFORNIA
POST AUTHORIZATION CHANGE REPORT

The City of Santa Cruz with support of the Sacramento District has completed the PAC Report. Notice is hereby given that an agency technical review, that is appropriate to the level of risk and complexity inherent in the project, has been conducted as defined in the Review Plan. During the agency technical review, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of PAC policy requirements: assumptions, methods, procedures; the appropriateness of data used and level obtained; and reasonableness of the result, including whether the product meets the customer's needs consistent with law and existing Corps policy. The ATR was accomplished by an agency team composed of staff from Huntington District. All comments resulting from the ATR have been resolved.


Karen V. Miller
Team Leader, San Lorenzo River Project
Post Authorization Change Report
Agency Technical Review Team

3-22-2010
Date

CERTIFICATION OF AGENCY TECHNICAL REVIEW

A summary of all comments and responses is attached. Significant concerns and the explanation of the resolution are as follows:

(Describe the major technical concerns, possible impact and resolution)

As noted above, all concerns resulting from the independent technical review of the project have been fully resolved.

Francis C. Piccola
Chief, Planning Division

REVIEW PLAN

SAN LORENZO RIVER PROJECT, SANTA CRUZ, CALIFORNIA
POST AUTHORIZATION CHANGE REPORT

SACRAMENTO DISTRICT

APPENDIX B

PRODUCT DELIVERY TEAM

Name	Discipline	Phone	Email
Andrew Muha	Project Planner	916-557-6767	Andrew.T.Muha@usace.army.mil
Katie Huff	Project Manager	916-557-7519	Katie.J.Huff@usace.army.mil

AGENCY TECHNICAL REVIEW TEAM

Name	Discipline	Phone	Email
Karen Miller	PAC Planning Policy	304-399-5859	Karen.v.miller@usace.army.mil
TBD			

VERTICAL TEAM

Name	Discipline	Phone	Email
Karen Berresford	District Support Team Lead	415-503-6557	Karen.G.Berresford@usace.army.mil
Ken Zwickl	Regional Integration Team	202-761-4085	Kenneth.J.Zwickl@usace.army.mil

PLANNING CENTER OF EXPERTISE
FLOOD RISK MANAGEMENT

Name	Discipline	Phone	Email
Eric Thaut	Program Manager, PCX Flood Risk Management	415-503-6852	Eric.W.Thaut@usace.army.mil

REVIEW PLAN

**SAN LORENZO RIVER PROJECT, SANTA CRUZ, CALIFORNIA
FLOOD RISK MANAGEMENT
POST AUTHORIZATION CHANGE REPORT**

SACRAMENTO DISTRICT

**APPENDIX C
ACRONYMS AND ABBREVIATIONS**

<u>Term</u>	<u>Definition</u>	<u>Term</u>	<u>Definition</u>
ASA(CW)	Assistant Secretary of the Army for Civil Works	OMRR&R	Operation, Maintenance, Repair, Replacement and Rehabilitation
ATR	Agency Technical Review	OEO	Outside Eligible Organization
CEQA	California Environmental Quality Act	PCX	Planning Center of Expertise
CESPD	Corps of Engineers, South Pacific Division	PDT	Product Delivery Team
		PAC	Post Authorization Change
DQC	District Quality Control	PPA	Project Partnership Agreement
DX	Directory of Expertise	PL	Public Law
EA	Environmental Assessment	QMP	Quality Management Plan
EC	Engineering Circular	QA	Quality Assurance
		QC	Quality Control
		RD	Reclamation District
EDR	Engineering Document Report	RED	Regional Economic Development
EIR	Environmental Impact Report	WRCB	Water Resources Control Board
EIS	Environmental Impact Statement	WRDA	Water Resources Development Act
EO	Executive Order		
ER	Ecosystem Restoration		
FDR	Flood Damage Reduction		
FEMA	Federal Emergency Management Agency		
FRM	Flood Risk Management		
GRR	General Reevaluation Report		
IEPR	Independent External Peer Review		
ITR	Independent Technical Review		
MSC	Major Subordinate Command		
NED	National Economic Development		
NER	National Ecosystem Restoration		
NEPA	National Environmental Policy Act		
O&M	Operation and maintenance		
OMB	Office and Management and Budget		

Review Plan Checklist For Decision Documents

Date: August 14, 2009
Originating District: SPK
Project/Study Title: San Lorenzo River
PWI #:
District POC: Andrew T. Muha
PCX Reviewer: Karen Miller

Please fill out this checklist and submit with the draft Review Plan when coordinating with the appropriate PCX. Any evaluation boxes checked 'No' indicate the RP may not comply with ER 1105-2-410 (22 Aug 2008) and should be explained. Additional coordination and issue resolution may be required prior to MSC approval of the Review Plan.

REQUIREMENT	REFERENCE	EVALUATION
1. Is the Review Plan (RP) a stand alone document?	EC 1105-2-410, Para 8a	Yes X No <input type="checkbox"/>
a. Does it include a cover page identifying it as a RP and listing the project/study title, originating district or office, and date of the plan? b. Does it include a table of contents? c. Is the purpose of the RP clearly stated and EC 1105-2-410 referenced? d. Does it reference the Project Management Plan (PMP) of which the RP is a component? e. Does it succinctly describe the three levels of peer review: District Quality Control (DQC), Agency Technical Review (ATR), and Independent External Peer Review (IEPR)? f. Does it include a paragraph stating the title, subject, and purpose of the decision document to be reviewed? g. Does it list the names and disciplines of the Project Delivery Team (PDT)?*	EC 1105-2-410, Appendix B, Para 4a	a. Yes X No <input type="checkbox"/> b. Yes X No <input type="checkbox"/> c. Yes X No <input type="checkbox"/> d. Yes <input type="checkbox"/> No X e. Yes X No <input type="checkbox"/> f. Yes X No <input type="checkbox"/> g. Yes X No <input type="checkbox"/> Comments: The Post Authorization Change document is for credit for a project feature that was constructed in 1998. PCX: Can remove references to 1105-2-408, as it has been superseded by 410. PCX Backcheck: This section is acceptable.
<i>*Note: It is highly recommended to put all team member names and contact information in an appendix for easy updating as team members change or the RP is updated.</i>		

<p>2. Is the RP detailed enough to assess the necessary level and focus of peer review?</p>	<p>EC 1105-2-410, Appendix B, Para 3a</p>	<p>Yes X No <input type="checkbox"/></p>
<p>a. Does it indicate which parts of the study will likely be challenging?</p> <p>b. Does it provide a preliminary assessment of where the project risks are likely to occur and what the magnitude of those risks might be?</p> <p>c. Does it indicate if the project/study will require preparation of an environmental impact statement (EIS)?</p> <p><i>Will an EIS be prepared? Yes <input type="checkbox"/> No X</i> <i>If yes, IEPR is required.</i></p> <p>d. Does it address if the project report is likely to contain influential scientific information or be a highly influential scientific assessment?</p> <p><i>Is it likely? Yes <input type="checkbox"/> No X</i> <i>If yes, IEPR is required.</i></p> <p>e. Does it address if the project is likely to have significant economic, environmental, and social affects to the nation, such as (but not limited to):</p> <ul style="list-style-type: none"> • more than negligible adverse impacts on scarce or unique cultural, historic, or tribal resources? • substantial adverse impacts on fish and wildlife species or their habitat, prior to implementation of mitigation? • more than negligible adverse impact on species listed as endangered or threatened, or to the designated critical habitat of such species, under the Endangered Species Act, prior to implementation of mitigation? <p><i>Is it likely? Yes <input type="checkbox"/> No X</i> <i>If yes, IEPR is required.</i></p>	<p>EC 1105-2-410, Appendix B, Para 3a</p> <p>EC 1105-2-410, Appendix B, Para 3a</p> <p>EC 1105-2-410 Para 7c & 8f</p> <p>EC 1105-2-410, Appendix B, Para 4b</p> <p>EC 1105-2-410, Para 6c</p> <p>EC 1105-2-410 Para 8f</p> <p>EC 1105-2-410 Para 8f</p> <p>EC 1105-2-410 Para 8f</p>	<p>a. Yes X No <input type="checkbox"/></p> <p>b. Yes X No <input type="checkbox"/></p> <p>c. Yes X No <input type="checkbox"/></p> <p>d. Yes X No <input type="checkbox"/></p> <p>e. Yes X No <input type="checkbox"/></p> <p>Comments: PCX Review Backcheck: This section is acceptable.</p>

<p>f. Does it address if the project/study is likely to have significant interagency interest?</p> <p><i>Is it likely? Yes <input type="checkbox"/> No X</i> <i>If yes, IEPR is required.</i></p> <p>g. Does it address if the project/study likely involves significant threat to human life (safety assurance)?</p> <p><i>Is it likely? Yes <input type="checkbox"/> No X</i> <i>If yes, IEPR is required.</i></p> <p>h. Does it provide an estimated total project cost?</p> <p><i>What is the estimated cost: \$1,990,902 (best current estimate; may be a range)</i></p> <p><i>Is it > \$45 million? Yes <input type="checkbox"/> No X</i> <i>If yes, IEPR is required.</i></p> <p>i. Does it address if the project/study will likely be highly controversial, such as if there will be a significant public dispute as to the size, nature, or effects of the project or to the economic or environmental costs or benefits of the project?</p> <p><i>Is it likely? Yes <input type="checkbox"/> No X</i> <i>If yes, IEPR is required.</i></p> <p>j. Does it address if the information in the decision document will likely be based on novel methods, present complex challenges for interpretation, contain precedent-setting methods or models, or present conclusions that are likely to change prevailing practices?</p> <p><i>Is it likely? Yes <input type="checkbox"/> No X</i> <i>If yes, IEPR is required.</i></p>	<p>EC 1105-2-410, Para 6c</p> <p>EC 1105-2-410, Appendix D, Para 1b</p> <p>EC 1105-2-410, Appendix D, Para 1b</p> <p>EC 1105-2-410, Appendix D, Para 1b</p> <p>EC 1105-2-410, Appendix D, Para 1b</p>	<p>f. Yes X No <input type="checkbox"/></p> <p>g. Yes X No <input type="checkbox"/></p> <p>h. Yes X No <input type="checkbox"/></p> <p>i. Yes X No <input type="checkbox"/></p> <p>j. Yes X No <input type="checkbox"/></p> <p>Comments: PCX Review Backcheck: This section is acceptable.</p>
<p>3. Does the RP define the appropriate level of peer review for the project/study?</p>	<p>EC 1105-2-410, Para 8a</p>	<p>Yes X No <input type="checkbox"/></p>
<p>a. Does it state that DQC will be managed by the home district in accordance with the Major Subordinate Command (MSC) and district Quality Management Plans?</p> <p>b. Does it state that ATR will be conducted or</p>	<p>EC 1105-2-410, Para 7a</p> <p>EC 1105-2-410,</p>	<p>a. Yes X No <input type="checkbox"/></p> <p>b. Yes X No <input type="checkbox"/></p>

<p>managed by the lead PCX?</p> <p>c. Does it state whether IEPR will be performed?</p> <p><i>Will IEPR be performed? Yes <input type="checkbox"/> No X</i></p> <p>d. Does it provide a defensible rationale for the decision on IEPR?</p> <p>e. Does it state that IEPR will be managed by an Outside Eligible Organization, external to the Corps of Engineers?</p>	<p>Appendix D, Para 3a</p> <p>EC 1105-2-410, Appendix B, Para 4b</p> <p>EC 1105-2-410, Para 7c</p>	<p>c. Yes X No <input type="checkbox"/></p> <p>d. Yes X No <input type="checkbox"/></p> <p>e. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a X</p> <p>Comments: PCX Review Backcheck: This section is acceptable.</p>
<p>4. Does the RP explain how ATR will be accomplished?</p>	<p>EC 1105-2-410, Appendix B, Para 4l</p>	<p>Yes X No <input type="checkbox"/></p>
<p>a. Does it identify the anticipated number of reviewers?</p> <p>b. Does it provide a succinct description of the primary disciplines or expertise needed for the review (not simply a list of disciplines)?</p> <p>c. Does it indicate that ATR team members will be from outside the home district?</p> <p>d. Does it indicate that the ATR team leader will be from outside the home MSC?</p> <p>e. Does the RP state that the lead PCX is responsible for identifying the ATR team members and indicate if candidates will be nominated by the home district/MSX?</p> <p>f. If the reviewers are listed by name, does the RP describe the qualifications and years of relevant experience of the ATR team members?*</p> <p><i>*Note: It is highly recommended to put all team member names and contact information in an appendix for easy updating as team members change or the RP is updated.</i></p>	<p>EC 1105-2-410, Appendix B, Para 4f</p> <p>EC 1105-2-410, Appendix B, Para 4g</p> <p>EC 1105-2-410, Para 7b</p> <p>EC 1105-2-410, Para 7b</p> <p>EC 1105-2-410, Appendix B, Para 4k(1)</p> <p>EC 1105-2-410, Appendix B, Para 4k(1)</p>	<p>a. Yes X No <input type="checkbox"/></p> <p>b. Yes X No <input type="checkbox"/></p> <p>c. Yes X No <input type="checkbox"/></p> <p>d. Yes X No <input type="checkbox"/></p> <p>e. Yes X No <input type="checkbox"/></p> <p>f. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a X</p> <p>Comments: PCX Review Backcheck: This section is acceptable.</p>
<p>5. Does the RP explain how IEPR will be</p>	<p>EC 1105-2-410,</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/> n/a X</p>

<p>accomplished?</p>	<p>Appendix B, Para 4k & Appendix D</p>	
<p>a. Does it identify the anticipated number of reviewers?</p> <p>b. Does it provide a succinct description of the primary disciplines or expertise needed for the review (not simply a list of disciplines)?</p> <p>c. Does it indicate that the IEPR reviewers will be selected by an Outside Eligible Organization and if candidates will be nominated by the Corps of Engineers?</p> <p>d. Does it indicate the IEPR will address all the underlying planning, safety assurance, engineering, economic, and environmental analyses, not just one aspect of the project?</p>	<p>EC 1105-2-410, Appendix B, Para 4f</p> <p>EC 1105-2-410, Appendix B, Para 4g</p> <p>EC 1105-2-410, Appendix B, Para 4k(1) & Appendix D, Para 2a</p> <p>EC 1105-2-410, Para 7c</p>	<p>a. Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>c. Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>d. Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>Comments: PCX Review Backcheck: This section is acceptable.</p>
<p>6. Does the RP address peer review of sponsor in-kind contributions?</p>		<p>Yes <input type="checkbox"/> No <input type="checkbox"/> n/a X</p>
<p>a. Does the RP list the expected in-kind contributions to be provided by the sponsor?</p> <p>b. Does it explain how peer review will be accomplished for those in-kind contributions?</p>	<p>EC 1105-2-410, Appendix B, Para 4j</p>	<p>a. Yes <input type="checkbox"/> No X</p> <p>b. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a X</p> <p>Comments: PCX Review Backcheck: This section is acceptable.</p>
<p>7. Does the RP address how the peer review will be documented?</p>		<p>Yes X No <input type="checkbox"/></p>
<p>a. Does the RP address the requirement to document ATR and IEPR comments using DrChecks?</p> <p>b. Does the RP explain how the IEPR will be documented in a Review Report?</p> <p>c. Does the RP document how written responses to the IEPR Review Report will be prepared?</p>	<p>EC 1105-2-410, Para 8g(1)</p> <p>EC1105-2-410, Appendix B, Para 4k(13)(b)</p> <p>EC 1105-2-410, Appendix B, Para 4l</p>	<p>a. Yes X No <input type="checkbox"/></p> <p>b. Yes X No <input type="checkbox"/> n/a <input type="checkbox"/></p> <p>c. Yes X No <input type="checkbox"/> n/a <input type="checkbox"/></p> <p>d. Yes X No <input type="checkbox"/> n/a <input type="checkbox"/></p> <p>Comments: PCX Review Backcheck: This section is</p>

<p>d. Does the RP detail how the district/PCX will disseminate the final IEPR Review Report, USACE response, and all other materials related to the IEPR on the internet and include them in the applicable decision document?</p>	<p>EC 1105-2-410, Para 8g(2) & Appendix B, Para 4l</p>	<p>acceptable.</p>
<p>8. Does the RP address Policy Compliance and Legal Review?</p>	<p>EC 1105-2-410, Para 7d</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>Comments: PCX Review Backcheck: This section is acceptable.</p>
<p>9. Does the RP present the tasks, timing and sequence (including deferrals), and costs of reviews?</p>	<p>EC 1105-2-410, Appendix B, Para 4c & Appendix C, Para 3d</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>
<p>a. Does it provide a schedule for ATR including review of the Feasibility Scoping Meeting (FSM) materials, Alternative Formulation Briefing (AFB) materials, draft report, and final report?</p> <p>b. Does it include interim ATR reviews for key technical products?</p> <p>c. Does it present the timing and sequencing for IEPR?</p> <p>d. Does it include cost estimates for the peer reviews?</p>	<p>EC 1105-2-410, Appendix C, Para 3g</p> <p>EC 1105-2-410, Appendix C, Para 3g</p>	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>c. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p> <p>d. Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>Comments: PAC Document is the only document to be reviewed.</p> <p>PCX Review Backcheck: This section is acceptable.</p>
<p>10. Does the RP indicate the study will address Safety Assurance factors?</p> <p>Factors to be considered include:</p> <ul style="list-style-type: none"> • Where failure leads to significant threat to human life • Novel methods\complexity\ precedent-setting models\policy changing 	<p>EC 1105-2-410, Para 2 & Appendix D, Para 1c</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p> <p>Comments: Project Feature has already been constructed.</p> <p>PCX Review Backcheck: This section is acceptable.</p>

<ul style="list-style-type: none"> conclusions • Innovative materials or techniques • Design lacks redundancy, resiliency of robustness • Unique construction sequence or acquisition plans • Reduced\overlapping design construction schedule 		
11. Does the RP address model certification requirements?	EC 1105-2-407	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<p>a. Does it list the models and data anticipated to be used in developing recommendations (including mitigation models)?</p> <p>b. Does it indicate the certification/approval status of those models and if certification or approval of any model(s) will be needed?</p> <p>c. If needed, does the RP propose the appropriate level of certification/approval for the model(s) and how it will be accomplished?</p>	EC 1105-2-410, Appendix B, Para 4i	<p>a. Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>b. Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>c. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p> <p>Comments: PCX Review Backcheck: This section is acceptable.</p>
12. Does the RP address opportunities for public participation?		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<p>a. Does it indicate how and when there will be opportunities for public comment on the decision document?</p> <p>b. Does it indicate when significant and relevant public comments will be provided to reviewers before they conduct their review?</p> <p>c. Does it address whether the public, including scientific or professional societies, will be asked to nominate potential external peer reviewers?</p> <p>d. Does the RP list points of contact at the home district and the lead PCX for inquiries about the RP?</p>	<p>EC 1105-2-410, Appendix B, Para 4d</p> <p>EC 1105-2-410, Appendix B, Para 4e</p> <p>EC 1105-2-410, Appendix B, Para 4h</p> <p>EC 1105-2-410, Appendix B, Para 4a</p>	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>c. Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>d. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>Comments: The Review Plan is for a PAC that documents potential credit to the sponsor for an already constructed project feature</p> <p>PCX Review Backcheck: This section is acceptable.</p>
13. Does the RP address coordination with the appropriate Planning Centers of Expertise?	EC 1105-2-410, Para 8a	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

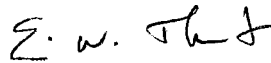
<p>a. Does it state if the project is single or multi-purpose? Single <input type="checkbox"/> Multi <input type="checkbox"/></p> <p>List purposes: Flood Risk Management</p> <p>b. Does it identify the lead PCX for peer review? Lead PCX: FRM</p> <p>c. If multi-purpose, has the lead PCX coordinated the review of the RP with the other PCXs as appropriate?</p>	<p>EC 1105-2-410, Appendix D, Para 3c</p>	<p>a. Yes X No <input type="checkbox"/></p> <p>b. Yes X No <input type="checkbox"/></p> <p>c. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a X</p> <p>Comments: PCX Review Backcheck: This section is acceptable.</p>
<p>14. Does the RP address coordination with the Cost Engineering Directory of Expertise (DX) in Walla Walla District for ATR of cost estimates, construction schedules and contingencies for all documents requiring Congressional authorization?</p>	<p>EC 1105-2-410, Appendix D, Para 3</p>	<p>Yes X No <input type="checkbox"/></p>
<p>a. Does it state if the decision document will require Congressional authorization?</p> <p>b. If Congressional authorization is required, does the state that coordination will occur with the Cost Engineering DX?</p>		<p>a. Yes X No <input type="checkbox"/></p> <p>b. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a X</p> <p>Comments: The Review Plan is for a PAC that documents potential credit to the sponsor for an already constructed project feature</p> <p>PCX Review Backcheck: This section is acceptable.</p>
<p>15. Other Considerations: This checklist highlights the minimum requirements for an RP based on EC 1105-2-410. Additional factors to consider in preparation of the RP include, but may not be limited to:</p> <p>a. Is a request from a State Governor or the head of a Federal or state agency to conduct IEPR likely?</p> <p>b. Is the home district expecting to submit a waiver to exclude the project study from IEPR?</p>	<p>EC 1105-2-410, Appendix D, Para 1b</p> <p>EC 1105-2-410, Appendix D, Para 1d</p>	<p>Comments: PCX Review Backcheck: This section is acceptable.</p>

<p>c. Are there additional Peer Review requirements specific to the home MSC or district (as described in the Quality Management Plan for the MSC or district)?</p> <p>d. Are there additional Peer Review needs unique to the project study?</p>		
<p>Detailed Comments and Backcheck: Minor editorial changes submitted to the District for consideration. The FRM-PCX highly encourages following the draft template for Review Plans in the future as it standardizes the way review plans are organized (simplifying preparation and review) and further expands on what type of information should be in the plan. The final template will be posted on the PCX sharepoint site (a sub-tab on the planning and policy sharepoint site) but will not differ much from the draft state.</p>		

MEMORANDUM FOR Andrew Muha, Sacramento District

SUBJECT: San Lorenzo River Project, Santa Cruz, California, Post Authorization Change (PAC)
Report Review Plan

1. The Flood Risk Management Planning Center of Expertise (FRM-PCX) has reviewed the Review Plan (RP) for the subject study and concurs that the RP satisfies peer review policy requirements outlined in Engineering Circular (EC) 1105-2-410 Review of Decision Documents, dated 22 August 2008.
2. The review was performed by Karen Miller of the Huntington District. The RP checklist documenting the review is attached.
3. The FRM-PCX recommends the RP for approval by the MSC Commander. Upon approval of the RP, please provide a copy of the approved RP, a copy of the MSC Commander approval memorandum, and the link to where the RP is posted on the District website to Eric Thaut, Program Manager for the FRM-PCX (eric.w.thaut@usace.army.mil) and Miki Fujitsubo, lead Regional Technical Specialist for the FRM-PCX (miki.fujitsubo@usace.army.mil).
4. Thank you for the opportunity to assist in the preparation of the RP. Please coordinate the Agency Technical Review (ATR), Independent External Peer Review (IEPR), and Model Certification efforts outlined in the RP with Eric Thaut, Program Manager for the FRM-PCX at 415-503-6852.



Eric Thaut
Program Manager, FRM-PCX

Encl