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

- 9 JUN 2009

CESPD-PDC

MEMORANDUM FOR Commander, San Francisco District, ATTN: CESPN-PF, Ms. Letellier

Subject: Review Plan Approval for the San Francisquito Creek Feasibility Study, California, Feasibility Study

1. The attached Review Plan for the San Francisquito Creek Feasibility Study, California, Feasibility Study has been prepared in accordance with EC 1105-2-410.

2. 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 has been coordinated with the Flood Risk Management Planning Center of Expertise (PCX) of the South Pacific Division which is the lead office to execute this plan. For further information, contact the PCX, 415-503-6852.

3. The Review Plan includes independent external peer review.

4. 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 JANICE L. DOMBI
Colonel, EN
Commanding

5 Encls
1. District Memo
2. Review Plan
3. FRM-PCX Memo
4. FRM-PCX Checklist
5. SPD Checklist

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO
CORPS OF ENGINEERS
1455 MARKET STREET
SAN FRANCISCO, CALIFORNIA 94103-1398

CESPN-ET-PF

8 May 2009

MEMORANDUM FOR: South Pacific Division District Support Team, ATTN: CESPN-PDC,

SUBJECT: Request for Approval of Review Plan for the San Francisquito Creek Feasibility Study.

1. In accordance with EC 1105-2-410, Review of Decision Documents, dated 22 August 2008, the subject Review Plan is provided for MSC 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 above EC and has been coordinated with the applicable Planning Centers of Expertise (PCX). The PCX for Flood Risk Management is designated as the lead PCX, and as such, coordinated the Review Plan with the PCX for Ecosystem Restoration. The PCX concurrence memorandum is provided as Enclosure 2.

3. Please address any questions or concerns to , who is serving as the San Francisco District POC for this Review Plan . Upon approval of this Review Plan, please provide notification to this office so we can post it to the San Francisco 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,

Thomas R. Kendall
Chief, Planning Branch
San Francisco District

Encls

CESPD-PDS-P

1 May 2009

MEMORANDUM FOR Yvonne LeTellier, and , San Francisco District

SUBJECT: San Francisquito Creek, California, Feasibility Study 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 of New Orleans 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 Program Manager for the FRM-PCX and , lead Regional Technical Specialist for the FRM-PCX

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 me.

Encl

Program Manager, FRM-PCX

REVIEW PLAN
SAN FRANCISCQUITO CREEK FEASIBILITY STUDY

SAN FRANCISCO DISTRICT

March 2009

REVISION 1 – N/A
PCX REVIEW

REVIEW PLAN
SAN FRANCISCQUITO CREEK
FEASIBILITY STUDY
SAN FRANCISCO DISTRICT

REVIEW PLAN
SAN FRANCISCQUITO CREEK FEASIBILITY STUDY
SAN FRANCISCO DISTRICT

1. PURPOSE AND REQUIREMENTS

A. Purpose. This document outlines the Review Plan for the San Francisquito Creek Feasibility Study. This Feasibility Study process is anticipated to culminate in a decision document to Congress for potential authorization of a new project. Engineering Circular (EC) *Peer Review of Decision Documents* 1105-2-408, dated 31 May 2005, (1) established procedures to ensure the quality and credibility of Corps decision documents by adjusting and supplementing the review process, and (2) required that documents have a peer review plan. That EC applies to all feasibility studies and reports and any other reports that lead to decision documents that require authorization by Congress. The San Francisquito Creek Feasibility Study is anticipated to result in recommendations to Congress for authorization of a project and is therefore covered by this EC.

A subsequent circular, *Review of Decision Documents*, EC 1105-2-410, dated 22 August 2008, revises 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 (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 U.S. Army Corps of Engineers (USACE) is warranted.

B. Requirements. EC 1105-2-410 outlines the requirement of the three review approaches (DQC, ATR, and IEPR). EC 1105-2-408 provides guidance on Corps Planning Centers of Expertise (PCX) involvement in the approaches. This document addresses review of the decision document as it pertains to both approaches and planning coordination with the appropriate PCX. The San Francisquito Feasibility Study will investigate Flood Risk Management (FRM) and Ecosystem Restoration (ER) opportunities in the study area. The primary purpose of the study is to determine flood related issues in the study area, therefore the PCX for FRM will coordinate the review of this document and with the PCX for ER as necessary.

(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 Francisquito Feasibility Study Project Management Plan (PMP) (to which this Review Plan will ultimately be appended). It is managed in the San Francisco 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 Quality Management Plan (QMP) providing for seamless review, quality checks and reviews, supervisory reviews, Project Delivery Team (PDT) reviews, etc. Additionally, the PDT is responsible for a complete reading of the report to assure the overall integrity of the report, technical appendices and the recommendations before the approval by the District Commander. non-PDT members and/or supervisory staff will conduct this review for major draft and final products, including products provided by the non-Federal sponsors as in-kind services following review of those products by the PDT. It is expected that the Major Subordinate Command (MSC)/District QMP address the conduct and documentation of this fundamental level of review. A Quality Control Plan (QCP) is included in

the PMP for the subject study and addresses DQC; DQC is not addressed further in this Review Plan. DCQ is required for this study.

(2) Agency Technical Review. EC 1105-2-410 recharacterized ATR (which replaces the level of review formerly known as Independent Technical Review) as 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 1105-2-408 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 Francisquito Feasibility Study. ATR is required for this study.

(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. 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. This Review Plan outlines the planned approach to meeting this requirement for the San Francisquito Feasibility Study. IEPR is required for this study.

(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 1105-2-410 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 1105-2-408 and EC 1105-2-410 outline PCX coordination in conjunction with preparation of the Review Plan. This Review Plan is being coordinated by the PCX for Flood Risk Management, who will in turn coordinate with the PCX for Ecosystem Restoration as necessary. The PCX for FRM is responsible for the accomplishment and quality of ATR and IEPR for the San Francisquito Review Plan. The PCX for FRM may conduct the review or manage the review to be conducted by others.

(6) Review Plan Approval and Posting. In order to ensure the Review Plan 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, South Pacific Division (SPD). Once the Review Plan is approved, the San Francisco District will post it to its district public website and notify the South Pacific Division and the PCX for FRM.

(7) Safety Assurance Review. In accordance with Section 2035 of WRDA 2007, EC 1105-2-410 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. When guidance is issued, the study will address its requirements for addressing safety assurance factors, which at a minimum will be included in the draft report and appendixes for public and agency review. Prior to preconstruction engineering and design (PED) of the identified for construction, a PMP will be developed that will include safety assurance review. Safety assurance review will also be accomplished during construction.

2. PROJECT DESCRIPTION

A. Decision Document.
The purpose of this General Investigations (GI) study is to identify flood related issues and ecosystem restoration opportunities in the San Francisquito Creek study area and to determine the National Economic Development (NED) plan.

The decision document will present planning, engineering, and implementation details of the recommended plan to allow final design and construction to proceed subsequent to approval of the recommended plan. The study will evaluate structural and non-structural FRM measures as well as ER measures in the study area.

The local, non-Federal, sponsor for the San Francisquito Creek Flood Risk Management and Ecosystem Restoration Study is the San Francisquito Creek Joint Powers Authority (JPA). The JPA consist of the cities of East Palo Alto, Palo Alto and Menlo Park; Santa Clara Valley Water District and the San Mateo County Flood Risk Management District. The study is cost-shared 50-50 with the non-Federal sponsor.

Further details of the San Francisquito Creek Study are described in the Project Management Plan prepared by the San Francisco District.

B. General Site Description. The San Francisquito Creek watershed encompasses an area of approximately 45 square miles, extending from the ridge of the Santa Cruz Mountains to the San Francisco Bay in California. San Francisquito Creek has an inadequate carrying capacity due to development, vegetation sedimentation, land subsidence, levee settlement and erosion. Flooding on the creek affects the cities of Menlo Park and East Palo Alto in San Mateo County, and Palo Alto in Santa Clara County. San Francisquito Creek starts at the base of Searsville Dam in Stanford University and flows into the San Francisco Bay about 2.5 miles south of the Dumbarton

Bridge. As a result of record rainfall in February 1998, San Francisquito Creek overtopped its banks, affecting approximately 1,700 residential and commercial structures and causing more than $26.6 million in property damages. The study area begins at Searsville Dam on Lower Corte Madera Creek and continues down San Francisquito Creek to San Francisco Bay and includes the alluvial fan area between the railroad trestle in Menlo Park and Matadero Creek.

C. Project Scope. The study will focus on FRM and ER measures in the San Francisquito study area which encompasses the area of San Francisquito Creek starting from the Searsville Dam to the San Francisco Bay where the creek terminates. The study area also includes the alluvial fan area between the railroad trestle in Menlo Park and Matadero Creek, as described in the preceding paragraph. The purpose of the study is to perform a feasibility-level investigation by identifying and evaluating potential alternatives plans to reduce the potential of flooding and address ecosystem restoration in the study area. The project sponsors are interested in reducing flood damage as well as instituting ecosystem restoration in the study area.

D. Problems and Opportunities. Major challenges to be addressed by the study include the commingling of fluvial and tidal flooding, formulation of flood-risk-management features in a highly developed area, and planning a combined flood-risk-management and ecosystem-restoration plan in a watershed. The primary problem in the study area is the potential for flooding. As described in the preceding paragraph, in 1998 $26.6 million in property damages occurred in the study area due to flooding. The primary opportunity is to reduce the risk to public safety and infrastructure, and to restore the ecosystem in the study area.

E. Potential Methods. The study will consider structural and non-structural measures to address flood-risk-management and ecosystem-restoration problems and opportunities. Potential non-structural measures include flood proofing, raising structures, relocations, a flood warning and evacuation plan, land management, and the designation of floodways. Potential structural methods include widening culverts, raising or constructing levees and/or floodwalls, widening the channel, installing flood stations, establishing a detention basin, bridge modification, and flap gates. Potential ecosystem-restoration measures include bank stabilization, bank regrading, vegetation plantings, creating vegetated terraces, rock placement, vegetated rip-rap, and dam removal.

F. Product Delivery Team. The PDT is comprised of those individuals directly involved in the development of the decision document. Individual contact information and disciplines are presented in appendix B. In accordance with the PMP, it is planned that the non-Federal sponsors will contribute in-kind services which will be determined at a later time. All in-kind work products will undergo review by the PDT for a determination of adequacy; products will ultimately undergo DQC. Some products will undergo IEPR (described later in this Review Plan).

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 USACE Planning Models Improvement Program (PMIP) was established in 2003 to assess the state of planning models in the USACE and to make recommendations to assure that high quality methods and tools are available to enable informed decisions on investments in the Nation's water resources infrastructure and natural environment. The main objective of the PMIP is to carry out "a process to

review, improve and validate analytical tools and models for USACE Civil Works business programs." In carrying out this initiative, a PMIP Task Force was established to examine planning model issues, assess the state of planning models in the Corps, and develop recommendations on improvements to planning models and related analytical tools. The PMIP Task Force collected the views of Corps leaders and recognized technical experts, and conducted investigations and numerous discussions and debates on issues related to planning models. It identified an array of model-related problems, conducted a survey of planning models, prepared papers on model-related issues, analyzed numerous options for addressing these issues, formulated recommendations, and issued a final report. The Task Force considered ongoing Corps initiatives to address planning capability, and built upon these where possible. Examples include several efforts under the Planning Excellence Program (training, specialized planning centers of expertise, modeling); the Science & Engineering Technology (SET) initiative (an EC publication on the SET initiative models is forthcoming) and associated Technical Excellence Network (TEN), which endeavors to provide uniform Science and Engineering tools and practices to the Corps and share them throughout; and, recognition of existing Quality Assurance/Quality Control programs and internal technical review within the Districts.

For the purposes of this Review Plan, 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, as specified in the following sub-paragraphs. This Review Plan does not cover engineering models used in planning which will be certified under a separate process to be established under SET.

The computational models to be employed in the San Francisquito Creek Feasibility Study have either been developed by or for the USACE. Model certification and approval for all identified planning models will be coordinated through the PCX as needed. Project schedules and resources will be adjusted to address this process for certification and PCX coordination. They are:

1. HEC-FDA version 1.2.4 (Certified): This model, developed by the Corps' Hydrological Engineering Center, will assist the PDT in applying risk analysis methods for flood risk management studies as required by, EM 1110-2-1419. This program:
    - Provides a repository for both the economic and hydrologic data required for the analysis
    - Provides the tools needed to understand the results
    - Calculates the Expected Annual Damages and the Equivalent Annual Damages
    - Computes the Annual Exceedence Probability and the Conditional Non-Exceedence Probability
    - Implements the risk-based analysis procedures contained in EM 1110-2-1619

This model will be used to address non-structural measures.

2. Various Habitat Evaluation Procedure models. The Ecosystem Restoration Planning Center of Expertise has responsibility for approving ecosystem output methodologies for use in ecosystem restoration planning and mitigation planning. The Ecosystem PCX will need to certify or approve for use each regionally modified version of these methodologies and

individual models and guidebooks used in application of these methods. The PDT will coordinate with the Ecosystem PCX during the study to identify appropriate models and certification approval requirements.

3. IWR-Planning Suite (Certified). This software assists with the formulation and comparison of alternative plans. While IWR-PLAN was initially developed to assist with environmental restoration and watershed planning studies, the program can be useful in planning studies addressing a wide variety of problems. IWR-PLAN can assist with plan formulation by combining solutions to planning problems and calculating the additive effects of each combination, or "plan." IWR-PLAN can assist with plan comparison by conducting cost effectiveness and incremental cost analyses, identifying the plans which are the best financial investments and displaying the effects of each on a range of decision variables.

The following are considered to be engineering models as opposed to planning models and undergo a different review and approval process for usage. Engineering tools anticipated to be used in this study are:

1. MCACES or MII: These are cost estimating models.

2. HEC-HMS: By applying this model the PDT is able to:
    - Define the watersheds' physical features
    - Describe the metrological conditions
    - Estimate parameters
    - Analyze simulations
    - Obtain GIS connectivity

3. HEC-RAS: The function of this model is to complete one-dimensional hydraulic calculations for a full network of natural and man made channels. HEC-RAS major capabilities are:
    - User interface
    - Hydraulic Analysis
    - Data storage and Management
    - Graphics and reporting

4. HEC-2: The HEC-2 program computes water surface profiles for one-dimensional steady, gradually varied flow in rivers of any cross section.

5. FLO-2D: This model will be used for the overbank reaches.

6. Groundwater Modeling System (GMS): This model is used to conduct seepage analysis.

7. Utaxas4: This model is used to conduct slope stability.

Additional models that may be employed include HEP and HGM. Any use of these models will be coordinated with the appropriate PCX.

3. AGENCY TECHNICAL REVIEW PLAN

For feasibility studies, ATR is managed by the PCX. For this study due to the heavy emphasis on FRM the PCX for FRM will identify individuals to perform ATR. The San Francisco District can provide suggestions on possible reviewers.

A. General. An ATR Team Leader shall be designated for the ATR process and shall be from outside the home MSC to ensure independence. The proposed ATR Team Leader for this project is to be determined, but will have expertise in project planning. The ATR Team Leader is responsible for providing information necessary for setting up the review, communicating with the Project Planner, 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, environmental compliance, economics, hydrology and reservoir operations, hydraulic design, civil design, geotechnical engineering, cost engineering, real estate, cultural resources; reviews of more specific disciplines maybe identified if necessary.

B. Agency Technical Review 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 to the extent practicable come from outside of the South Pacific Division region. It is anticipated that the team will consist of about 10 reviewers. The ATRT members will be identified at the time the review is conducted and will be presented in appendix B.

Table 1: Agency Technical Review Team

Discipline	Experience Needed for Review
ATR Manager/Plan Formulation	Plan formulation for multi-purpose projects, including flood risk management; familiarity with the "Planning Guidance Notebook" (ER-1105-100) and the Water Resources Council's Principals and Guidelines.
Environmental Resources	Integration of environmental evaluation and compliance requirements pursuant to the "Procedures for Implementing NEPA" (ER 200-2-2), national environmental statutes, applicable executive orders, and other Federal planning requirements, into the planning of Civil Works projects. Experience with ESA, fishery resources, and riparian habitat.
Cultural Resources	Archaeologist familiar with records searches, cultural resource survey methodology, area of potential effects, Section 106 of the National Historic Preservation Act, and state and Federal laws/executive orders pertaining to American Indian Tribes.
Hydrology and Hydraulics	Hydrologist or hydraulic engineer proficient with river hydraulics, GEO-RAS, HEC-RAS and associated one dimensional models, floodplain mapping, hydrologic statistics, sediment transport analysis, channel stability analysis, risk and uncertainty analysis, and a number of other closely associated technical subjects.

Discipline	Experience Needed for Review
Geotechnical Engineering	Geotechnical engineer familiar with sampling and laboratory testing, embankment stability and seepage analyses, planning analysis, and a number of other closely associated technical subjects.
Economics	Analysis of demographics, land use, recreation analysis, and flood damage assessments using HEC-FDA; use of IMPLAN model to address regional economic development associated with a project; discussion of other social effects (OSE) associated with flood risk, and well as OSE benefits from reduction in flood risk; economic justification of projects in accordance with current USACE policy for urban flood damages.
Civil Design	Civil engineer with experience in designing grading plans and levees, levee stability, and levee and bank-protection removal or modification, earthen channels, and concrete bypasses.
Cost Engineering [1]	Cost estimating specialist competent in cost estimating for both construction and ecosystem restoration using MCACES/Mii; working knowledge of construction and environmental restoration; capable of making professional determinations based on experience.
Real Estate/Lands	Real estate specialist familiar with real estate valuation, gross appraisal, utility relocations, takings and partial takings as needed for implementation of Civil Works projects.

[1]Coordination with the USACE Cost Engineering Directory of Expertise (DX) located in the Walla Walla District will be conducted as required by CECW-EC memo dated 10 Sep 2007 and CECW-CP memo
dated 19 Sep 2007.

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

(1) The team will use DrChecks to document the ATR process. The Project Planner will facilitate the creation of a project portfolio in the system to allow access by all PDT and ATRT members. An electronic version of the document, appendices, and any significant and relevant public comments shall be posted in Word format at: ftp://ftp.usace.army.mil/pub/ at least one business day prior to the start of the comment period.

(2) The PDT shall send the ATR Team Leader one hard copy (with color pages as applicable) of the document and appendices for each ATRT member such that the copies are received at least one business day prior to the start of the comment period.

(3) The PDT shall host an ATR kick-off meeting virtually to orient the ATRT during the first week of the comment period. If funds are not available for an on-site meeting, the PDT shall provide a presentation about the project, including photos of the site, for the team.

(4) The Project Planner shall inform the ATR Team Leader 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 posted at ftp://ftp.usace.army.mil/pub/ for use during back checking of the comments.

(6) Team members shall contact ATR members or leader as appropriate to seek clarification of a comment's intent or provide clarification of information in the report. Discussions shall occur outside of DrChecks but a summary of discussions may be provided in the system.

(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.

(8) The ATRT, the PDT, and the vertical team shall conduct an after action review (AAR) no later than 2 weeks after the policy guidance memo is received from HQUSACE for the for the AFB and draft reports.

D. Funding

(1) The PDT district shall provide labor funding by cross charge labor codes. Funding for travel, if needed, will be provided through government order. The Project Planner will work with the ATR Team Leader to ensure that adequate funding is available and is commensurate with the level of review needed. The current cost estimate for this review is $240,000. Any funding shortages will be negotiated on a case by case basis and in advance of a negative charge occurring. Coordination with the USACE Cost Engineering Directory of Expertise (DX) located in the Walla Walla District will be conducted as required by CECW-EC memo dated 10 Sep 2007 and CECW-CP memo dated 19 Sep 2007.

(2) The team leader shall provide organization codes for each team member and a responsible financial point of contact (CEFMS responsible employee) for creation of labor codes.

(3) Reviewers shall monitor individual labor code balances and alert the ATRT Project Planner to any possible funding shortages.

E. Timing and Schedule

(1) Throughout the development of this document, the team will conduct seamless review to ensure planning quality.

(2) The ATR will be convened early in the study and will participate in the Technical Review Strategy Session (TRSS) with the PDT and DST. The TRSS is to verify the basic plan of study and the rationale for key planning assumptions.

(3) The ATR will be conducted on the Feasibility Scoping Meeting documentation and assumptions; the Alternatives Review Conference; the Alternative Formulation Briefing documentation; the draft Feasibility Report; and if changes are made to the draft report, those changes will be reviewed in the Final Feasibility Report.

(4) The PDT will hold a "page-turn" session to review the draft report to ensure consistency across the disciplines and resolve any issues prior to the start of ITR. Writer/editor services will be performed on the draft prior to ITR as well.

(5) The ATR process for this document will follow the following timeline. Actual dates will be scheduled once the period draws closer. All products produced for these milestones will be reviewed, including those produced as in-kind services by the non-Federal sponsors.

ATR Timeline Task	Date
ATR Feasibility Scoping Meeting (FSM) Document	1 March 2010
ATR FSM Comments	1 April 2010
PDT FSM Responses	15 April 2010
Back check	30 April 2010
ATR Alternatives Review Conference (ARC) Material	1 March 2011
ATR ARC Comments	1 April 2011
PDT ARC Responses	15 April 2011
Back Check	30 April 2010
Alternative Formulation Briefing (AFB) Document	1 June 2011
ATR AFB Comments	1 July 2011
PDT AFB Responses	15 July 2011
Back check	31 July 2011
AFB Policy Guidance Memorandum (PGM) Issued	30 August 2011
ATR Draft Report	1 March 2012
ATR Draft Report Comments	1 April 2012
PDT Draft Report Responses	15 April 2012
Back Check	30 April 2012
ATR Certification Draft Report	1 May 2012
Public Review of Draft Report	15 May – 30 June 2012
ATR Final Report	1 September 2012
ATR Final Report Comments	1 October 2012
PDT Final Report Responses	15 October 2012
Back Check	31 October 2012
ATR Certification Final Report	1 November 2012
ATR After Action Review	15 November 2012
Final District Report Review	1 December 2012

1Required by the Major Subordinate Command.

F. Review

(1) ATRT responsibilities are as follows:

(a) Reviewers shall review conference material and the draft report to confirm that work was done in accordance with established professional principles, practices, codes, and criteria and for compliance with laws and policy. Comments on the report shall be submitted into DrChecks.

(b) Reviewers shall pay particular attention to one's discipline but may also comment on other aspects as appropriate. Reviewers that do not have any significant comments pertaining to their assigned discipline shall provide a comment stating this.
(c) Grammatical and editorial comments shall not be submitted into DrChecks. Comments should be submitted to the ATR Team Leader via electronic mail using tracked changes feature in the Word document or as a hard copy mark-up. The ATR Team Leader shall provide these comments to the Project Planner.
(d) 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

(e) The "Critical" comment flag in DrChecks shall not be used unless the comment is discussed with the ATR Team Leader and/or the Project Planner 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. Conference calls shall be used to resolve any conflicting comments and responses.

(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 Team Leader and, if not resolved by the ATR Team Leader, it should be brought to the attention of the planning chief who will need to sign the certification. ATRT members shall keep the ATR Team Leader informed of problematic comments. The vertical team will be informed of any policy variations or other issues that may cause concern during HQ review.

H. Certification

To fully document the ATR process, a statement of technical review will be prepared. Certification by the ATR Team Leader and the Project Planner 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.

I. Alternative Formulation Briefing (AFB)

The AFB for this project will occur after the majority of the ATR comments have been resolved. It is possible that the briefing will result in additional technical or policy comments from high level reviewers for resolution. The resolution of significant policy comments may result in major

changes to the document. Therefore, the ATR Team Leader will perform a brief review of the report to ensure that technical issues are resolved.

4. INDEPENDENT EXTERNAL PEER REVIEW PLAN

The San Francisquito Creek Feasibility Study will consider FRM and ER measures in the study area. 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, is preparing an EIS, or has significant economic, environmental and social effects to the nation, IEPR will be conducted.

The project report is not likely to contain influential scientific information or be a highly influential scientific assessment. The project is not likely to have significant economic, environmental, and social affects to the nation, nor is it likely to have significant interagency interest. However, due to the location of the potential project in a densely populated area the project presents public safety concerns, is considered to be highly complex. There has been and will continue to be a high level of public interest in the outcome of the study. The total cost of the project will be over $45 million and potentially over $100 million. An EIS is being prepared for this project. For all of the above reasons IEPR is required and will be conducted for this study.

IEPR is a project cost but is not cost shared. The IEPR panel review will be Federally funded. In-house costs associated with developing and procuring the IEPR panel contract as well as PDT response to IEPR comments will be cost shared expenses.

IEPR will be conducted by a minimum of 4 IEPR team members. Disciplines that are anticipated to undergo IEPR are hydrology, hydraulic and geotechnical engineering and feasibility-level design, environmental compliance, and economics. Work undertaken as part of these technical disciplines is considered to be highly complex due to the size of the study area as well as the existing complex water storage and conveyance system in the study area. Of these products that will undergo IEPR, all will be reviewed by the PDT and undergo DCQ and ATR prior to submittal for IEPR. This includes products that are produced by the non-Federal sponsors as in-kind services.

A. Project Magnitude. Due to the densely populated study area and the scale of the project the magnitude is considered to be high.

B. Project Risk. This project is considered to have high overall risk. The potential for failure is high because of the complex nature of the study area. It will be important to make sound planning assumptions in application of all the modeling and judgment and to do so will require application of multiple levels of review. Public and agency input will be sought in order to minimize the potential for controversy. Uncertainty of success of the project ultimately will be low to moderate – if the proposed review processes are implemented - because the methods used for evaluating the project are standard and the concept of implementing proposed project features is not innovative.

The greatest project risks will involve the level of protection provided by structural flood-risk management measures. The study will attempt to quantify residual risk associated with the alternative plans.

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

D. Products for Review. Interim products for hydrology, hydraulic and geotechnical design and economics will be provided before the draft report is released for public review. The full IEPR panel will receive the entire draft feasibility report, draft environmental impact statement and all technical appendixes concurrent with public and agency review. Public comments were received at a public scoping meeting held in April 26 and will be summarized in an appendix to the feasibility report and thus be made available too the IEPR panel. The final report to be submitted by the IEPR panel must be submitted to the PDT within 60 days of the conclusion of public review. A representative of the IEPR panel must attend any public meeting(s) held during public and agency review of the draft report. The San Francisco District will draft a response to the IEPR final report and process it through the vertical team for discussion at the Civil Works Review Board (CWRB). An IEPR panel member must attend the CWRB. Following the CWRB, the Corps will issue final response to the IEPR panel and notify the public.

E. Communication and Documentation. The communication plan for the IEPR is as follows:

(1) The panel will use DrChecks to document the IEPR process. The Project Planner will facilitate the creation of a project portfolio in the system to allow access by all PDT and a qualified Outside Eligible Organization (OEO). An electronic version of the document, appendices, and any significant and relevant public comments shall be posted in Word format at: ftp://ftp.usace.army.mil/pub/ at least one business day prior to the start of the comment period.

The OEO will compile the comments of the IEPR panelists, enter them into DrChecks, and forwards the comments to the District. The District will consult the PDT and outside sources as necessary to develop a proposed response to each panel comment. The District will enter the proposed response to DrChecks, and then return the proposed response to the panel. The panel will reply to the proposed response through the OEO, again using DrChecks. This final panel reply may or may not concur with the District's proposed response and the panels final response will indicate concurrence or briefly explain what issue is blocking concurrence. There will be no final closeout iteration. The District will consult the vertical team and outside resources to prepare an agency response to each comment. The initial panel comments, the District's proposed response, the panels reply to the District's proposed response, and the final agency response will all be tracked and archived in DrChecks for the administrative record. However, only the initial panel comments and the final agency responses will be posted. This process will continue to be refined as experience shows need for changes. This is specifically in accordance with the EC 1105-2-410 Frequently Asked Questions, dated 3 November 2008.

(2) The PDT shall send each IEPR panel member one hard copy (with color pages as applicable) of the document and appendices such that the copies are received at least one business day prior to the start of the comment period.

(3) The Project Planner shall inform the IEPR panel when all responses have been entered into DrChecks and conduct a briefing to summarize comment responses to highlight any areas of disagreement.

(4) A revised electronic version of the report and appendices with comments incorporated shall be posted at ftp://ftp.usace.army.mil/pub/ for use during back checking of the comments.

(5) PDT members shall contact IEPR panel members as appropriate to seek clarification of a comment's intent or provide clarification of information in the report. Discussions shall occur outside of DrChecks but a summary of discussions may be provided in the system.

(6) The IEPR panel shall produce a final Review Report to be provided to the PDT not later than 60 days after the close of the public and agency review of the draft report. This report shall be scoped as part of the effort to engage the IEPR panel. The San Francisco District will draft a response report to the IEPR final report and process it through the vertical team for discussion at the CWRB. Following direction at the CWRB and upon satisfactorily resolving any relevant follow-on actions, the Corps will finalize its response to the IEPR Review Report and will post both the Review Report and the Corps final responses to the public website.

F. Funding. The PCX for FRM will identify someone independent from the PDT to scope the IEPR and develop an Independent Government Estimate. The San Francisco District will provide funding to the IEPR panel.

5. PUBLIC AND AGENCY REVIEW

The public and agencies will have multiple opportunities to participate in this study. The earliest opportunity will be as part of the public scoping process during the first year of the study. Public review of the draft feasibility report will occur after issuance of the AFB policy guidance memo and concurrence by HQUSACE that the document is ready for public release. As such, public comments other than those provided at any public meetings held during the planning process will not be available to the review teams. Public review of the draft report will begin approximately 1 month after the completion of the ATR process and policy guidance memo. The period will last a minimum of 45 days as required for a Draft Environmental Impact Statement. One or more public workshops will be held during the public and agency review period. Comments received during the public comment period for the draft report could be provided to the IEPR team prior to completion of the final Review Report and to the ATRT before review of the final Decision Document. The public review of necessary state or Federal permits will also take place during this period. A formal State and Agency review will occur concurrently with the public review. However, it is anticipated that intensive coordination with these agencies will have occurred concurrent with the planning process. Upon completion of the review period, comments will be consolidated in a matrix and addressed, if needed. A comment resolution meeting will take place if needed to decide upon the best resolution of comments. A summary of the comments and resolutions will be included in the document. A plan for public participation will be developed early in the study which might identify informal as well as additional formal forums for participation in the study.

6. PLANNING CENTERS OF EXPERTISE COORDINATION

The primary PCX for this document is the National Flood Risk Management Center of Expertise, located at the South Pacific Division (CESPD). The Review Plan for this study will be submitted to the The Primary FRM-PCX for review and comment who will in turn coordinate with the secondary PCX for Ecosystem Restoration as necessary. The National Ecosystem Restoration Center of Expertise is located at the Mississippi Valley Division (CEMVD). IEPR is required for this study. As such, the primary PCX will be asked to manage the IEPR review. For ATR, the primary PCX is requested to nominate the ATR team as discussed in paragraph 3.b. above. The approved Review Plan will be posted to the San Francisco District public website. Any public comments on the Review Plan will be collected by the Office of Water Project Review (OWPR) and provided to the San Francisco District for resolution and incorporation if needed.

7. APPROVALS

The PDT will carry out the Review Plan as described. The Project Planner will submit the plan to the PDT District Planning Chief for endorsement of MSC 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 the San Francisco District Project Delivery Team Planning contact, Yvonne LeTellier, at (415) 503-6744, Yvonne.C.LeTellier@usace.army.mil, or to the Program Manager for the Planning Center of Expertise for Flood Risk Management, at (415) 503-6852.

REVIEW PLAN
SAN FRANCISQUITO CREEK FEASIBILITY STUDY
SAN FRANCISCO DISTRICT

APPENDIX A
STATEMENT OF TECHNICAL REVIEW
COMPLETION OF AGENCY TECHNICAL REVIEW
SAN FRANCISQUITO CREEK FEASIBILITY STUDY

The San Francisco District has completed the Technical Review of the San Francisquito Creek Feasibility Study. 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: assumptions, methods, procedures, and material used in analyses; alternatives evaluated; 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 multiple districts. All comments resulting from the ATR have been resolved.

_____ _____

Yvonne LeTellier, San Francisquito Creek Feasibility Study Date

Agency Technical Review Team

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.

_____ _____

Thomas R. Kendall
Chief, Planning Division Date

REVIEW PLAN
SAN FRANCISQUITO CREEK FEASIBILITY STUDY

SAN FRANCISCO DISTRICT

APPENDIX B

PRODUCT DELIVERY TEAM

Name	Discipline	Phone	Email
Yvonne LeTellier	Project Management	(415) 503-6744	Yvonne.C.LeTellier@usace.army.mil
	Plan Formulation		
	Environmental Planning		
	Cultural Resources		
	Economics		
	Geo-Sciences		
	Real Estate		

AGENCY TECHNICAL REVIEW TEAM

Name	Discipline	Phone	Email
	ATR Team Leader/Plan Formulation		
	Civil Design		
	Environmental Resources		
	Hydrology/Reservoir Operations		
	Hydraulics		
	Economics		
	Cost Engineering [1]		
	Real Estate/Lands		
	Cultural Resources		
	Geotechnical Engineering		

INDEPENDENT EXTERNAL PEER REVIEW PANEL

Name	Discipline	Phone	Email
	Hydrology		
	Hydraulic Design		
	Geotechnical Engineering		
	Economics		

VERTICAL TEAM

Name	Discipline	Phone	Email
	District Support Team Lead		
	Regional Integration Team		

PLANNING CENTER OF EXPERTISE

Name	Discipline	Phone	Email
	PCX for Flood Risk Management	(415) 503-6852	

Review Plan Checklist
For Decision Documents

Date: 4/28/2009
Originating District: San Francisco
Project/Study Title: San Francisquito Creek Feasibility Study
PWI #:
District POC: Yvonne LeTellier/.
PCX Reviewer: (MVN)

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.

1. Is the Review Plan (RP) a stand alone document?	EC 1105-2-410, Para 8a	Yes ☒ No ☐
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 Technical 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)?* **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.*	EC 1105-2-410, Appendix B, Para 4a	a. Yes ☒ No ☐ b. Yes ☒ No ☐ c. Yes ☒ No ☐ d. Yes ☒ No ☐ e. Yes ☒ No ☐ f. Yes ☒ No ☐ g. Yes ☒ No ☐ **Comments:** Reviewer: Checklist Requirements 1a though 1h were sufficiently addressed and comply with ER 1105-2-410. Add page numbers to RP and Correct typos (2)Agency Technical Review section change "is" to "as" in first sentence. In (4) Policy and Legal Compliance Review Section add "1" to EC 105-2-410 and in (7) Safety Assurance Review add "-" to EC 11052-410. Also revise

		wording from Flood Damage Reduction Study to FLood Risk Management to be consistent with current Corps terminology in 3rd paragraph of under Project Description, A. Decision Document, third paragraph. In Planniing Centers of Expertise Coordination Section change "National Flood Damage Reduction" to "Flood RIsk Management Center of Expertise." Page numbers were added. 2. Typos were corrected. 3. FDR was changed to FRM.
2. Is the RP detailed enough to assess the necessary level and focus of peer review?	EC 1105-2-410, Appendix B, Para 3a	Yes ☒ No ☐
a. Does it indicate which parts of the study will likely be challenging? 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? c. Does it indicate if the project/study will include an environmental impact statement (EIS)? *Is an EIS included? Yes ☒ No ☐* *If yes, IEPR is required.* d. Does it address if the project report is likely to contain influential scientific information or be a highly influential scientific assessment? *Is it likely? Yes ☐ No ☒* *If yes, IEPR is required.* e. Does it address if the project is likely to have significant economic, environmental,	EC 1105-2-410, Appendix B, Para 3a EC 1105-2-410, Appendix B, Para 3a EC 1105-2-410 Para 7c & 8f EC 1105-2-410, Appendix B, Para 4b EC 1105-2-410, Para 6c	a. Yes ☒ No ☐ b. Yes ☒ No ☐ c. Yes ☒ No ☐ d. Yes ☒ No ☐ e. Yes ☒ No ☐ **Comments:** Reviewer: Evaluation Requirements 2a through 2e were sufficiently addressed.

and social affects to the nation, such as (but not limited to):		
• more than negligible adverse impacts on scarce or unique cultural, historic, or tribal resources?	EC 1105-2-410 Para 8f	
• substantial adverse impacts on fish and wildlife species or their habitat, prior to implementation of mitigation?	EC 1105-2-410 Para 8f	
• 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?	EC 1105-2-410 Para 8f	
Is it likely? Yes ☐ No ☒ *If yes, IEPR is required.*		
f. Does it address if the project/study is likely to have significant interagency interest?	EC 1105-2-410, Para 6c	
Is it likely? Yes ☐ No ☒ *If yes, IEPR is required.*		f. Yes ☒ No ☐
g. Does it address if the project/study likely involves significant threat to human life (safety assurance)?	EC 1105-2-410, Appendix D, Para 1b	g. Yes ☒ No ☐ h. Yes ☒ No ☐
Is it likely? Yes ☐ No ☒ *If yes, IEPR is required.*		i. Yes ☒ No ☐ j. Yes ☒ No ☐
h. Does it provide an estimated total project cost? *What is the estimated cost: $100M* *(best current estimate; may be a range)* *Is it > $45 million? Yes ☒ No ☐* *If yes, IEPR is required.*	EC 1105-2-410, Appendix D, Para 1b	**Comments:** Reviewer: Checklist evaluation 2f through 2j were sufficiently addressed. The estimated cost of the project is over $45m and IEPR is required.
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?	EC 1105-2-410, Appendix D, Para 1b	

Is it likely? Yes ☐ No ☒ *If yes, IEPR is required.* 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? *Is it likely? Yes ☐ No ☒* *If yes, IEPR is required.*	EC 1105-2-410, Appendix D, Para 1b	
3. Does the RP define the appropriate level of peer review for the project/study?	EC 1105-2-410, Para 8a	Yes ☒ No ☐
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?	EC 1105-2-410, Para 7a	a. Yes ☒ No ☐
b. Does it state that ATR will be conducted or managed by the lead PCX?	EC 1105-2-410, Appendix D, Para 3a	b. Yes ☒ No ☐ c. Yes ☒ No ☐
c. Does it state whether IEPR will be performed? *Will IEPR be performed? Yes ☒ No ☐*	EC 1105-2-410, Appendix B, Para 4b	d. Yes ☒ No ☐ e. Yes ☒ No ☐ n/a ☐
d. Does it provide a defensible rationale for the decision on IEPR?		**Comments:** Reviewer: Checklist evaluation requirements 3a through 3e were addressed in IEPR Section.
e. Does it state that IEPR will be managed by an Outside Eligible Organization, external to the Corps of Engineers?	EC 1105-2-410, Para 7c	
4. Does the RP explain how ATR will be accomplished?	EC 1105-2-410, Appendix B, Para 4l	Yes ☒ No ☐
a. Does it identify the anticipated number of reviewers?	EC 1105-2-410, Appendix B, Para 4f	a. Yes ☒ No ☐ b. Yes ☒ No ☐
b. Does it provide a succinct description of the primary disciplines or expertise needed for the review (not simply a list of disciplines)?	EC 1105-2-410, Appendix B, Para 4g	c. Yes ☒ No ☐ d. Yes ☒ No ☐ e. Yes ☒ No ☐
c. Does it indicate that ATR team members will be from outside the home district?	EC 1105-2-410, Para 7b	f. Yes ☒ No ☐ n/a ☐

d. Does it indicate that the ATR team leader will be from outside the home MSC? 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/MSC? f. If the reviewers are listed by name, does the RP describe the qualifications and years of relevant experience of the ATR team members?* **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.*	EC 1105-2-410, Para 7b EC 1105-2-410, Appendix B, Para 4k(1) EC 1105-2-410, Appendix B, Para 4k(1)	**Comments:** Reviewer: Recommend adding more detail to RP on the areas of a discipline or expertise that is needed for the ATR review. A listing of discuplines is not sufficient relative to checklist evaluation 4b. What areas of engineering expertise such as levee design or concrete channel development etc. This detail will help PCX to focus the review resources for the PCX. table describing ATR discipline expertise was added to section 3 of the RP.
5. Does the RP explain how IEPR will be accomplished?	EC 1105-2-410, Appendix B, Para 4k & Appendix D	**Yes** ☒ **No** ☐ **n/a** ☐
a. Does it identify the anticipated number of reviewers? b. Does it provide a succinct description of the primary disciplines or expertise needed for the review (not simply a list of disciplines)? 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? 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?	EC 1105-2-410, Appendix B, Para 4f EC 1105-2-410, Appendix B, Para 4g EC 1105-2-410, Appendix B, Para 4k(1) & Appendix D, Para 2a EC 1105-2-410, Para 7c	a. Yes ☒ No ☐ b. Yes ☒ No ☐ c. Yes ☒ No ☐ d. Yes ☒ No ☐ **Comments:** Reviewer: Recommend adding specific areas within disciplines to focus review resources rather than just a listing of disciplines. The number of reviewers has been added. More information regarding IEPR disciplines will be available at a later date and updates will be provided to FRM-PCX.

6. Does the RP address peer review of sponsor in-kind contributions?		Yes ☒ No ☐
a. Does the RP list the expected in-kind contributions to be provided by the sponsor? b. Does it explain how peer review will be accomplished for those in-kind contributions?	EC 1105-2-410, Appendix B, Para 4j	a. Yes ☒ No ☐ b. Yes ☒ No ☐ n/a ☐ **Comments:** Reviewer: Include specific in-kind contributions to be provided by sponsor when available. pecific in-kind services to be provided by sponsor will be communicated to PCX, once known.
7. Does the RP address how the peer review will be documented?		Yes ☒ No ☐
a. Does the RP address the requirement to document ATR and IEPR comments using DrChecks?	EC 1105-2-410, Para 8g(1)	a. Yes ☒ No ☐
b. Does the RP explain how the IEPR will be documented in a Review Report?	EC1105-2-410, Appendix B, Para 4k(13)(b)	b. Yes ☒ No ☐ n/a ☐ c. Yes ☒ No ☐ n/a ☐
c. Does the RP document how written responses to the IEPR Review Report will be prepared?	EC 1105-2-410, Appendix B, Para 4l	
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?	EC 1105-2-410, Para 8g(2) & Appendix B, Para 4l	d. Yes ☒ No ☐ n/a ☐ **Comments:** Reviewer: Checklist Requirements 7a through 7d, documentation of the peer review, are sufficiently addressed in the ATR and IEPR sections of the RP.
8. Does the RP address Policy Compliance and Legal Review?	EC 1105-2-410, Para 7d	Yes ☒ No ☐ **Comments:** Reviewer: Checklist Requirements for Policy Compliance and Legal Review are sufficiently addressed in

		the Section 1B(4) of the RP.
9. Does the RP present the tasks, timing and sequence (including deferrals), and costs of reviews?	EC 1105-2-410, Appendix B, Para 4c & Appendix C, Para 3d	Yes ☒ No ☐
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? b. Does it include interim ATR reviews for key technical products? c. Does it present the timing and sequencing for IEPR? d. Does it include cost estimates for the peer reviews?	EC 1105-2-410, Appendix C, Para 3g EC 1105-2-410, Appendix C, Para 3g	a. Yes ☒ No ☐ b. Yes ☒ No ☐ c. Yes ☒ No ☐ n/a ☐ d. Yes ☒ No ☐ **Comments:** Reviewer: Checklist Requirements 9a through 9d are suffficiently addressed in the RP. A Schedule Timeline table is shown in the ATR and IEPR Sections of the RP. Recommend adding that ATR should be completed before initiating IEPR to RP. The RP currently includes the sentence, " Of these products that will undergo IEPR, all will be reviewed by the PDT and undergo DCQ and ATR prior to submittal for IEPR. This includes products that are produced by the non-Federal sponsors as in-kind services" (p12 Section 4, para 4). Please advise if clarification is required.
10. Does the RP indicate the study will address Safety Assurance factors? Factors to be considered include: • Where failure leads to significant threat to	EC 1105-2-410, Para 2 & Appendix D, Para 1c	**Yes ☒ No ☐ n/a ☐** **Comments:** Reviewer: Checklist Requirements for Safety Assurance factors are sufficiently

human life • Novel methods\complexity\ precedent-setting models\policy changing conclusions • Innovative materials or techniques • Design lacks redundancy, resiliency of robustness • Unique construction sequence or acquisition plans • Reduced\overlapping design construction schedule		addressed in RP.
11. Does the RP address model certification requirements?	EC 1105-2-407	Yes ☒ No ☐
a. Does it list the models and data anticipated to be used in developing recommendations (including mitigation models)? b. Does it indicate the certification/approval status of those models and if certification or approval of any model(s) will be needed? c. If needed, does the RP propose the appropriate level of certification/approval for the model(s) and how it will be accomplished?	EC 1105-2-410, Appendix B, Para 4i	a. Yes ☒ No ☐ b. Yes ☒ No ☐ c. Yes ☒ No ☐ n/a ☐ **Comments:** Reviewer: Checklist Requirements 11a through 11c are addressed in Model Certification Section of the RP. Recommend adding that HEC-FDA program will be used to address nonstructural measures. Also, include in RP use of possible environmental impact or mitigation models such as HEP HSI, HGM, etc. if considered. 1. Added sentence to Models section indicating HEC-FDA will address non-structural measures. 2. Added sentence indicating models HEP and HGM may be used (P7).
12. Does the RP address opportunities for public participation?		Yes ☒ No ☐
a. Does it indicate how and when there will	EC 1105-2-410,	a. Yes ☒ No ☐

be opportunities for public comment on the decision document? b. Does it indicate when significant and relevant public comments will be provided to reviewers before they conduct their review? c. Does it address whether the public, including scientific or professional societies, will be asked to nominate potential external peer reviewers? d. Does the RP list points of contact at the home district and the lead PCX for inquiries about the RP?	Appendix B, Para 4d EC 1105-2-410, Appendix B, Para 4e EC 1105-2-410, Appendix B, Para 4h EC 1105-2-410, Appendix B, Para 4a	b. Yes ☒ No ☐ c. Yes ☒ No ☐ d. Yes ☒ No ☐ **Comments:** Reviewer: Section 5, Public and Agency Review, addresses opportunities for public participation evaluation requirements 12a through 12d. The point of contact for home district and PCX are included in Section 8.
13. Does the RP address coordination with the appropriate Planning Centers of Expertise?	EC 1105-2-410, Para 8a	Yes ☒ No ☐
a. Does it state if the project is single or multi-purpose? Single ☐ Multi ☒ List purposes: FRM/ER b. Does it identify the lead PCX for peer review? Lead PCX: **FRM** c. If multi-purpose, has the lead PCX coordinated the review of the RP with the other PCXs as appropriate?	EC 1105-2-410, Appendix D, Para 3c	a. Yes ☒ No ☐ b. Yes ☒ No ☐ c. Yes ☒ No ☐ n/a ☐ **Comments:** Reviewer: Coordination with appropriate PCX is sufficiently addressed in RP. Multi-purpose with FRM as lead and must coordinate with other PCXs.
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?	EC 1105-2-410, Appendix D, Para 3	Yes ☒ No ☐
a. Does it state if the decision document will require Congressional authorization? b. If Congressional authorization is required, does it state that coordination will occur with the Cost Engineering DX?		a. Yes ☒ No ☐ b. Yes ☒ No ☐ n/a ☐ **Comments:** Reviewer: Checklist requirements 14a and 14b are not addressed in RP. Recommend adding to

		text of RP. Added text regarding coordination with DX (P9, Section 3D, para 1). Congressional authorization is addressed at the beginning of the RP.
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: a. Is a request from a State Governor or the head of a Federal or state agency to conduct IEPR likely? b. Is the home district expecting to submit a waiver to exclude the project study from IEPR? 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)? d. Are there additional Peer Review needs unique to the project study?	EC 1105-2-410, Appendix D, Para 1b EC 1105-2-410, Appendix D, Para 1d	**Comments:** Reviewer: VE study is mentioned with team members also being recommended as part of ATR review team.
Detailed Comments and Backcheck: Reviewer: Excellent RP was prepared. IEPR is required and a defensible rationale was presented. The complexity of the study and the supporting disciplines was also addressed. Additonal detail (succinct description of vital disciplines and specific experience within discipline) should be provided in the RP to assist the PCX in allocating and focusing review resources for ATR and IEPR. Reviewer: The initial comments were sufficiently addressed and incorporated into the revised RP.		

SAN FRANCISQUITO CREEK
FEASIBILITY STUDY

CESPD SUPPLEMENTAL REVIEW PLAN CHECKLIST

8 MAY 2009

Approval of RP(s) rests with Division Commanders, but management and coordination with the appropriate Planning Center of Expertise. The Flood Risk Management PCX has developed a review checklist for its RP coordination and management responsibilities. Below is a regional supplemental checklist identifying the regional quality management requirements from CESPD's QMP, Appendix C, Planning.

Following are review process principles from EC 1105-2-410, Review of Decision Documents:

- Reviews significantly improve product quality
- Peer review is concurrent with product development
- Agency technical reviews by another district will be performed on all products
- ATR teams should be chaired by another Division
- Civil Works policy reviews must be consistent

CHECKLIST

1. Is there a Technical Review Strategy Session identified early in the study process? (See Appendix C paragraph 8.2,)
Response: TRSS is addressed in the Review Plan (RP) under Section 3.E.-Timing and Schedule

2. Are there any potential Continuing Authority Program (CAP) "spinoffs" identified, and the appropriate QCP identified for them?
Response: No potential CAP projects have been identified to date.

3. Are the review costs identified? for District Quality Control (DCQ), ATR, and Independent External Peer Review (IEPR)?
Response: ATR cost estimate of $240,000 is included RP. DQC cost estimate is included in the PMP. IEPR has not been scope out nor has a cost estimate been developed; this will be accomplished as soon as practicable.

4. Does the RP identify seamless technical review (8.4) including supervisory oversight of the technical products? (8.5)
Response: Yes, this type of review is considered as a component of DQC.

5. Does the RP identify the recommended review comment content and structure? (8.5.4)
Response: Yes.

6. The RP should encourage face-to-face resolution of issues between PDT and reviewers. (8.5.5)
Response: The resolution process encourages face-to-face resolution of issues between the PDT and reviewers and is described in the Communication section (Section C) of the Agency Technical Review Plan (Section 3) and in Section 4.E for IEPR. If the reviewers are at many locations, methods including email, VTC, and conference calls will be used by team members to resolve issues between the PDT and reviewers.

7. And if issues remain, does the RP must identify an appropriate dispute resolution process? (8.6)
Response: Yes, in Section 3.G for ATR and 4.E for IEPR.

8. The RP must require documentation of all the significant decision and leave a clear audit trail. (8.5.6)
Response: Included in the RP are the methods for documentation on significant decisions for review related issues. Issues not related to review are not discussed in the RP.

9. Does the RP identify all the requirements for technical certifications? (8.5.7)
Response: Yes.

10. Does the RP identify the requirement that without-project hydrology is certified at the Feasibility Scoping Meeting? (8.5.8)
Response: Yes.

11. Does the RP fully address products developed by contractors? (8.10)
Response: Yes. Section 2.F (Project Delivery Team) indicates that all in-kind work products will undergo review by the PDT for a determination of adequacy, be reviewed under DQC, and that some products will also undergo IEPR.

12. Is the need for a VE study identified and incorporated into the review process subsequent to the feasibility scoping meeting? (8.11)
Response: The VE study requirement is discussed in the PMP.

13. Does the RP include a Feasibility Alternative Review Milestone, where CESPD buy-in to the recommended plan is obtained. (12.1)
Response: Yes, the "ATR Timeline Task" table in Section 3.E includes a preliminary target date for the Alternative Review Conference.

14. The RP should identify the final public meeting milestone. (See Appendix C, Enclosure 1, SPD Milestones)
Response: The "ATR Timeline Task" table in Section 3.E includes a preliminary target date for initiating Public Review of the Draft Report. The final public meeting will occur sometime during this review period. Section 5 of the RP describes the public review timing and process.

15. Does the RP identify the report approval process and if there is a delegated approval authority?

Response: The report approval process for the study is discussed Section 1.B.4 (Policy and Legal Compliance Review). There is not a delegated approval authority for this study. The review plan approval process is indicated in Section 7 (Approvals).