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

REPLY TO
ATTENTION OF

25 Jan 2013

CESPD-PDS-P

MEMORANDUM FOR Commander, San Francisco District, ATTN: CESPN-ET-PF, Ms. Joél Benegar

Subject: Wildcat Creek Ecosystem Restoration Study, Section 1135, Continuing Authorities Program, Contra Costa County, California, Review Plan Approval

1. The enclosed Wildcat Creek Ecosystem Restoration Study, Section 1135, Continuing Authorities Program, Contra Costa County, California, Review Plan is in accordance with Engineering Circular (EC) 1165-2-214, Review of Decision Documents, dated 15 Dec 2012. With MSC approval the Review Plan will be made available for public comment via the internet and the comments received will be incorporated into future revisions of the Review Plans. At this time the Review Plan excludes independent external peer review.

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

3. Point of contact for this action is Mr. Lawrence (Leigh) Skaggs, CESPD-PDS-P, 415-503-6588, Lawrence.C.Skaggs@usace.army.mil .

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

for Andrew R. Nelson COL, EN
Dpty Cdr
MICHAEL C. WEHR
BG, USA
Commanding

Encl
Review Plan

REVIEW PLAN

Wildcat Creek Ecosystem Restoration Study
Section 1135, Continuing Authorities Program
Contra Costa County, California

Detailed Project Report

San Francisco District
U.S. Army Corps of Engineers

MSC Approval Date: 25 January 2013
Last Revision Date: 2 January 2013

US Army Corps
of Engineers ®

REVIEW PLAN

Wildcat Creek Restoration Study, Contra Costa County, California
Detailed Project Report

TABLE OF CONTENTS

1. PURPOSE AND REQUIREMENTS

a. Purpose. This Review Plan defines the scope and level of peer review for the Wildcat Creek Ecosystem Restoration Study, Contra Costa County, California.

b. References

(1) Engineering Circular (EC) 1165-2-209, Civil Works Review Policy, 31 Jan 2010
(2) EC 1105-2-412, Assuring Quality of Planning Models, 31 Mar 2011
(3) Engineering Regulation (ER) 1110-1-12, Quality Management, 30 Sep 2006
(4) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007
(5) CAP 1135 – Wildcat Creek Ecosystem Restoration, Project Management Plan, 11 Apr 2011
(6) Quality Management Plan, CESPD R 1110-1-8, 30 Dec 2002 (in process of being replaced by Quality Management System references)

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

2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

The Review Management Organization (RMO) is responsible for managing the overall peer review effort described in this review plan. The RMO for Section *1135* decision documents is the home Major Subordinate Command (MSC) of the U.S. Army Corps of Engineers (USACE or Corps). For this project, the MSC is the South Pacific Division (SPD or Division). SPD will coordinate and approve the review plan and manage the ATR. The San Francisco District (SPN or District) will post the approved review plan on its public website at:

http://www.spn.usace.army.mil/project_review_plans/index.html.

A copy of the approved review plan (and any updates) will be provided to the Ecosystem Restoration Planning Center of Expertise (*ECO-PCX)* to keep the PCX apprised of requirements and review schedules.

3. STUDY INFORMATION

a. Decision Document. SPN will be producing a Detailed Project Report (DPR) for the Wildcat Creek Ecosystem Restoration Study, Contra Costa County, California. The purpose of the DPR is to document the feasibility of modifying an existing Federal flood risk management project for ecosystem restoration. The DPR must be approved by the Division Commander of the South Pacific Division. The DPR will be accompanied by an Environmental Assessment (EA), which will address the requirements of the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

b. Study/Project Description.

Authorization

The study is being conducted under the authority of Section 1135 of the Water Resources Distribution Act (WRDA) of 1986 (P.L. 99-662) as amended. Section 1135 provides authority to review and modify the structures and operations of water resources projects constructed by the Corps for the purpose of improving the quality of the environment when it is determined that such modifications are feasible and consistent with the authorized project purposes, and will improve the quality of the environment in the public interest. The Federal share of initial implementation costs for any one project under Section 1135 may not exceed $5 million.

Section 1135 of the 1986 WRDA is one of the nine legislative authorities under which the Corps of Engineers is authorized to plan, design, and construct certain types of water resource and ecosystem restoration projects that are of limited scope and complexity, without additional and specific Congressional authorization. These authorities are called the Continuing Authorities Program (CAP) when referred to as a group.

Study Area Description and Non-Federal Sponsor

Wildcat Creek (see Figure 1, Vicinity Map) is located on a gently sloping alluvial plain, 11 miles northeast of San Francisco, California. The climate of the basin is characterized by warm, dry summers and wild, wet winters. The average annual rainfall in the project area is just over 20 inches, most of which occurs from October through April.

The portion of Wildcat Creek under evaluation for the Section 1135 project lies between the city of San Pablo and the San Francisco Bay, in North Richmond, an unincorporated area of Contra Costa County. Specifically, the site begins downstream of the Richmond Parkway and extends approximately 100 feet upstream of the intersection of the creek with the Atchison, Topeka and Santa Fe Railway ()Railroad Bridge. The linear distance between these two points is approximately 1.5 miles.

The non-Federal sponsor for the DPR of the study is the Contra Costa County Flood Control District (CCCFCD).

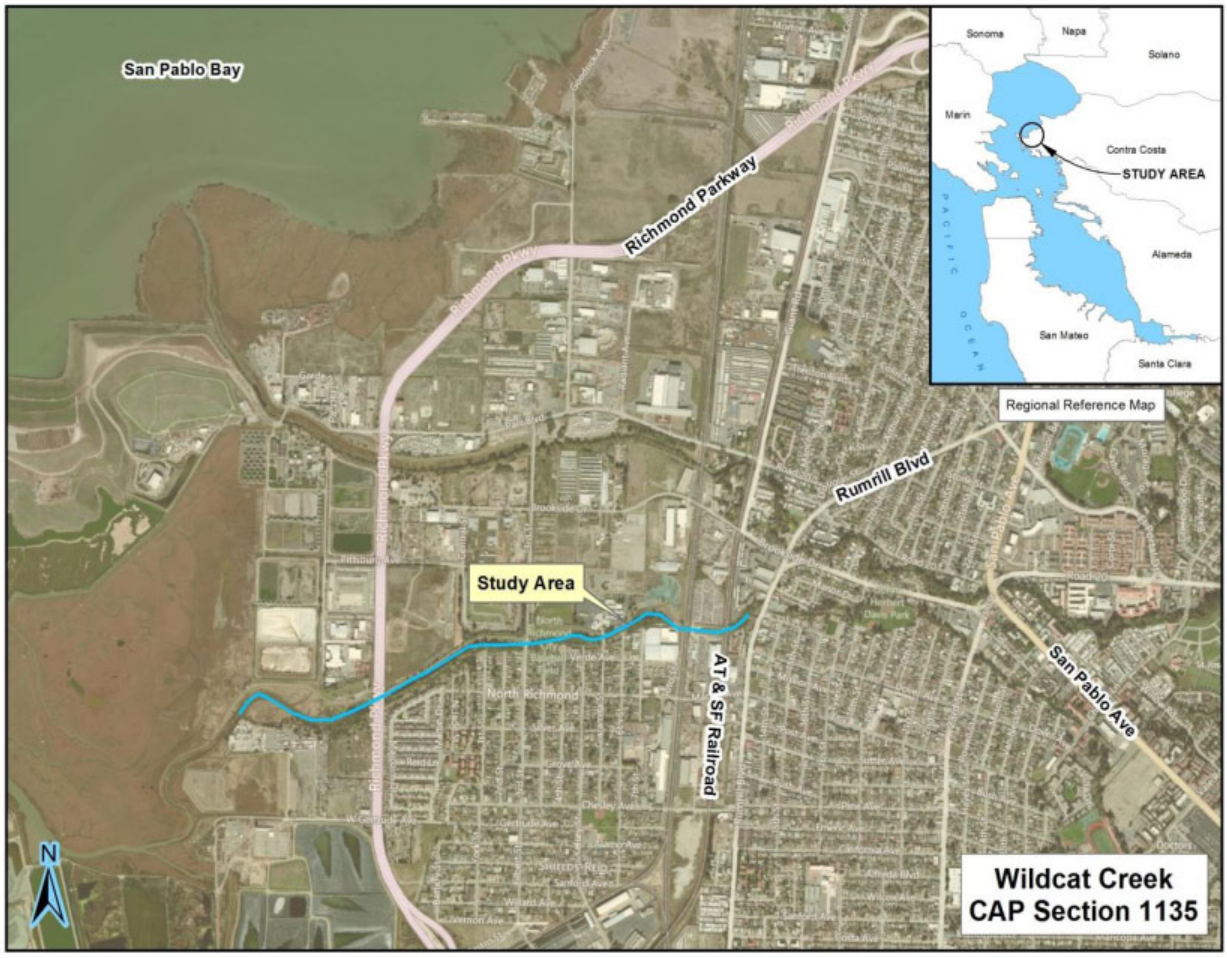

Figure 1. Vicinity Map

Study Purpose and Background

Flooding in the 1940s and 1950s prompted the CCCFCD to seek assistance for flood control, beginning a decades-long search for flood control alternatives which eventually resulted in the choice of an environmentally minded flood risk reduction project. The original flood control project was completed by the Corps in four phases between 1987 and 1992 and was designed to a 1% annual chance of exceedence (ACE), which is another way of stating that there was estimated to be a 1% chance in any given year of waters overtopping the levees. This is often referred to as a project designed for a 100-year flood event. The project's design balanced flood risk reduction with environmental acceptability by incorporating design components related to fish passage, excessive sediment, water temperatures, and riparian restoration.

Today, it has been determined that the existing project has contributed to the degradation of the quality of the environment. Restoration objectives for this study include enhancing riparian habitat and reducing barriers to migration for steelhead, a member of the Central Coast Environmentally Significant Unit in the San Francisco Bay region.

The feasibility study will evaluate and recommend restoration measures that may be implemented at the project site that does not conflict with the 1% ACE project design.

Potential Project Features and Estimated Cost

A wide variety of methods to achieve the project objectives will be considered during the study, some of which might be found to be infeasible due to technical, economic, or environmental constraints. The following measures (and others) will be assessed and a determination will be made regarding whether they should be retained in the formulation of alternative plans:

- Remove cattails
- Raise existing floodplain bench
- Widen sediment basin
- Raise weir elevation at base of sediment basin to increase trap effectiveness
- Construct boulder drop structure in increase sediment basin trap efficiently
- Debris diversion above fish ladder
- Modify existing fish ladder
- Vegetation planting
- Remove vegetation

The Federal cost share for a Section 1135 project is 65% and is limited to $5 million. Therefore, the total project cost should be no more than $7.7 million

c. Factors Affecting the Scope and Level of Review.

The Wildcat Creek Ecosystem Restoration Study will evaluate a variety of ecosystem restoration measures, to be potentially implemented to improve environmental conditions within an existing flood risk management project.

Project Challenges. Currently, the only known challenges for the project are fundamentally technical. For instance, modifying a fish ladder to provide for both juvenile and adult migration through the project location will be technical challenging, as it is project and site specific. However, this project is in preliminary design. If future analysis proposes that existing flood control structures be modified, then the project challenges will be significantly greater as the project will have to evaluate changes or impacts to human life and safety.

Project Magnitude. The estimated project cost is less than $8 million, and the study will be completing an EA, not an EIS, due to low potential for public controversy and complexity. No public safety concerns are anticipated, as there is currently no measure that would modify the project's flood risk reduction features.

Project Risk. This project is considered to have low overall risk because of the nature of the measures under consideration (see above).

d. In-Kind Contributions. The non-Federal sponsor will not be providing in-kind products and analyses for this study.

4. DISTRICT QUALITY CONTROL (DQC)

All decision documents (including supporting data, analyses, environmental compliance documents, etc.) shall undergo DQC. DQC is an internal review process of basic science and engineering work products focused on fulfilling the project quality requirements defined in the Project Management Plan (PMP). The home district shall manage DQC. Documentation of DQC activities is required and should be in accordance with the Quality Manual of the District and the home MSC.

a. Documentation of DQC. For each review, DQC reviewers will provide comments to the project delivery team in MS Word or MS Excel. For each milestone (i.e., Feasibility Scoping Meeting, Alternative Review Conference, Alternative Formulation Briefing, Draft DPR, Final DPR, the comments, responses, and resolution will be compiled into a DQC report with a signed letter of certification from the District Chief of Planning.

b. Products to Undergo DQC. DQC will be performed on interim reports and milestone documentation (i.e., Feasibility Scoping Meeting, Alternative Review Conference, Alternative Formulation Briefing, Draft Feasibility Report, Final Feasibility Report) prior to agency technical review.

c. Required DQC Expertise. Senior-level non-PDT members and/or supervisory staff will conduct DQC. The technical disciplines represented on the DQC team will mirror that of the project delivery team. DQC will be managed by the project manager or lead planner.

5. AGENCY TECHNICAL REVIEW (ATR)

ATR is mandatory for all decision documents (including supporting data, analyses, environmental compliance documents, etc.). The objective of ATR is to ensure consistency with established criteria, guidance, procedures, and policy. The ATR will assess whether the analyses presented are technically correct and comply with published USACE guidance, and that the document explains the analyses and results in a reasonably clear manner for the public and decision makers. ATR is managed within USACE by the designated RMO and is conducted by a qualified team from outside the home district that is not involved in the day-to-day production of the project/product. ATR teams will be comprised of senior

USACE personnel and may be supplemented by outside experts as appropriate. The ATR team lead will be from outside the home MSC.

a. Products to Undergo ATR.

ATR will be performed on the following documents and their interim products:

- Alternative Review Conference (SPD F4 milestone) documentation
- Alternative Formulation Briefing (SPD F4a milestone) documentation
- Draft DPR and appendices
- Final DPR and appendices

b. Required ATR Team Expertise.

ATR Team Members/Disciplines	Expertise Required
ATR Lead	The ATR lead should be a senior professional with extensive experience in preparing Civil Works decision documents and conducting ATR. The lead should also have the necessary skills and experience to lead a virtual team through the ATR process. The ATR lead may also serve as a reviewer for a specific discipline (such as planning, economics, environmental resources, etc).
Planning	The Planning reviewer should be a senior water resources planner with experience in ecosystem restoration planning, familiarity with riparian systems, and familiarity with flood risk management concepts. The reviewer should also be familiar with CAP study requirements.
Economics	The Economics reviewer should have extensive experience in Cost-Effectiveness Analysis and Incremental Cost Analysis (commonly referred to as CEA-ICA).
Environmental Resources	The Environmental Resources reviewer should have extensive experience with the following: • National Environmental Policy Act requirements • Environmental laws and statutes (e.g., Clean Water Act, Coordination Act, Endangered Species Acts) • California Environmental Quality Act requirements (desired, but not required) • Experience with environmental benefit quantification and may include the use of models such as the Habitat evaluation procedure (HEP). • Ecological processes and quality indicators associated with riparian habitat • Ecosystem restoration planning procedures
Cultural Resources	The Cultural Resources reviewer should have extensive experience with consultation requirements and other applicable laws regarding cultural resources.
Hydrology and Hydraulic (H&H)	The H&H reviewer should have extensive experience in the

Engineering	field of hydraulics, open channel dynamics geomorphology, river and stream restoration, levees, fish ladder design, and modeling expertise for H&H engineering (e.g., HEC-RAS)
Geotechnical Engineering	The Geotechnical Engineering reviewer should have extensive experience in evaluating the following: • Bank stability, erosion, settlement and associated protective measures • Riparian ecosystem restoration measures • Experience with geotechnical models that may include Slope/W(GeoSlope), Seep/W(GeoSlope)UTEXAS, and GMS Seep2d.
Civil Design	The Civil Design reviewer should have extensive experience in evaluating the following: • Bank protection measures • Stream and riparian ecosystem restoration measures • Fish ladder design
Cost Engineering	The Cost Engineering reviewer should have extensive experience in using the MCACES-II software, and in determining unit costs associated with riparian ecosystem restoration measures.
Real Estate	The Real Estate reviewer should have extensive experience with USACE Real Estate appraisal procedures and requirements, and Real Estate Plan requirements.
Other	A subject matter expert will ensure vertical datums compliance

c. Documentation of ATR. DrChecks review software will be used to document all ATR comments, responses and associated resolutions accomplished throughout the review process. Comments should be limited to those that are required to ensure adequacy of the product. The four key parts of a quality review comment will normally include:

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

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

The ATR documentation in DrChecks will include the text of each ATR concern, the PDT response, a brief summary of the pertinent points in any discussion, including any

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

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

- Identify the document(s) reviewed and the purpose of the review;
- Disclose the names of the reviewers, their organizational affiliations, and include a short paragraph on both the credentials and relevant experiences of each reviewer;
- Include the charge to the reviewers;
- Describe the nature of their review and their findings and conclusions;
- Identify and summarize each unresolved issue (if any); and
- Include a verbatim copy of each reviewer's comments (either with or without specific attributions), or represent the views of the group as a whole, including any disparate and dissenting views.

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

6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)

IEPR may be required for decision documents under certain circumstances. IEPR is the most independent level of review, and is applied in cases that meet certain criteria where the risk and magnitude of the proposed project are such that a critical examination by a qualified team outside of USACE is warranted. A risk-informed decision, as described in EC 1165-2-209, is made as to whether IEPR is appropriate. IEPR panels will consist of independent, recognized experts from outside of the USACE in the appropriate disciplines, representing a balance of areas of expertise suitable for the review being conducted. There are two types of IEPR:

- **Type I IEPR.** Type I IEPR reviews are managed outside the USACE and are conducted on project studies. Type I IEPR panels assess the adequacy and acceptability of the economic and environmental assumptions and projections, project evaluation data, economic analysis, environmental analyses, engineering analyses, formulation of alternative plans, methods for integrating risk and

uncertainty, models used in the evaluation of environmental impacts of proposed projects, and biological opinions of the project study. EC 1105-2-410 sets forth thresholds that can trigger IEPR: (1) public safety concerns; (2) high level of complexity; (3) novel or precedent-setting approaches; (4) project is controversial; (5) significant interagency interest; (6) has a total project cost greater than $45 million; (7) preparation of an EIS and; (7) significant economic, environmental and social effects to the nation. IEPR panels will consist of independent, recognized experts from outside of the USACE in the appropriate disciplines, representing a balance of areas of expertise suitable for the review being conducted. For decision documents where a Type II IEPR (Safety Assurance Review) is anticipated during project implementation, the below questions regarding Safety Assurance will also be addressed during the Type I IEPR.

Paragraph 2.c.(3) of Appendix D of EC 1165-2-209:

a) In accordance with ER1110-2-1150, is the quality and quantity of the surveys, investigations, and engineering sufficient for a concept design?
b) Are the models used to assess hazards appropriate?
c) Are the assumptions made for the hazards appropriate?
d) Does the analysis adequately address the uncertainty given the consequences associated with the potential for loss of life for this type of project?

- **Type II IEPR.** Type II IEPR reviews, or Safety Assurance Reviews (SAR), are managed outside USACE and are conducted on design and construction activities for hurricane, storm, and flood risk management projects, or other projects where existing and potential hazards pose a significant threat to human life. Type II IEPR panels will conduct reviews of the design and construction activities prior to initiation of physical construction and, until construction activities are completed, periodically thereafter on a regular schedule. The reviews shall consider the adequacy, appropriateness, and acceptability of the design and construction activities in assuring public health safety and welfare.

a. Decision on IEPR.

EC 1165-2-209 sets forth thresholds that trigger IEPR. For the Wildcat Creek CAP 1135 Ecosystem Restoration study, none of the triggers above are applicable. The ultimate cost associated with a recommended plan will be under $8 million and an EA, not an EIS, will be prepared. In addition, none of the currently proposed measures would impact the existing project's flood control features. Based on this, the study is not required to undergo Type I IEPR and Type II IEPR will not be required because the Federal action is not justified by life safety. However, In the future, if the project proposes to modify the existing project's flood control structures or function (i.e. levees), SPN will reassess the need for a IEPR I and/or IEPR II review.

In accordance with EC 1165-2-209, the San Francisco District's Chief of Engineering and Technical Services Division has assessed the potential for Wildcat Creek to pose a

significant threat to human life. Based on preliminary review and analyses, it has been determined that at this time, the project does not incur life safety concerns or pose a significant threat to human life.

b. Products to Undergo Type I IEPR.
Not applicable at this time.

c. Required Type I IEPR Panel Expertise
Not applicable at this time.

d. Documentation of Type I IEPR.
Not applicable at this time.

7. POLICY AND LEGAL COMPLIANCE REVIEW

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

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

The DPR review will be coordinated with the Cost Engineering DX, located in the Walla Walla District. The DX will assist in determining the expertise needed on the ATR team and in the development of the review charge(s). The DX will also provide the Cost Engineering DX certification. The RMO is responsible for coordination with the Cost Engineering DX.

9. MODEL CERTIFICATION AND APPROVAL

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

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

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

Model Name and Version	Brief Description of the Model and How It Will Be Applied in the Study	Certification / Approval Status
IWR-Planning Suite	This software will be used to assist with the formulation of alternative plans by combining solutions to planning problems and calculating the additive effects of each combination, or "plan." IWR-PLAN will 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. IWR-PLAN will also be used to perform multi-criteria decision analysis (MCDA)	Certified

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

Model Name and Version	Brief Description of the Model and How It Will Be Applied in the Study	Approval Status
MCACES or MII	These models will be used to develop cost estimates for the final array of alternative plans	Allowed for use
HEC-RAS	The function of this model is to complete one-dimensional hydraulic calculations for a full network of natural and manmade channels. HEC-RAS major capabilities are: • User interface • Hydraulic Analysis • Data storage and Management • Graphics and reporting	Allowed for use

10. REVIEW SCHEDULES AND COSTS

a. ATR Schedule and Cost.

Milestone or Product	Schedule (initiation through completion)	Cost estimate
Alternative Review Conference	Tentative date set for July 2013	$20,000
Alternative Formulation Briefing	Tentative date set for Sept 2013	$20,000
Draft DPR and EA	Tentative date set for Sept 2013	$20,000
Final DPR and EA	FY14	$20,000

b. Type I IEPR Schedule and Cost.

Not applicable

c. Model Certification/Approval Schedule and Cost.

None required.

11. PUBLIC PARTICIPATION

The next opportunity for providing formal public comments will be during the public review period for the Draft DPR and Environmental Assessment. The public review period will occur in June 2013. These public comments will be documented in the Final Detailed Project Report, which is anticipated in August 2013. Hard copies of the DPR will be submitted to local libraries, and made available electronically through the study partnership website. Individuals on the mailing list will receive a CD containing the Final Integrated Document.

12. 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 (involving District, MSC, RMO, and HQUSACE members) as to the appropriate scope and level of review for the decision document. Like the PMP, the Review Plan is a living document and may change as the study progresses. The home district is responsible for keeping the Review Plan up to date. Minor changes to the review plan after MSC Commander approval will be documented in future versions of this Review Plan in Appendix 3. Significant changes to the Review Plan (such as changes to the scope and/or level of review) should be re-approved by the MSC Commander following the process used for initially approving the plan. The latest version of the Review Plan, along with the Commanders' approval memorandum, should be posted on the home district's webpage. The latest Review Plan should also be provided to the RMO and home MSC.

13. REVIEW PLAN POINTS OF CONTACT

Public questions and/or comments on this review plan can be directed to the following points of contact:

- Patrick Sing (Project Manager), 415-503-6950 or Joél Benegar (Lead Planner), 415-503-6848
- Boni Bigornia, Civil Engineering Lead, South Pacific Division, 415-503-6567

ATTACHMENT 1: TEAM ROSTERS (TBD)

ATTACHMENT 2: SAMPLE STATEMENT OF TECHNICAL REVIEW FOR DECISION DOCUMENTS

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the *<type of product>* for *<project name and location>*. The ATR was conducted as defined in the project's Review Plan to comply with the requirements of EC 1165-2-209. During the ATR, 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 results, including whether the product meets the customer's needs consistent with law and existing US Army Corps of Engineers policy. The ATR also assessed the District Quality Control (DQC) documentation and made the determination that the DQC activities employed appear to be appropriate and effective. All comments resulting from the ATR have been resolved and the comments have been closed in DrChecks[sm].

SIGNATURE _____ _____

Name Date
ATR Team Leader
Office Symbol/Company

SIGNATURE _____ _____

Name Date
Project Manager
Office Symbol

SIGNATURE _____ _____

Name Date
Architect Engineer Project Manager[1]
Company, location

SIGNATURE _____ _____

Name Date
Review Management Office Representative
Office Symbol

CERTIFICATION OF AGENCY TECHNICAL REVIEW

Significant concerns and the explanation of the resolution are as follows: *Describe the major technical concerns and their resolution.*

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

SIGNATURE _____ _____

Name Date
Chief, Engineering Division
Office Symbol

SIGNATURE _____ _____

Name Date
Chief, Planning Division
Office Symbol

[1] Only needed if some portion of the ATR was contracted

ATTACHMENT 3: REVIEW PLAN REVISIONS

Revision Date	Description of Change	Page / Paragraph Number

ATTACHMENT 4: ACRONYMS AND ABBREVIATIONS

Term	Definition	Term	Definition
AFB	Alternative Formulation Briefing	NED	National Economic Development
ASA(CW)	Assistant Secretary of the Army for Civil Works	NER	National Ecosystem Restoration
ATR	Agency Technical Review	NEPA	National Environmental Policy Act
CSDR	Coastal Storm Damage Reduction	O&M	Operation and maintenance
DPR	Detailed Project Report	OMB	Office and Management and Budget
DQC	District Quality Control/Quality Assurance	OMRR&R	Operation, Maintenance, Repair, Replacement and Rehabilitation
DX	Directory of Expertise	OEO	Outside Eligible Organization
EA	Environmental Assessment	OSE	Other Social Effects
EC	Engineer Circular	PCX	Planning Center of Expertise
EIS	Environmental Impact Statement	PDT	Project Delivery Team
EO	Executive Order	PAC	Post Authorization Change
ER	Ecosystem Restoration	PMP	Project Management Plan
FDR	Flood Damage Reduction	PL	Public Law
FEMA	Federal Emergency Management Agency	QMP	Quality Management Plan
FRM	Flood Risk Management	QA	Quality Assurance
FSM	Feasibility Scoping Meeting	QC	Quality Control
GRR	General Reevaluation Report	RED	Regional Economic Development
Home District/MSC	The District or MSC responsible for the preparation of the decision document	RMC	Risk Management Center
HQUSACE	Headquarters, U.S. Army Corps of Engineers	RMO	Review Management Organization
IEPR	Independent External Peer Review	RTS	Regional Technical Specialist
ITR	Independent Technical Review	SAR	Safety Assurance Review
LRR	Limited Reevaluation Report	USACE	U.S. Army Corps of Engineers
MSC	Major Subordinate Command	WRDA	Water Resources Development Act