

CESPD-RBT

29 Amil 2013

MEMORANDUM FOR Commander, Los Angeles District, ATTN: CESPL-PM-C, Ms. Raina Fulton

Subject: San Luis Rey River, CA, Review Plan Approval

1. San Luis Rey River Review Plan that is enclosed is in accordance with Engineering Circular (EC) 1165-2-214, Review of Decision Documents, dated 15 Dec 2012. The South Pacific Division, Planning and Policy Division, Regional Business Technical Division, and Los Angeles District Support Team have reviewed the Review Plan that has been submitted.

2. 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. The Review Plan excludes Independent External Peer Review Type II Safety Assurance Review (SAR).

3. 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.

4. Points of contact for this action are Mr. Boniface (Boni) Bigornia, CESPD-RBT, 415-503-6567, boniface.g.bigornia@usace.army.mil and Mr. Paul Bowers, CESPD-PDC, 415-503-6556, paul.w.bowers@usace.army.mil.

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

Encl Review Plan

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ANDREW B. NELSON, P.E. COL, EN Commanding

Review Plan San Luis Rey River, CA Los Angeles District March 2013

1. PURPOSE

a. Purpose. This document outlines the Review Plan for defining the scope and level of quality management activities and peer review for the San Luis Rey River Flood Control Project.

b. References.

(1) ER 1110-2-1150, Engineering and Design for Civil Works Projects, 31 Aug 1999

(2) ER 1110-1-12, Engineering and Design Quality Management, 21 Jul 2006

(3) WRDA 2007 H. R. 1495 Public Law 110-114, 8 Nov 2007

(4) EC 1165-2-214, Civil Works Review Policy, 15 Dec 2012

(5) Army Regulation 15–1, Committee Management, 27 November 1992 (Federal Advisory Committee Act Requirements)

(6) National Academy of Sciences, Background Information and Confidential Conflict Of Interest Disclosure, BI/COI FORM 3, May 2003

(7) Final Integrated Post Authorization Decision Document for the San Luis Rey Flood Control Project From College Blvd. to the Pacific Ocean, San Diego, California, July 2007

(8) San Luis Rey River Flood Control Project Real Estate Plan Supplement, [date]

(9) San Luis Rey Flood Control Project, Rincon Mitigation Site Habitat Restoration Action, San

Diego County, California, Draft Environmental Assessment/Mitigated Negative Declaration, June 2012

(10) Operation, Maintenance, Repair, Replacement, and Rehabilitation Manual, San Luis Rey River Flood Control Project (Murray Road to Pacific Ocean), Oceanside, California, April 2010

<u>c. Review Requirements.</u> This review plan was developed in accordance with EC 1165-2-214, which establishes the procedures for ensuring the quality and credibility of U.S. Army Corps of Engineers (USACE) decision and implementation documents through review. This Review Plan describes the scope of review for the implementation documents. All appropriate levels of review (DQC and ATR) will be included in this Review Plan and any levels not included will require documentation in the Review Plan of the risk-informed decision not to undertake that level of review. The Review Plan identifies the most important skill sets needed in the reviews and the objective of the review and the specific advice sought, thus setting the appropriate scale and scope of review for the individual project.

<u>d. Review Management Organization (RMO).</u> The RMO is responsible for managing the overall peer review effort described in this review plan. The SPD will coordinate and approve the review plan and procure the services of a suitable ATR lead and support the ATR.

2. PROJECT DESCRIPTION

a. Project Authority. The San Luis Rey River Flood Control Project was authorized under the Senate Public Works Committee and House Public Works Committee resolutions dated 17 December 1970 approving the project under provision of Section 201 of the Flood Control Act of 1965 (Public Law 89-298; 79 Stat 1073):

"The project for the flood protection on the San Luis Rey River, California, is hereby approved substantially in accordance with the recommendations of the Secretary of the Army and the Chief of Engineers in Senate Document numbered 91-106."

Water Resources Development Act of 1986 (WRDA 86) Section 1165 stated: "The interest rate used for purposes of analyzing the costs and benefits of the San Luis Rey Flood Control Program in San Diego County, California, shall be the applicable interest rate at the time of the agreement under Section 215 of the Flood Control Act of 1968 was entered into." Section 103 of the Act established the 75/25 cost sharing formula and 5% cash requirement for the project

Water Resources Development Act of 1990 (WRDA 90) Approval of the Supplemental Phase II General Design Memorandum (Section 1.3.2.5) in 1988 by the Chief of Engineers, as the Congressionally Authorized Plan or Modified Single Levee Plan, was a result of Section 7 consultation with the USFWS. The Standard Project Flood (SPF) design was 89,000 cubic feet per second (cfs) discharge frequency. The WRDA of 1990, Section 102.f. states:

"SAN LUIS REY RIVER, CALIFORNIA.—The project for flood control, San Luis Rey River, authorized pursuant to section 210 of the Flood Control Act of 1965 (42U. S. C. 1962d-5; 79 Stat. 1073-1074) is modified to construct the project at a total cost of \$ 60,400,000, with an estimated first Federal cost of \$ 45,100,000 and an estimated first non-Federal cost of \$15,300,000."

Water Resources Development Act of 1996 (WRDA 96) As a result of the Post Authorization Change (PAC) Report of December 1995, the San Luis Rey River Flood Control Project was reauthorized with an increased cost of the project due to a revised total cost above the limit prescribed in Section 902 of WRDA 86. As stated in the re-authorization the total project cost increased to \$81,600,000. Section 301.a.3. states:

"3. SAN LUIS REY RIVER, CALIFORNIA.—The project for flood control of the San Luis Rey River, California authorized pursuant to section 210 of the Flood Control Act of 1965 (42 U. S. C. 1962d-5; 79 Stat. 1073-1074) is modified to construct the project at a total cost of \$81,600,000, with an estimated Federal cost of \$61,100,000, and an estimated non-Federal cost of \$20,500,000."

<u>b. Location and Description.</u> The San Luis Rey River Flood Control Project is located in southern California, 86 miles south of the City of Los Angeles and 30 miles north of the City of San Diego in San Diego County, California. The San Luis Rey River heads at the crest of the coast range near the northern boundary of San Diego County and flows generally westward and enters the Pacific Ocean at the City of Oceanside, San Diego County, California. The project area encompasses a total of approximately 7.2 river miles from College Blvd. (formerly Murray Rd.) in the east to the Pacific Ocean in the west.

As authorized, the San Luis Rey Flood Control Project was designed and constructed to convey a Standard Project Flood of 89,000 cubic feet per second (cfs), as documented in the Supplemental Phase II General Design Memorandum approved in 1988. The authorized project, which includes a recommended operation and maintenance plan for vegetation and sediment removal within the flood control channel, is the Congressionally Authorized Plan.

The plan was designed and constructed as the result of formal Section 7 consultation (under the Endangered Species Act), with the USFWS. The constructed design established a 400-foot wide flow conveyance zone as well as in- channel and detention pond habitat areas. The Corps and the City of Oceanside (City) initiated construction in 1990 and completed the structural construction phase of the flood control project in January 2000.

Over the next several years, vegetation filled in the channel, but funds were not available to remove it. Vegetation grew to the extent that flow conveyance was reduced. Vegetation provided habitat for four threatened and endangered species. When funding became available to clear the vegetation, negotiations with the resource agencies began to obtain the necessary permits and Biological Opinion. The resulting mitigation, terms and conditions were extensive, including a plan to clear vegetation mowed strips over four phases and rotations to minimize impact on the threatened and endangered species. A PADD/SEIS/EIR was approved in May 2007 to implement that action.



The PADD Plan

3. WORK PRODUCTS TO BE REVIEWED

a. Products for Review. The construction of the levees was complete in 2000. The Operation, Maintenance, Repair, Replacement, and Rehabilitation (OMRR&R) Manual for the levees was completed. The listing of endangered species and the designation of critical habitat prevented clearing vegetation and removing sediment as specified in the OMRR&R Manual. Since completion of the levees, numerous environmental commitments have been negotiated in compliance with the Endangered Species Act and ensuing permits. The remaining work includes vegetation and sediment removal performed under service contracts, environmental commitments and incorporating the environmental commitments into the OMRR&R Manual.

Implementation of the mitigation measures identified in the PADD requires acquisition of mitigation lands. The Real Estate Plan Supplement presents the real estate requirements for the mitigation associated with the PADD. The accompanying Environmental Assessment addresses environmental impacts of the implementing the mitigation requirements. Land necessary for physical construction of the project was acquired based on the 1988 plan. All land with the Project Area was acquired at that time. No additional land is necessary for the Project, except to meet mitigation requirements subsequent to construction. Previous real estate requirements were identified in the *Phase I GDM*, *1981, the Phase II GDM*, *1983*, and *the Supplemental Phase II GDM*, *1987*.

Documents requiring review are the Real Estate Plan Supplement and accompanying Environmental Assessment required to include mitigation lands and the OMRR&R Manual.

b. Authorization & Reference Materials. Electronic versions of the documents, including the 1981, 1983 and 1987 GDMs, the PADD, the Real Estate Plan and EA, and the OMRR&R Manual, and all relevant information available shall be posted in Adobe Acrobat PDF format for the ATR to review.

4. SCOPE OF REVIEW

<u>a. District Quality Control (DQC).</u> DQC is the review of basic science and engineering work products focused on fulfilling the project quality requirements defined in the Project Management Plan (PMP). SPL will continue to follow the Standard Operating Procedures as outlined in ER 1110-1-12 Quality Management where the DQC will consist of Quality Checks and Reviews, supervisory reviews, Project Delivery Team (PDT) Reviews including input from the Local Sponsor.

<u>b. Agency Technical Review (ATR)</u>. Agency Technical Review (ATR) is undertaken to "ensure the quality and credibility of the government's scientific information" in accordance with ER 1110-1-12. In order to insure incorporation of COE national experience for Flood Risk Management Projects (as updated per post-Katrina investigations), and in addition to the DQC, an ATR will also be performed.

(1) ATR Team responsibilities are as follows:

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

(b) Reviewers shall pay particular attention to one's discipline but may also comment on other aspects as appropriate. Reviewers that do not have any significant comments pertaining to their assigned discipline shall provide a comment stating this.

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

(d) Review comments shall contain these principal elements:

• a clear statement of the concern – identify the product's information deficiency or incorrect application of policy, guidance, or procedures;

• the basis for the concern, such as law, policy, or guidance – cite the appropriate law, policy, guidance, or procedure that has not be properly followed;

• significance for 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

• specific actions needed to resolve the comment – identify the action(s) that the PDT must take to resolve the concern.

(e) The "Critical" comment flag in DrChecks shall not be used unless the comment is discussed with the ATR manager and/or the Technical Project Leader first.

(2) PDT Team responsibilities are as follows:

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

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

c. Independent External Peer Review (Safety Assurance Review)

(1) Type II Independent External Peer Review (Safety Assurance Review)

(a) A Type II IEPR (SAR) shall be conducted on design and construction activities for any project where potential hazards pose a significant threat to human life (public safety); the Federal action is justified by life safety; or the failure of the project would pose a significant threat to human life. Also, there may be other type projects where the District should assess whether the hazards pose a significant threat to human life and warrants a Safety Assurance Review.

(b) External SAR panels will conduct reviews of the design and construction activities prior to the 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) This applies to new projects and to the major repair, rehabilitation, replacement, or modification of existing facilities. This guidance is effective immediately for any project subject to Type II IEPR in Pre-Construction Engineering and Design (PED) or under construction as of 8 November 2007. The construction of this project was completed in 2000. Had the design and construction of the levees and other project features related to life safety not been completed prior to 8 November 2007, this project would have been subject to a Safety Assurance Review.

(d) The responsibility rests with the District Chief of Engineering, as the Engineer in Responsible Charge, to assess and document in the Review Plan the assessment as to whether there is a significant threat to human life. The District Chief of Engineering has determined that the remaining activities described in this Review Plan, namely Vegetation and Sediment removal, Real Estate Plan, Environmental Assessment, and revision to the OMRR&R Manual to add mitigation requirements and Biological Opinion requirements, do not in themselves pose a significant threat to human life and therefore these activities do not require a Safety Assurance Review.

(e) The OMRR&R was prepared after construction of the levees were complete, however, the project was not turned over due to occupation of the channel by endangered species which prevented the Corps from clearing the channel to design level. It took 7 years to complete consultation with USFWS, which resulted in the 2007 PADD. The PADD plan balanced flood risk reduction with endangered species habitat by reducing the flood risk reduction from 270-year level of protection to 100-year (the minimally acceptable level) by mowing in strips alternately over time that would allow the birds to nest alternately from one side to the other. Sediment removal would follow the final phases of mowing to restore capacity to the 100-year protection level. The PADD was approved February 21, 2008 by MSC, reducing the authorized project cfs from 89,000cfs to 71,200. All hydraulic and risk analyses were completed as part of the PADD, including a Hydraulics Appendix utilizing HEC-RAS modeling of alternatives, with review and issue resolution at MSC and HQ levels completed prior to approval. As each strip is mowed, the OMRR&R Manual is to be updated to describe that strip's mowing and then that strip is turned over to the local sponsor for ongoing O&M. Thus, the updates do not pose a significant threat to human life.

(g) The Real Estate Plan Supplement and EA add a 45-acre parcel outside of the channel, not connected to the levees, but nearby for mitigation. The acquisition of non-adjacent mitigation lands does not pose a threat to human life.

5. MODELS USED IN DEVELOPING

No models will be used on the remaining work for this project.

6. REVIEW TEAM

<u>a. District Quality Control</u>. District Quality Control activities for the Real Estate Plan, accompanying EA and OMRR&R Manual will consist of quality checks and reviews, supervisory reviews, Project Delivery Team (PDT) reviews, and Local Sponsor review. Current supervisors, PDT members and Local Sponsor POC are listed below:

| Discipline/Role | Name | Agency/Office | Phone No. |
|-------------------------------------|--------------------------|-------------------|----------------|
| SPL District Supervisors include: | | | |
| Supervisor of Real Estate Plan work | Karen Kennedy | CESPL-AM-CW | (213) 452-3128 |
| Supervisor of EA work | Hayley Lovan | CESPL-PD-RQ | (213) 452-3863 |
| Supervisor of OMRR&R work | Stephen Vaughn | CESPL-ED-DB | (213) 452-3654 |
| PDT Members Include: | | | |
| Project Manager | Raina Fulton | CESPL-PM-C | (213) 452-3998 |
| Environmental Coordinator | Tiffany Bostwick | CESPL-PD-RN | (213) 452-3845 |
| Biologist | Thomas Keeney | CESPL-PD-RQ | (213) 452-3875 |
| Landscape Architect | Debbie Lamb | CESPL-PD-RL | (213) 452-3789 |
| Soils Engineer | Paul Beaver | CESPL-ED-GD | (213) 452-3588 |
| Archeologist | Steve Dibble | CESPL-PD-RN | (213) 453-3849 |
| Hydraulics Engineer | Sharon Garcia | CESPL-ED-HH | (213) 452-3552 |
| Hydrologic Engineer | Mylene Perry | CESPL-ED-HH | (213) 452-3030 |
| Economist | Joe Lamb | CESPL-PD-WE | (213) 452-3819 |
| Counsel | Elizabeth Moriarty | CESPL-OC | (213) 452-3955 |
| Civil Design Engineer | Jose Rocha | CESPL-ED-DA | (213) 452-3661 |
| Real Estate Specialist | Willie Starks | CESPL-AM-DOD-R | (213) 452-3140 |
| Regulator | Robert Smith | CESPL-CO-RS | (760) 602-4831 |
| Local Sponsor POC: | | | |
| Deputy City Manager | Michelle Lawrence-Skaggs | City of Oceanside | (760) 801-0993 |

DQC Review Team Roster

<u>b. Agency Technical Review.</u> The ATR team will be established per ER 1110-1-12 and EC 1165-2-214. The Corps will manage the ATR internally and it will be conducted by individuals and organizations that are separate and independent from those that accomplished the work, in accordance with policy. As stipulated in ER 1110-1-12, ATR members will be sought from the following sources: regional technical specialists (RTS); appointed subject matter experts (SME) from other districts; senior level experts from other districts; Center of Expertise staff; appointed SME or senior level experts from the responsible district; experts from other USACE commands; contractors; academic or other technical experts; or a combination of the above.

(1) Real Estate Plan (REP). This brief plan supplements the project REP to document a decision made in 2008 by SPL, the DST and the RIT that implements mitigation requirements documented in the PADD. It was the risk-informed decision of SPD Asset Management to conduct the ATR on District by a Real Estate Specialist with extensive experience in civil works projects and real estate plans who was not already familiar with the action. Ann Volz, Chief, Arizona/Nevada Branch, meets these qualifications and is identified as the ATR lead and reviewer.

(2) Environmental Assessment (EA) for the Real Estate Plan. The Draft EA completed ATR review in June 2012. Changes to the draft document will be reviewed by the original ATR reviewer, Matthew Davis, Environmental Coordinator and Landscape Architect at SPK.

(3) OMRR&R Manual Agency Technical Review Team Qualifications. The ATR of the OMRR&R Manual will be conducted after the last vegetation management phase, currently scheduled for 2018. At that time, the ATR Team will be identified with the following disciplines and qualifications:

(a) Hydrology and Hydraulics. The team member should be a registered professional with 10 or more years experience in conducting and evaluating hydrologic and hydraulic analyses for flood risk management projects. The team member should be experienced performing hydrologic and hydraulic engineering studies and analysis of surface water, groundwater, meteorology, discharge frequency, sediment and debris production, water quality, and flood hydraulic studies of overflow, hydraulic design, and sediment transport. Experience with all aspects of hydraulic engineering including: hydraulic analyses and designs for approach channels, and diversion structures; water velocities, pressures, directions, trajectories, and erosion potential; and hydraulic modeling is desired. Active participation in related professional societies is encouraged.

(b) Geotechnical Engineering. The team member should have 10 or more years experience in geotechnical engineering. Team member must demonstrate significant experience in the geotechnical aspects of analysis, design and construction of flood risk management structures including channels, floodwalls, and soil cement structures. Specific required design experience includes assessing soil properties, slope stability, seepage analysis, filter design, slope protection design, preparation of plans/specifications and instructions to field personnel. Required construction experience includes diversion and control of water, foundation treatment and improvement, compaction and moisture conditioning methods, evaluating QA/QC and record test data, and evaluating earthwork construction and differing site condition claims.

(c) Environmental Specialist. The team member should have a solid background in the habitat types to be found in the arid southwestern United States and understand the factors that influence the reestablishment of native species of plants and animals. The team member also should have 10 or more years experience in NEPA compliance activities and preparation of Environmental Assessments and Environmental Impact statements for complex civil/site work projects.

(d) Civil Engineering. The team member should have 10 or more years experience with large scale civil/site work projects to include levee systems, floodwalls, roads and highways, relocations, paving and drainage, and be knowledgeable in the art of science Ecosystem Restoration Projects such as design of channels, detention ponds, and site layout.

(e) Operations. The team member should have 10 years or more experience in implementing OMRR&R Manuals to operate and maintain flood control features including levees, including inspecting for structural deficiencies, and insuring that mitigation measures that are part of the project are implemented as specified by the OMRR&R Manual.

(f) ATR Team Leader. The ATR Team Leader should have 10 or more years experience with Civil Works Projects, preferably on flood risk management and environmental restoration projects, also capable of performing ATR Team Lead duties on complex civil works projects.

ATR Review Team Roster

| Discipline/Role | Name | Agency/Office | Phone No. |
|---------------------------|---------------|---------------|----------------|
| Real Estate Plan | | | |
| Real Estate | Ann Votz | CESPL-RE | (602) 230-6960 |
| EA | | | |
| Environmental Coordinator | Matthew Davis | CESPK-PD | (916) 557-6708 |
| OMRR&R | | | |
| Hydrology & Hydraulics | TBD | | |
| Geotechnical Engineering | TBD | | |
| Environmental Specialist | TBD | | |
| Civil Engineering | TBD | | |
| Operations | TBD | | |
| ATR Team Leader | TBD | | |

7. REVIEW SCHEDULE

a. ATR Schedule.

The ATR process for the San Luis Rey River work products will follow the following timeline. Actual dates may have to be adjusted once the period draws closer.

| Review Plan Approved by RMO (SPD) | 29 March 2013 |
|---|-------------------|
| DQC of Real Estate Plan & EA | 30 September 2013 |
| ATR Review of Real Estate Plan & EA | 30 October 2013 |
| ATR Complete Back Checking | 15 November 2013 |
| ATR Certification for Real Estate Plan and EA | 30 November 2013 |
| DQC & ATR of OMRR&R Manual | TBD (after 2018) |

<u>b. ATR Funding.</u> The current cost estimate for the review of the Real Estate Plan is \$5,000. The current cost estimate to complete the ATR of the Environmental Assessment is \$5,000. The current cost estimate for the review of the OMRR&R Manual is \$10,000.

8. PUBLIC COMMENT

To ensure that the peer review approach is responsive to the wide array of stakeholders and customers, both within and outside the Federal Government, this Review Plan will be published on the district's public internet site following approval by SPD at

http://www.spl.usace.army.mil/Missions/CivilWorks/ReviewPlans.aspx. This is not a formal comment period and there is no set timeframe for the opportunity for public comment. If and when comments are received, the PDT will consider them and decide if revisions to the review plan are necessary. The public is invited to review and submit comments on the plan as described on the web site.

9. DOCUMENTATION OF REVIEW

ATRs will be documented in DrChecks in accordance with EC 1165-2-214.

10. POINTS OF CONTACT

Questions about this Review Plan may be directed to the Los Angeles District Project Manager, Ms. Raina Fulton at (213) 452-3998. Questions specific to the OMRR&R Manuel may be directed to Design Lead Supervisor, Mr. Stephen H. Vaughn at (213) 452-3654; questions specific to the Real Estate Plan may be directed to Real Estate Specialist, Willie Starks at (213) 452-3140; and questions specific to the EA may be directed to Environmental Coordinator, Tiffany Bostwick at (213)452-3945. The Chief, Engineering Division is Mr. Richard J. Leifield at (213) 452-3629. Inquiries to the MSC should be directed to Mr. Paul Bowers at (415) 503-6556.

11. REVIEW PLAN APPROVAL

In summary, the Los Angeles District proposes to fully comply with all existing guidance in accordance with EC 1165-2-214. In order to ensure the Review Plan is in compliance with the principles of EC 1165-2-214, the Review Plan must be reviewed and approved by the applicable MSC, in this case the Commander, South Pacific Division (SPD). Once the Review Plan is approved, the District will post it to its district public website and notify SPD. If necessary, any changes to the review plan will be approved by following the process used for initially approving the plan. The Los Angeles District requests that the South Pacific Division endorse the above recommendations and approve this Review Plan as described in Appendix B of EC 1165-2-609.

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the San Luis Rey River Flood Control Project Real Estate Plan Supplement and accompanying Environmental Assessment. 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. All comments resulting from the ATR have been resolved and the comments have been closed in DrCheckssm.

| TBD ATR Team Leader | Date |
|--|---------------------|
| TBD ATR Team Leader's Supervisor | Date |
| Raina Fulton Project Manager CESPL-PM-C | Date |
| TBD Review Management Office Representative CESPD | Date |
| CERTIFICATION OF AGENC | Y TECHNICAL REVIEW |
| Significant concerns and the explanation of the resolution | ion are as follows: |

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

Josephine R. Axt, Ph.D Chief, Planning Division

Theresa M. Kaplan Chief, Asset Management Date

Date

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the San Luis Rey River Flood Control Project OMRR&R Manual. 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. All comments resulting from the ATR have been resolved and the comments have been closed in DrCheckssm.

TBD ATR Team Leader

TBD ATR Team Leader's Supervisor

Raina Fulton Project Manager CESPL-PM-C

TBD Review Management Office Representative CESPD

CERTIFICATION OF AGENCY TECHNICAL REVIEW

Significant concerns and the explanation of the resolution are as follows:

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

Richard Leifield, PE Chief, Engineering Division

Date

Date

Date

Date

Date