

American River Flood Control District

SAFCA Agreement for OMRR&R

Staff Report

Discussion:

The Sacramento Area Flood Control Agency(SAFCA) has developed a levee improvement project to increase the level of protection of the District's Arcade Creek Levees. The project, called the North Sacramento Streams(NSS) Levee Improvement Project, will be cost-shared with the State of California(State). The State requires a Local Project Partnering Agreement with a local project sponsor such as SAFCA to assign roles, responsibilities, and cost-sharing provisions for the work.

The State also requires and Operation, Maintenance, Repair, Replacement, and Rehabilitation(OMRR&R) Agreement between the State and the local sponsors. In recent years, the State also identifies the Local Maintaining Agency as an entity that must be a party to the OMRR&R Agreement. In order for SAFCA to obtain cost-sharing funding to construct the NSS project, SAFCA staff believes that the District must sign the State OMRR&R Agreement.

In the past, the District provided assurances to the State that they would Operate and Maintain any levee facilities constructed and turned over to the District. It is not evident that the District has ever committed to Repair, Replace, or Rehabilitate(RR&R) any levee facilities.

Many Local Maintaining Agencies in the Central Valley are struggling with the idea of RR&R and their ability to pay for the enormous costs associated with RR&R. The Sutter Butte Flood Control Agency in the Yuba City area has acknowledged this discrepancy between the costs of RR&R and the small budgets of LMAs and has crafted an alternate definition for OMRR&R that better captures what an LMA could actually provide. This draft description of LMA OMRR&R is included in your materials for this agenda item.

During a recent meeting with District Legal Counsel and SAFCA staff, three possible options were identified to help SAFCA construct the NSS project with State funding:

1. Sign the OMRR&R Agreement
2. Sign the OMRR&R Agreement but include a transmittal letter indicating that the signature is only given because there is no feasible alternative
3. Sign the OMRR&R Agreement but indicate the District has an alternate definition of OMRR&R

Recommendation:

The General Manager recommends that the Board of Trustees choose one of the three listed options to sign the OMRR&R Agreement and thereby allow SAFCA to construct the NSS project with cost-shared State funding.

OPERATION, MAINTENANCE, REPAIR, REPLACEMENT, AND
REHABILITATION AGREEMENT BETWEEN
The Central Valley Flood Protection Board
AND
American River Flood Control District and
the Sacramento Area Flood Control Agency
FOR
The Levee Accreditation Project
North Sacramento Streams Levee Improvement Project

This Operation, Maintenance, Repair, Replacement, and Rehabilitation Agreement (“OMRR&R Agreement”) is entered into by and between the State of California (“State”), acting by and through the Central Valley Flood Protection Board, or any successor thereto, (“Board”), American River Flood Control District (“Local Maintaining Agency”), and, for the limited purpose of Section I.A.3., hereof, the Sacramento Area Flood Control Agency (“Funding Recipient”) on this _____ day of _____, 2017 in view of the following circumstances:

1. The North Sacramento Streams Levee Improvement Project (the “Project”) is being undertaken under the Department of Water Resources’ (Department) Urban Flood Risk Reduction (“UFRR”) Program. The Project is a part of the Sacramento River Flood Control Project which was authorized by Congress by Section 101(a)(1) of the Water Resources Development Act (WRDA) of 1996 (Pub. L. No. 104-303, § 101(a)(1), 110 Stat. 3658, 3662-3663 (1996)), as amended. Amendments to this authority are as follows: 1) Section 366 of WRDA of 1999 (Pub. L. 106-53, § 366, 113 Stat. 269, 319-20 (1999)); 2) Section 129 of the Energy and Water Development Appropriations Act (EWDAA) of 2004 (Pub. L. No. 108-137, § 129, 117 Stat. 269, 1839 (2003)); 3) Section 130 of the Consolidated Appropriations Act (CAA) of 2008 (Pub. L. No. 110-161, § 130, 121 Stat. 1844, 1947 (2007)); and 4) Section 7002 of the Water Resources Reform and Development Act (WRRDA) of 2014 (Pub. L. No. 113-121, §7002, 128 Stat. 1193, 1366 (2014)).and the Water Infrastructure Improvements for the Nation Act (WINN) of 2016 (Pub. L. No 114-322, §1401) and is a part of the Sacramento River Flood Control Project which was authorized by Congress on March 1, 1917, and amended on May 16, 1928, August 26, 1937, August 18, 1941, August 17, 1954, and July 14, 1960.
2. State funding had become available for the Project:
 - The voters of California approved the California Disaster Preparedness and Flood Prevention Bond Act of 2006 (Proposition 1E) on November 7, 2006, making available proceeds from the sale of general obligation bonds for flood control work and other purposes.
 - The State, acting by and through the Department of Water Resources (“Department”), solicited applications for funding for its Urban Flood Risk Reduction (UFRR) Program.
 - The Funding Recipient applied for funding and ~~signed an the~~ UFRR Funding Agreement- was executed on February 23, 2015 (“Funding Agreement”). This Funding ~~agreement~~Agreement is between the Department and the Sacramento Area Flood Control Agency (“Funding Recipient”) for the Project.
 - The Funding Agreement provides that the Funding Recipient will be responsible for construction, operation, maintenance, repair, replacement, and rehabilitation (“OMRR&R”) of projects on land and rights-of-way that will ultimately be transferred to the Sacramento and San Joaquin Drainage District, acting by and through the Board.

- The Department has agreed to enter into the Funding Agreement on the condition that the Funding Recipient enters into this OMRR&R Agreement under which ~~the Central Valley Flood Protection Board ("The Board")~~ Board will oversee OMRR&R for the Project for the State of California, as part of the State Plan of Flood Control.
 - Under the Funding Agreement, the Funding Recipient may agree to assume the responsibility of the Local Maintaining Agency as set out in this OMRR&R Agreement, or may agree with a Local Maintaining Agency that it shall assume responsibility for OMRR&R of the Project, provided that the Funding Recipient shall seek to assume responsibility for OMRR&R if for any reason the Local Maintaining Agency fails to perform under this OMRR&R Agreement.
 - The Funding Recipient has agreed with the Local Maintaining Agency that the Local Maintaining Agency shall assume responsibility for OMRR&R by entering into this OMRR&R Agreement.
 - The Department has agreed to enter into the Funding Agreement with the Funding Recipient on the condition that the Local Maintaining Agency enter into the OMRR&R Agreement and that the Funding Recipient shall seek to assume responsibility for OMRR&R if for any reason the Local Maintaining Agency fails to perform under this OMRR&R Agreement.
3. It is not expected that the federal government will provide funding for the Project at this time, but in anticipation that federal funds may become available eventually:
- The Funding Agreement requires the Funding Recipient to seek credit for the expenditures made under the Funding Agreement from the federal government, acting by and through the U.S. Army Corps of Engineers ("USACE"), and to enter into agreements necessary to obtain credit or reimbursement from the USACE.
 - The parties agree that this OMRR&R Agreement may be superseded by one or more agreements acceptable to the USACE, the Department, and the Board that gives satisfactory assurances to the federal government and the Board that the required local cooperation will be furnished in connection with the Project.
4. The Local Maintaining Agency agrees that it already has responsibility for ~~OMRR&R for~~ existing portions of the Project (as hereinafter defined and as depicted on the plat attached here to as Figure 1) under California Water Code Section 12642 which states, and under which the State contends, that in all cases where the Federal Government does not maintain and operate projects, it is the responsibility and duty of the county, city, state agency, or public district affected to maintain and operate flood control and other works, after constructed pursuant to the Water Code, after their completion, and hold and save the State and the United States free from damages.
5. The Board has agreed to enter into this OMRR&R Agreement on the condition that the Local Maintaining Agency provides the Board with the assurances specified in this OMRR&R Agreement that Local Maintaining Agency or Funding Recipient will be responsible for OMRR&R of the Project upon its completion; and will, as described below, hold and save the federal government, State, their representatives, officers, directors, and employees, including their attorneys, ~~as well as their successors and assigns,~~ free and harmless from any and all claims and damages arising from OMRR&R of the Project, and Funding Recipient will, as described below, hold and save the federal government, State, their representatives, officers, directors, and employees, including their attorneys, ~~as well as their successors and assigns,~~ free and harmless from any and all claims and damages arising from construction of the Project.

6. The Board, Funding Recipient, and the Local Maintaining Agency have agreed that this OMRR&R Agreement will set forth not only their agreement with respect to OMRR&R for the Project, but also for work funded under prior and future funding agreements related to the Project, on land and rights-of-way that have been or will ultimately be transferred to the Sacramento and San Joaquin Drainage District, acting by and through the Board, and all of the federally and State authorized flood facilities related to the project that are within the Local Maintaining Agency's boundaries.

NOW, THEREFORE, IT IS HEREBY AGREED:

For purposes of this OMRR&R Agreement, the terms below are defined as indicated:

“Board:” The State of California Central Valley Flood Protection Board or any successor thereto.

“Department:” The State of California Department of Water Resources.

~~**“Functional Portion of the Project:”** A completed portion of the Project to be constructed under the Overall Work Plan as determined by the Board to be suitable to operate and maintain in advance of completion of construction of the entire Project.~~

“Funding Agreement:” Agreement between the State of California Department of Water Resources and the Sacramento Area Flood Control Agency for The Levee Accreditation Project dated February 23, 2017, Agreement Number 4600011724, as amended.

“Funding Recipient:” The Sacramento Area Flood Control Agency (SAFCA), a public agency in the State of California, duly organized, existing, and acting pursuant to the laws thereof, which is the signatory to the Funding Agreement.

“Local Maintaining Agency:” The American River Flood Control District, a public agency in the State of California, duly organized, existing, and acting pursuant to the laws thereof, which has been designated by the Funding Recipient as the agency which will assume responsibility for OMRR&R for any Functional Portion of the North Sacramento Streams Levee Improvement Project.

“OMRR&R:” Operation, maintenance, repair, replacement, and rehabilitation of the Project.

“OMRR&R Agreement:” This agreement between the Central Valley Flood Protection Board, the Sacramento Area Flood Control Agency and American River Flood Control District for OMRR&R of the Project.

“Overall Work Plan:” The plan described in the Funding Agreement ~~in Paragraph [22],~~ as amended, and Funding Agreement Exhibit A, as amended.

“Post Construction Performance Reports:” This report shall be prepared annually in compliance with Assembly Bill 156 (Stats. 2007, ch. 368) and comply with Section 9140 of the California Water Code.

~~**“Project:”** The Project Site described in the Overall Work Plan, but also including all~~ **“Project:”** All of the federally and State authorized flood facilities to the extent to which they are within the Local Maintaining Agency's boundaries as shown in Figure 1.

“Project Site:” The location of the North Sacramento Streams Levee Improvement Project where permanent improvements are made to facilities of the State Plan of Flood Control.

“North Sacramento Streams Levee Improvement Project:” The ~~project~~ flood risk reduction project features of such North Sacramento Streams Levee Improvement Project as described in the Overall Work Plan described in the relevant Funding Agreement, as amended.

“Standard Operation and Maintenance Manual:” A document prepared by the Funding Recipient and approved by the Local Maintaining Agency and submitted to the State for review, comment and approval that will govern the operation, maintenance, repair, replacement and rehabilitation of the Project. This manual will include all manuals related to the State Plan of Flood Control facilities covered by this OMRR&R agreement, including those prepared by the USACE and/or Board for flood, ecosystem, habitat, mitigation or other purposes and any other such manuals.

“State:” The State of California, acting by and through the Board.

“State Plan of Flood Control:” The state and federal flood control works, lands, programs, plans, conditions, and mode of maintenance and operations described in Cal. Pub. Res. Code § 5096.805(j).

“USACE:” The United States Army Corps of Engineers.

SECTION I: Obligations of the Local Maintaining Agency, and, in part, the Funding Recipient.

A. General Obligations. The Local Maintaining Agency, and, in part, as provided in Subsection 3 and 4, below, the Funding Recipient agree to the following:

1. To cause to perform OMRR&R for the Project, without limitation, in accordance with the Project design specifications, environmental permits, environmental impact reports, regulations, and directions prescribed by the State, all without any cost to the State. The duties of the Local Maintaining Agency to perform OMRR&R for all State Plan of Flood Control Project features shall be performed in a manner that does not diminish the flood protection afforded by or jeopardize the structural integrity of the Project and the flood control system of which the Project is part. The duties of the Local Maintaining Agency pursuant to this paragraph are described further in Section I-B below.
2. To defend, indemnify, hold and save the federal government and the State, to the extent allowed by law, their representatives, officers, directors, agents, and employees, including their attorneys ~~as well as their successors and assigns~~ free and harmless, to the extent permitted by law, from any and all liability for any claims and damages (including inverse condemnation) that may arise out of this OMRR&R Agreement, including but not limited to any claims or damages arising from the construction and performance of OMRR&R under this Agreement.
3. The Funding Recipient agrees to defend, indemnify, hold and save the federal government and the State, to the extent allowed by law, their representatives, officers, directors, agents, and employees, including their attorneys ~~as well as their successors and assigns~~ free and harmless, to the extent permitted by law, from any and all liability for any claims and damages (including inverse condemnation) that may arise out of construction of the Project, and to assume responsibility for OMRR&R if for any reason the Local Maintaining Agency fails to perform under this Agreement.
4. The Funding Recipient agrees to cause to perform OMRR&R of all mitigation features of the Project, without limitation, in accordance with environmental permits, environmental impact reports, ~~regulations, and directions prescribed by the State, all without any cost to the State~~ and regulations.

B. Specific Obligations to Operate, Maintain, Repair, Replace, and Rehabilitate

1. The Local Maintaining Agency hereby accepts responsibility for OMRR&R of the Project. The Local Maintaining Agency agrees that it will be responsible for OMRR&R of the

Project as further explained in: (1) the Standard Operation and Maintenance Manual for the Project and (2) any applicable Supplement to the Standard Operation and Maintenance Manual for the Project.

2. The Local Maintaining Agency agrees to cooperate in the Funding Recipient's development of a Standard Operation and Maintenance Manual for State Plan of Flood Control features of the Project as required by Board permits issued to The Funding Recipient for the Project. The Standard Operation and Maintenance Manual for the Project or Functional Portions of the Project may be a stand-alone document or an amendment to the Standard Operation and Maintenance Manual for the Project as directed by the Board. The Local Maintaining Agency acknowledges and the Funding Recipient acknowledge that changes to the Standard Operation and Maintenance Manual of State Plan of Flood Control facilities may be made by the State and the USACE before the document becomes final. The State may make reasonable changes but shall consult with Local Maintaining Agency and Funding Recipient prior to making such changes. Local Maintaining Agency shall be required to update the Standard Operation and Maintenance Manual as may be necessary or as required by the Board and shall make a copy available to the State and Funding Recipient within three (3) days after the State or Funding Recipient so requests. Local Maintaining Agency shall be responsible for OMRR&R in accordance with any revised version of the Standard Operation and Maintenance Manual for the Project or any Supplement to the Standard Operation and Maintenance Manual.
3. The Local Maintaining Agency hereby gives the State and Funding Recipient the right to enter, at reasonable times and in a reasonable manner, upon the Project Site and land which it owns or controls for access to the Project Site for the purpose of: (i) conducting subsequent inspections to verify that the Local Maintaining Agency is complying with its obligations under this OMRR&R Agreement; and (ii) operating, maintaining, repairing, replacing, or rehabilitating any part of the Project located at or accessible by the Project Site in conjunction with any present or future flood control plan if in the reasonable judgment of State or Funding Recipient, the Local Maintaining Agency fails to comply with its obligations under this OMRR&R Agreement. In the event the State assumes title to any of the land to which the Local Maintaining Agency needs access to fulfill the obligations set forth in the paragraph, the State grants an irrevocable license to the Local Maintaining Agency and Funding Recipient to enter the land to fulfill its obligations under this OMRR&R Agreement.
4. If the Local Maintaining Agency has failed or refused to perform the obligations set forth in this OMRR&R Agreement or the requirements of the manuals mentioned above, ~~the State~~ Funding Recipient may take appropriate actions including proceedings to establish a maintenance area under Water Code Section 12878 *et seq.*

If the Local Maintaining Agency has failed or refused to perform the obligations set forth in this OMRR&R Agreement or the requirements of the manuals mentioned above, and for any reason the Funding Recipient is not able to take appropriate actions under these provisions of law, then the Funding Recipient may take appropriate actions under this OMRR&R Agreement as follows: If the failure or refusal constitutes, in the sole discretion of the Funding Recipient, a threat to the continued ability of the Project or functional portion thereof to perform in a manner necessary to provide its designed level of flood protection, then the Funding Recipient may itself perform the necessary work or do so by contract. The Funding Recipient may in its sole discretion develop a work plan and present it to the Local Maintaining Agency with instructions that if the Local Maintaining Agency does not agree to carry out the work plan within the time specified in the work plan, the Funding Recipient will perform the necessary work or do so by contract. The Local Maintaining Agency will reimburse the Funding Recipient for the costs of performing such work in accordance with the procedures set forth in this OMRR&R

Agreement. No completion, operation, maintenance, repair, replacement, or rehabilitation by the Funding Receipt shall operate to relieve the Local Maintaining Agency of responsibility to meet the Local Maintaining Agency's obligations as set forth in this OMRR&R Agreement, or to preclude the Funding Recipient from pursuing any other remedy at law or equity to ensure faithful performance pursuant to this OMRR&R Agreement.

5. If both the Local Maintaining Agency and the Funding Recipient have failed or refused to perform the obligations set forth in this OMRR&R Agreement or the requirements of the manuals mentioned above, the State may take appropriate actions including proceedings to establish a maintenance area under Water Code Section 12878 et seq.

If the both Local Maintaining Agency and the Funding Recipient have failed or refused to perform the obligations set forth in this OMRR&R Agreement or the requirements of the manuals mentioned above, and for any reason the State is not able to take appropriate actions under these provisions of law, then the State may take appropriate actions under this OMRR&R Agreement as follows: If the failure or refusal constitutes, in the sole discretion of the State, a threat to the continued ability of the Project or functional portion thereof to perform in a manner necessary to provide its designed level of flood protection, then the State may itself perform the necessary work or do so by contract. The State may in its sole discretion develop a work plan and present it to the Local Maintaining Agency and Funding recipient with instructions that if the Local Maintaining Agency and/or Funding Recipient does not agree to carry out the work plan within the time specified in the work plan, the State will perform the necessary work or do so by contract. The Local Maintaining Agency and/or Funding Recipient will reimburse the State for the costs of performing such work in accordance with the procedures set forth in this OMRR&R Agreement. No completion, operation, maintenance, repair, replacement, or rehabilitation by the State shall operate to relieve the Local Maintaining Agency and Funding Recipient of responsibility to meet the Local Maintaining Agency's their obligations as set forth in this OMRR&R Agreement, or to preclude the State from pursuing any other remedy at law or equity to ensure faithful performance pursuant to this OMRR&R Agreement.

C. Additional Obligations:

1. The Funding Recipient and/or Local Maintaining Agency shall annually review and, if appropriate or requested by the State, update the safety plan for the Project prepared pursuant to the relevant Funding Agreements or required by Cal. Water Code § 9650. The Funding Recipient and/or Local Maintaining Agency agrees to use best efforts to ensure that the updated safety plan is integrated into any other local agency emergency plan and is coordinated with the State emergency plan.
2. No later than September 30 of each calendar year Local Maintaining Agency shall provide an annual Post Construction Performance Report to the Department, in accordance with Water Code Section 9140 that pertain to the Project.
 - (a) If the Local Maintaining Agency is not the same as the Funding Recipient, the Local Maintaining Agency represents that it has made arrangements with the Funding Recipient to obtain any information needed from the Funding Recipient in order to prepare this report.
 - (c) The Department in its sole determination may modify these reporting requirements as needed to ensure that it has adequate information with which to perform its responsibilities.

3. Upon request, the Funding Recipient will provide the State with copies of Project Completion Reports prepared pursuant to the Funding Agreement.

SECTION II: Hazardous Substances

The Local Maintaining Agency ~~acknowledges~~ and Funding Recipient acknowledge State may incur obligations with respect to hazardous substances regulated under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. §§ 9601-9675; California Hazardous Substances Account Act, Calif. Health & Safety Code § 25310 *et seq.* or other statutes or regulations (collectively referred to as “state and federal Hazardous Substances Laws”) on lands necessary for Project construction and OMRR&R to the extent the Local Maintaining Agency fails to comply with its obligations under this OMRR&R Agreement. The Local Maintaining Agency agrees:

- A. That in the event that the Local Maintaining Agency discovers through an environmental investigation or other means that any lands, easements, or rights of way that have been acquired or provided for the Project contain reportable quantities of hazardous substances regulated under CERCLA and/or other state and federal Hazardous Substances Laws, the Local Maintaining Agency shall promptly notify the State and Funding Recipient of that discovery if it can be reasonably anticipated that the discovery of reportable quantities of hazardous substances will require Local Maintaining Agency to incur response costs in excess of \$10,000.

If the Funding Recipient is responsible for OMRR&R, that in the event that the Funding Recipient discovers through an environmental investigation or other means that any lands, easements, or rights of way that have been acquired or provided for the Project contain reportable quantities of hazardous substances regulated under CERCLA and/or other state and federal Hazardous Substances Laws, the Funding Recipient shall promptly notify the State and Local Maintaining Agency of that discovery if it can be reasonably anticipated that the discovery of reportable quantities of hazardous substances will require the Funding Receipt to incur response costs in excess of \$10,000.

- B. That in the event reportable quantities of hazardous substances regulated under CERCLA and/or other state and federal Hazardous Substances Laws have been found, the Local Maintaining Agency shall initiate and complete any and all necessary response and cleanup activity required under CERCLA and/or other state and federal Hazardous Substances Laws, which shall include any studies and investigations necessary to determine the appropriate response to the contamination. Payment for the costs of such necessary response and cleanup activity as required under CERCLA and/or other state and federal Hazardous Substances Laws shall be made by the Local Maintaining Agency. In the event that the Local Maintaining Agency fails to provide the funds necessary for response and cleanup activity required under CERCLA and/or other state and federal Hazardous Substances Laws or to otherwise discharge the Local Maintaining Agency’s responsibilities under this Paragraph B, then the State may perform the necessary response and cleanup activity, and the Local Maintaining Agency shall reimburse the State in accordance with the procedures set out in this OMRR&R Agreement. If the State performs the necessary response and cleanup activity required under CERCLA and/or other state and federal Hazardous Substances Laws, the State shall consult with the Local Maintaining Agency concerning the selection of the person(s) to perform the work, the amount of money to be spent on the work, the scope of the work, and any other aspect of response and cleanup activity.

If the Funding Recipient is responsible for OMRR&R, that in the event reportable quantities of hazardous substances regulated under CERCLA and/or other state and federal Hazardous Substances Laws have been found, the Funding Recipient shall initiate and complete any and all necessary response and cleanup activity required under CERCLA and/or other state and federal Hazardous Substances Laws, which shall include any studies and investigations necessary to determine the appropriate response to the contamination. Payment for the costs of such necessary response and cleanup activity as required under CERCLA and/or other state and federal Hazardous Substances Laws shall be made by the Funding Recipient. In the event that

the Funding Recipient fails to provide the funds necessary for response and cleanup activity required under CERCLA and/or other state and federal Hazardous Substances Laws or to otherwise discharge the Funding Recipient's responsibilities under this Paragraph B, then the State may perform the necessary response and cleanup activity, and the Funding Recipient shall reimburse the State in accordance with the procedures set out in this OMRR&R Agreement. If the State performs the necessary response and cleanup activity required under CERCLA and/or other state and federal Hazardous Substances Laws, the State shall consult with the Funding Recipient concerning the selection of the person(s) to perform the work, the amount of money to be spent on the work, the scope of the work, and any other aspect of response and cleanup activity.

- C. That the Local Maintaining Agency shall consult with the State in order to ensure that responsible persons under CERCLA and/or other state and federal Hazardous Substances Laws ultimately bear all necessary response and cleanup costs as defined in CERCLA and/or other state and federal Hazardous Substances Laws.

If the Funding Recipient is responsible for OMRR&R, that the Funding Recipient shall consult with the State in order to ensure that responsible persons under CERCLA and/or other state and federal Hazardous Substances Laws ultimately bear all necessary response and cleanup costs as defined in CERCLA and/or other state and federal Hazardous Substances Laws.

- D. That the Local Maintaining Agency shall operate, maintain, repair, replace, and rehabilitate the Project in a manner that will control and minimize the release or threatened release of hazardous substances regulated under CERCLA and/or other state and federal Hazardous Substances Laws on lands necessary for Project construction, operation, maintenance, repair, replacement, or rehabilitation.

If the Funding Recipient is responsible for OMRR&R, that the Funding Recipient shall operate, maintain, repair, replace, and rehabilitate the Project in a manner that will control and minimize the release or threatened release of hazardous substances regulated under CERCLA and/or other state and federal Hazardous Substances Laws on lands necessary for Project construction, operation, maintenance, repair, replacement, or rehabilitation.

- E. That in the event that the State, their representatives, officers, directors, employees, including their attorneys, as well as their successors and assigns, are found to be liable under CERCLA and/or other state and federal Hazardous Substances Laws for the release or threatened release of hazardous substances arising out of the operation, maintenance, repair, replacement, or rehabilitation of the Project, then the Local Maintaining Agency shall indemnify and hold the State, their representatives, officers, directors, employees, including their attorneys, as well as their successors and assigns, harmless from any response or cleanup costs for which the State, their representatives, officers, directors, employees, including their attorneys, as well as their successors and assigns, may be found to be liable under CERCLA and/or other state and federal Hazardous Substances Laws.

If the Funding Recipient is responsible for OMRR&R, that in the event that the State, their representatives, officers, directors, employees, including their attorneys, as well as their successors and assigns, are found to be liable under CERCLA and/or other state and federal Hazardous Substances Laws for the release or threatened release of hazardous substances arising out of the operation, maintenance, repair, replacement, or rehabilitation of the Project, then the Funding Recipient shall indemnify and hold the State, their representatives, officers, directors, employees, including their attorneys, as well as their successors and assigns, harmless from any response or cleanup costs for which the State, their representatives, officers, directors, employees, including their attorneys, as well as their successors and assigns, may be found to be liable under CERCLA and/or other state and federal Hazardous Substances Laws.

- F. No decision made or action taken pursuant to any provision of this Section of the Project OMRR&R Agreement shall relieve any responsible person from any liability that may arise under CERCLA and/or other state and federal Hazardous Substances Laws, nor shall such decision or action be considered a waiver by the State ~~or~~, the Local Maintaining Agency or the Funding Recipient of any right to seek from any responsible person as defined by CERCLA and/or other state and federal Hazardous Substances Laws the recovery, contribution of, or indemnification from costs incurred by the State ~~or~~, the Local Maintaining Agency or the Funding Recipient for response or cleanup activity required under CERCLA and/or other state and federal Hazardous Substances Laws, nor shall such decision or action be considered a waiver by the State of any other right or remedy provided by law.

SECTION III: Authorization for Delegation or Subcontracting

The Local Maintaining Agency or the Funding Recipient may delegate or subcontract its responsibilities under this OMRR&R Agreement. The Local Maintaining Agency or the Funding Recipient shall be responsible for all work to be performed under the contract, including any delegated work. The State shall have the right to ask that any services for this OMRR&R Agreement provided by any subcontractor be terminated if its performance is unsatisfactory.

Payment for services rendered by subcontractors shall be made entirely by the Local Maintaining Agency or the Funding Recipient; the State shall not have any responsibility for making any payments to the subcontractors for any services they may render in connection with this OMRR&R Agreement.

SECTION IV: Procedures for Reimbursing the State

If the Local Maintaining Agency fails to fulfill its obligations under this Agreement and if the failure or refusal constitutes, in the sole discretion of the State, a threat to the continued ability of the flood project to perform in a manner necessary to provide its designed level of flood protection, then the StateFunding Recipient, after notifying the Local Maintaining Agency and providing a sixty (60) day opportunity to cure period, may in its sole discretion develop a work plan and present it to the Local Maintaining Agency with instructions that if the Local Maintaining Agency does not agree to carry out, or is unable to carry out, the work plan within the time specified in the work plan, the StateFunding Recipient will perform the necessary work or do so by contract. The Local Maintaining Agency agrees, subject to compliance with applicable state law, to reimburse the StateFunding Recipient for the costs of performing such work in accordance with the procedures set forth in this Agreement. No completion, operation and maintenance, by the StateFunding Recipient shall operate to relieve the Local Maintaining Agency of responsibility to meet the Local Maintaining Agency's obligations as set forth in this Agreement, or to preclude the StateFunding Recipient from pursuing any other remedy at law or equity to ensure faithful performance pursuant to this Agreement.

If the Local Maintaining Agency and Funding Recipient fails to fulfill its obligations under this Agreement and if the failure or refusal constitutes, in the sole discretion of the State, a threat to the continued ability of the flood project to perform in a manner necessary to provide its designed level of flood protection, then the State, after notifying the Local Maintaining Agency and the Funding Recipient and providing a sixty (60) day opportunity to cure period, may in its sole discretion develop a work plan and present it to the Local Maintaining Agency and the Funding Recipient with instructions that if the Local Maintaining Agency or the Funding Recipient does not agree to carry out, or is unable to carry out, the work plan within the time specified in the work plan, the State will perform the necessary work or do so by contract. The Local Maintaining Agency and the Funding Recipient agree, subject to compliance with applicable state law, to reimburse the State for the costs of performing such work in accordance with the procedures set forth in this Agreement. No completion, operation and maintenance, by the State shall operate to relieve the Local Maintaining Agency or the Funding Recipient of responsibility to meet the Local Maintaining Agency's and the Funding Recipient's obligations as set forth in this Agreement, or to preclude the State from pursuing any other remedy at law or equity to ensure faithful performance pursuant to this Agreement.

SECTION V: Disputes

Before any party to the OMRR&R Agreement may bring suit in any court concerning an issue relating to this OMRR&R Agreement, that party must first seek in good faith to resolve the issue through negotiation or other forms of nonbinding alternative dispute resolution mutually acceptable to all parties.

SECTION VI: Obligation of Future Appropriations

The parties agree that nothing herein shall constitute, or be deemed to constitute, an obligation of future appropriations by the Legislature of the State of California, the Board of Directors of Funding Recipient, and the Board of Trustees of the Local Maintaining Agency.

SECTION VII: Term of Agreement; Amendment

The effective date of this OMRR&R Agreement is the date ~~it is signed by~~ all parties sign it. The OMRR&R Agreement will continue in full force and effect unless terminated or amended upon written consent of all parties.

The parties acknowledge that in order to obtain federal credits or reimbursement for this Project, it may be necessary to amend this OMRR&R Agreement as required by the USACE. The parties agree that they will not unreasonably withhold consent for any amendments necessary to obtain federal credits or reimbursement.

SECTION VIII: Notices

All notices, requests, demands, and other communications required or permitted to be given under this OMRR&R Agreement shall be deemed to have been duly given if in writing and delivered personally or mailed by first class (postage pre-paid), registered, or certified mail, as follows:

If to the Local Maintaining Agency:
American River Flood Control District
ATTN: General Manager
185 Commerce Circle
Sacramento, CA 95815

If to the Board:
Central Valley Flood Protection Board
ATTN: Executive Officer
3310 El Camino Avenue, Suite 170
Sacramento, CA 95821

If to the Funding Recipient:
Sacramento Area Flood Control Agency
ATTN: Executive Director
1007 7th Street, 7th Floor
Sacramento, CA 95814

A party may change the address to which such communications are to be directed by giving written notice to the other party in the manner provided in this section.

Any notice, request, demand, or other communication made pursuant to this section shall be deemed to have been received by the addressee at such time as it is personally delivered or seven (7) calendar days after it is mailed, as the case may be.

SECTION IX: Standard Conditions

This OMRR&R Agreement incorporates by reference the standard conditions that are included in Attachment A to this OMRR&R Agreement.

SECTION X: Authority

The Funding Recipient and the Local Maintaining Agency have each provided a copy of a resolution adopted by its governing body designating a representative to execute this OMRR&R Agreement. This resolution is substantially the same as the draft resolution provided in Attachment B to this OMRR&R Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this OMRR&R Agreement.

The Central Valley Flood Protection Board

American River Flood Control District

By _____
Leslie M. Gallagher,
Executive Officer

By _____
Timothy R. Kerr,
General Manager

Date: _____

Date: _____

Approved as to Legal Form
and Sufficiency:

Approved as to Legal Form
and Sufficiency:

Kenwarjit Dua,
Board Counsel

David Aladjem,
District Legal Counsel

Sacramento Area Flood Control Agency

By _____
Jason Campbell,
Deputy Executive Director

Approved as to Legal Form
And Sufficiency:

M. Holly Gilchrist,
Agency Counsel

Attachment A

STANDARD CONDITIONS

1. **GOVERNING LAW:** This OMRR&R Agreement is governed by and shall be interpreted in accordance with the laws of the State of California.
2. **TIMELINESS:** Time is of the essence in this OMRR&R Agreement.
3. **AMENDMENT:** This OMRR&R Agreement may be amended at any time by mutual agreement of the Parties, except insofar as any proposed amendments are in any way contrary to applicable law. Requests by the Local Maintaining Agency for amendments must be in writing stating the amendment request and the reason for the request. State shall have no obligation to agree to an amendment.
4. **SUCCESSORS AND ASSIGNS:** This OMRR&R Agreement and all of its provisions shall apply to and bind the successors and assigns of the parties. No assignment or transfer of this OMRR&R Agreement or any part thereof, rights hereunder, or interest herein by the Local Maintaining Agency shall be valid unless and until it is approved by State and made subject to such reasonable terms and conditions as State may impose.
5. **INSPECTION OF BOOKS, RECORDS, AND REPORTS:** During regular office hours, each of the parties hereto and their duly authorized representatives shall have the right to inspect and to make copies of any books, records, or reports of either party pertaining to this OMRR&R Agreement or matters related hereto. Each of the parties hereto shall maintain and shall make available at all times for such inspection accurate records of all its costs, disbursements, and receipts with respect to its activities under this OMRR&R Agreement. Failure or refusal by Local Maintaining Agency to comply with this provision shall be considered a breach of this OMRR&R Agreement, and State may take any other action it deems necessary to protect its interests, after complying with paragraph V of the OMRR&R Agreement.
6. **PROHIBITION AGAINST DISPOSAL OF PROJECT WITHOUT STATE PERMISSION:** Local Maintaining Agency shall not sell, abandon, lease, transfer, exchange, mortgage, hypothecate, or encumber in any manner whatsoever all or any portion of any real or other property necessarily connected or used in conjunction with the Project, without prior permission of State. Local Maintaining Agency shall not take any action, including but not limited to actions relating to user fees, charges, and assessments that could adversely affect the ability of Local Maintaining Agency meet its obligations under this OMRR&R Agreement, without prior written permission of State. State may require that the proceeds from the disposition of any real or personal property acquired, reimbursed or credited with State funds be remitted to State.
7. **NO THIRD PARTY RIGHTS:** The parties to this OMRR&R Agreement do not intend to create rights in, or grant remedies to, any third party as a beneficiary of this OMRR&R Agreement, or of any duty, covenant, obligation or undertaking established herein.
8. **OPINIONS AND DETERMINATIONS:** Where the terms of this OMRR&R Agreement provide for action to be based upon, judgment, approval, review, or determination of either party hereto, such terms are not intended to be and shall never be construed as permitting such opinion, judgment, approval, review, or determination to be arbitrary, capricious, or unreasonable.
9. **SUIT ON OMRR&R AGREEMENT:** Each of the parties hereto may sue and be sued with respect to this OMRR&R Agreement.
10. **REMEDIES NOT EXCLUSIVE:** The use by either party of any remedy specified herein for the enforcement of this OMRR&R Agreement is not exclusive and shall not deprive the party using such remedy of, or limit the application of, any other remedy provided by law.

11. SEVERABILITY: Should any portion of this OMRR&R Agreement be determined to be void or unenforceable, such shall be severed from the whole and the OMRR&R Agreement shall continue as modified.
12. WAIVER OF RIGHTS: None of the provisions of this OMRR&R Agreement shall be deemed waived unless expressly waived in writing. It is the intention of the parties hereto that from time to time either party may waive any of its rights under this OMRR&R Agreement unless contrary to law. Any waiver by either party of rights arising in connection with the OMRR&R Agreement shall not be deemed to be a waiver with respect to any other rights or matters, and such provisions shall continue in full force and effect.
13. TERMINATION FOR CAUSE: The State may terminate this OMRR&R Agreement should Local Maintaining Agency fail to perform the requirements of this OMRR&R Agreement at the time and in the manner herein provided or in the event of a default by the Funding Recipient under the relevant Funding Agreement.
14. INDEPENDENT CAPACITY: Local Maintaining Agency, and the agents and employees of Local Maintaining Agencies, in the performance of the OMRR&R Agreement, shall act in an independent capacity and not as officers, employees, or agents of the State.
15. CONFLICT OF INTEREST
 - a) Current State Employees: No State officer or employee shall engage in any employment, activity, or enterprise from which the officer or employee receives compensation or has a financial interest and which is sponsored or funded by any State agency, unless the employment, activity, or enterprise is required as a condition of regular State employment. No State officer or employee shall contract on his or her own behalf as an independent contractor with any State agency to provide goods or services.
 - b) Former State Employees: For the two-year period from the date he or she left State employment, no former State officer or employee may enter into a contract in which he or she engaged in any of the negotiations, transactions, planning, arrangements, or any part of the decision-making process relevant to the contract while employed in any capacity by any State agency. For the twelve-month period from the date he or she left State employment, no former State officer or employee may enter into a contract with any State agency if he or she was employed by that State agency in a policy-making position in the same general subject area as the proposed contract within the twelve-month period prior to his or her leaving State service.
 - c) Employees of the Local Maintaining Agency: Employees of the Local Maintaining Agency shall comply with all applicable provisions of law pertaining to conflicts of interest, including but not limited to any applicable conflict of interest provisions of the California Political Reform Act, Cal. Gov't Code § 87100 *et seq.*
 - d) Employees of and Consultants to the Local Maintaining Agency: Individuals working on behalf of a Local Maintaining Agency may be required by the Department to file a Statement of Economic Interests (Fair Political Practices Commission Form 700) if it is determined that an individual is a consultant for Political Reform Act purposes.
16. WORKERS' COMPENSATION: Local Maintaining Agency affirms that it is aware of the provisions of Labor Code Section 3700 *et seq.*, which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and Local Maintaining Agency affirms that it will comply with such provisions before commencing the performance of the work under this OMRR&R Agreement and will make its contractors and subcontractors aware of this provision.

17. **AMERICANS WITH DISABILITIES ACT:** By signing this OMRR&R Agreement, Local Maintaining Agency assures State that it complies with the Americans with Disabilities Act (ADA) of 1990, (42 U.S.C., 12101 et seq.), which prohibits discrimination on the basis of disability, as well as all applicable regulations and guidelines issued pursuant to the ADA.
18. **NONDISCRIMINATION CLAUSE:** During the performance of this OMRR&R Agreement, Local Maintaining Agency and its subcontractors shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), mental disability, medical condition (cancer), age (over 40), marital status, and denial of family care leave. Local Maintaining Agency and subcontractors shall insure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment. Local Maintaining Agency and subcontractors shall comply with the provisions of the Fair Employment and Housing Act (Gov. Code §12990 (a-f) et seq.) and the applicable regulations promulgated thereunder (California Code of Regulations, Title 2, Section 7285 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code Section 12990 (a-f), set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations, are incorporated into this Agreement by reference and made a part hereof as if set forth in full. Local Maintaining Agency and its subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.

Local Maintaining Agency shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under the OMRR&R Agreement.

19. DRUG-FREE WORKPLACE CERTIFICATION

Certification of Compliance: By signing this OMRR&R Agreement, Local Maintaining Agency, its contractors or subcontractors hereby certify, under penalty of perjury under the laws of State of California, compliance with the requirements of the Drug-Free Workplace Act of 1990 (Government Code 8350 et seq.) and, if such Act applies to Local Maintaining Agency, have or will provide a drug-free workplace by taking the following actions:

a) Publish a statement notifying employees, contractors, and subcontractors that unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited and specifying actions to be taken against employees, contractors, or subcontractors for violations, as required by Government Code Section 8355(a)(1).

b) Establish a Drug-Free Awareness Program, as required by Government Code Section 8355(a)(2) to inform employees, contractors, or subcontractors about all of the following:

1. The dangers of drug abuse in the workplace,
2. Local Maintaining Agency's policy of maintaining a drug-free workplace,
3. Any available counseling, rehabilitation, and employee assistance programs, and
4. Penalties that may be imposed upon employees, contractors, and subcontractors for drug abuse violations.

c) Provide as required by Government Code Sections 8355(a)(3), that every employee, contractor, and/or subcontractor who works under this OMRR&R Agreement:

1. Will receive a copy of Local Maintaining Agency's drug-free policy statement, and
2. Will agree to abide by terms of Local Maintaining Agency's condition of employment, contract or subcontract.

Suspension of Payments: This OMRR&R Agreement may be subject to suspension of payments or termination, or both, and Local Maintaining Agency may be subject to debarment if the State determines that:

- a) Local Maintaining Agency, its contractors, or subcontractors have made a false certification, or
- b) Local Maintaining Agency, its contractors, or subcontractors violates the certification by failing to carry out the requirements noted above.

20. UNION ORGANIZING: Local Maintaining Agency, by signing this OMRR&R Agreement, hereby acknowledges the applicability of Government Code 16645 through 16649 to this OMRR&R Agreement. Furthermore, Local Maintaining Agency, by signing this OMRR&R Agreement, hereby certifies that:

- a) No State funds disbursed by this OMRR&R Agreement will be used to assist, promote, or deter union organizing.
- b) Local Maintaining Agency shall account for State funds disbursed for a specific expenditure by this OMRR&R Agreement to show those funds were allocated to that expenditure.
- c) Local Maintaining Agency shall, where State funds are not designated as described in (b) above, allocate, on a pro rata basis, all disbursements that support the program.
- d) If Local Maintaining Agency makes expenditures to assist, promote, or deter union organizing, Local Maintaining Agency will maintain records sufficient to show that no State funds were used for those expenditures and that Local Maintaining Agency shall provide those records to the Attorney General upon request.

21. COMPUTER SOFTWARE: Local Maintaining Agency certifies that it has appropriate systems and controls in place to ensure that state funds will not be used in the performance of this OMRR&R Agreement for the acquisition, operation, or maintenance of computer software in violation of copyright laws.

22. DELIVERY OF INFORMATION, REPORTS, AND DATA: Local Maintaining Agency agrees to expeditiously provide, during work on the Urban Flood Risk Reduction Program and throughout the term of this OMRR&R Agreement, such reports, data, information, and certifications as may be reasonably required by State.

23. RIGHTS IN DATA: Local Maintaining Agency agrees that all data, plans, drawings, specifications, reports, computer programs, operating manuals, notes, and other written or graphic work produced in the performance of this OMRR&R Agreement shall be made available to the State and shall be in the public domain to the extent to which release of such materials is required under the California Public Records Act, Cal. Gov't Code §§ 6250 *et seq.* Local Maintaining Agency may disclose, disseminate and use in whole or in part, any final form data and information received, collected, and developed under this OMRR&R Agreement, subject to appropriate acknowledgement of credit to State for financial support. Local Maintaining Agency shall not utilize the materials for any profit-making venture or sell or grant rights to a third party who intends to do so. The State shall have the right to use any data described in this paragraph for any public purpose.

23. CHILD SUPPORT COMPLIANCE ACT: For any OMRR&R Agreement in excess of \$100,000, the Funding Recipient acknowledges in accordance with Public Contract Code 7110, that:

- a) The Funding Recipient recognizes the importance of child and family support obligations and shall fully comply with all applicable state and federal laws relating to child and family support enforcement, including, but not limited to, disclosure of information and compliance with earnings

assignment orders, as provided in Chapter 8 (commencing with section 5200) of Part 5 of Division 9 of the Family Code; and

b) The Funding Recipient, to the best of its knowledge is fully complying with the earnings assignment orders of all employees and is providing the names of all new employees to the New Hire Registry maintained by the California Employment Development Department.

24. PRIORITY HIRING CONSIDERATIONS: If this OMRR&R Agreement includes services in excess of \$200,000, the Funding Recipient shall give priority consideration in filling vacancies in positions funded by the OMRR&R Agreement to qualified recipients of aid under Welfare and Institutions Code Section 11200 in accordance with Pub. Contract Code § 10353.
25. DOMESTIC PARTNERS: For contracts over \$100,000 executed or amended after January 1, 2007, the Funding Recipient certifies by signing this OMRR&R Agreement, under penalty of perjury under the laws of State of California that Funding Recipient is in compliance with Public Contract Code section 10295.3
26. LOCAL MAINTAINING AGENCY NAME CHANGE: Approval of the State is required to change the Local Maintaining Agency's name as listed on this OMRR&R Agreement. Upon receipt of legal documentation of the name change the State will process the amendment. Payment of invoices presented with a new name cannot be paid prior to approval of said amendment.
27. AIR OR WATER POLLUTION VIOLATION: Under State laws, the Local Maintaining Agency shall not be: (1) in violation of any order or resolution not subject to review promulgated by the State Air Resources Board or an air pollution control district; (2) subject to cease and desist order not subject to review issued pursuant to Section 13301 of the Water Code for violation of waste discharge requirements or discharge prohibitions; or (3) finally determined to be in violation of provisions of federal law relating to air or water pollution

Section 9 Inspection and Maintenance

Inspection and maintenance requirements are generally described in the USACE *Standard Operation and Maintenance Manual for the Sacramento River Flood Control Project*, the Supplement Manuals, and DWR's *Superintendent's Guide to Operation & Maintenance of California's Flood Control Projects*. These documents, as well as any manufacturer's instructions for specialized features and/or appurtenances should be readily available at all times. Additional inspection and maintenance guidance, forms, and checklists are included in **Appendix I** (attached).

For purposes of this local agency supplement manual, Maintenance is defined using the definition from the *Flood System Long-Term Operations, Maintenance, Repair, Rehabilitation, and Replacement Cost Evaluation* prepared by DWR as part of the 2017 CVFPP Update as:

Maintenance includes routine activities that need to be performed to keep the system operational. Maintenance is further defined to include minor repairs, rehabilitation, and replacement of items as necessary to keep the system in good working condition.

Typical activities involved in routine repairs, rehabilitation, and replacement as part of routine maintenance are generally described below and are described in more detail later in this section. For purposes of this manual, routine repair and rehabilitation are generally referred to as repair.

Routine or periodic maintenance includes activities that must be performed annually or semiannually, including vegetation management (such as invasive species and channel snags), sediment removal, mowing, rodent and burrowing vector control to maintain levee integrity, minor erosion repair, levee crown repairs, crown road surfacing, and bank stabilization. Other typical activities include maintaining pumping plants, gates and closure structures, and other appurtenant flood control facilities as necessary.

Major repairs resulting from levee breaches, deep underseepage repairs, large slips with large stability failures, or erosion damage that threatens the integrity or stability of the levee are beyond the capacity of the LMAs to address as part of routine OMRR&R. Furthermore, repairs or improvements to the levee or appurtenant structures that may be needed in the future in order to meet updated design criteria are not included in routine OMRR&R.

The specific actions to be taken by the LMAs for routine inspection and maintenance of the levee and appurtenant structures are outlined in this section. **This document is general and preliminary in nature. Specific details of OMRR&R actions are currently in development.**

9.1. General

As indicated in the USACE *Standard Operation and Maintenance Manual for the Sacramento River Flood Control Project*, inspections should be completed by the LMA under the following circumstances:

- 1) Immediately prior to the beginning of each flood season;
- 2) Immediately following each major high-water period (i.e.: when the river stage exceeds the elevation of the landside levee toe);
- 3) At intervals not exceeding 90 days;
- 4) At intermediate times as may be necessary to confirm the levee is properly maintained; and

5) Following significant earthquakes in the vicinity of the project as shown below:

<u>Magnitude</u>	<u>Distance to Epicenter</u>
$5 > M$	less than 10 miles
$5 < M < 6$	less than 30 miles
$M > 6$	less than 50 miles

9.2. Levees and Embankments

Crown Roadways and Access Roads

The crown roadway, ramps, and access roads should be properly maintained and kept serviceable. Levee crown roadway and access roads need to be maintained to be free of ruts, pot holes, or other depressions. The levee crown and access road crowns should also be maintained so that they drain properly without any ponded water.

This work involves periodically grading and gravelling road surfaces following the same procedures and requirements outlined in Section 4 of the *Superintendent's Guide to Operation & Maintenance of California's Flood Control Projects*. Other specific actions for LD1 to be added.

Cracking and Slips

Repair of cracking and slips that are less than four feet in depth, and that do not encroach into the theoretical levee prism or threaten the structural integrity / stability of the levee are included as part of routine maintenance. Repairs for slips and cracking more than four feet in depth, those that encroach into the theoretical levee prism, or those that threaten the structural integrity or stability of the levee are not included in routine OMRR&R.

Any cracks or slips should be immediately marked on the ground, reported to the LMA General Manager, and evaluated by a registered civil engineer with levee experience and remedial measures implemented, as determined necessary.

All cracks greater than one inch wide in the levee crown or slopes should be repaired using the following procedure: 1) remove and salvage the gravel surfacing material on the levee crown; 2) excavate the levee crown and/or slope along the crack to the full depth of the crack; 3) backfill the excavation with compacted clayey material placed in thin lifts and meeting the material property and compaction requirements for the original levee construction; 4) replace and compact the gravel surfacing over the levee crown; and 5) stabilize the repaired area on the levee slope using an erosion mat or fabric, and reseed it to re-establish the ground cover.

Localized sloughing and slips should be immediately repaired and the areas promptly stabilized and revegetated, if needed. These repairs should be made with earth that is free from brush, roots, sod, or other unsuitable material. The materials should be placed in 6-inch-thick lifts and compacted in accordance with Title 23. Other specific repair actions for LD1 to be added.

Erosion and Riprap Revetment

Repair of erosion damage, scour holes, or bank caving caused by high water events, heavy rains, or wave wash action that are less than four feet in depth and that do not encroach into the theoretical levee prism or threaten the structural integrity / stability of the levee are included as part of routine maintenance. Repairs for erosion damage that are more than four feet in depth,

encroach into the theoretical levee prism, or damage that threaten the structural integrity or stability of the levee are not included in routine OMRR&R.

Dragging, seeding and mulching of the levee slopes to repair minor surface erosion or irregularities and to prevent serious erosion should be performed when needed. Procedures for dragging should be implemented as outlined in Section 4.22 of DWR's *Superintendent's Guide to Operation & Maintenance of California's Flood Control Projects*.

Erosion, scour holes or bank caving should be immediately repaired and the areas promptly stabilized and revegetated, if needed. These repairs should be made with earth that is free from brush, roots, sod, or other unsuitable material. The materials should be placed in 6-inch-thick lifts and compacted in accordance with Title 23. Rock slope protection or riprap that becomes dislodged or displaced should be replaced. **Other specific repair actions for LD1 to be added.**

Cutoff Walls

The cutoff wall acts as an impervious barrier and should not be penetrated or encroached at any location. Modification or repair work in the vicinity of the SB, CB, or SCB cutoff walls should include provisions to avoid damaging the cutoff wall. Proposed future utilities should be placed over the existing cutoff wall. Repairs or improvements to cutoff walls are not part of routine OMRR&R.

Rodent Activity

Ground squirrels, beavers, and other burrowing rodents can threaten the structural integrity of levees by loosening soil which increases the risk of erosion and sloughing, reduces the length of the seepage path, and increases the seepage gradient and the likelihood of piping-type erosion failures. Therefore, a continuous rodent control program should be implemented.

The rodent control program should use the same procedures and requirements as outlined in Section 5 of DWR's *Superintendent's Guide to Operation & Maintenance of California's Flood Control Projects*. Animal dens and runways should be opened up and backfilled with compacted fill or pumped full of a grout mixture. **Other specific repair actions for LD1 to be added.**

Vegetation Management

DWR has established a Life Cycle Management (LCM) approach for maintaining vegetation on levees. The LCM generally applies to a Vegetation Management Zone (VMZ) consisting of the entire landside levee slope (and berm) plus 15 feet beyond the landside toe, the levee crown, and the top 20 feet (slope length) of the waterside levee slope (see Section 7.16.7 of the ULDC for more information). LCM achieves visibility and accessibility criteria while progressing gradually (over many decades) toward the current USACE vegetation policy goal of eventually eliminating woody vegetation from the VMZ.

Mowing, grazing, burning, spraying, and/or discing of low-lying vegetation and trimming, pruning, and/or removal of woody vegetation may be needed in order to ensure that vegetation is maintained in accordance with the LCM.

LCM provides that:

- The required removal of immature trees and other woody vegetation less than four inches in diameter at breast height is conducted in consultation with the appropriate resources agencies.
- Trees and other woody vegetation beyond this size (that do not pose an unacceptable threat to levee integrity) may live out their normal lives on the levee.
- Throughout their lives and after their deaths, these trees and other woody vegetation are periodically evaluated and, if found to pose an unacceptable threat to levee integrity, would be removed.

Therefore, trees and other woody vegetation on the levee and within 15 feet of the levee toe that pose an unacceptable threat to the integrity of the levee need to be removed, and associated root balls and roots should be appropriately remediated. At a minimum, all roots larger than 1.5 inches in diameter that are within 3 feet of the perimeter of the tree trunk will be removed. Immature trees less than 4 inches in diameter at breast height that are removed may be cut off at or below ground level, generally without root removal. More extensive root removal may be required, depending upon the location, size, and type of tree; the quantity, orientation, and size of the roots; the dimensions of the levee; the composition of the levee and foundation; and the levee features that address seepage and underseepage. Less extensive root removal may be justified where roots from adjacent trees would be unduly damaged. Any excavation resulting from the above actions should be backfilled with engineered fill using appropriate placement, moisture conditioning, and compaction methods.

Trees and other woody vegetation that do not pose an unacceptable threat do not need to be removed. As part of the routine O&M, trees and other woody vegetation that are not removed must be monitored to identify changing conditions that could cause any of these remaining trees and other woody vegetation to pose an unacceptable threat to levee integrity. Trees allowed to remain must be trimmed five feet above the ground level (12-foot clearance is needed above the levee crown) in order to maintain visibility and access within the VMZ.

Sod-forming grasses and ground covers which permit inspection and flood fighting are necessary to prevent erosion on the levee embankment and slopes. Ground cover should be maintained at 12 inches in height or less. The levee crown should be kept free of vegetation. Inspections should determine if there is good coverage of sod over the levees and should also note those areas that are deficient. No action should be taken (such as burning grass and weeds during inappropriate seasons) which may retard or destroy the growth or sod. Broadleaf weeds growing among desirable grasses should be controlled by selective herbicides. Brush and weeds should be trimmed, thinned, or removed as needed to maintain visibility and access within the VMZ.

Authorized mowing, burning, spraying, managed grazing, and other vegetation management procedures should be implemented as outlined in Section 3 of DWR's *Superintendent's Guide to Operation & Maintenance of California's Flood Control Projects*. **Other specific repair actions for LD1 to be added.**

9.3. Stability Berms and Seepage Berms

Stability berms and seepage berms should be maintained in the same manner that the levee embankments are maintained. Vegetation and rodent control in these areas is important so that the berm

geometry does not change and is free from borrows or voids. **Other specific repair actions for LD1 to be added.**

9.4. Pipe Penetrations

The known penetrations through or over the levee are summarized in Table 4 (attached). The penetrations must be clear of debris and structurally sound. If significant settlement or seepage is detected along a pipe, a registered civil engineer with seepage and levee experience should be contacted for repair measures. Additionally, exposed portions of pipe and culvert penetrations must be visually inspected at least annually.

All flap gates, slide gates, vaults, head walls and other appurtenances should be inspected (and the mechanical devices lubricated if recommended by the manufacturer) at least once per year just before the flood season. During the inspection, all gates should be operated and any debris or obstructions removed. All gate seats should be checked and, if the gate is not seating properly, the frames should be readjusted. The inlet and outlet channels and pump station sumps should be kept free of debris, trees, brush, and sediment.

The interiors of all pipes and culvert penetrations must be visually inspected and/or pressure tested every five years. Pipes and culverts that could be damaged by corrosion should be further examined for signs of interior and exterior corrosion. Inspections of the exterior should be performed in representative areas where the pipe or culvert is in contact with the levee embankment and/or foundation soils. Corrosion assessment inspections performed from the interior can be completed using non-destructive means such as ultrasonic or electrical conductivity measurements.

Pipes that are found to be structurally damaged or near the end of their useful life need to be replaced. Replacement is the responsibility of the owner of the pipe/penetration. **Other specific repair actions and specific pipe details for LD1 to be added.**

9.5. Encroachments

Known encroachments are summarized in Table 5 (attached). During routine inspections, LMA personnel should check to determine if trash, debris, excavations, structures, or other obstructions are present within the physical levee prism or within the waterside and landside easements. If non-permitted encroachments are observed, the LMA should contact the encroaching entity by mail and instruct them to remove the encroachment. The LMA should also notify the CVFPB of any non-permitted encroachments. Any levee modification, including utility penetrations, must be reviewed and approved via the normal encroachment permit process through the CVFPB. **Other specific repair actions and specific encroachment details for LD1 to be added.**

9.6. Pump Stations

The pump station near Levee Mile 4.39 (Star Bend) must be inspected and maintained by LD1 as necessary to properly drain the relief wells that it serves. Routine maintenance activities include, but are not limited to: rewinding the motor, inspecting and replacing the pump bowls as needed (approx. every ten years), as well as maintenance of the electrical panel and motor control units. **Other specific repair actions and pump station details for LD1 to be added.**

9.7. Railroad Flood Gates

During routine inspections, all permanent components of the UPRR Closure Structure located at Levee Mile 16.10 should be inspected by LD 1 to verify that they are intact. If damage is noted, it should be repaired as soon as practical.

Additionally, all temporary components of the UPRR Closure Structure must be visually inspected at least once each year to verify that all components are present and in good condition. If any damage is noted, it should be repaired as soon as practical.

At least once every two years, LD1 will assemble, install and then disassemble the closure structure. It is estimated that installation and disassembly of the closure structure takes approximately four hours with a well-trained crew of four people. Prior to installation of the closure structure, the UPRR Response Management Communication Center (RMCC) must be contacted at 1-888-877-7267 in order to request approval from UPRR that activities can be completed within the allowable track windows. This testing may not occur without prior approval from UPRR. Sand bagging at the closure structure is not necessary during these periodic inspections and training exercises. (Will update this section if we can add a mock-up assembly station in the LD-1 maintenance yard).

9.8. Relief Wells

Relief well access points must be maintained so that cover plates can be easily removed for inspection of the tees and surrounding piping. The outfall structures must be kept clear of debris or other material that may affect the operation of the outlet pipe flap gates.

The relief wells should be pump-tested, swabbed/cleaned, and sounded by the LMA every five years using the procedures outlined in USACE EM 1110-2-1914, Chapter 8. The purpose of these tests is to measure the efficiencies and flow capacities of the wells and to determine whether sediment or other debris have been deposited in the wells. All wells requiring sediment removal must be pump-tested after sediment has been removed to confirm that the well efficiency has not decreased by more than 20 percent due to the presence of foreign material in the well.

During pump tests, runoff must be directed through the lateral pipes toward the outfall structures in order to check that the lines are free of blockages and that the flap gates function properly. Sediment amounts in the relief wells must be measured by sounding a well before and after pump tests. If significant algae or other biological growth is suspected within a well, it must be cleaned as described in USACE EM 1110-2-1914. If efficiencies are less than 80 percent of those recorded at the time of installation, corrective measures per USACE EM 1110-2-1914, Chapters 10 and 11 should be employed. If corrective measures are implemented but do not improve performance to at least 80 percent of the original efficiency, the well should be replaced.

Any items that are malfunctioning or have been damaged must be replaced by the LMA. Any condition that prohibits flow into or out of relief wells could result in potentially unstable and hazardous conditions. Malfunctioning and damage to the relief wells can be caused by vandalism, breakage, or excessive deformation of the well screens due to ground movements, corrosion or erosion of the well screen. Repairs to relief wells should be made in accordance with USACE EM 1110-2-1914.

Reliefwells must be replaced upon reaching 50 years of service life. If non-functioning relief wells cannot be repaired and are found to be no longer acceptable due to collapse, excessive sediment production or other conditions, they should be properly abandoned and replaced. Abandoned wells

should be sealed following procedures established by Yuba County and the California Water Well Standards (Bulletins 74-90 and 74-81). New well replacements should be installed and operational before the old ones are abandoned.

9.9. Piezometers

Maintenance of the piezometers associated with the relief well fields should include evaluations of the following items:

- The LMA should inspect the piezometer and cables to verify that they are in good condition and have not been tampered with.
- The LMA should sound each piezometers and record the groundwater elevation to the nearest 0.1 foot on an annual basis and compare with piezometer readings.
- DWR should evaluate the recorded groundwater elevation and river stage annually, and compare with predicted values to evaluate the performances of the piezometers and relief wells.

The piezometers associated with the relief well fields do not require regular maintenance, except when depth sounding indicates that a discrepancy exists between piezometer readings and sounded depth. When this is the case, the piezometers should be replaced by the LMA.

If a piezometer appears to be malfunctioning (i.e.: water levels in the well do not rise and fall with river stages or seasonal fluctuations, or differ significantly from nearby wells), the well should be redeveloped by removing the piezometer, pumping approximately 1,000 gallons out of the well, and allowing the groundwater readings to recover. If this does not resolve the issue, the well may need to be redeveloped or abandoned and replaced.

9.10. Data Collection and Telemetry System

Recommended maintenance of the data collection and telemetry system by the LMA includes:

- Maintain the fence, gates and locks that protect the data collection and telemetry system.
- Maintain the fire break slab to be free of vegetation and soil build-up.
- Maintain the enclosure cabinet in sound condition to protect the equipment from vandalism, rain and dust. Replace the desiccant packs in the cabinet annually in order to control humidity within the cabinet.
- Replace cables, wires, data logger, modem, etc., as needed.
- A voltage meter is included with the data collection and telemetry system so that the 12VDC battery can be changed when necessary. The battery pack for the data controller/logger and cellular module is expected to last approximately three months based on the settings described in Section 4.1, and can vary depending on the frequency and duration of the data collection and transmission to Valarm CDEC. The battery usage will be monitored by the LMA after construction, and the settings will be adjusted by the LMA as needed to balance data collection/transmission intervals and battery life. The procedure for making adjustments to the data logger settings via the cloud-based server is described in Appendix G. It is recommended that the battery be recharged when the voltage drops below 10.5 volts.
- Recommended maintenance for the data logger and cellular module should be performed as described in their respective instruction manuals. See Appendix G for product data details (will

include when construction is complete and component manuals are available).

9.11. Observation Wells

The relief wells that were converted to observation wells between Stations 846+64 and 926+69 do not need to be inspected or maintained. Other specific abandonment criteria for LD1 to be added.

9.12. Fences, Gates, and Signs

Fences, gates, concrete barriers, and bollards must be inspected and maintained by the LMA as necessary to maintain access control to the levee and appurtenant structures. Routine maintenance activities include, but are not limited to: replacing lock mechanisms, replacing bollards, repairing and replacing fences or gates that have been vandalized, and painting/coating metal surfaces prone to corrosion.

Additionally, signs and mile markers need to be maintained as necessary to maintain visibility. Signs or markers that are corroded, damaged, or stolen need to be repaired or replaced as necessary. Other specific repair actions/locations for LD1 to be added.

9.13. Canals

There is an existing canal along the landside toe of the levee from RM X to Y. This canal mitigates seepage issues in this segment as long as it is kept full of water during high water events.

The canal should be properly maintained as needed to be able to convey water. If any vegetation or other flow obstructions are identified, the LMA should request that the obstructions be removed by the canal owners as soon as possible. Similarly, if scour or erosion is identified along the canal, the LMA should request that the damage be repaired by the canal owners as soon as possible. If the necessary actions are not performed by the canal owner, the LMA should work with the CVFPB to have the issue addressed as an enforcement action. Other specific repair actions for LD1 to be added.

9.14. Habitat Mitigation

Information from the Star Bend Levee Setback O&M manual, as well as other specific actions for LD1 to be added.

9.15. Routine Geotechnical Explorations

Routine geotechnical explorations, potholing, evaluations, and/or assessments may be required for routine repairs. The LMA is responsible for retaining a qualified geotechnical engineer to perform these services as needed.

9.16. Record Keeping

A permanent record should be maintained of all levee inspection and maintenance activities. Records should include dated inspection reports, conditions observed (including a description of the specific locations), and maintenance actions taken. Data collected should include relief well water levels and flows, and piezometer levels, together with river stages. All records must be kept by the LMA.