



REPLY TO
ATTENTION OF

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

M. Jan 2013

CESPD-PDC

MEMORANDUM FOR Commander San Francisco District, US Army Corps of Engineers, ATTN:
CESPN-PM-C (Mr. Arden Sansome)

Subject: Review Plan Approval for the San Pablo Bay Watershed Restoration Study

1. Reference. Ecosystem Restoration Planning Center of Expertise (ECO-PCX) Memo Subject: San Pablo Bay Watershed Restoration Study, San Francisco District, Ecosystem Restoration Planning Center of Expertise Recommendation for Review Plan Approval (Encl 1).
2. The ECO-PCX has reviewed the review plan, finds it has been prepared in accordance with EC 1165-2-209 and recommends approval (reference above). The updated review plan has also been coordinated with the San Francisco District Support Team (Encl 2).
3. The Review Plan does not include independent external peer review.
4. I hereby approve this Review Plan, which is subject to change as circumstances require, consistent with project development under the Project Management Business Process. Subsequent revisions to this Review Plan or its execution will require new written approval from this office.
5. For any additional information or assistance, contact Paul Devitt, District Support Team Lead, (415) 503-6558, Paul.A.Devitt@usace.army.mil

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

Encl


MICHAEL C. WEHR
BG, USA
Commanding



DEPARTMENT OF THE ARMY
MISSISSIPPI VALLEY DIVISION, CORPS OF ENGINEERS
P.O. BOX 80
VICKSBURG, MISSISSIPPI 39181-0080

REPLY TO
ATTENTION OF:

CEMVD-PD-N

14 December 2012

MEMORANDUM FOR Commander, South Pacific Division
ATTN: (Clark Frentzen)

SUBJECT: San Pablo Bay Watershed Restoration Study, San Francisco District, Ecosystem Restoration Planning Center of Expertise Recommendation for Review Plan Approval

1. References:

- a. Engineering Circular (EC) 1165-2-209, Water Resources Policies and Authorities, CIVIL WORKS REVIEW POLICY, Change 1, 31 January 2012
- b. EC 1105-2-412, Assuring Quality of Planning Models, 31 March 2011
- c. Engineering Regulation (ER) 1110-2-12, Quality Management, 30 Sep 2006

2. The Ecosystem Restoration Planning Center of Expertise (ECO-PCX) has reviewed the enclosed Review Plan (RP). It complies with all applicable policy and provides an adequate Agency Technical Review (ATR) of the plan formulation, engineering, and environmental analyses, and other aspects of plan development.

3. The study is a Corps-led watershed effort that will not evaluate specific projects for Corps construction. As such, Independent External Peer Review (IEPR) and an exclusion request are not required. However, the vertical team should determine if a single IEPR for the watershed effort is more cost effective than potential multiple IEPRs on spinoff feasibility efforts.

4. The study proposes to use Habitat Suitability Index (HSI) models to evaluate project outputs, but specific HSI models have not been selected at this time. If selected HSI models are on the list of those approved for use by HQ Memorandum Policy Guidance on Certification of Ecosystem Output Models (Aug 2007), additional model coordination is not required. If other HSI models are proposed for use, the District should submit model documentation to the ECO-PCX and request project-specific approval for use as soon as possible.

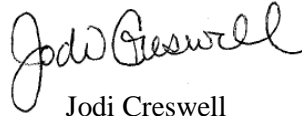
5. The ECO-PCX concurs with the RP. Upon approval by the MSC Commander, please provide the approved RP, the MSC Commander's approval memorandum, and the link to the District posting of the RP to Jodi Creswell. When substantive revisions are made to the RP, a revised RP should be provided to the ECO-PCX for review. Non-substantive changes do not require further PCX review.

6. Thank you for the opportunity to assist in the preparation of the RP. We look forward to working with you on ATR. Please keep us informed of the schedule for the effort.

CEMVD-PD-N

14 December 2012

SUBJECT: San Pablo Bay Watershed Restoration Study, San Francisco District, Ecosystem Restoration
Planning Center of Expertise Recommendation for Review Plan Approval



Jodi Creswell
Operational Director,
National Ecosystem Planning
Center of Expertise

Enclosures (1)

CF:

CEMVD (Wilbanks, Smith, Creswell)

CESPD (Tejeda, Devitt)

CESPN (O'Halloran, Rippey)

CEMVP (Knollenberg, Richards)

CENWS (Scuderi)



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

REPLY TO
ATTENTION OF

CESPN-ET-PF

14 December 2012


MEMORANDUM FOR: South Pacific Division District Support Team, ATTN: CESPD-PDC,
(Devitt)

SUBJECT: Request for South Pacific Division Approval of the San Pablo Bay Watershed
Restoration Study Review Plan

1. In accordance with EC 1165-2-209, Civil Works Review Policy, dated 31 January 2010, the San Pablo Bay Watershed Restoration Study Review Plan is submitted to the MSC for review and approval by the Commander, South Pacific Division.
2. The Review Plan is in compliance with the above Engineering Circular and has been coordinated with the applicable Planning Centers of Expertise (PCX). The PCX for Ecosystem Restoration is designated as the lead PCX. The PCX concurrence memorandum was received on 14 December 2012 and is provided as Enclosure 2. The SPD Review Plan Checklist is provided as Enclosure 3.
3. Please address any questions or concerns about the Review Plan to the Project Planner, Jaime O'Halloran, at (415) 503-6738, or jaimel.o'halloran@usace.army.mil. Upon approval, please provide notification to this office to facilitate the posting of the Review Plan to the San Francisco District public website. The South Pacific Division District Support Team will be notified when the Review Plan has been posted on the public website.

3 Encls

1. San Pablo Bay Draft Review Plan
2. PCX Concurrence Memorandum
3. SPD Review Plan Checklist

FOR

LYN GILLESPIE, P.E.
Chief, Engineering and Technical Services
Division

REVIEW PLAN

San Pablo Bay Watershed Restoration Study Other Work Products

San Francisco District



South Pacific Division Approval Date: Pending
Last Revision Date: 31 December 2012



**US Army Corps
of Engineers®**

REVIEW PLAN

San Pablo Bay Watershed Report

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1. PURPOSE AND REQUIREMENTS

a. Purpose.

This Review Plan defines the scope and level of quality management activities for the San Pablo Bay Watershed Restoration Study, Watershed Report. Specifically, this Review Plan describes the level of review required for the work products specified in section 4.

b. References

- (1) Engineer Circular (EC) 1165-2-209, Civil Works Review Policy, 31 Jan 2010
- (2) EC 1105-2-411, Watershed Plans, 15 January 2010
- (3) EC 1105-2-412, Assuring Quality of Planning Models, 31 Mar 2011
- (4) Engineer Regulation (ER) 1110-1-12, Engineering and Design Quality Management, 21 Jul 2006
- (5) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007
- (6) Flood Control Act of 1962, Section 209
- (7) Water Resources Development Act (WRDA) 1996, Section 503
- (8) WRDA 2007, Section 5053
- (9) CESP-D-R 1110-1-8, Quality Management Plan; 30 December 2002
- (10) 02500-SPD, South Pacific Division Preparation and Approval of Review Plans, 15 July 2010
- (11) Project Management Plan (PMP) Update for the San Pablo Bay Watershed Report dated: To Be Determined

c. Requirements.

This review plan was developed in accordance with EC 1165-2-209, which establishes an accountable, comprehensive, life-cycle review strategy for Civil Works products by providing a seamless process for review of all Civil Works projects from initial planning through design, construction, and operation, maintenance, repair, replacement and rehabilitation (OMRR&R). The EC outlines four general levels of review: District Quality Control/Quality Assurance (DQC), Agency Technical Review (ATR), Independent External Peer Review (IEPR), and Policy and Legal Compliance Review. In addition to these levels of review, these work products are subject to cost engineering review and certification (per EC 1165-2-209) and planning model certification/approval (per EC 1105-2-412).

2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

The RMO is responsible for managing the overall peer review effort described in this Review Plan. The RMO is typically either a Planning Center of Expertise (PCX) or the Risk Management Center (RMC), depending on the primary purpose of the work products. Watershed study work products are neither decision nor implementation documents, but rather fall under the category of "other work products". However, these work products are most similar to decision documents and therefore should be reviewed by the appropriate PCX. The RMO for this Review Plan is the National Ecosystem Planning Center of Expertise (ECO-PCX). This Review Plan is being coordinated with the ECO-PCX point of contact for the South Pacific Division. The ECO-PCX will also coordinate review with the Flood Risk Management Planning Center of Expertise.

No feasibility level cost estimates will be prepared during this watershed assessment. The RMO will not need to coordinate with the Cost Engineering Directory of Expertise (DX) to conduct ATR of cost estimates, construction schedules, and contingencies.

3. STUDY INFORMATION

a. Watershed Authorities and Partnership.

The San Pablo Bay Watershed Restoration Study was originally authorized in Section 209 of the Flood Control Act of 1962, then reauthorized by Section 503 of the Water Resources and Development Act of 1996 (WRDA 1996). The Study is authorized to, “provide technical, planning, and design assistance to non-Federal interests for carrying out watershed management, restoration, and development projects” in the San Pablo Bay Watershed (WRDA 1996). The Study is a partnership with the California State Coastal Conservancy (the non-Federal sponsor [NFS]), in collaboration with local government agencies, community organizations, and individuals, to promote watershed-based management and ecosystem restoration.

b. Study Description.

The San Pablo Bay watershed study area is located in the northern section of the San Francisco Bay Area between Suisun Bay, to the east, and Central San Francisco Bay to the southwest (see Figure 1). The study area encompasses areas within Marin, Sonoma, Napa, Solano and Contra Costa Counties. The 2,330 square kilometer watershed is part of the San Francisco Bay-Delta Estuary; one of the most important ecological units on the west coast of North America. The Estuary affords the largest tidal wetland habitat on the West Coast of the United States, providing critical habitat for endangered and endemic species, including critical habitat for waterfowl along the Pacific Flyway with essential habitat for several endemic, endangered species. Urban and agricultural development has contributed to a decline in ecosystem function and an overall loss of biodiversity within the San Pablo Bay watershed. As a result, many unique opportunities exist to restore streams, rivers, and wetlands in this region.

The drainage areas of the major streams and creeks that flow into San Pablo Bay have established the boundary of the watershed. The watershed’s furthest upstream point to the north is Mount St. Helena. To the east, the boundary includes the Howell Mountains in Napa and Solano Counties, the Carquinez Strait, and the Franklin Ridge, the Briones Hills, and the Berkeley Hills in Contra Costa County. The western border is defined by a series of small mountains and hilltops including: Loma Alta and Red Hill in Marin County; Meacham Hill, Sonoma Mountain, Bennet Mountain, and Mt. Hood in Sonoma County; and the Mayacmas Mountains along the northern border of Napa and Sonoma Counties. San Pablo Bay flows into the central portion of San Francisco Bay (Central Bay) at Point San Pedro in Marin County and Point San Pablo in Contra Costa County.

Unique features in the San Pablo Bay watershed are the large tracts of historical baylands – diked and tidal, particularly along the perimeter of the Estuary and adjacent to the Sonoma Creek, the Petaluma River, and the Napa River. Some of these diked baylands include important seasonal wetlands. Approximately one-half of the diked historic baylands are publicly owned. Public ownership is principally through wildlife agencies, military agencies, and special purpose districts such as flood control districts.

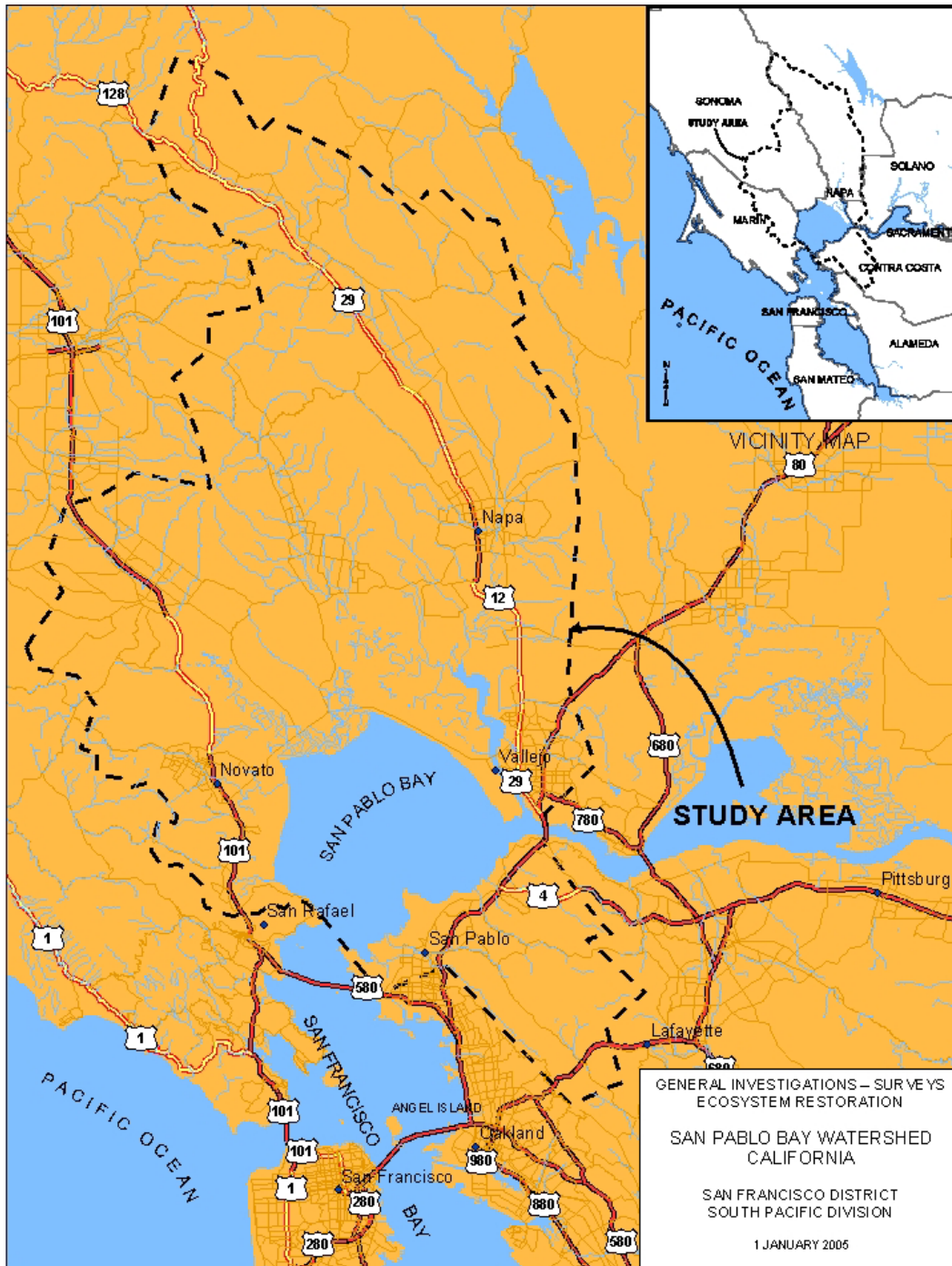


Figure 1. The San Pablo Bay Watershed Study Area

c. Factors Affecting the Scope and Level of Review.

The remaining work products present a low risk in completion of the study and a low risk to the Corps, as the study does not propose decisions on future Federal investments for project implementation. The development of the watershed study is anticipated to be challenging and beneficial, but it will not be novel, controversial or precedent-setting. The main challenge of the watershed study will be to develop criteria to prioritize and rank potential water resources project, primarily for ecosystem restoration, and

for potential implementation under separate related USACE authorities (e.g., continuing authorities program (CAP), Section 5053, WRDA 2007, etc.). Ranking criteria will likely include environmental, ecological, social and policy considerations, and will also have to weigh factors such as potential project cost and potential for identifying a viable NFS.

The study will not necessarily lead to USACE action. Any flood risk management components of the plan will require an individual assessment on whether there is a significant threat to human life associated with the proposed project. Any proposed flood risk management project will require additional authority and feasibility study prior to implementation.

d. In-Kind Contributions.

The NFS has submitted in-kind work to meet their portion of the study's cost-share. These NFS in-kind contributions will be evaluated for credit eligibility.

e. Project Delivery Team (PDT).

The PDT is primarily comprised of team members from the San Francisco District and NFS directly involved in the development of the remaining "other" work products. The PDT may also include supplemental contractor support. Individual contact information and disciplines are presented in Attachment 1

f. Vertical Team.

The Vertical Team includes the management of the San Francisco District, the District Support Team (DST) of the South Pacific Division, and the Regional Integration Team (RIT), HQUSACE staff. Specific points of contact for the Vertical Team can be found in Attachment 1.

4. WORK PRODUCTS

The Study is scheduled for completion (provided sufficient funds) by the end of fiscal year 2013. There are two remaining work products that must be completed:

- San Pablo Bay Watershed White Paper
- San Pablo Bay Watershed Report (Watershed Report)¹

a. San Pablo Bay Watershed White Paper.

The White Paper outlines a strategy for completing the Watershed Report with limited funding (~\$200K) and under the existing study authority (Section 503 of WRDA 1996) in conjunction with the development of implementation guidance for Section 5053 of WRDA 2007. The Watershed Report will also focus on identification of potential ecosystem restoration as well as flood risk management projects for implementation via separate authorizations (e.g., Section 5053 of WRDA 2007, Section 205 CAP, Section 206 CAP, etc.).

¹ The Watershed Report includes an analysis of the Novato Creek sub-watershed, which shows the most promise for near-term solutions, and is specifically mentioned in Section 5053 of WRDA 2007.

b. San Pablo Bay Watershed Restoration Report.

A Watershed Report is being developed to document all of the findings of the San Pablo Bay Watershed Restoration Study. The Watershed Report will identify multi-purpose project proposals (with an emphasis on restoration measures), that have been submitted by stakeholders. The Report will include criteria to rank potential ecosystem restoration projects and will recommend critical ecosystem restoration projects for feasibility-level study and implementation, upon receipt of construction general (CG) appropriations under Section 5053 of WRDA 2007. While the Study is consistent with the spirit and intent of Reference (2), established criteria for Watershed Plans, it cannot fully meet those requirements due to the cost of data collection and level of analysis involved that would be required (cost estimated at \$6.5M). Current funding levels are not sufficient to support full compliance and the NFS has stated that they will not be able to cost-share completion of a policy compliant Watershed Report. The final Watershed Report may be submitted to Congress, pending receipt of HQUSACE approved Implementation Guidance for Section 5053 of WRDA 2007. It is noted that this Watershed Study is not an implementation feasibility study that will lead to a Chief of Engineers Report or Congressional project authorization for construction.

5. DISTRICT QUALITY CONTROL (DQC)

All work products shall undergo DQC. DQC is a District internal review process of basic science and engineering work products focused on fulfilling the project quality requirements defined in the Project Management Plan (PMP). Basic quality control tools include a Quality Management Plan (QMP) providing for seamless review, quality checks and reviews, supervisory reviews, and Project Delivery Team (PDT) reviews, including input from the NFS.

DQC will be managed by 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. 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. A DQC certificate (see attachment 2) will be provided to the ATR team that documents specific and general findings from the DQC activity. Additional pages shall be enclosed with the DQC certificate as necessary to provide complete DQC documentation to the ATR team. A DQC certificate will be issued separately for each work product

6. AGENCY TECHNICAL REVIEW (ATR)

The White Paper is considered an “other work product” and will undergo DQC, but will not be subject to ATR. The Watershed Report will undergo ATR with the objective of ensuring consistency with established criteria, guidance, procedures, and policy. The ATR will assess whether the analyses presented are technically correct and comply with published USACE guidance, and that the document explains the analyses and results in a reasonably clear manner for the public and decision makers. ATR is managed within USACE by the designated RMO and is conducted by a qualified team from outside the San Francisco District that is not involved in the day-to-day production of the project/product. ATR teams will be comprised of senior USACE personnel and may be supplemented by outside experts as appropriate. The ATR team lead will be from outside the home Major Subordinate Command (MSC).

a. Risk Informed Decisions for ATR.

Following the questions and guidance given in Section 15b of EC 1165-2-209 a risk informed decision has been made that all work products, except for the White Paper, will undergo ATR.

b. Required ATR Team Expertise.

The Watershed Report will undergo ATR. It is anticipated that the ATR team will include up to 7 reviewers. The table below outlines the expertise ATR team members need to evaluate the work products.

ATR Team Members/Disciplines	Expertise Required
ATR Lead	The ATR lead should be a senior professional with extensive experience in plan formulation for multi-purpose projects and should have experience conducting ATR. Familiarity with the <i>“Planning Guidance Notebook”</i> (ER-1105-100), the Water Resources Council’s Principals and Guidelines, and EC 1105-2-411, Watershed Plans, dated 15 January 2010 is necessary.
Plan Formulation	The Plan Formulation reviewer should be a senior water resources planner with experience in watershed planning Familiarity with the <i>“Planning Guidance Notebook”</i> (ER-1105-100), the Water Resources Council’s Principals and Guidelines, and EC 1105-2-411, Watershed Plans, dated 15 January 2010 is necessary.
Economics	The economics reviewer should have experience in watershed planning, Cost-Effectiveness Analysis and Incremental Cost Analysis, economic analysis of recreation features, NED analysis, NED/NER trade-off analysis, HEC-FDA, and non-structural flood-risk management.
Environmental Resources	The Environmental Resources reviewer should be a senior staff member with experience in watershed planning. The reviewer should have extensive knowledge of the integration of environmental evaluation and compliance requirements pursuant to the <i>“Procedures for Implementing NEPA”</i> (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, riparian habitat, and dredged material management, and HEP, EFDC models.
Water Resources	A senior hydraulic engineer familiar with the hydrology of the San Francisco Bay area, fish passage structures, flood risk management structures, and has direct work experience with coastal and fluvial ecosystem restoration projects in the San Francisco Bay area. Engineer will have experience with HEC-FDA, HEC-HMS, HEC-RAS, HEC-6, EFDC
Geo-Sciences	A senior geologist or geotechnical engineer familiar with San Francisco Bay geology and soils who has direct work experience with coastal and fluvial ecosystem restoration projects in the San Francisco Bay area.
Cost Engineering	Cost estimating review will be conducted by the Civil Works Cost

ATR Team Members/Disciplines	Expertise Required
	Engineering Directorate of Engineering at the Walla Walla District if required as appropriate.

c. Documentation and Certification of ATR.

DrChecks review software will be used to document all ATR comments, responses and associated resolutions accomplished throughout the review process. 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 fact. 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 or Engineer first. Comments should be limited to those that are required to ensure adequacy of the product. 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.

The four key parts of a quality review comment will normally include:

- (1) The review concern – identify the product’s information deficiency or incorrect application of policy, guidance, or procedures;
- (2) The basis for the concern – cite the appropriate law, policy, guidance, or procedure that has not been properly followed;
- (3) The significance of the concern – indicate the importance of the concern with regard to its potential impact on the plan selection, recommended plan components, efficiency (cost), effectiveness (function/outputs), implementation responsibilities, safety, Federal interest, or public acceptability; and
- (4) The probable specific action needed to resolve the concern – identify the action(s) that the reporting officers must take to resolve the concern.

In some situations, especially addressing incomplete or unclear information, comments may seek clarification in order to then assess whether further specific concerns may exist.

The ATR documentation in DrChecks will include the text of each ATR concern, the PDT response, a brief summary of the pertinent points in any discussion, including any vertical team coordination (the vertical team includes the district, RMO, MSC, and HQUSACE), and the agreed upon resolution. If an ATR concern cannot be satisfactorily resolved between the ATR team and the PDT, it will be elevated to the vertical team for further resolution in accordance with the policy issue resolution process described in either ER 1110-1-12 or ER 1105-2-100, Appendix H, as appropriate. Unresolved concerns can be closed in DrChecks with a notation that the concern has been elevated to the vertical team for resolution.

At the conclusion of each ATR effort, the ATR team will prepare a Review Report summarizing the review. Review Reports will be considered an integral part of the ATR documentation and shall:

- Identify the document(s) reviewed and the purpose of the review;
- Disclose the names of the reviewers, their organizational affiliations, and include a short paragraph on both the credentials and relevant experiences of each reviewer;
- Include the charge to the reviewers;
- Describe the nature of their review and their findings and conclusions;

- Identify and summarize each unresolved issue (if any); and
- Include a verbatim copy of each reviewer's comments (either with or without specific attributions), or represent the views of the group as a whole, including any disparate and dissenting views.

ATR may be certified when all ATR concerns are either resolved or referred to the vertical team for resolution and the ATR documentation is complete. The ATR Lead will prepare a Statement of Technical Review certifying that the issues raised by the ATR team have been resolved (or elevated to the vertical team). A sample Statement of Technical Review is included in Attachment 2.

d. Funding of ATR.

1. The Project Manager (PM) shall provide labor funding by cross charge labor codes. Funding for travel, if needed, will be provided through government order. The PM 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 ATR reviews varies depending on the work product, with an estimated range from \$15,000 to \$60,000. Any funding shortages will be negotiated on a case-by-case basis and in advance of a negative charge occurring.
2. The ATR 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 PM to any possible funding shortages.

e. Timing and Schedule of ATR.

1. Throughout the development of the implementation documents, the team will conduct seamless review to ensure timeliness and quality of the work product.
2. ATRs will be conducted on the final draft versions of the work products; and if changes are made to the final draft version, those changes will be reviewed in the final version of the document.
3. At the discretion of the PDT, a "page-turn" session may be held by the PDT to review the draft version to ensure consistency across the disciplines and resolve any issues prior to the start of ATR. Writer/editor services will be performed on the draft prior to ATR as well.
4. The ATR process for all work products will follow timelines and milestones given in the project's P2 schedule. The P2 schedule will be kept current and updated at least annually. Actual dates will be scheduled once the period of review draws closer. All products produced for these milestones will be reviewed, including those produced as in-kind services by the non-Federal sponsor (should that be applicable to this project), and products developed by contractors.

7. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)

DQC, ATR and Policy and Legal Compliance reviews will be conducted for the work products listed in this Review Plan. Since the Watershed Report does not include feasibility level analysis as the basis for project authorization, the risks are low. The White Paper and Watershed Report do not warrant the need for IEPR.

A risk informed decision process was used to determine that IEPR is unnecessary for all work products listed in this Review Plan. The risks and challenges for completion of the remaining work products for this study are limited to budgetary and schedule driven concerns. The Study will not produce anything that recommends future Federal investment or construction of a specific project and therefore the risks are very low. At this time, the likelihood of future Federal (Corps) construction projects resulting from this study is unknown. Until Federal construction projects are identified within a feasibility study, independent external peer review (IEPR) will not be planned. The White Paper and Watershed Restoration Report do not document a feasibility study and as such do not make recommendations to authorize a project. Therefore, there are not significant economic and social effects to the nation. The White Paper and Watershed Report do not provide analysis with a high level of complexity, not do they recommend or include novel or precedent setting approaches. An EIS is not being prepared for this study. The Study will continue to draw interagency and stakeholder interest as it is based on collaboration at the scale of the watershed and encompasses multiple Counties.

Additionally, these work products do not meet the requirements for IEPR. Specifically, these work products do not meet the criteria required for IEPR as given in sections 11d and 12a of Reference (1). The Study does not pose a significant threat to human life, is less than 45 million dollars, the Governor of California has not requested an IEPR, the Chief of Engineers has not determined that this Study is controversial, and the Study is not a hurricane and storm risk management or flood risk management project. Therefore, the Study does not meet the criteria for an IEPR and no IEPR will be conducted.

8. COST ENGINEERING DIRECTORY OF EXPERTISE (DX) REVIEW AND CERTIFICATION

Cost Engineering is not required for the Final Watershed Assessment as there will be no official cost estimates in the Watershed Pan.

9. POLICY AND LEGAL COMPLIANCE REVIEW

All decision documents will be reviewed throughout the study process for their compliance with law and policy. Guidance for policy and legal compliance reviews is addressed in Appendix H, ER 1105-2-100. These reviews culminate in determinations that the recommendations in the reports and the supporting analyses and coordination comply with law and policy, and warrant approval or further recommendation to higher authority by the home MSC Commander. DQC and ATR augment and complement the policy review processes by addressing compliance with pertinent published Army policies, particularly policies on analytical methods and the presentation of findings in decision documents.

10. MODEL CERTIFICATION AND APPROVAL

EC 1105-2-412 mandates the use of certified or approved models for all planning activities to ensure the models are technically and theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions. Planning models, for the purposes of the EC, are defined as any models and analytical tools that planners use to define water resources management problems and opportunities, to formulate potential alternatives to address the problems and take advantage of the opportunities, to evaluate potential effects of alternatives and to support decision making. The use of a certified/approved planning model does not constitute technical review of the planning product. The selection and application of the model and the input and output data is still the responsibility of the users and is subject to review (DQC and possibly ATR).

Planning models may or may not be used in developing criteria to evaluate and rank potential ecosystem restoration projects in the San Pablo Bay Watershed given budget constraints and that the NFS is unable to cost-share completion of a policy compliant Watershed Report. EC 1105-2-412 will be followed if a planning models. A qualitative assessment may be utilized in lieu of a quantitative analysis involving the use of planning models

EC 1105-2-412 does not cover engineering models used in planning. The responsible use of well-known and proven USACE developed and commercial engineering software will continue and the professional practice of documenting the application of the software and modeling results will be followed. As part of the USACE Scientific and Engineering Technology (SET) Initiative, many engineering models have been identified as preferred or acceptable for use on Corps studies and these models should be used whenever appropriate. The selection and application of the model and the input and output data is still the responsibility of the users and is subject to review (DQC and possibly ATR).

a. Planning Models.

The following planning model may be used for the San Pablo Bay Watershed Study:

Model Name and Version	Brief Description of the Model and How It Will Be Applied in the Study	Certification / Approval Status
HEC-FDA 1.2.4 (Flood Damage Analysis)	The Hydrologic Engineering Center’s Flood Damage Reduction Analysis (HEC-FDA) program provides the capability for integrated hydrologic engineering and economic analysis for formulating and evaluating flood risk management plans using risk-based analysis methods.	Certified
HEP	USFWS Habitat Evaluation Procedures to evaluate and provide a quantification of wildlife habitat outputs based on a habitat suitability index and area of habitat quantity.	Certified

b. Engineering Models.

The following engineering models will be used in the San Pablo Bay Watershed Study:

Model Name and Version	Brief Description of the Model and How It Will Be Applied in the Study	Approval Status
HEC-HMS, version 3.5	<p>The Hydrologic Modeling System (HEC-HMS) is designed to simulate the precipitation-runoff processes of dendritic watershed systems. The program is a generalized modeling The program features a completely integrated work environment including a database, data entry utilities, computation engine, and results reporting tools. A graphical user interface allows the seamless movement between the different parts of the program. Program functionality and appearance are the same across all supported platforms. The system is capable of representing many different watersheds.</p>	Corps CoP Preferred
HEC-RAS, version 4.1	<p>HEC-RAS is designed to perform one-dimensional hydraulic calculations for a full network of natural and constructed channels. HEC-RAS allows you to perform steady flow, unsteady flow, sediment transport/mobile bed computations, and water temperature modeling.</p>	Corps CoP Preferred
HEC- 6	<p>HEC-6 is a one-dimensional movable boundary open channel flow numerical model designed to simulate and predict changes in river profiles resulting from scour and/or deposition over moderate time periods (typically years, although applications to single flood events are possible). Features of HEC-6 include: capability to analyze networks of streams, channel dredging, various levee and encroachment alternatives, and to use several methods for computation of sediment transport rates.</p> <p>The model was used for sediment transport analysis and must be reviewed.</p>	Corps CoP Preferred
EFDC	<p>USEPA’s Environmental Fluid Dynamics Code (EFDC Hydro) is a state-of-the-art hydrodynamic model that can be used to simulate aquatic systems in one, two, and three dimensions. EFDC solves three-dimensional, vertically hydrostatic, free surface, turbulent averaged equations of motion for a variable-density fluid. Dynamically-coupled transport equations for turbulent kinetic energy, turbulent length scale, salinity and temperature are also solved. The EFDC model allows for drying and wetting in shallow areas by a mass conservation scheme.</p>	Allowed for Use

11. PUBLIC PARTICIPATION

The Study has had numerous stakeholder and public meetings since its inception in 1999. At present there are no additional public meetings planned for the Study. Therefore, no additional significant and relevant public comments are expected for this Study at this time. A copy of this Review Plan will be posted onto the San Francisco District's website for public review.

12. REVIEW SCHEDULES AND COSTS

a. DQC Schedule and Cost.

All work products identified in Section 4 of this Review Plan will undergo DQC. Seamless DQC review will be conducted on each work product as it progresses and is finished. Costs for the DQC for each work product will be presented in scopes of services for each discipline and included in the annually updated PMP

b. ATR Schedule and Cost

Work Product	Estimated Cost	Date
San Pablo Bay Watershed Restoration Report	\$15,000 to \$60,000	Start: 1 July 2013 End: 30 August 2013

a. Type I IEPR Schedule and Cost. Not-Applicable.

b. Model Certification/Approval Schedule and Cost. No model has been selected yet to evaluate and prioritize the restoration projects. Any uncertified planning models selected will undergo model review and approval process. Coordination with PCX will be initiated at the start of the study and a separate model review and approval/certification plan will be prepared. The plan will detail the schedule and cost depending on the level of the review required. Model certification/approval costs are not yet determined but have been estimated to be \$20,000 to \$50,000.

13. REVIEW PLAN APPROVAL AND UPDATES

The South Pacific Division Commander is responsible for approving this Review Plan. The Commander's approval reflects vertical team input as to the appropriate scope and level of review for the work products listed in section 4. Like the PMP, the Review Plan is a living document and may change as the study progresses. The San Francisco District is responsible for keeping the Review Plan up to date. Minor changes to the review plan since the last MSC Commander approval are documented in Attachment 3. Significant changes to the Review Plan (such as changes to the scope and/or level of review) should be re-approved by the MSC Commander following the process used for initially approving the plan. The latest version of the Review Plan, along with the Commanders' approval memorandum, will be posted on the San Francisco District's webpage.

The San Francisco District requests that the South Pacific Division Commander endorse the above recommendations and approve this Review Plan as described in Appendix B, Section 6, of Reference (1).

14. REVIEW PLAN POINTS OF CONTACT

The points of contact for this Review Plan are the review plan preparer Craig Conner (415-503-6903; Craig.s.Conner@usace.army.mil) or the Project Planner Jaime O'Halloran (415-503-6738; Jaime.L.O'Halloran@usace.army.mil)

Jodi Creswell, Operations Director, Ecosystem Restoration Planning Center of Expertise
309-794-5448, Jodi.K.Creswell@usace.army.mil

ATTACHMENT 1: TEAM ROSTERS

San Pablo Bay Watershed Restoration Study PDT		
Title	Name	Org
Project Manager	Karen Rippey	CESPN-PM-B
Planner	Jaime O'Halloran	CESPN-ET-PF
Environmental	Fari Tabatabai	CESPN-ET-PB
Water Resources	Lisa Andes	CESPN-ET-EW
Economics	Lynn Anderson	CESPN-ET-PC
Geosciences	Nicholas Malasavage	CESPN-ET-EG
GIS	James Zoulas	CESPN-ET-EI
Civil Design	To Be Determined	To Be Determined
Real Estate	Bonivee Delapaz	CESPN-RE-B
Cost Engineering	To Be Determined	To Be Determined

San Pablo Bay Watershed Restoration Study Vertical Team		
Title	Name	Org
RMO/ECO-PCX	Jodi Creswell	CEMVD-PD-N
FRM-PCX	Eric Thaut	CESPD-PDS-P
MSC/ Watershed PM	Cindy Tejeda	CESPD-PDS
MSC/District Support Team	Paul Devitt	CESPD-PDC
RIT	Pauline Acosta	CEMP-SPD-RIT

ATTACHMENT 2: SAMPLE CERTIFICATE OF TECHNICAL REVIEW

**DISTRICT QUALITY CONTROL CERTIFICATION
COMPLETION OF QUALITY CONTROL ACTIVITIES**

The District has completed the (insert work product here) for the San Pablo Bay Watershed Restoration Study.

Certification is hereby given that all quality control activities appropriate to the level of risk and complexity inherent in the product have been completed.

GENERAL FINDINGS

Compliance with clearly established policy principles and procedures, utilizing clearly justified and valid assumptions, has been verified. This includes assumptions; methods, procedures and materials used in analyses; alternatives evaluated; the appropriateness of data used and level of data obtained; and the reasonableness of the results.

SPECIFIC FINDINGS

(insert specific findings here)

The undersigned recommends certification of the quality control process for this product.

[Name of DQC member]
[Position Title]
[Office Symbol]

Date

ATTACHMENT 3: REVIEW PLAN REVISIONS

This page will document all of the minor changes that were made to the Review Plan after its approval by the South Pacific Division Commander.

Revision Date	Description of Change	Page / Paragraph Number

ATTACHMENT 4: ACRONYMS AND ABBREVIATIONS

Term	Definition
ATR	Agency Technical Review
CoP	Community of Practice
Corps	United States Army Corps of Engineers
DQC	District Quality Control/Quality Assurance
DST	District Support Team
EC	Engineer Circular
ECO-PCX	National Ecosystem Planning Center of Expertise
EFDC	Environmental Fluid Dynamics Code
EIS	Environmental Impact Statement
ER	Engineer Regulation
HEC	Hydrologic Engineering Center
HEC-6	Hydrologic Engineering Center – 6 (movable boundary numerical model)
HEC-HMS	Hydrologic Engineering Center - Hydrologic Modeling System
HEC-RAS	Hydrologic Engineering Center - River Analysis System
HQUSACE	Headquarters, U.S. Army Corps of Engineers
IEPR	Independent External Peer Review
MCX	Cost Engineering Mandatory Center of Expertise
MSC	Major Subordinate Command
NED	National Economic Development
NER	National Ecosystem Restoration
NEPA	National Environmental Policy Act
NFS	Non-Federal Sponsor
OMRR&R	Operation, Maintenance, Repair, Replacement and Rehabilitation
P2	Corps Project management System
PCX	Planning Center of Expertise
PDT	Project Delivery Team
PM	Project Manager
PMP	Project Management Plan
QMP	Quality Management Plan
RIT	Regional Integration Team
RMC	Risk Management Center
RMO	Review Management Organization
SET	Scientific and Engineering Technology
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
WRDA	Water Resources Development Act

DRAFT SPD Review Plan Checklist

Section I - Decision Documents

Review Plan Checklist For Decision Documents

Planning Working Group will revise National and SPD RP checklists based on the new EC 1165-2-209. The existing National and SPD RP checklists based on EC 1105-2-410 for decision documents is included below.

Date:

Originating District: SPN

Project/Study Title: San Pablo Bay Watershed Restoration Study

PWI #:

District POC: Jaime O'Halloran

PCX Reviewer: Michael Scuderi

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 possibly may not comply with EC 1165-2-209 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 <input checked="" type="checkbox"/> 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?		a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
b. Does it include a table of contents?		b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
c. Is the purpose of the RP clearly stated and EC 1105-2-410 referenced?		c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
d. Does it reference the Project Management Plan (PMP) of which the RP is a component?		d. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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)?		e. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
f. Does it include a paragraph stating the		f. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

<p>title, subject, and purpose of the decision document to be reviewed?</p> <p>g. Does it list the names and disciplines of the Project Delivery Team (PDT)?*</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 4a</p>	<p>g. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>Comments:</p>
<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 <input checked="" type="checkbox"/> 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 <input checked="" type="checkbox"/></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 <input type="checkbox"/></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, 	<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>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>d. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>e. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>

<p>prior to implementation of mitigation?</p> <ul style="list-style-type: none"> • 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 <input checked="" type="checkbox"/></i> <i>If yes, IEPR is required.</i></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 <input checked="" type="checkbox"/></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 <input checked="" type="checkbox"/></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: _____</i> <i>(best current estimate; may be a range)</i></p> <p><i>Is it > \$45 million? Yes <input type="checkbox"/> No <input type="checkbox"/></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 <input checked="" type="checkbox"/></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</p>	<p>EC 1105-2-410 Para 8f</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>EC 1105-2-410, Appendix D, Para 1b</p>	<p>f. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>g. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>h. Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>i. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>j. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
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<p>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 <input checked="" type="checkbox"/></i> <i>If yes, IEPR is required.</i></p>		<p>Comments: 2h. There will be no official cost estimates in the Watershed Pan.</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 <input checked="" type="checkbox"/> 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 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 <input checked="" type="checkbox"/></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>EC 1105-2-410, Para 7a</p> <p>EC 1105-2-410, Appendix D, Para 3a</p> <p>EC 1105-2-410, Appendix B, Para 4b</p> <p>EC 1105-2-410, Para 7c</p>	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>d. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>e. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p> <p>Comments:</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 <input checked="" type="checkbox"/> 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>EC 1105-2-410, Appendix B, Para 4f</p> <p>EC 1105-2-410, Appendix B, Para 4g</p>	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></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/MSc?</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, 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>c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>d. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>e. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>f. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p> <p>Comments:</p>
<p>5. Does the RP explain how IEPR will be accomplished?</p>	<p>EC 1105-2-410, Appendix B, Para 4k & Appendix D</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" 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 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:</p>
<p>6. Does the RP address peer review of</p>		<p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>

sponsor in-kind contributions?		
<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 checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> n/a <input type="checkbox"/></p> <p>Comments:</p>
7. Does the RP address how the peer review will be documented?		<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p>a. Does the RP address the requirement to document ATR and IEPR comments using Dr Checks?</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>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(1)</p> <p>EC1105-2-410, Appendix B, Para 4k(13)(b)</p> <p>EC 1105-2-410, Appendix B, Para 4l</p> <p>EC 1105-2-410, Para 8g(2) & Appendix B, Para 4l</p>	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <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 type="checkbox"/> n/a <input checked="" type="checkbox"/></p> <p>Comments:</p>
8. Does the RP address Policy Compliance and Legal Review?	<p>EC 1105-2-410, Para 7d</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>Comments:</p>
9. Does the RP present the tasks, timing and sequence (including deferrals), and costs of reviews?	<p>EC 1105-2-410, Appendix B, Para 4c & Appendix C, Para 3d</p>	<p>Yes <input checked="" 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>EC 1105-2-410, Appendix C, Para 3g</p>	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></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>b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>c.</p> <p>d. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p> <p>e. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></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 conclusions • Innovative materials or techniques • Design lacks redundancy, resiliency of robustness • Unique construction sequence or acquisition plans • Reduced\overlapping design construction schedule 	<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: The RP describes that the study will not address Safety Assurance Factors</p>
<p>11. Does the RP address model certification requirements?</p>	<p>EC 1105-2-407</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<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>	<p>EC 1105-2-410, Appendix B, Para 4i</p>	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>c. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p> <p>Comments:</p>
<p>12. Does the RP address opportunities for public participation?</p>		<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p>a. Does it indicate how and when there will be opportunities for public comment on</p>	<p>EC 1105-2-410, Appendix B,</p>	<p>a. Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>

<p>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>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>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: Watershed Report not submitted for Congressional authorization. There have been numerous opportunities for public participation since the inception of the Study. No additional public meetings or review is planned.</p>
<p>13. Does the RP address coordination with the appropriate Planning Centers of Expertise?</p>	<p>EC 1105-2-410, Para 8a</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p>a. Does it state if the project is single or multi-purpose? Single <input type="checkbox"/> Multi <input checked="" type="checkbox"/></p> <p>List purposes: Watershed Study: ECO, FRM</p> <p>b. Does it identify the lead PCX for peer review? Lead PCX: ECO</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 <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> n/a <input type="checkbox"/></p> <p>Comments:</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</p>	<p>EC 1105-2-410, Appendix D, Para 3</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>

Congressional authorization?		
<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 <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p> <p>Comments: Congressional Authorization not required.</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>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>EC 1105-2-410, Appendix D, Para 1b</p> <p>EC 1105-2-410, Appendix D, Para 1d</p>	<p>Comments:</p>
Detailed Comments and Back check:		

