REVIEW PLAN
Sacramento River Flood Control Project, California
Mid-Valley Area, Phase III
Area 3 Knights Landing

Interim
Limited Reevaluation Report
Sacramento District

MSC Approval Date: *Pending*
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US Army Corps
of Engineers ®

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TABLE OF CONTENTS

1. PURPOSE AND REQUIREMENTS

Purpose: This Review Plan (RP) defines the scope and level of peer review for the Sacramento River Flood Control Project, California, Mid-Valley Area, Phase III Area 3 Knights Landing Limited Reevaluation Report (LRR). The LRR is considered an interim report which specifically evaluates the continued economic viability and Federal interest in the project. The project includes 4 areas: Area 1 is constructed, Areas 2 and 4 are deferred, and Area 3 is the subject of this plan. Flood Risk Management features located in the remaining authorized Sacramento River Flood Control Project, California, Mid-Valley Area, Phase III Areas, are not being evaluated or recommended for implementation at this time for a number of reasons ranging from lack of economic viability to sponsorship. Actions for these separable elements are being deferred pending further future analysis. Budgeting for reevaluation and implementation of these project areas will be reassessed as merited.

References:

- Engineer Circular (EC) 1165-2-214, Civil Works Review, 15 December 2012
- EC 1105-2-407, Assuring Quality of Planning Models, 31 May 2005
- Engineer Regulation (ER) 1110-1-12, Quality Management, 30 Sep 2006
- ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007
- Project Management Plan (PMP) for the Mid Valley Project, October 1998
- South Pacific Division Regulation (CESPD-R) 1110-1-8, Quality Management Plan (QMP), September 2004
- Sacramento District (CESPK) 01-B Quality Management Plan, Appendix B, QMP for Planning, March 2004

Requirements: The RP was developed in accordance with EC 1165-2-214, 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). This RP is a component of the PMP. 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 1165-2-214) and planning model certification/approval (per EC 1105-2-407). The LRR is considered a decision document, subject to referenced guidance and subject to CESPD approval. Review will be conducted as an ATR.

- DQC. All work products (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 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 Major Subordinate Command (MSC). Reviews to be performed using DrChecks (Reviewer making comments and technical staff responding to comments in DrChecks.)

- ATR is mandatory for all decision and implementation documents (including supporting data, analyses, environmental compliance documents, etc.). The objective of this 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 US Army Corps of Engineers (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 a designated Risk Management

Organization (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 selected Chair of the ATR team from outside the home MSC to assure total independent oversight consistent with current regulation.

- The review consists of an ATR as prescribed by the South Pacific Division (SPD) and referenced guidance. The ATR is to be conducted and managed independently by a qualified team from outside the home district and the MSC that is not involved in the day-to-day production of the project/product.
- Supporting technical documents (Design Documentation Reports (DDR) were previously evaluated independent of reviews of the LRR. Reports (DDRs) were contracted and managed by CESPK-ED.
- 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 the USACE is warranted. A risk-informed decision, as described in EC 1165-2-214, 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 is generally used for decision documents, and Type II is generally for implementation products described as follows:

(a) 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 a biological opinion of the project study. Type I IEPR will cover the entire decision document or action and will address all the underlying engineering, economics, and environmental work, not just one aspect of the study. For decision documents where a Type II IEPR (Safety Assurance Review) is anticipated during project implementation, safety assurance shall also be addressed during the Type I IEPR per EC 1165-2-214.

(b) Type II IEPR. Type II IEPR, or Safety Assurance Review (SAR), is managed outside the USACE and is conducted on design and construction activities for 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 documents 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.

(c) Value Engineering (VE) Regulation ER 11-1-321, Change 1, 01 January 2011, Appendix C, Paragraph 2.a, states "Construction Programs or projects with potential Total Cost equal to or exceeding $10 Million shall perform a VE study in both planning (feasibility) and design phases of project development … ". Appendix C, Paragraph 2.a.2.c states "For all Post-Authorization Changes (e.g., LRRs, GRRs, PACRs) a VE study shall be performed during the PAC report development.

A VE study during the feasibility phase (pre-authorization) shall be oriented toward planning level issues as part of the plan formulation process prior to the selection of final alternatives.

The intent of the VE effort is to utilize VE concepts to ensure that the fullest range of measures and alternatives are considered prior to the authorization of a plan and not to propose or calculate VE savings.

A VE study during the Design/Construction phase (post-authorization) shall be conducted on or around the 35% completion of design of the authorized project. The intent is to review the project design to insure the project is designed in the most cost effective way for the life of the project.

A VE study was conducted on the Mid-Valley Area Phase III LRR in December of 2003 (VE report number 04-002c). However, VE Regulation ER 11-1-321, Change 1, 01 January 2011, paragraph 9.b.4 states "Project or Program study reports will be valid for no more than six years; if not awarded within this timeframe; a new VE study is required." Prior to this LRR being sent to SPD and HQ, the VE study will need to be re-visited by the Value Engineering Officer and select members of the project development team to determine if there has been sufficient change to the project scope and/or the project alternatives since FY04 to warrant another VE study at this phase. Regardless of the outcome of that re-visit, an additional VE study will be required during the design phase (no later than 35% design) on the selected and authorized plan.

(d) 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 Chief of Engineers. 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.

(e) Model Certification/Approval. EC 1105-2-407 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. EC 1105-2-407 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. Use of engineering models is also subject to DQC, ATR, and IEPR.

2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

The RMO is responsible for managing the overall peer review effort described in this Review Plan. The Sacramento River Flood Control Project, California, Mid-Valley Area, Phase III, Area 3 Knights Landing LRR will provide an update of costs and benefits for the authorized project making the LRR a decision

document. The project purpose is FRM. The RMO for the peer review effort described in this Review Plan is CESPD.

For the design and construction phase, the RMO will be the Risk Management Center (RMC). The RMC will coordinate with the Cost Engineering Mandatory Center of Expertise (MCX) during ATR to ensure the appropriate expertise will be included on the review teams to assess the adequacy of cost estimates, construction schedules and contingencies.

3. STUDY INFORMATION

- Decision Document. The decision document provide an evaluation of a specific portion of a plan under current policies, criteria and guidelines, and is limited in scope to economics and compatibility to the authorized project. No additional or changed measures or formulation of alternatives were considered in developing the LRR. Design refinements where recommended to restore levee performance to that established by the originally authorized project The construction drawings are provided in referenced completed and previously approved DDRs.

The following summarizes the document's content:

- LRR will be limited to documentation reflecting the results of the economic analysis undertaken. The MSC is delegated approval authority per ER 1165-2-502 and is anticipated to approve the LRR subject to policy compliance. Should SPD ascertain that approval, specifically related to the project cost escalation, is beyond its delegated authority, the LRR will be forwarded to HQUSACE for action. The actual approval of the economic analysis is believed to be within the MSC's vested approval authority.

- National Environmental Protection Agency (NEPA). There will be no additional NEPA evaluation conducted as part of this LRR. Specific NEPA actions were completed to support recommendations provided in the projects DDRs. The effort resulted in the Finding Of No Significant Impact (FONSI) being executed in April 2013. The LRR will reference the NEPA documentation as they are requirement in the identification of continued Federal interest in the project.

Authorization**.** The SRFCP was first authorized by the Flood Control Act, Pub. L. No. 64-367, §2, 39 Stat. 948, 949-50 (1917) and received subsequent authorizations under the Flood Control Act, Pub. L. No. 70-391, § 13, 45 Stat. 534, 539 (1928); Flood Control Act, Pub. L. No. 74-738, § 6, 49 Stat. 1570, 1592-95 (1936); Rivers and Harbors Act, Pub. L. No. 75-392, § 1, 50 Stat. 844, 844-49 (1937); Flood Control Act, Pub. L. No. 77-228, § 3, 55 Stat. 638, 639, 647 (1941)

The Flood Control Act, Pub. L. No. 78-534, § 10, 58 Stat. 887, 900-01 (1944) and Flood Control Act, Pub. L. No. 81-516, § 204, 64 Stat. 163, 177 (1950) authorized additional modifications. The Knights Landing project was constructed by the Corps of Engineers (Corps) and completed in 1955. The Mid-Valley Area, Phase III is a component of the Sacramento River Flood Control Project (SRFCP). After the 1986 flood, the Corps conducted a system-wide analysis Sacramento River Flood Control Project System Evaluation (System Evaluation) of the Sacramento River Flood Control Project to bring it up to current design standards.

H.R. Rep. No. 99-670, pt. 1, at 53 (1987) (associated with funds appropriated in Energy Water Development Act 1987) along with S.R. Sen. No. 99-441 (1987) provided the authority and funds to

initiated the conduct of a "system evaluation" of exiting Federal levees located in the Central. The resultant of this mandate was the preparation of the Initial Appraisal Report for the SRFCP System Evaluation which was published in 1991. This document became the decision document supporting the delegated authority to implement the SRFCP in phases.

The HQUSACE approved system evaluation was organized into five phases, each representing a different geographic area. The agency approved and authorized construction phases, with the urban areas (Phases I and II) receiving the highest priority. Phase VI was added to evaluate other potential sites in all phases. Some of the work recommended by the System Evaluation has been completed as proposed in a series of design memoranda and related Environmental Assessment-Impact Statements. The authority for this project is from the Conference Report accompanying the Energy and Water Development Act for 1987 (Public Law 99-591). It included funds under Operation and Maintenance, General Appropriation, Inspection of Completed Works, for evaluation of the flood control system for the Sacramento River and its tributaries (Sacramento River Flood Control Project System Evaluation). The House of Representatives Report (99-670) and the Senate Report (99-441) contained similar language.

Study/Project Description**.** The Knights Landing (Area 3) (see Figure 1) portion of the Mid-Valley Area, Phase III Project is located in Yolo County, California about 25 miles northwest of Sacramento. Area 3 consists of the town of Knights Landing as bounded by the right bank of the Yolo Bypass between RM 53 and 56, right bank of the Sacramento River, and the left bank of the Knights Landing Ridge Cut. Frequent flooding characterized by large flows has plagued the Sacramento River Basin. The 1986, 1995, and 1997 flood events sustained severe damages in the region resulting in landside levee slope failures. The recommended fixes include replacing the landside levee face with clean clay; construct seepage/stability berks, toe drains, slurry walls, and relocate an existing ditch. There are six sites for the Knights Landing Project. Three sites are on the right bank of the Sacramento River and three sites are on the left bank of the Knights Landing Ridge Cut. No additional or changed measures or alternatives will be further considered by the analysis contained in the LRR, nor will it recommend a new plan.

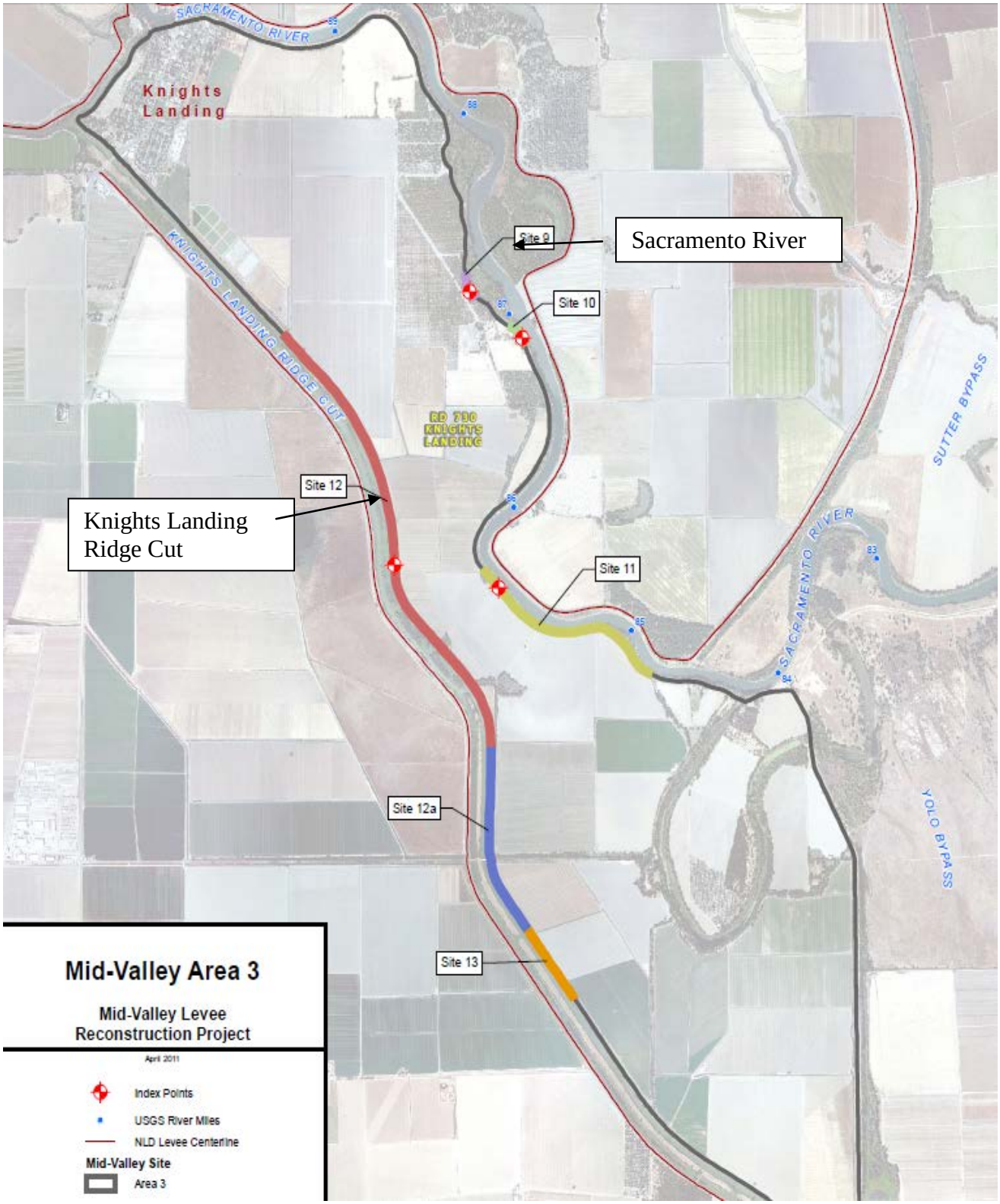

Figure 1 Area 3, Knights Landing Study Area

Design refinements were recommended to restore the levee performance to the authorized and completed Knights landing project. The detailed plans are provided in referenced completed and approved DDRs. Summary is as follows:

Sacramento River

This Sacramento River features involve installing slurry cutoff walls on the existing levee at three sites along the west side of the Sacramento River between river miles 70 and 118. These levees are features of the Sacramento River Flood Control Project (SRFCP), and the work would help to maintain the integrity of the SRFCP by reducing the potential for erosion and failure due to seepage under or through the levees at Sites 9, 10, and 11.

• Site 9 - Levee rehabilitation consists of providing a landside seepage/stability berm with a landside 5 ft deep toe drain and internal drain. The average berm height is 7 ft for a distance of 700 LF.

• Site 10 – Authorized remediation includes a 5 ft landside toe drain or slurry cutoff wall, The depth would vary from 23.04 feet to 26.38 feet deep.

• Site 11 – FRM is a landside seepage/stability berm cutoff wall depth that varies from 21.00 feet to 116.75 feet deep. No toe drain is recommended at Site 11. Average berm height is 5 to 6 ft for 2000 LF.

Knights Landing Ridge Cut

Remediating the existing levee at three sites along the east side of the Knights Landing Ridge Cut (KLRC) also involve installing slurry cutoff walls on the existing correcting levee instability at Sites 12, 12A, and 13. The sponsor, the Central Valley Flood Protection Board (CVFPB) representing the State of California plans using Corps designs to construct these features in advance of the Corps and requesting in-kind creditfor the actions. The levee rehabilitation consists of actions:

- Site 12: Landside Slope flattening and stabilization and existing irrigation ditch relocation.

- Site 12A: Lime stabilization of landside slope and crown.

- Site 13: Lime stabilization of landside slope and crown and existing irrigation ditch relocation Type VI. Landside, flatten and stabilize slope, backfill irrigation ditch and relocate 35 ft from the toe. The landside is to be treated and the levee slope stabilized. The FRM includes backfill of the irrigation ditch and to be relocated 35 ft from toe.

Factors Affecting the Scope and Level of Review. The LRR reevaluates the continued Federal interest in the authorized plan consistent with recommended project remediation presented in the 1996 Design Memorandum and subsequent design refinements presented in the project's construction DDRs. Previous DQC Regional Technical Reviews and ATRs completed will be reassessed for adequacy in the LRR. The design refinements to the authorized project have been documented in separate reviews of the DDRs (sites 9,10 and 11) (sites 12, 12A and 13). Design and construction documents including the Environmental Assessment, resulting in the May 2013 FONSI, have undergone DQC. ATR and Safety Assurance Reviews (Type II IEPR) independent of this report are further discussed in paragraph b(3)(c).

Under EC1165-2-214, should the non-Federal interest undertake a study, design, or implementation of a Federal project or features of the project, or requests permission to alter a Federal project, the non-Federal interest would be required to undertake, at its own expense, any IEPR that the Government determines would have been required if the Government were doing

the work. The non-Federal interest shall make a risk informed decision on whether to undertake a Type I and/or Type II IEPR and document their proposed reviews in a Review Plan that will be reviewed by the local district and approved by the host MSC Commander. The Federal Advisory Committee Act does not apply to peer reviews undertaken by non-Federal interests. The non-Federal interest is required to use the National Academies of Science (NAS) policy for selecting reviewers and is encouraged to use an OEO (Outside Eligible Organization) for management of the effort.

The Cost Engineering Center of Expertise (MCX) located in Walla Walla, Washington will be performed under the management of CESPD-ED. Cost estimates developed and approved will be used in the preparation of the LRR. Designs have had QA/DQC and ATR.

Questions to Determine Scope	Mid Valley, Knights Landing LRR
Will parts of the study be challenging?	Standard planning procedures will be used to evaluate economic feasibility of the recommended plan.
What are the likely study risks and the magnitude of the risks?	The low risks identified by the PDT include: There is little potential for public controversy with this study. The risk has been mitigated by careful communications with the sponsor and public in general.
Will the study have significant threat to human life/safety assurance?	The study area is surrounded by levees and has significant threat to human life and safety assurance if the project should fail.
Will the study report contain influential scientific information or be a highly influential scientific assessment?	The study will not include influential scientific information.
Will the study have significant economic, environmental, and/or social effects to the Nation such as: • more than negligible adverse impacts on scarce or unique cultural, historic or tribal resources • substantial adverse impacts on fish and wildlife species or their habitat, prior to implementation of mitigation • more than negligible adverse impact on species listed as endangered or threatened or their habitat prior to implementation of mitigation.	The study will not have national significance on economic, environmental, social or tribal effects. An Environment Impact Statement is not required. NEPA documentation was accomplished and FONSI signed in April 2013.

Will the study have significant interagency interest?	The study has local, state, and Federal interest but not significant therefore little interagency interest in study.
Will the study be highly controversial?	The project has little or no potential for public or environmental controversy.
Will the information in the decision document be based on novel methods, present complex challenges for interpretation, contain precedent-setting methods or models, or present conclusions that are likely to change prevailing practices?	The study will not result in precedent-setting methods, models, or practices.
Will the project design require redundancy, resiliency, and/or robustness or unique construction sequencing or schedules?	No new design will be proposed by the LRR, so redundancy, resiliency, and/or robustness will not need to be reconsidered in the LRR. The DDRs considered redundancy, resiliency, and robustness as part of the Type II IEPR (SAR). Any design refinements are reflected in the construction recommended in the DDRs. Changes are limited to those required to ensure the functionality of the approved plan and the accuracy of the updated costs and benefits.

In-Kind Contributions**.** Products and analyses provided by non-Federal sponsors as in-kind services are a local responsibility as indicated in EC 1165-2-214. The non-Federal sponsor will not provide any in-kind services for the preparation of the LRR.

4. DISTRICT QUALITY CONTROL

The LRR decision documents (including supporting data, analyses, environmental compliance documents, etc.) shall or have undergone DQC including those as part of the DDRs. DQC is an internal review process of basic science and engineering work products focused on fulfilling the project quality requirements defined in the PMP. The Sacramento District shall manage DQC. Documentation of DQC activities is in accordance with the Quality Manual of the District and the South Pacific Division designated as the home MSC. DQC is the review of basic science and engineering work products focused on fulfilling the project quality requirements. DQC is required for this study.

DQC shall be documented by Excel spreadsheet or Word document from the comments and responses of the DQC Team and the PDT. The documentation of the LRR shall be provided to the ATR Team at each review. All disciplines will undergo DQC and ATR. DQC of the DDRs and ERR has been accomplished prior to initiation of this LRR and may require a refresher depending on revisions required resulting from review of DDRs and ERR. Current plan are to fully utilize these reviews and incorporate recommendations into the LRR. A modified ATR for the LRR is required.

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. The South Pacific Division Review Management Organization (SPD RMO) will manage ATR for the LRR. Whenever possible, meetings between reviewers and the PDT will be face-to-face.

The LRR to be submitted for SPD approval will undergo ATR separately from the other supporting documents. Review comments and responses must be documented, as required format, in Dr. Checks. The draft LRR will be reviewed by the ATR team shown below. The final LRR will be reviewed by the ATR Team only if there are major revisions of the technical content of the draft LRR as a result of review by the South Pacific Division. ATR for the H&H has been completed supporting the Economic Reevaluation Report and will be reevaluated for adequacy in supporting the LRR development . The non-federal sponsor will not submit any technical products that will be subject to DQC and ATR.

The LRR is considered an administrative decision document to support the budgeting for future project implementation. Individual supporting documents that will undergo reviews are:

- Economics Reevaluation Report/Economic Appendix
- Real Estate Plan
- LRR Main Report

Required ATR Team Members (ATRT) Expertise for the LRR and Economics Appendix**.** The ATRT for the LRR is comprised of individuals that have not been involved in the development of the decision document and were previously chosen based on expertise, experience, and/or skills and prior review involvement on the ERR (Table 1). Because the LRR includes an economic evaluation, the ATRT economist will be one of the key reviewers.

Table 1 Agency Team Member Requirements

ATR Team Members/Disciplines	Expertise Required
Planning/Lead	The Planning reviewer should be a senior water resources planner with experience in civil works process; current flood risk management planning and policy guidance; and have experience in crediting. Chair must be from outside SPD.
Economics	Team member will be experienced in civil works and related flood risk reduction projects, and have a thorough understanding of HEC-FDA, V1.2.5a.
Hydrology and Hydraulics	The reviewer should be experienced with the use of HEC-RAS 4.0 (River Analysis System), the HEC Statistical Software Package (SSP). It is used to compute peak flow frequency curve

	statistics (mean, standard deviation, and skew). The reviewer should be familiar with the computation of frequency curves using conditional probability methods and development of hydrographs. The reviewer should be an expert in the field of urban hydrology & hydraulics, have a thorough understanding of the dynamics of the both open channel flow systems, enclosed systems, application of detention / retention basins, effects of best management practices and low impact development on hydrology, approaches that can benefit water quality, application of levees and flood walls in an urban environment with space constraints, non-structural measures especially as related to multipurpose alternatives including ecosystem restoration, non-structural solutions involving flood warning systems, and non-structural alternatives related to flood proofing. The team member will have an understanding of computer modeling techniques that will be used for this project. (See models listed in table provided in Para 9 a. and b.). The reviewer should also be experienced in FLO-2D, a flood routing model that simulates channel flow, unconfined overland flow and street flow over complex topography.
Geotechnical Engineering	The Geotechnical Engineering reviewer should be a senior geotechnical engineer with experience in levees and floodwalls as well as implementation documents for projects midway through construction. The lead reviewer should be familiar with the FOSOM method as recommended in ETL 1110-2-556, deterministic seepage and stability analyses performed for various water surface elevations, including top of levee, on index points determined by the PDT. In addition must be familiar with the under seepage analysis using theory analysis as described in ETL 1110-2-256, EM 1110-2-1913, and TM 3 – 424. The reviewer should also be familiar with SEEP2D within GMS 6.5 (Groundwater Modeling System) for seepage analysis used to calculate average vertical exit gradients at the landside levee toe and/or at more critical location near the levee toe if applicable. Reviewer should also be familiar with the UTEXAS 4 software package for steady state conditions used for analysis of embankment stability against shear failure.
General Engineering (for SAR only)	The lead reviewer should be well versed in design and/or construction activities prior to initiation of physical construction and, until construction activities are completed, periodically thereafter on a regular schedule. The reviewer will consider the assurance of public health, safety, and welfare when conducting reviews.
Cost Engineering	The cost engineering reviewer should be well versed with the Micro-Computer Aided Cost Estimating System (MCACES) Second Generation (MII) and be MCX certified and preferred to have experience in costs of FRM structures. Cost engineer should be pre-certified within the region or by the Walla Walla Cost Engineering (MCX).
Real Estate	The lead reviewer should be a senior realty specialist and have experience related to flood risk reduction projects and knowledge of ER 405-1-12 Real Estate Roles and Responsibilities for Civil Works; Cost Shared and Full Federal Projects.

- Documentation of ATR. DrChecks review software will be used for 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:
- The review concern – identify the product's information deficiency or incorrect application of policy, guidance, or procedures;
- The basis for the concern – cite the appropriate law, policy, guidance, or procedure that has not be properly followed;
- 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
- 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, commenter's 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

- 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.

The 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. A sample Statement of Technical Review is included in Appendix E.

6. INDEPENDENT EXTERNAL PEER REVIEW

IEPR will not be required for the LRR. As previously discussed the technical documents (DDRs) have been conducted separately and managed by CESPK-ED. Type I IEPR is required for decision documents that have public safety concerns, significant controversy, a high level of complexity, or significant economic, environmental, and/or social effects to the nation (EC 1165-2-214, Paragraph 11.a). The LRR will not recommend a plan for approval. Rather, it will verify that the previously approved plan is still economically justified and in the Federal interest.

Type II IEPR, Safety Assurance Review, is described in the review plan for the design and construction implementation documents. The LRR describes the recommended design refinements, but they would be within the scope and footprint of the approved plan for the Knights Landing element (Area 3) of the authorized project. No plan formulation will be required. Specific requirements are as follows:

- **Products to Undergo Type I IEPR.** Not Applicable.
- **Required Type I IEPR Panel Expertise.** Not Applicable.
- **Documentation of Type I IEPR.** Not Applicable.

7. POLICY AND LEGAL COMPLIANCE REVIEW

The LRR will be reviewed for its 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 report 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.

8. COST ENGINEERING MANDATORY CENTER OF EXPERTISE REVIEW AND CERTIFICATION

EC 1165-2-214, paragraph 9.c. (1)(d), requires coordination and certification by the Cost Engineering Mandatory Center of Expertise (MCX) during ATR for implementation and decision documents. The Cost Engineering MCX will conduct an ATR of the revised cost engineering products. Reaffirmation of findings will be performed and included as part of the ATR process.

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 are still the responsibility of the users and are 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 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).

- Planning Models**.** The following planning models were used in the development of the ERR (table 2). The results upon confirmation will be used in the development of the LRR.

Table 2 Planning Model Used in development of the LRR

Model Name and Version	Brief Description of the Model and How It Will Be Applied in the Study
HEC-FDA 1.2.5a (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. The program will be used to evaluate and compare the future without- and with-project conditions along the Sacramento River and Knights Landing Ridge Cut.

- Engineering Models**.** The following engineering models were used in the development of the ERR which is now an LRR and are considered acceptable by the PDT (Table 3).

Table 3 Engineering Models

Model Name and Version	Brief Description of the Model and How It Will Be Applied in the Study
HEC-RAS 4.0 (River Analysis System)	The Hydrologic Engineering Center's River Analysis System (HEC-RAS) program provides the capability to perform one-dimensional steady and unsteady flow river hydraulics calculations. The program will be used to evaluate the future without- and with-project conditions. HEC- Statistical Software Package (SSP). Used to compute peak flow frequency curve statistics (mean, standard deviation, and skew).
MII	Micro-Computer Aided Cost Estimating System (MCACES) Second Generation (MII).
SEEP2D within GMS 6.5 (Groundwater Modeling System)	Results from the seepage analysis were used to calculate average vertical exit gradients at the landside levee toe and/or at more critical location near the levee toe if applicable.
UTEXAS4	Software package for steady state conditions. Used for analysis of

	embankment stability against shear failure. Groundwater Modeling System (GMS 6.5)
FLO-2D	A flood routing model that simulates channel flow, unconfined overland flow and street flow over complex topography.

10. REVIEW SCHEDULES AND COSTS

- **ATR Schedule and Cost.**

  Funding:

  (a) The PDT district shall provide labor funding by cross charge labor codes. Funding for travel, if needed, will be provided through government order. The lead planner will work with the ATR Leader to ensure that adequate funding is available and is commensurate with the level of review needed. The cost for this review is estimated at $50,000.

  Funding shortages will be negotiated on a case by case basis and in advance of a negative charge occurring.

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

  (c) Reviewers shall monitor individual labor code balances and alert the ATRT Lead planner to any possible funding shortages.

  (d) Schedule for completion of LRR has not been determined. Table 4 will be finalized at a later date. The schedule will be made upon receipt of Federal and matching non-Federal funds. Estimate of study funds has not been established. The study will be cost shared 75 Federal /25 non-Federal.

Table 4 - ATR Schedule/Completion:

	Scheduled/Completed
Economics Reevaluation Report/Appendix	TBD
LRR Main Report	TBD

- **Type I IEPR Schedule and Cost.** Not Applicable.
- **Model Certification/Approval Schedule and Cost.** All planning models to be used for the LRR are certified.
- **Type II Safety Assurance Review Schedule and Cost.** The review plan for the design and construction documents will state that SAR panels will be made up of independent, recognized experts (outside of USACE) in the appropriate disciplines, representing a balance of areas of expertise suitable for the review being conducted. Panel members will be selected using the National Academies of Science policy for selecting reviewers. The SAR panel will conduct the review of the design and/or construction activities prior to the initiation of physical construction and, until construction activities are completed, periodically thereafter

on a regular schedule. The SAR panel will consider the assurance of public health, safety, and welfare when conducting reviews.

The Review Management Office for Type II IEPR reviews is the USACE Risk Management Center (RMC). Panel members will include similar member disciplines listed in the ATR in Appendix B. The cost for this effort is estimated at $75,000.

Table 5 - Type II IEPR SAR Reviewer Expertise

Type II IEPR SAR Members/Disciplines	Expertise Required
Hydrology and Hydraulics	The H&H reviewer should be experienced with the use of HEC-RAS 4.0 (River Analysis System), the HEC Statistical Software Package (SSP). It is used to compute peak flow frequency curve statistics (mean, standard deviation, and skew). The reviewer should be familiar with the computation of frequency curves using conditional probability methods and development of hydrographs. The reviewer should be an expert in the field of urban hydrology & hydraulics, have a thorough understanding of the dynamics of the both open channel flow systems, enclosed systems, application of detention / retention basins, effects of best management practices and low impact development on hydrology, approaches that can benefit water quality, application of levees and flood walls in an urban environment with space constraints, non-structural measures especially as related to multipurpose alternatives including ecosystem restoration, non-structural solutions involving flood warning systems, and non-structural alternatives related to flood proofing. The team member will have an understanding of computer modeling techniques that will be used for this project. (See models listed in table provided in Para 9 a. and b.). The reviewer should also be experienced in FLO-2D, a flood routing model that simulates channel flow, unconfined overland flow and street flow over complex topography. The hydraulic engineering reviewer will be an expert in the field of hydraulics and have a thorough understanding of two-dimensional modeling products. They should have experience in driving stage frequency curves and knowledge in applying regression and correlation analysis (i.e. Regression Analysis and Kendall's Tau).
Civil Engineer	Experience in design of levees and flood control.
Geotechnical Engineer	Knowledge of Groundwater Modeling System (GMS 6.5). Experience in Deterministic Analyses and Probabilistic Analyses,

11. PUBLIC PARTICIPATION

This Review Plan will be posted to the Sacramento District's website upon approval.

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 document. Like the PMP, the Review Plan is a living document and may change as the study progresses. The home district is responsible for keeping the Review Plan up to date. Minor changes to the review plan since the last MSC Commander approval will be documented in Appendix C. 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 Commander's approval memorandum, will be posted on the District's webpage. The latest Review Plan will 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:

- Karin Lee, Sacramento District - Planner, 916-557-7987
- Eric Thaut, Program Manager, PCX Flood Risk Management 415-503-6852
- Karen Beresford, District Support Team Lead/Review Management Organization, 415-503-6555

APPENDIX A

REVIEW DOCUMENT FORMS

SACRAMENTO RIVER FLOOD CONTROL PROJECT, CALIFORNIA
MID-VALLEY AREA, PHASE III
AREA 3 KNIGHTS LANDING

COMPLETION OF DISTRICT QUALITY CONTROL (DQC)

INTERIM
LIMITED REEVALUATION REPORT WITH ECONOMIC REEVALUATION APPENDIX

COMPLETION OF QUALITY CONTROL ACTIVITIES. The District has completed the DQC Review for the Sacramento River Flood Control Project, California, Mid-Valley Area, Phase III Area 3, Knights Landing Interim Limited Reevaluation Report. Certification is hereby given that all quality control activities, appropriate to the level of risk and complexity inherent in the project, associated with project development and District Quality Control (DQC), as defined in the Quality Control Plan and Review Plan (RP), have been completed.

GENERAL FINDINGS. Compliance with established policy, principles and procedures, utilizing justified and valid assumptions, was verified. This included review of 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, including whether the project meets the customer's needs consistent with law and existing Corps policy. Documentation of the quality control process is contained in the project file.

_____	_____
DQC Lead,	Date
_____	_____
Project Manager, Charles Austin	Date
_____	_____
Section Chief,	Date
_____	_____
Branch Chief,	Date

SACRAMENTO RIVER FLOOD CONTROL PROJECT, CALIFORNIA
MID-VALLEY AREA, PHASE III
AREA 3 KNIGHTS LANDING
INTERIM
LIMITED REEVALUATION REPORT WITH ECONOMIC REEVALUATION APPENDIX

The Agency Technical Reviews (ATR) has been completed for the Sacramento River Flood Control Project, California, Mid-Valley Area, Phase III Area 3, Knights Landing Limited Reevaluation Report. The ATR was conducted as defined in the project's Review Plan to comply with the requirements of EC 1165-2-214. 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 and provided to SPD in DrChecks[sm].

SIGNATURE
Name
ATR Team Leader
Office Symbol/Company

SIGNATURE
Charles Austin
Project Manager
CESPK-PM-C

SIGNATURE
Name
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 _____ _____

Rick Poeppelman — Date
Chief, Engineering Division
CESPK-ED

SIGNATURE _____ _____

Alicia Kirchner — Date
Chief, Planning Division
CESPK-PD

APPENDIX B

REVIEW TEAM MEMBERS

TABLE 1. PROJECT DELIVERY TEAM MEMBERS

Name	Discipline/Title
Charles Austin	Project Manager
Karin Lee	Planner
Kristy Riley	Hydraulic Design
Rick Torbik	Civil Design
Glen Johnson	Geotechnical/QC of contract
Bob Vrchoticky	Cost Engineering
Laurie Parker	Real Estate
Nicholas Applegate	Economics
Jeff Koschak	Environmental
Patrick Caden	Budget Analyst
Liz Bryson	Sponsor Project Manager
Lewis Bair	KLRCDD

TABLE 2. DQC TEAM MEMBERS

Name	Discipline	District
Brooke Schlenker	Team Leader/Planning and Policy	Sacramento
Timi Shimabukuro	Economics	Sacramento
Ethan Thomas	Hydrology and Hydraulics	Sacramento
Mary Perlea	Geotechnical	Sacramento
Joe Reynolds	Cost Engineering	Sacramento
Paul Zianno	Real Estate	Sacramento

TABLE 3. ATR TEAM MEMBERS

Name	Discipline	District
Roger Setters	Team Leader/Planning and Policy (ATR)	Louisville
Robert Browning	Economics (ATR)	Albuquerque
Russell Wyckoff	Hydrology and Hydraulics (ATR)	SWT
Jim Neubauer	Cost Engineering (ATR)	Walla Walla
Patty Smith	Real Estate	Louisville

TABLE 4. VERTICAL TEAM MEMBERS:

District Support Team Lead	Karen Berresford
Regional Integration Team	Scott Whiteford

TABLE 5 - PLANNING CENTER OF EXPERTISE

FLOOD RISK MANAGEMENT

Name	Discipline
Eric Thaut[1]	Program Manager, PCX Flood Risk Management

[1] Primary PCX is FRM.

APPENDIX C
GLOSSARY of Acronyms and Abbreviations

A-E	Architect – Engineer
ASA(CW)	Assistant Secretary of the Army for Civil Works
ATR	Agency Technical Review
BA	Biological Assessment
CES	Cost Engineering Section
CEQA	California Environmental Quality Act
CESPK	United States Army Corps of Engineers, Sacramento District
CFS	Cubic Feet per Second
CVFCP	Central Valley Flood Control Project
CVFPB	State of California, Central Valley Flood Protection Board
DDR	Detailed Documentation Report
DQC	District Quality Control
DQR	Data Quality Report
DWR	State of California, Central Valley Flood Protection Board (CVFPB)
CX	Corps of Engineers, Center of Expertise
EA	Environmental Assessment
EC	Engineering Circular
EDR	Engineering Document Report
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EM	Engineer Manual
EO	Executive Order
ER	Engineering Regulation
ESA	Endangered Species Act
FCSA	Feasibility Cost-Sharing Agreement
FDR	Flood Damage Reduction
FEMA	United States Federal Emergency Management Agency
FRM-PCX	Flood Risk Management Planning Center of Expertise
GIS	Geographical Information System
GRR	General Reevaluation Report
IDR	Integral Determination Report
IEPR	Independent External Peer Review
ITR	Independent Technical Review
IWG	Interagency Working Group
IWM	In-Stream Woody Material
KLRCDD	Knights Landing Ridge Cut Drainage District
LERRDS	Land Easements Relocations Right of Way and Disposal Sites

LF	Linear Feet
LRR	Limited Reevaluation Report
MSC	Major Subordinate Command
NED	National Economic Development
NER	National Ecosystem Restoration
NEPA	National Environmental Policy Act
NOAA	U.S. National Oceanic & Atmospheric Administration
O&M	Operation and maintenance
OMB	U.S. Office and Management and Budget
OMRR&R	Operation, Maintenance, Repair, Replacement and Rehabilitation
OEO	Outside Eligible Organization
PAC	Post Authorization Change
PADD	Post Authorization Decision Document
PAPSS	Post Authorization Plan of Study & Strategy
PCA	Project Cooperation Agreement
PDT	Project Delivery Team
PL	Public Law
PM	Project Manager
PMP	Project Management Plan
PPA	Project Partnership Agreement
PRP	Peer Review Plan
QA/QC	Quality Assurance / Quality Control
QMP	Quality Management Plan
RD	Reclamation District
REP	Real Estate Plan
RP	Review Plan
RED	Regional Economic Development
RM	River Mile
SACCR	Schedule & Cost Change Request
SAM	Standard Assessment Methodology
SAR	Safety Assurance Review
SOS	Scope of Services
SOW	Scope of Work
SPD	South Pacific Division
SRBPP	Sacramento River Bank Protection Project
SRFCP	Sacramento River Flood Control Project
TRSS	Technical Review Strategy Session
USFWS	United States Fish & Wildlife Service
VE	Value Engineering
WRCB	Water Resources Control Board
WRDA	Water Resources Development Act

APPENDIX D: REVIEW PLAN REVISIONS

Revision Date	Description of Change	Page / Paragraph Number
March 2013	Update of project description and schedule	Throughout
3April 2013	Update per SPD review comments	Throughout/
16 May 2013	Update per SPD review comments	p-3 para. 2; p 9 Table; App B tables 1 & 2
22 May 2013	Revised per SPD comments	as follows

CESPK-PDW- Furman 22 May 2013
Memorandum of Record

Subject: Knights Landing Review Plan Comments/Responses

The following comments offered by SPD on the draft review plan were provided to help the PDT obtain compliance and MSC Commander approval. A revised (tracked changes) draft and a document noting how each comment was addressed is provided in the revised draft.

Comments provided by e-mail (May 2013):
Boniface (Boni) Bigornia, P.E.
Senior Regional Hydraulic Engineer
South Pacific Division
1455 Market St., Rm. 2043-B
San Francisco, CA 94103-1399
Telephone (415) 503-6567
Cell Phone (415) 533-7989

Response: Concur Responses are provided in text below; RP changes were made in tract change as requested.

1. Recommend spelling out IKC (in kind credit) rather than using this new abbreviation as it is only used once or twice.
Response: Noted. Paragraph 1 spells out IDR in previous revision. Appendix D Glossary also revised.

2. In Sec 3.a, please elaborate on the sentence: "Design changes have been limited to design refinements of the approved authorized plan." This is necessary to provide supporting information to confirm that statement.
Response: Concur; report revised to clarify. Design refinements where recommended to restore the levee performance to the authorized and completed Knights landing project. The detailed plans are provided in referenced completed and approved DDRs. Summary is as follows:

Sacramento River

This Sacramento River features involve installing slurry cutoff walls on the existing levee at three sites along the west side of the Sacramento River between river miles 70 and 118. These levees are features of the Sacramento River Flood Control Project (SRFCP), and the work would help to maintain the integrity of the SRFCP by reducing the potential for erosion and failure due to seepage under or through the levees at Sites 9, 10, and 11.

• Site 9 - Levee rehabilitation consists of providing a landside seepage/stability berm with a landside 5 ft deep toe drain and internal drain. The average berm height is 7 ft for a distance of 700 LF.

• Site 10 – Authorized remediation includes a 5 ft landside toe drain or slurry cutoff wall, The depth would vary from 23.04 feet to 26.38 feet deep.

• Site 11 – FRM is a landside seepage/stability berm cutoff wall depth that varies from 21.00 feet to 116.75 feet deep. No toe drain is recommended at Site 11. Average berm height is 5 to 6 ft for 2000 LF.

Knights Landing Ridge Cut

Remediating the existing levee at three sites along the east side of the Knights Landing Ridge Cut (KLRC) also involve installing slurry cutoff walls on the existing correcting levee instability at Sites 12, 12A, and 13. The sponsor, the Central Valley Flood Protection Board (CVFPB) representing the State of California plans using Corps designs to construct these features in advance of the Corps and requesting IKC for the actions. The levee rehabilitation consists of actions:

- Site 12: Landside Slope flattening and stabilization and existing irrigation ditch relocation.

- Site 12A: Lime stabilization of landside slope and crown.

- Site 13: Lime stabilization of landside slope and crown and existing irrigation ditch relocation Type VI. Landside, flatten and stabilize slope, backfill irrigation ditch and relocate 35 ft from the toe. The landside is to be treated and the levee slope stabilized. The FRM includes backfill of the irrigation ditch and to be relocated 35 ft from toe.

3. In Sec 3.c, please provide more information to support the statements: "Design changes will be limited to refinements of the approved authorized plan. These refinements will be factored into the approved plan in order to accurately estimate the costs and integral nature of the CVFPB advanced work."
Response: Noted. Reference deleted. Response to previous comment addressed concern

4. In Sec 3.d, please include a description of design improvements to supplement the sentence: "The design refinements to the authorized project are documented in separate DDRs (sites 9, 10, and 11) (sites 12, 12A, and 13)."
Response: Noted, the purpose of the RP is not to provide description of the plans only description how these plans will be evaluated for independent technical compliance. Description of the plan are detailed in DDRs as well as summarized in the ERR and IDRs.

5. In Sec 9.b, please include in the table of models, all of the models described in the table of Sec 5.e.
Response: Concur; Paragraph 5.e. revised for accuracy and consistency.

6. In Sec 10.d, please identify the skill sets needed for the SAR rather than referring to Attachment 1 (which could not be found). Also describe the skill sets/experience being considered for those SAR team members.
Response: Concur; Report revised Table in paragraph 5.e.

7. In Sec 10.e, please note that VE studies are also required for implementation documents. Coordinate with the District Value Engineering Officer.
Response: Concur, paragraph revised.