Delta Levees Maintenance Subventions Program

2016 Guidelines

California Department of Water Resources

August 26, 2016

This page intentionally left blank.

EDMUND G. BROWN JR., Governor
State of California

JOHN LAIRD, Secretary
Natural Resources Agency

MARK COWIN, Director
Department of Water Resources

CARL TORGERSEN, Chief Deputy Director

GARY BARDINI, Deputy Director

KEITH SWANSON, Chief
Division of Flood Management

Prepared by:
Delta Levees Office

DAVE MRAZ	Principal Engineer, Water Resources
ANDREA LOBATO	Supervising Engineer, Water Resources
SANDRA R. MAXWELL	Senior Engineer, Water Resources
SUSAN ARAO	Engineer, Water Resources
NATHAN EVENSON	Engineer, Water Resources
TONY MEJIA	Water Resources Technician

Prepared for:
Central Valley Flood Protection Board

WILLIAM H. EDGAR	President
EMMA SUAREZ	Vice President
JANE DOLAN	Secretary
JOSEPH COUNTRYMAN	Member
CLYDE MACDONALD	Member
TIM RAMIREZ	Member
MICHAEL VILLINES	Member
SENATOR FRAN PAVLEY	Ex-Officio Member
ASSEMBLYMAN MARC LEVINE	Ex-Officio Member

LESLIE GALLAGHER
Executive Officer

§12984 of the California Water Code requires the Department of Water Resources to develop and submit to the Central Valley Flood Protection Board, for adoption by the Board, criteria for the maintenance and improvement of nonproject and eligible project levees in the Sacramento and San Joaquin Delta as defined in § 12220 of the California Water Code.

Table of Contents

Program Overview **1**

Article 1 - Definitions **3**

Article 2 - Plans **7**

2.1 Eligibility, Submission, and Approval of Plans 7
2.2 Long-Range Plans 7
2.3 Annual Routine Maintenance Plans 9
2.4 Levee Rehabilitation Plans 9
2.5 Maintenance or Levee Rehabilitation Plan Revisions 9

Article 3 - Administration **11**

3.1 Application Requirements 11
3.2 Application of Easement 12
3.3 Application Deadline 12
3.4 Approval of Application – Engineering Requirements and CDFW Review 13
3.5 CEQA/NEPA Compliance 13
3.6 Agreements 13
3.7 Advances 14
3.8 Local Agency Claims 14
3.9 Inspection of Work by DWR and CDFW 15
3.10 Payment to the Local Agency 15
3.11 Local Agency Records and Audits 16
3.12 Local Agency Engineering and Biological Data 17

Article 4 - Reimbursement Provisions **19**

4.1 General Provisions 19
4.2 Prioritization of Funds 19
Priority 1. Maintenance 20
Priority 2. Rehabilitation 20
Priority 2.1 21
Priority 2.2 21
Priority 2.3 21
4.3 Eligible and Ineligible Costs 21
4.4 Compliance with Applicable Laws 22

4.5 Local Agency Contracting 22
4.6 Expenditure Markups 23
4.7 Mileage Rates 23
4.8 Use of Local Agency Equipment 23
4.9 Use of On-Island Borrow Material 24
4.10 Easements 24
4.11 Emergency Work 25
4.12 Disaster Assistance 25

Article 5 - Levee Maintenance 27
5.1 Levee Maintenance Inspection and Inspection Reporting for Project and Nonproject Levees 27
5.2 Eligible Levee Maintenance 27

Article 6 - Levee Rehabilitation 31

Article 7 - Levee Easement Acquisition 33
7.1 Levee Easement Acquisition 33
7.2 Levee Easement Funding 33
7.3 Requirements for Eligible Levee Easements 35
7.4 Application Requirements for Eligible Levee Easements 35
7.5 Reimbursement for Eligible Levee Easements 35

Article 8 - Flood Management Reports & Safety Plans 37
8.1 Requirements for Flood Management Reports 37
8.2 Requirements for Safety Plans 37

Appendices

Appendix A
A.1 Delta Levee Standards Summaries
A.2 Delta Levees Standards Cross Sections

Appendix B
B.1 Procedure for Requesting Advance Funding
B.2 CDFW Advance Payment Form

Appendix C
Blank

Appendix D
Local Agency Project and Nonproject Levee Maintenance Inspection

Program Overview

The Delta Levees Maintenance Subventions Program (Subventions Program) has been dedicated to maintaining and helping to manage the aging levees in the Sacramento – San Joaquin Delta (Delta) for over 40 years. Since the passage of SB 541 (Way Bill) in 1973, the California Department of Water Resources (DWR) has invested over $180 million in flood control and habitat projects carried out by local agencies in the Delta through the Subventions Program. The Disaster Preparedness and Flood Prevention Bond Act of 2006 (Proposition 1E), the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Proposition 84) and the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1), have all required DWR to provide local assistance under the Subventions Program to fund activities that reduce the risk of levee failure and flooding in the Delta and do not result in a net long-term loss of riparian, fisheries, or wildlife habitat (CA Water Code § 12987[c]).

The Subventions Program is a cost-share program that provides technical and financial assistance to local agencies in the Delta for the maintenance and rehabilitation of nonproject and eligible project levees. The Subventions Program is authorized by CA Water Code § 12980 *et seq.*, and is managed by DWR for the Central Valley Flood Protection Board (CVFPB). The CVFPB reviews and approves DWR's recommendations, and enters into agreements with local agencies to reimburse eligible costs of levee maintenance and rehabilitation. Under CA Water Code § 12987(d), the Subventions Program ensures that expenditures are consistent with a net long-term habitat improvement program and has a net benefit for aquatic species in the Delta.

The Delta Levees Maintenance Subventions Program 2016 Guidelines (Guidelines) are an update to the 2011 Delta Levee Maintenance Subventions Guidelines, adopted by the CVFPB on September 23, 2011. The Guidelines contained herein, authorized by CA Water Code § 12984 and Public Resources Code § 5096.830 and § 75076, and adopted by the CVFPB, set forth the requirements for State financial assistance to local agencies and guide the administration of the Subventions Program including requirements to reflect the priorities of, and be consistent with the Delta Plan and CA Water Code § 12986(c). DWR will not fund projects that do not meet the minimum requirements of CA Water Code § 12980-12995.

To be eligible to participate in the Subventions Program applicants must be in compliance with all requirements set forth in CA Water Code §§ 12980-12995. In addition, applicants who also participate in the Delta Levees Special Flood Control Projects Program must be in compliance and in good standing with that Program.

In the event any provision in these Guidelines is unenforceable, or held to be unenforceable, all other provisions contained herein shall have force and effect and shall not be affected thereby.

(This page intentionally left blank.)

Article 1 - Definitions

Annual Routine Maintenance Plan	A Local Agency's fiscal year goals for maintenance activities and flood protection
Bulletin 192-82 Design Standards	DWR Bulletin 192-82. See Appendices A.1 and A.2
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act, CA Public Resource Code § 21000 *et seq.*
CVFPB	Central Valley Flood Protection Board
Delta	The Sacramento-San Joaquin Delta as described in CA Water Code § 12220 of the California Water Code
District Operations	Work that is done by district-owned equipment and work forces on the payroll of the district/local agency. For districts made up of ten owners or less, district operations may also include levee work accomplished by farmer-owned equipment and farm work forces. For these districts, the identity of the landowners and the district are substantially the same.
DSC	Delta Stewardship Council
DWR	California Department of Water Resources
Eligible Cost	The appropriate and practical actual costs associated with the operation, maintenance, repair or improvement of a levee eligible to participate in the Delta Levees Maintenance Subventions Program
Eligible Project Levee	Project Levees located in the primary zone of the Delta, as defined in CA Water Code § 12980(f)
FEMA	Federal Emergency Management Agency
Five-Year Plan	The Five-Year Plan is a document that describes, in detail, an Applicant's integrated work plan to repair and improve flood protection infrastructure for the next five to ten years in the geographic area controlled by the applicant.
Force Account	Work arrangements defined in terms of engaging labor, services, or equipment on a per time unit basis.

Guidelines	The Delta Levees Maintenance Subventions Program 2016 Guidelines
HMP	The short-term hazard mitigation plan levee configuration geometry set forth in the Flood Hazard Mitigation Plan for the Sacramento-San Joaquin Delta, prepared by the Department of Water Resources for the Office of Emergency Services, dated September 15, 1983, or successor documents. More information on levee geometry can be found in Appendices A(1) and A(2).
Levee Inspection	Formal or official levee examination supported by detailed documentation of Appendix D
Levee Patrol	To routinely pass along the levee in order to identify changes in the levee and dangerous or unusual conditions, as supported by the documentation of Article 5.2(b) 2 of these Guidelines
Levee Rehabilitation Plan	A local agency's fiscal year description for implementing levee rehabilitation activities and vegetation, wildlife or fisheries habitat improvements.
Levee System	All the nonproject and project levees as defined in these Guidelines
Local Agency	A reclamation, levee district, or other public agency in the State of California, duly organized, existing and acting pursuant to the laws thereof, with the responsibility for the maintenance of a nonproject levee as defined in CA Water Code § 12980(e) or a project levee as defined in CA Water Code § 12980(f)
Long-Range Plan	A Local Agency's long-range goals for maintenance, rehabilitation and flood protection as stated in the Subventions application and five-year plan
NEPA	National Environmental Policy Act, 42 U.S.C. § 4321 *et seq*.
Nonproject Levee	A local flood control levee in the Delta that is not a project facility under the State Water Resources Law of 1945, as shown on page 38 of DWR's Sacramento-San Joaquin Delta Atlas, dated 1993. (CA Water Code § 12980[e])
Plan or Plans	A plan or plans as defined in CA Water Code § 12987 which describe the specific maintenance and improvement work of the project and nonproject levees; for the annual routine

	maintenance of the levees, including cost estimates of work to be performed in the upcoming year, and as described in detail in the work agreement and Article 2 of these Guidelines
Primary Zone	The area to which the resources management plan applies as defined in the Delta Protection Act of 1992, as shown on page 68 of DWR's Sacramento-San Joaquin Delta Atlas, dated 1993
Project Levee	A federal flood control levee, as shown on page 40 of DWR's Sacramento-San Joaquin Delta Atlas, dated 1993, that is a project facility under the State Water Resources Law of 1945, (Chapter 1 [commencing with § 12570] and Chapter 2 [commencing with § 12639] of Part 6), if not less than a majority of the acreage within the jurisdiction of the local agency that maintains the levee is within the primary zone of the Delta, as defined in § 29728 of the Public Resources Code. (CA Water Code § 12980[f])
Secondary Zone	The area to which the resources management plan applies as defined in the Delta Protection Act of 1992, as shown on page 68 of DWR's Sacramento-San Joaquin Delta Atlas, dated 1993
State Fiscal Year	July 1 through June 30
USACE	U.S. Army Corps of Engineers

(This page intentionally left blank.)

Article 2 - Plans

2.1 Eligibility, Submission, and Approval of Plans

Pursuant to CA Water Code § 12987, local agencies maintaining project or nonproject levees shall be eligible for reimbursement upon submission to and approval by the CVFPB of plans for the maintenance and improvement of its eligible levees, based upon the following:

(a) Plans shall be provided to DWR in both hard copy and digital format prior to the local agency receiving final reimbursement, if requested;

(b) Plans shall not call for the use of channel islands or berms with significant riparian communities as borrow sites for levee repair material, unless fully mitigated;

(c) Plans shall not result in a net long-term loss of riparian, fisheries, or wildlife habitat;

(d) Local agencies will comply with the net habitat improvement mandates of CA Water Code § 12987; and

(e) Plans should reflect the priorities of, and be consistent with the Delta Plan and the CA Water Code § 12986(c).

2.2 Long-Range Plans

Long-range plans shall consist of the following:

(a) A map showing the levee system on which project levees and nonproject levees under jurisdiction of the local agency are clearly shown;

(b) Either engineering plans or a statement setting forth the local agency's long-range plans and methods for maintenance and rehabilitation of the nonproject and eligible project levees in the system, including plans for preservation and planting of levee vegetation where vegetation on the levee section is acceptable.
   (1) The plans should describe the local agency's existing maintenance schedule for the entire nonproject and eligible project levee system, and the plans should also describe the local agency's long-range goal for flood protection (e.g., Short-Term Hazard Mitigation Plan geometry, PL 84-99 standards, Bulletin 192-82 standards, or other applicable standards);

(c) The target date for achieving long-range levee rehabilitation goals;

(d) Long-range plan cost estimates for annual routine maintenance;

(e) An estimate of the total cost of rehabilitation and mitigation including costs associated with long-term maintenance and management of existing habitat mitigation and enhancement sites established to fulfill CDFW mitigation and enhancement requirements ensuring net long-term improvement and no net long-term loss of habitat;

(f) An inventory of nonproject and eligible project levees, consisting of:
   (1) A map of the levees at a scale of 1" = 2,000' or larger;
   (2) The establishment of a levee mile or station designation and marking on the ground such mile or station designations at one-half mile or 2,500-foot intervals;
   (3) A profile of the centerline of the levees;
   (4) Typical cross-sections of the existing levee and cross-sections at problem areas from the landside levee toe to under water levee toe or its adjacent berm; (Sections should be taken at the beginning and end of transitions between materially different levee cross sections.)
   (5) The location, proposal, elevations and description of all encroachments on, over, or through the levee section;
   (6) Such other material or information pertinent to the inventory that the local agency may have submitted to FEMA; and
   (7) Drawings showing the dimensions (length, width, and depth in feet) of the proposed worksites, including all borrow areas or dredge areas.

(g) Provisions for the acquisition of any easements on and adjacent to the levee where DWR has made the determination required by CA Water Code § 12987 that an easement for open space and non-tillable crops is desirable to maintain the structural stability of the levee;

(h) Specify projected land-use changes, if any;

(i) A strategy to compensate for any impacts to fish, wildlife, or riparian habitat caused by levee rehabilitation or maintenance that meets the goal of net long-term improvement and no net long-term loss for these habitats as determined by CDFW;

(j) A statement affirming: "The local agency's work activities will be carried out in a manner consistent with the requirements set forth under CA Water Code § 12987. If habitat impacts occur in association with these activities, the local agency will mitigate the impacts to meet the requirements of CA Water Code § 12987"; and

(k) A statement affirming the local agency will comply with the net habitat improvement mandates of the CA Water Code § 12987.

2.3 Annual Routine Maintenance Plans

Maintenance plans shall cover work to be performed on a fiscal year (July 1 to June 30) basis. They shall be in the form of a statement setting forth the local agency's planned maintenance within the scope of Article 5. An estimate shall be prepared showing the cost of each major activity and the year's total maintenance cost. When a statement will not adequately describe the work, it shall be shown on engineering plans or sketches.

In addition, the following information shall be included:

(a) A map, aerial photo, or engineering drawing showing the actual (or anticipated) locations and dimensions of the areas where maintenance will occur for the appropriate fiscal year, including, but not limited to, borrow areas, dredge areas, areas to be sprayed, disked, burned, or mechanically cleared, and areas where revetment must be replaced;

(b) A statement of anticipated habitat impacts, include avoidance and minimization measures, to be incorporated into the project;

(c) A statement affirming: "The local agency's work activities for the fiscal year of the application will be carried out in a manner consistent with the requirements set forth under CA Water Code § 12987. If habitat impacts occur associated with these activities, the local agency will mitigate the impacts to meet the requirements of CA Water Code § 12987"; and

(d) A maintenance schedule including details of the maintenance activities to be considered for reimbursement (e.g., length of time between maintenance treatments).

2.4 Levee Rehabilitation Plans

Levee Rehabilitation plans shall cover work to be performed on a fiscal year (July 1 to June 30) basis. The Levee Rehabilitation Plan shall be shown on an engineering drawing. The Levee Rehabilitation Plan shall be accompanied by an explanation of the vegetation, wildlife, or fisheries habitat within the work area that may be disturbed or removed, and any proposed avoidance, re-vegetation, or mitigation measures the local agency will implement. Representative photos should be included.

An estimate shall be prepared showing the cost of each major activity and the total cost of the planned rehabilitation. Levee Rehabilitation plans will conform to Article 6.

2.5 Maintenance or Levee Rehabilitation Plan Revisions

To the extent that there is a significant change in the Maintenance or Levee Rehabilitation Plan(s), the local agency shall inform DWR in writing. Depending on the type of plan revision, approval may be required from DWR and/or CVFPB.

(This page intentionally left blank.)

Article 3 - Administration

3.1 Application Requirements

To meet the requirements of the CVFPB a local agency must submit an application in order to participate in the Delta Levees Maintenance Subventions Program for each fiscal year; two hard copies and one digital copy of the application package shall be submitted to DWR and one hard copy and one digital copy of the application package shall be submitted to CDFW. Each application package shall consist of the following:

(a) A letter expressing the local agency's intent to participate;

(b) A statement of the existence of the local agency's long-range plans that reflects current levee conditions (see Article 2.2);

(c) The local agency's annual routine maintenance work plan (see Article 2.3) for the fiscal year in which the work will be accomplished;

(d) The local agency's rehabilitation work plan (see Article 2.4) for the fiscal year in which the work will be accomplished;

(e) A statement defining the land use of the area protected by the levee as well as any planned land-use changes;

(f) Acreage of the area protected by project and nonproject levees and approximate number of permanent residents;

(g) Method of assessment, assessed value, local agency tax rate for flood control, bonded indebtedness for flood control, and a summary of unpaid warrants for flood control work and/or a financial report that includes aforementioned items shall be provided to DWR upon request prior to the local agency receiving final reimbursement;

(h) A statement characterizing the reclamation district as rural or urban. Urban development is defined as 10 percent or more of the land area within the reclamation district is used for residential land use. Rural residential land use is not considered urban development for the purpose of this determination under the Delta Levee Maintenance Subventions Program;

(i) Proof of application for federal disaster assistance, whenever eligible, under Public Law 93-288;

(j) If application is for reimbursement of work deemed ineligible for federal disaster assistance, damage survey report and/or other pertinent documentation (see Article 4.12) plus proof of costs incurred;

(k) Evidence that the local agency's maintenance and improvement plans are in compliance or consistent with CEQA. This requirement may be satisfied by a statement that the local agency has or will have one of the following approved: a Categorical Exemption; a Negative Declaration; or an Environmental Impact Report.

(l) A statement affirming the local agency will comply with the net habitat improvement mandates of the CA Water Code § 12987;

(m) A statement describing the anticipated habitat impacts, including avoidance and minimization measures to be incorporated into the project and how the local agency will mitigate for all environmental impacts, including the requirements of CA Water Code § 12987, which requires no net long-term loss of habitat through impact avoidance, minimization, and/or mitigation;

(n) A statement that the local agency's maintenance and improvement plans comply with the California Endangered Species Act, the Federal Endangered Species Act, and California Fish and Game Code § 1600 *et seq.*, regarding Lake and Streambed Alteration Agreements;

(o) A statement that the local agency's maintenance and improvement plans comply or are consistent with the Clean Water Act and the Rivers and Harbors Act, as administered by USACE; and

(p) A statement that the local agency will notify responsible and trustee agencies of any actions that fall within these agencies' jurisdiction as required by law.

3.2 Application of Easement

To meet the requirements of the CVFPB in requesting reimbursement for an easement (see Article 7) under the Subventions Program, a local agency must submit an application by July 1 or a date as modified by the program under a separate cover for each fiscal year. All the requirements of Article 3 and 4 apply to this separate application.

3.3 Application Deadline

With the exception of applications submitted pursuant to CA Water Code § 12993 and § 12994, the application shall be submitted to DWR by July 1 or a date as modified by the program for levee maintenance and rehabilitation work for the corresponding fiscal year.

3.4 Approval of Application – Engineering Requirements and CDFW Review

DWR shall review the application and make recommendations to the CVFPB. The CVFPB will approve the application in whole or in part, or disapprove the application. The applicant will be informed of the disapproval of any application or any part of an application.
The following conditions need to be satisfied for approval of the application:

(a) Engineering – All engineering plans and reports shall be prepared and signed by a Civil Engineer licensed by the California Board of Registration for Professional Engineers, Land Surveyors, and Geologists. The engineering plans shall indicate which activities will be performed under the supervision of a duly licensed Civil Engineer.

(b) CDFW Review – Pursuant to CA Water Code § 12987, CDFW shall review all local agency plans. The local agency must have completed all of the requirements of CA Water Code § 12987 and § 79050 to the satisfaction of CDFW in its previous agreements with the CVFPB to be eligible for current funding under this program.

3.5 CEQA/NEPA Compliance

The local agency shall have full responsibility for ensuring the project is in compliance with CEQA and all applicable environmental laws and regulations.

The local agency shall be the lead agency for purposes of CEQA. The CVFPB and DWR, as responsible agencies, will review and consider the project's CEQA environmental document(s) prior to providing funding for any project that is subject to CEQA. Such approval is fully discretionary and shall constitute a condition precedent to any reimbursement for work for which it is required. In cases where CEQA requires findings, the CVFPB and DWR will make independent findings pursuant to CEQA based on information provided by the applicant and lead agency and decide whether to fund the project or to require changes, alterations, or mitigation, as determined by CDFW before entering into a binding agreement authorizing payment.

3.6 Agreements

CVFPB and the local agency will enter into an agreement for the reimbursement of the costs of the work to be performed in accordance with the approved application, with the provisions and policies of CA Water Code § 12980 et seq., with these Guidelines, and with the recommendations of DWR.

A resolution signed by the local agency authorizing the local agency to enter into an agreement with the CVFPB and designating a representative(s) to execute and sign the agreement.

The agreement will include a hold-harmless clause based on CA Water Code § 12992, and will be submitted to the local agency for signature. Upon return of the signed agreement by the local agency, CVFPB will execute the agreement.

3.7 Advances

The local agency may request advance funds in accordance with the executed agreement. DWR has prepared an instructional procedure for local agencies for requesting advance funds, which is attached in Appendix B. A summary of the instructional procedure is as follows:

(a) DWR may provide, at its discretion, an advance to the applicant in an amount not to exceed seventy-five percent of the estimated State's share. No advance shall be made until the applicant has incurred costs averaging one thousand dollars ($1,000) per mile of nonproject and eligible project levee.

(b) The amount advanced shall be subtracted from the final amount due to be reimbursed after the work has been completed and inspected. If DWR finds the work unsatisfactory after the work has been inspected, or the advances made exceed the reimbursable amount, the local agency shall promptly remit all amounts in excess of the State cost-share to the State. CVFPB may require a bond to be posted to ensure faithful performance of the work set forth.

(c) Advanced payments or progress payments may only be made to the local agency after DWR and CDFW determine the following approval requirements have been met by the local agency:
   (1) An AB 360 program Advance Payment Form is approved in writing by CDFW and DWR;
   (2) A site inspection has been performed, as deemed necessary by DWR and/or CDFW, prior to approval;
   (3) Documentation is submitted to DWR confirming that eligible deductible expenditures exceed the $1,000-per-levee-mile criteria; and
   (4) A schedule and appropriate bidding and contract documentation are submitted to DWR for projects requesting advanced funding.

3.8 Local Agency Claims

The local agency shall submit a claim for reimbursement to DWR upon completion of the maintenance and rehabilitation work associated with the fiscal year (July 1 through June 30) for which the application is made to the Subventions Program. This claim must be filed by November 1 of the following fiscal year. DWR will compute the amount of reimbursement to the local agency based on the claim submitted, the availability of State funds, and the results of a field inspection.

3.9 Inspection of Work by DWR and CDFW

Upon completion of work described in the approved plans, the local agency shall submit to DWR a claim for reimbursement of eligible expenses. The local agency shall submit two hard copies and one digital copy of the claim to DWR, and one hard copy and one digital copy of the claim to CDFW. Following submittal of the claim, the local agency shall request an inspection of the work by DWR and CDFW. The purpose of this inspection is as follows:

(a) To confirm that work eligible for reimbursement was completed in conformance with the approved plans;

(b) For CDFW to identify impacts and associated mitigation and habitat enhancement work required for reimbursement; and

(c) For planned mitigation costs greater than $60,000, to confirm the local agency satisfied avoidance and minimization measures for potential impacts, as discussed with CDFW prior to construction. (Refer to section 5.2[22]).

DWR will notify the local agency and the CVFPB regarding both the results of the inspection and requirements for remedial efforts, if any.

The local agency shall cooperate in the conduct of all inspections, including those by DWR pursuant to CA Water Code § 12989 for monitoring and ascertaining compliance with, and progress toward, meeting the geometry in the State's Flood Hazard Mitigation Plan, as updated or amended.

All habitat and mitigation requirements shall be completed to the satisfaction of CDFW no later than three years from the date of the funding agreement absent a waiver of this requirement by DWR and CDFW in writing. Failure to complete habitat and mitigation requirements within the three-year period will result in forfeiture of reimbursement under this Program. Failure of a local agency to complete all of the requirements of CA Water Code § 12987 and § 79050 in any previous agreement with the CVFPB will cause the local agency to be ineligible for funding under this Program until such time as the local agency completes its outstanding habitat and mitigation requirements.

3.10 Payment to the Local Agency

Pursuant to CA Water Code § 12988, upon receipt of DWR's and CDFW's findings that the work has been completed in conformance with the approved plans, and that all habitat and mitigation requirements have been completed to the satisfaction of CDFW, DWR will proceed with reimbursement of funds to the local agency as certified by the CVFPB.

As stated in Article 3.4(b), failure of a local agency to complete all of the requirements of CA Water Code § 12987 and § 79050 in any previous agreement with the CVFPB will

cause local agency to be ineligible for funding under the Subventions Program until such time as local agency completes its outstanding habitat and mitigation requirements.

3.11 Local Agency Records and Audits

The local agency shall maintain all records, plans, receipts, accountings, books, and invoices relating to the costs and quantities of labor and materials used, purchased, or contracted for in the performance of its levee maintenance and rehabilitation work for a period of ten years after the work has been performed or the expenses therefore incurred.

CVFPB and DWR shall have full and free access at all reasonable times to these books and records with the right at any time during office hours to make copies thereof.

DWR, CVFPB, Department of Finance, or Bureau of State Audits, shall have the right to conduct audits, on a periodic basis, of the local agency's expenditures for levee maintenance and rehabilitation. The purpose of such audits is to ensure the following:

(a) State funds are being properly used;

(b) Payments are not being made under different assistance programs for the same work; and

(c) Local agencies are seeking the lowest reasonable costs in the use of State funds. The local agency shall cooperate fully in any such audits.

The retention of source documentation is essential. Source documentation involves the concept of calibration when dealing with quantities. For example, barge tags by themselves do not represent adequate documentation. Some type of backup calibration is necessary to substantiate the unit quantity per barge. This calibration can consist of certification by a weigh master or field verification by the project engineer. In general, one of the responsibilities of the contract administrator is the provision of quantities calibration, where applicable. Work performed by labor forces is best documented through original timesheets.

Audits may require access to contractors' project records. Therefore, all contracts should include a standard clause providing for access to the contractor's project records.

In general, when dealing with local agency records, especially for those local agencies that make use of more than one financial assistance program, the establishment of a separate account for Subventions Program activities is a great help in separating out costs for Subventions Program and other local agency activities. It is therefore encouraged that a special county account be set up for Subventions Program warrants.

Audits and associated costs and work related to the audit process are not eligible for reimbursement.

3.12 Local Agency Engineering and Biological Data

The local agency shall upon request provide DWR with all relevant engineering, surveying, and biological data compiled or obtained during the course of activities funded by the Subventions Program. Such data shall include, but not be limited to, surveys and survey control, topography, mapping products, material quantities, quality test data, habitat impacts, proof of mitigation, engineering reports, and biological reports. If requested, the data shall be provided to DWR in both hard copy and digital format prior to the local agency receiving final reimbursement. These data shall become part of public domain and be available for DWR's use.

(This page intentionally left blank.)

Article 4 - Reimbursement Provisions

4.1 General Provisions

Subject to availability of State funds, a local agency shall be eligible for reimbursement for work completed under the agreement with the CVFPB in accordance with the following:

(a) No costs shall be reimbursed until the local agency has spent an average of $1,000 per levee mile for all of its nonproject and eligible project levees;

(b) The local agency shall be reimbursed up to 75 percent of eligible costs incurred in excess of $1,000 per levee mile for all of its nonproject and eligible project levees;

(c) Levees which are not under the jurisdiction of an applicant agency but are in its system may be maintained under a formal agreement which results in costs to the local agency. Such levees will be considered the same as the local agency's other nonproject levees in computing State reimbursement so long as they meet the requirements of CA Water Code § 12980(e) and 12980(f);

(d) Payments through the Delta Levee Maintenance Subventions Program are for maintenance and rehabilitation activities that reflect the priorities of, and are consistent with the Delta Plan and the CA Water Code § 12986(c);

(e) In accordance with CA Water Code § 79707(g), an applicant receiving funds from the Water Quality, Supply, and Infrastructure Improvement Act of 2014, Proposition 1 will display signage informing the public that the project received those funds, to the extent practical;

(f) The program will inform applicants of funding source and funding source requirements in the request for applications and in the work agreement; and

(g) The local agency cannot, without prior program approval, use other state funds to offset or pay for their local cost share. This includes funds dispersed directly or indirectly through another state agency.

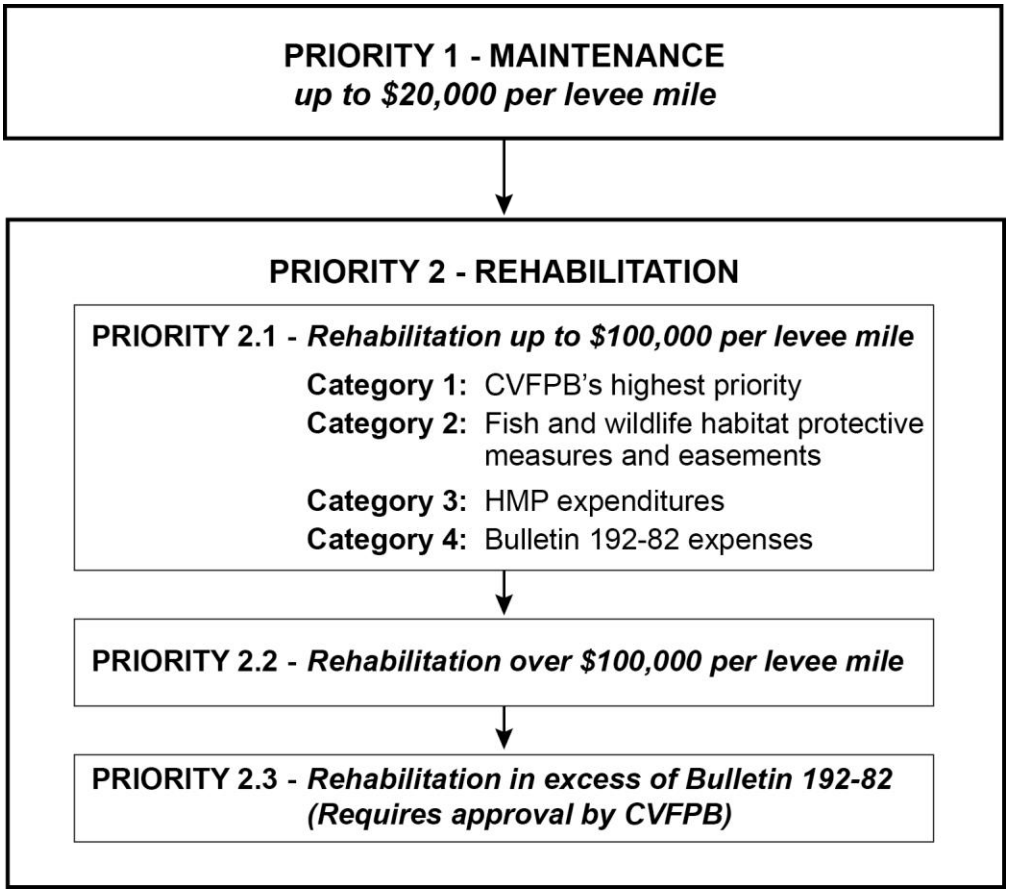
4.2 Prioritization of Funds

Pursuant to CA Water Code § 12987(f), if in any year the total eligible costs incurred exceed the State funds available, the CVFPB will apportion the funds among those levees, or levee segments identified by DWR as being most critical and beneficial for flood control, water quality, recreation, navigation, habitat improvements, and fish and wildlife. The prioritization of funds shall be in accordance with the following scheme:

Priority 1. Maintenance

The first priority for funding is for levee maintenance up to the geometric Bulletin 192-82 standards associated with the existing land use at the time the Delta Flood Protection Act of 1988 was signed into law. Maximum reimbursable expenditures for annual routine levee maintenance are limited to an average of $20,000 per levee mile for all eligible levees. The $20,000 cap includes the $1,000 per levee mile local contribution required by CA Water Code § 12986. Maintenance expenditures in excess of the average $20,000 per levee mile cap will be given a priority equal to work under Priority 2.1, Category 4, as shown in *Figure 1. Funding Priority Flow Chart*.

Figure 1. Funding Priority Flow Chart



Priority 2. Rehabilitation

The second priority for funding is for rehabilitation and levee maintenance expenditures in excess of the average $20,000 per levee mile. Priority 2 expenditures will only be reimbursed if funds are available after reimbursement of all Priority 1 expenditures. When claims exceed available funds, levee maintenance will be funded first, and then full reimbursement of each approved expenditure will be made in the order of priority until funds are exhausted.

Priority 2.1

Priority 2.1 provides funding for Categories 1-4, up to the average of $100,000 per levee mile of all nonproject and eligible project levees. When claims exceed available funds, levee maintenance will be funded first, then full reimbursement of each category, in the order shown below, until funds are exhausted for that category. The expenditures in the last category to receive any funding will be paid on a pro rata basis. Expenditures in lower categories will not be funded.

Category 1: The CVFPB-mandated top-priority funding items.

Category 2: Projects that make special provisions for protection or enhancement of fish and wildlife habitat, maintenance of habitat mitigation and enhancement sites, recreation opportunities, or land-use changes to reduce land subsidence or erosion must be coordinated with DWR and CDFW.

Category 3: Projects based on meeting the Short-Term Hazard Mitigation Plan (HMP) geometry (see Appendices A.1 and A.2).

Category 4: Projects based on meeting Bulletin 192-82 standards or PL 84-99 standards (see Appendices A.1 and A.2) and maintenance expenditures in excess of the average $20,000 per levee mile.

Priority 2.2

Priority 2.2 funding is for portions of an individual local agency's fiscal year work in excess of an average of $100,000 per levee mile of all nonproject and eligible project levees. Priority 2.2 expenditures will only be reimbursed if funds are available after reimbursement of all Priority 2.1 expenditures.

Priority 2.3

Priority 2.3 funding is for reimbursement of work in excess of Bulletin 192-82 standards and requires approval by the CVFPB. The local agency will be required to seek CVFPB approval for all Priority 2.3 activities in excess of Bulletin192-82 prior to receiving final reimbursement. Priority 2.3 expenditures will only be reimbursed if funds are available after reimbursement of all Priority 2.2 expenditures.

4.3 Eligible and Ineligible Costs

Eligible and ineligible costs are itemized and discussed in Articles 2, 3, 5, 6, and 7.

Local agency costs incurred in the preparation and execution of the application, which meets the requirements of Article 3 and is part of the CVFPB approved applications, will

be eligible for reimbursement. These costs must be associated with the state fiscal year for which the application was made.

The salaries, expenses, and fringe benefits of the executive board, executive officer in charge of the agency, their immediate clerical support and the pro rata rent charge for their office and equipment are not eligible for reimbursement.

Costs required to meet CDFW requirements pursuant to the CA Water Code § 12981(c) are eligible for reimbursement under the Delta Levees Maintenance Subventions Program. This includes costs for long-term maintenance of habitat mitigation and enhancement established to fulfill CDFW mitigation requirements and programmatic enhancement under the Delta Levees Program. CDFW may request additional information pursuant to Article 3.1, and may refuse to approve subventions claims consistent with their statutory role of confirming no net long-term loss of habitat and ensuring net long-term habitat improvement.

4.4 Compliance with Applicable Laws

All of the local agencies actions and contracting procedures shall be in conformance with all applicable laws.

4.5 Local Agency Contracting

Local agencies shall comply with the following:

(a) The local agency shall be responsible for compliance with competitive bidding, prevailing wage provisions, contract administration laws, and all applicable labor laws. At DWR's request, the local agency must promptly submit written evidence of its compliance with labor compliance program requirements.

(b) Pursuant to Public Contract Code § 20920, *et seq.*, local agency contracts for reimbursable work in excess of $25,000 shall be let to the lowest responsive, responsible bidder. If the local agency determines that no bids are in its best interests, any or all bids may be rejected. The local agency may re-advertise, negotiate, or proceed to complete the project by force account. In any case, pertinent documentation indicating the reasons for the particular course of action should be retained and supplied to DWR. This documentation should clearly demonstrate that the concept of reasonable competition was adhered to, and consequently the price for the project met the lowest reasonable cost expectation.

(c) The responsibility for contract administration by the local agency should be clearly defined. A statement providing the name of the responsible individual should be included in the application to the Subventions Program. Unit price or lump sum type contracts are acceptable; however, cost plus contracts should be avoided.

(d) Construction work performed by the local agency's own forces, which the local agency has determined to be exempt from competitive bidding, shall be reimbursed pursuant to Article 4.8.

4.6 Expenditure Markups

Markups by consultants for certain expenses incurred by the consultant and billed to the local agency may be eligible for reimbursement as follows:

(a) Up to 5 percent of subcontractor invoices for services including, but not limited to, engineering, surveying, mapping, construction management, construction inspection, geotechnical investigations, testing, environmental consulting, and obtaining permits;

(b) Up to 10 percent of eligible expenses such as document reproduction, mailing, and fees for providing public notice; and

(c) Markups for expenses such as specialized equipment rental that are not addressed in these Guidelines will be evaluated on a case-by-case basis.

These markups shall constitute full reimbursement for associated administrative costs. If a local agency can demonstrate that the markups set forth herein are too low for their particular situation, they can be adjusted on a case-by-case basis at DWR's discretion.

4.7 Mileage Rates

Reimbursement of automobile mileage that is related to eligible work will be no more than the prevailing federal standard mileage rate for the cost of operating an automobile. No payment will be made for administrative costs related to mileage.

4.8 Use of Local Agency Equipment

Reimbursement for use of local agency-owned equipment shall be limited to 90 percent of the equipment rates established by Caltrans (Annual Labor Surcharge and Equipment Rental Rates) and the Subventions Program. The Caltrans equipment rental rates are available on the internet at: http://www.dot.ca.gov/hq/construc/ .

If a local agency can demonstrate that these rates are too low for their particular situation, these rates can be adjusted on a case-by-case basis, at DWR's discretion. The decision to base reimbursement on 90 percent of Caltrans equipment rates was made for the following reasons:

(a) This percentage limits the fixed component of these rates to include only depreciation with no provision for overhead or profit; and

(b) The variable component incorporates all maintenance and operating expenses, including fuel.

4.9 Use of On-Island Borrow Material

(a) The use of on-island borrow material, although not encouraged by DWR, may be reimbursable. On-island borrow material is defined as material originating from within the local agency. The following provisions apply when reimbursement is requested for use of on-island borrow material as fill for Delta levees:
   (1) The material must be certified by a Geotechnical Engineer licensed by the Board of Professional Engineers, Land Surveyors and Geologists as suitable for levee construction;
   (2) The excavation of such material shall be limited to sites at least 400 feet from the land side toe of any flood control levee. An exception to this limitation will be made in cases where material has been stockpiled immediately adjacent to the levee or a geotechnical evaluation is performed by a certified Geotechnical Engineer demonstrating no effect to the levee;
   (3) Compliance with any and all applicable provisions of State law is required, including but not limited to Government Code § 1090; and
   (4) The local agency shall consult with CDFW regarding potential impacts to habitat and any potential threatened and endangered species associated with any on-island borrow prior to borrow site impacts. In addition, the on-island borrow site shall be subject to CEQA compliance as summarized in Article 3.5.

(b) The reimbursable components associated with the use of on-island borrow material are as follows:
   (1) Associated engineering costs;
   (2) Transportation and placement costs; and
   (3) Royalty of $1.00 per cubic yard of material when paid by the local agency to the landowner or owner of the material.

4.10 Easements

State reimbursement for easement acquisitions is 75 percent of the total cost of easement acquisition. The deductible amount of $1,000 per levee mile of nonproject and eligible project levees is not applicable for easement acquisition reimbursement.

Total easement funding under the Program is subject to an additional cap of 10 percent of the total Subventions Program's allocated funding for that year. Priorities outlined in Article 4.2 shall be applied when funding is capped.

When a shortfall of funds occurs, the priority for reimbursement of easement acquisitions will be determined on a case-by-case basis. Additional information for reimbursement when a shortfall of funds occurs can be found in Article 7.

To receive reimbursement for easement acquisitions, a final claim must be submitted by the November 1 deadline. The requirements of Article 7 shall be met and the local

agency shall submit evidence that the easement was recorded and is an encumbrance on the relevant property.

4.11 Emergency Work

Local agencies shall comply with the following:

(a) Pursuant to CA Public Contract Code § 22050, in the event of an emergency, a local agency may, with a four-fifths vote of its governing body, negotiate and award a contract for construction of work to prevent damage or repair of damaged works without advertising for bids. Specific requirements are detailed in applicable statutes.

(b) Pursuant to CA Water Code § 12994, in an emergency (as defined by § 21060.3 of the Public Resources Code) requiring immediate levee work to protect public benefits in the Delta, DWR may expend up to $50,000 per emergency levee site and $200,000 annual program maximum without prior approval of a plan by the CVFPB or CDFW. Eligibility requirements include, but are not limited to, the following:
   (1) The local agency must fund 25 percent of the total costs of the emergency repair at the site;
   (2) The local agency shall provide to DWR, in a timely manner, a resolution from its governing body that declares the emergency and authorizes the emergency repair;
   (3) Costs incurred under such an emergency are only reimbursable to the extent they are not covered by other agencies such as USACE and/or FEMA; and
   (4) Any impacts from emergency repair shall be mitigated pursuant to CA Water Code §12987.

4.12 Disaster Assistance

If it is determined after the applicant has applied for federal disaster assistance under PL 93-288 that the work performed does not qualify for such assistance, the applicant may apply for reimbursement to the Subventions Program. The associated costs shall be deemed incurred by the applicant in the year in which the application is filed. Such work must be compatible with Articles 5 and 6 of this document, and must have been denied reimbursement under Public Law 93-288 or the California Disaster Assistance Act.

Work items under this category must be clearly and separately indicated in the local agency's final claim. Project Worksheets (PWs) and/or other pertinent documentation must be included with the agency's final claim as well as evidence of all costs incurred for the work performed. DWR will review the local agency's final claim and will determine the eligibility as if the costs were incurred in the fiscal year of the final claim. The review of costs will be conducted as regular subventions work and may be subject to audit by the State Controller's Office.

If an applicant is not fully reimbursed for work rejected by FEMA due to a shortfall of funds in one fiscal year, the applicant may apply for the remaining reimbursement in the following fiscal year(s).

Article 5 - Levee Maintenance

5.1 Levee Maintenance Inspection and Inspection Reporting for Project and Nonproject Levees

A levee maintenance inspection report for the local agency's project and nonproject levees, prepared in accordance with the reporting guidelines provided in Appendix D, is required for reimbursement if inspection expenses are incurred. The requirements in Appendix D are provided to for consistency in levee maintenance inspections and to ensure that Subvention Program funds are properly expended.

(a) Routine levee maintenance inspections by the local agency are necessary to ensure that adequate maintenance is being carried out and that dangerous or unusual conditions are discovered early. DWR recommends that, at a minimum, levees should be inspected:
   (1) Once by September 15 to allow time to correct dangerous conditions;
   (2) Once in April to provide information to plan annual maintenance and repair; and
   (3) During and after periods of high water, and high winds which can accelerate wave erosion.

5.2 Eligible Levee Maintenance

Annual or routine levee maintenance is work intended to preserve the levee system in its current condition.

(a) Maximum reimbursable expenditures for annual routine levee maintenance are limited to $20,000/mile for eligible levees. The $20,000 cap includes the $1,000/mile local contribution required by CA Water Code § 12986. Maintenance expenditures in excess of the $20,000 cap will be given a priority based on Article 4.2.

Pursuant to CA Water Code § 12994 (b)(1) in an emergency, as defined by Public Resources Code § 21060.3, that requires immediate levee work to protect public benefits in the Delta, this maintenance cap can be exceeded based on Article 4.11. Costs incurred under such an emergency are only reimbursable to the extent they are not covered by other agencies, such as USACE and/or FEMA.

(b) The following levee maintenance activities are eligible for reimbursement:
   (1) Levee maintenance inspections of project and nonproject levees by the local agency to ensure that adequate maintenance is being carried out and that dangerous or unusual conditions are discovered early;
   Note: A levee inspection report prepared in accordance with the reporting guidelines provided in Appendix D is required for reimbursement.
   (2) Routine levee maintenance patrols by the local agency to identify or monitor changes to existing conditions in or along the levee and to ensure that dangerous or unusual conditions are discovered early;
   Notes:
   - Routine levee maintenance patrol logs are required for reimbursement;

- Patrol logs must be recorded in a bound book or DWR-approved log form that includes: date, time, area patrolled, findings, weather conditions, district map with stations, and patroller's name(s) and signature(s); and
- All information must be recorded in ink.

(3) Extermination and control of burrowing animals and filling their burrows with compacted material to minimize seepage through the levee section;

(4) Shaping the levee crown to drain run-off freely;

(5) Repairing and shaping patrol or access roads and controlling the weight and speed of all vehicles using patrol roads on the levee crown;

Notes:

- Repair of gravel, asphalt or paved surfaces damaged as part of levee maintenance projects are eligible for in-kind replacement and reimbursement; and
- Eligibility for reimbursement of local access roads is subject to program discretion; and - The local agency is encouraged to get prior approval for repair of access road expenditures.

(6) Repairing any minor slip outs, erosion, or subsidence of the levee section;

(7) Removing drift deposits, debris, and litter from the levee and berm;

(8) Control of seepage and boils, including installation of sections of impervious cores in the levee section;

(9) Cleaning drains and toe ditches that are adjacent to the landside levee toe and which intercept seepage;

(10) Vegetation control including cutting, removing or trimming vegetative growth such as weeds, brush, and trees in an allowable manner to the extent necessary to inspect and maintain the levee and the landside toe;

(11) Repairing or restoring rock protection except where such repairs are the responsibility of a federal agency;

Note: Repairs can be made in cases of federal responsibility, if the appropriate federal agency does not perform these repairs expeditiously.

(12) Planning for flood emergencies, including but not limited to ensuring the availability of adequate repair materials and equipment so that immediate action can be taken in the event of a flood fight;

(13) Removing or modifying encroachments which endanger the levee or interfere with maintenance, i.e.:

- The costs associated with removal of encroachments and restoration of the levee section are eligible;
- The costs incurred by the local agency to compensate for the loss of encroachments are not reimbursable under this program;
- 50 percent of the cost of material and engineering in cases where pipes through the levee are raised above the floodplain;
- 50 percent of the cost to replace or repair reclamation encroachments, such as cutoff walls, may be considered eligible on a case-by-case basis when a shared benefit with flood control can be shown or as otherwise agreed.

(14) Levee profile and cross section surveys;

(15) Other levee and underwater surveys including topographic and bathymetric surveys, and habitat assessments;

(16) Engineering services and associated administrative work in connection with the Delta Levee Subventions Program, except specialized engineering work done in connection with rehabilitating levees to standards associated with proposed or ongoing change in land use;

(17) Miscellaneous items such as gates to control traffic on the levee, guard rails, required signage, etc.;

Notes:

- The local agency is encouraged to get prior approval on miscellaneous expenditures that will be submitted to the Subventions Program.
- Eligibility of reimbursement for miscellaneous expenditures is subject to program discretion.

(18) Reasonable costs for engineering, labor, materials, hourly equipment rental, and pro-rata rental charges of agency-owned equipment;

(19) Levee toe drains (excluding new construction or maintenance of drainage pumps and drainage ditches);

(20) Maintenance of net habitat improvement sites to meet the requirements of CDFW under CA Water Code § 12987;

(21) Management and maintenance of mitigation sites resulting from levee work as necessary to comply with CDFW requirements pursuant to CA Water Code §12307 and § 78543; and

(22) All eligible mitigation costs may be considered for cost-share reimbursement. Planned mitigation costs up to $60,000 may be cost-shared without prior CDFW approval. Planned mitigation costs in excess of $60,000 may be reimbursed if the local agency provides documentation that it has engaged with CDFW in a pre-project consultation regarding minimization and avoidance measures, and CDFW has provided the local agency with a written estimate of the mitigation obligations that would ensue as a result of the proposed project work. Prior CDFW approval is not required for emergency response.

(This page intentionally left blank.)

Article 6 - Levee Rehabilitation

Levee rehabilitation refers to physical improvements intended to raise the levee system's standards, i.e., HMP, PL 84-99, and Bulletin 192-82 (see Appendices A.1 and A.2).

The following levee rehabilitation activities are eligible for reimbursement:

(a) Work that is considered eligible under the HMP criteria for agricultural levees includes the following:
   (1) Raising the levee crown to an elevation of 1.0 foot above the 100-year flood frequency levels determined by USACE; (An additional +0.5 foot, up to 1.5 feet above the 100-year flood frequency level, will be allowed for subsidence.)
   (2) Flattening waterside slopes to 1.5 horizontal to 1 vertical, and landside slopes to 2 horizontal to 1 vertical; and
   (3) Widening the levee crown to a width of 16 feet and shaping to drain run-off freely.

(b) Work that is considered eligible under the PL 84-99 criteria for agricultural levees includes the following:
   (1) Raising the levee crown to an elevation of 1.5 above the 100-year flood frequency level; (An additional +0.5 foot, up to 2.0 feet above the 100-year flood frequency level to allow for subsidence is acceptable.)
   (2) Flattening waterside slopes to 2 horizontal to 1 vertical and landside slopes to 3 horizontal to 1 vertical or flatter, as required to account for local depth of peat; and
   (3) Widening the levee crown to a width of 16 feet and shaping to drain run-off freely.

(c) Work that is considered eligible as part of the Bulletin 192-82 criteria for agricultural and urban levees includes the following:
   (1) Raising the levee crown to an elevation of 1.5 feet above the 300-year flood frequency level for agricultural levees and 3.0 feet above the 300-year flood frequency level for urban levees;
   Note: In each case, an additional +0.5 foot to allow for subsidence is acceptable.
   (2) Flattening waterside slopes to 2 horizontal to 1 vertical and landside slopes to 3 horizontal to 1 vertical or flatter, as required to account for local depth of peat;
   (3) Constructing landside berms to increase levee structural stability;
   (4) Widening the levee crown to a width of 16 feet and shaping to drain run-off freely;
   (5) Replacing existing and/or upgrading patrol and access roads to provide greater width or structural section for levee inspection, and flood fighting purposes;
   Notes:
   - Repair of gravel, asphalt or paved surfaces damaged as part of levee rehabilitation projects are eligible for in-kind replacement and reimbursement; and

(6) Providing turnouts, access roads, and ramps as necessary;
Notes:
- The local agency is encouraged to get prior approval for repair of access road expenditures.
- Eligibility of reimbursement for expenditures is subject to program discretion.

(7) Relocation of toe ditches, if required, as a result of levee rehabilitation to Bulletin 192-82 criteria; and

(8) Placing rock protection (or equivalent) on the waterside levee slope when erosion may potentially endanger the stability of the foundation or the integrity of the levee.
Note:
-The local agency is urged to consult with DWR staff to determine eligibility of rehabilitation activities prior to work being undertaken.

(d) All eligible mitigation costs may be considered for cost-share reimbursement. Total mitigation of up to $60,000 may be cost-shared without prior CDFW approval. Any eligible mitigation costs in excess of $60,000 may be reimbursed if the local agency provides documentation that it has engaged with CDFW in a pre-project consultation regarding minimization and avoidance measures, and CDFW has provided the local agency with a written estimate of the mitigation obligations that would ensue as a result of the proposed project work. Prior CDFW approval is not required for emergency response.

Article 7 - Levee Easement Acquisition

7.1 Levee Easement Acquisition

This Article sets forth the requirements for State financial assistance to local agencies for levee easement acquisition and eligibility requirements for easements used as part of the local agency cost-share.

Easement acquisition is a tool for maintaining Delta nonproject and eligible project levees in areas prioritized by DWR. Easements can also provide other benefits, such as the protection or creation of wildlife habitat areas and the prevention of future encroachments.

Pursuant to CA Water Code § 12987(b), nonproject plans shall also be compatible with the plan for Delta levees as set forth in DWR Bulletin 192-82, dated December 1982, and as approved in CA Water Code § 12225. Both project and nonproject plans shall include provisions to acquire easements along levees that allow for the control and reversal of subsidence in areas where DWR determines that such easements would be desirable to maintain structural stability of the levee. Such easements shall:

(a) Restrict the use of the land to open-space uses, non-tillable crops, the propagation of wildlife habitat, and other compatible uses;

(b) Provide full access to the local agency for levee maintenance and improvement purposes; and

(c) Allow the owner to retain reasonable rights of ingress and egress as well as reasonable rights of access to the waterways for water supply and drainage.

7.2 Levee Easement Funding

The local agency cost of acquisition of the easements shall be reimbursable by DWR from moneys appropriated pursuant to CA Water Code § 12300(b), or any other sources appropriated by the Legislature for purposes of levee easement acquisition.

(a) State reimbursement for easement acquisitions is 75 percent of the total cost of easement acquisition including any associated engineering and administrative costs. A deductible amount of $1,000 per levee mile of nonproject and eligible project levees is not applicable for easement acquisition reimbursement.

(b) Total easement funding under the Program is subject to an additional cap of 10 percent of the total Subventions Program's allocated funding for that year. Priorities outlined in Article 4.2 shall be applied when easement funding is capped.

(c) State reimbursement of an easement acquisition will be based upon an appraisal of the fair market value of the easement, which is subject to the approval of DWR and/or General Services.

(d) When a shortfall of funds occurs, the priority for reimbursement of easement acquisitions will be determined on a case-by-case basis. Prioritization of funds for levee acquisitions will generally depend on the following two factors:
   (1) Potential flood control benefits achievable through levee acquisition; and
   (2) Other public benefits achievable through these acquisitions.

The higher the potential flood control benefits associated with the acquisition of a particular easement are, the higher the priority assigned to that acquisition will be. For borderline decisions between priorities, the second factor—degree of other public benefits—will be the deciding factor.

The possible equivalent funding priorities (as defined in Article 4) for reimbursement of levee easement acquisitions are as follows:

Priority 2.1, Category 1: Plans based on meeting CVFPB's top priority funding items;

Priority 2.1, Category 3: Plans based on meeting the Short-Term Hazard Mitigation Plan geometry (see Appendices A.1 and A.2);

Priority 2.1, Category 4: Plans based on meeting Bulletin 192-82 standards or PL-84-99 standards (see Appendices A.1 and A.2); and

Priority 2.2: Portions of an individual local agency's fiscal-year work in excess of an average of $100,000 per mile of all nonproject and eligible project levees.

(e) In certain cases, levee easements can be used as a contribution toward the 25 percent (or more) local cost-share percentage required for participation in the Subventions Program. The conditions under which a local agency's acquisition of a levee easement could serve as all, or a portion of, their local cost-share are as follows:
   (1) DWR confirms that the dedication of an easement is desirable in the maintenance of levee stability;
   (2) The local agency acquires an appraised easement by payment to a property owner or the local agency acquires an easement through means of an in-lieu dedication, or some other means whereby no claim for any costs associated with the acquisition of this levee easement is filed;
   Note: Where easements are dedicated without an exchange of funds, the value of the easement must be determined through a formal appraisal process as described in this Article 7.3.

(3) The resulting contribution toward the local cost-share would equal no more than 75 percent of the total value of the easement and any pertinent engineering and administrative costs.

7.3 Requirements for Eligible Levee Easements

All easements shall be appraised in accordance with the Uniform Standards of Professional Appraisal Practice to be accepted as part of the local agency cost-share and/or to be reimbursed under the Program. The local agency shall hold title on all easements acquired using Subventions Program funds or used as part of the local agency cost-share.

7.4 Application Requirements for Eligible Levee Easements

Easement Applications shall be submitted to DWR by July 1 or a date as modified by the program for easement acquisition for the corresponding fiscal year. The Easement Application should include the following:

(a) Map showing the location of the proposed easement;

(b) Detailed estimate of all easement acquisition-related costs and a copy of all completed appraisal reports;

(c) Statement regarding the purpose and benefits of the easement acquisition;
Notes:
- If easements are proposed because of levees in poor condition, an analysis of the structural stability of the levees in question will be required.
- This analysis should be done by qualified engineering firm.

(d) Proposed schedule for the acquisition process;
Notes:
- If the acquisition process is expected to run over into the following fiscal year(s), it should be noted.
- An updated application must be submitted for each fiscal year in which the acquisition process will run over.

For easements that have not yet been formally appraised, a statement that the local agency will obtain and submit appraisal documents prior to requesting reimbursement or credit as part of the local agency cost-share.

7.5 Reimbursement for Eligible Levee Easements

Eligible reimbursable components for easements are as follows:

(a) The cost of obtaining an easement appraisal; and

(b) Associated engineering and administrative costs.

A final claim for reimbursement of easement acquisition costs must be filed under a separate cover by November 1, following the end of the fiscal year for which the application is made. As with the itemized costs in any claim, full documentation such as invoices for services and copies of warrants must be included. The local agency shall submit evidence that the easement was recorded and is an encumbrance on the relevant property.

Article 8 - Flood Management Reports & Safety Plans

8.1 Requirements for Flood Management Reports

In accordance with CA Water Code § 9140, AB156 (2008), if a local agency is responsible for the operation and maintenance of a project levee, or if a local agency operates and maintains a nonproject levee benefiting land within the boundaries of an area that is benefited by a project levee, the local agency shall prepare and submit a report to DWR containing the following information for inclusion in DWR's periodic flood management reports relating to the project levee, on or before September 30th of each year:

(a) Information known to the local agency that is relevant to the condition of the project levee;

(b) Information identifying known conditions that might impair or compromise the level of flood protection provided by the project levee;

(c) A summary of the maintenance performed by the local agency during the previous fiscal year;

(d) A statement of work and estimated cost for operation and maintenance of the project levee for the current fiscal year, as approved by the local agency; and

(e) Any other readily available information contained in the records of the local agency relevant to the condition or performance of the project levee, as determined by the CVFPB or DWR.

8.2 Requirements for Safety Plans

In accordance with CA Water Code § 9650, if a local agency receives funding from the State to upgrade a project levee that protects an area in which more than 1,000 people reside, the local agency responsible for the project levee and any city or county, including charter cities or counties, protected by the project levee shall enter into an agreement to adopt a safety plan within two years. The safety plan shall be integrated into any other local agency emergency plan and shall be coordinated with the state emergency plan. The local entity responsible for the operation and maintenance of the project levee shall submit a copy of the safety plan to DWR and the CVFPB. No advances or reimbursements shall be made by the State for a levee covered by this paragraph until it receives the agreement from all necessary entities. The safety plan shall include all of the following elements:

(a) A flood preparedness plan that includes storage of materials that can be used to reinforce or protect a levee when a risk of failure exists;

(b) A levee patrol plan for high water situations;

(c) A flood-fight plan for the period before the state or federal agencies assume control over the flood fight;

(d) An evacuation plan that includes a system for adequately warning the general public in the event of a levee failure, and a plan for the evacuation of every affected school, residential care facility for the elderly, and long-term health care facility;

(e) A flood water removal plan; and

(f) A requirement, to the extent reasonable, that either of the following applies to any new building in which the inhabitants are expected to be essential service providers:
   (1) The building is located outside an area that may be flooded; or
   (2) The building is designed to be operable shortly after the floodwater is removed.

Appendix A

1. **Delta Levee Standards Summaries**
2. **Delta Levees Standards Cross Sections**

This page intentionally left blank.

Appendix A

A.1 Delta Levee Standards Summaries

The following are summaries of common levee standards used in the Sacramento – San Joaquin Delta.

Short-Term Hazard Mitigation Plan (HMP) Geometry (for Agricultural Levees)

The short-term mitigation plan cited in Water Code section 12984(a) and set forth in the *Flood Hazard Mitigation Plan for the Sacramento-San Joaquin Delta*, prepared by the Department of Water Resources (DWR) for the Office of Emergency Services, dated September 15, 1983, or as amended, contains criteria that include the following:

(a) Minimum freeboard of 1 foot above the 100-year flood frequency elevations determined by the Corps of Engineers;

(b) Minimum crown width of 16 feet with an all-weather access road;

(c) Waterside slopes no steeper than 1.5 horizontal to 1 vertical, with revetment in areas where erosion has been a problem; The size of the revetment material to be appropriate for the slope; and

(d) Landside slopes no steeper than 2 horizontal to 1 vertical, with flatter slopes in the lower portion of the levee in areas where soil stability or seepage have been a problem.

PL 84-99 Standards (for Agricultural Levees)

The U.S. Army Corps of Engineers' (USACE) publication *Guidelines for Rehabilitation of Non-Federal Levees in the Sacramento-San Joaquin Legal Delta* contains criteria that include the following:

(a) Minimum freeboard of 1.5 feet above the 100-year flood frequency elevations determined by the Corps of Engineers;

(b) Minimum crown width of 16 feet with an all-weather access road

(c) Waterside slopes no steeper than 2 horizontal to 1 vertical

(d) Landside slopes vary with levee height and depth of peat (range 3:1 – 5:1); and

(e) Levee toe drain located 30 feet landward from the landside levee toe.

Bulletin 192-82 Standards (for Agricultural and Urban Levees).

DWR's publication *Bulletin 192-82, Delta Levees Investigation*, dated December 1982, contains criteria that include the following:

(a) Minimum freeboard for levees protecting agricultural and urban land consists of 1.5 feet and 3.0 feet respectively above the 300-year flood frequency elevations determined by USACE.

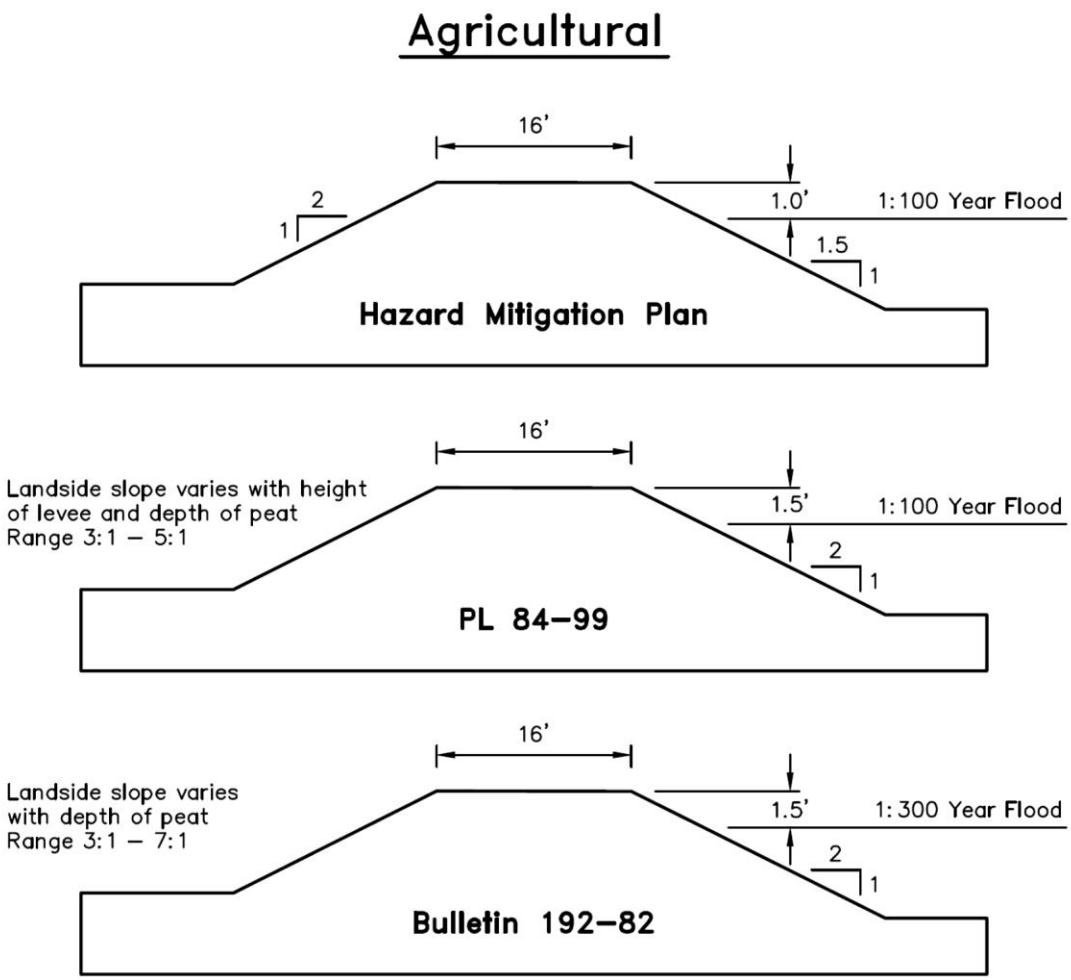
(b) A typical levee section has a crown width of 16 feet, a waterside slope of 2 horizontal to 1 vertical, and a landside slope that varies with depth of peat (range 3:1 to 7:1).

(c) Landside berms should be constructed where necessary to help provide stability for weak, highly compressible, peat foundations. Slopes on landside berms should be as flat as 15 horizontal to 1 vertical where required.

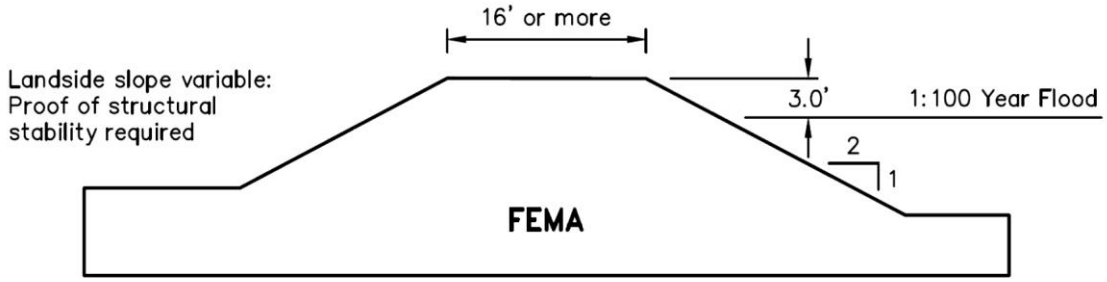
(d) In deep peat areas, staged construction consisting of periodic raising of the levee crown, back slope, and the landside berm may be required to compensate for continuing subsidence.

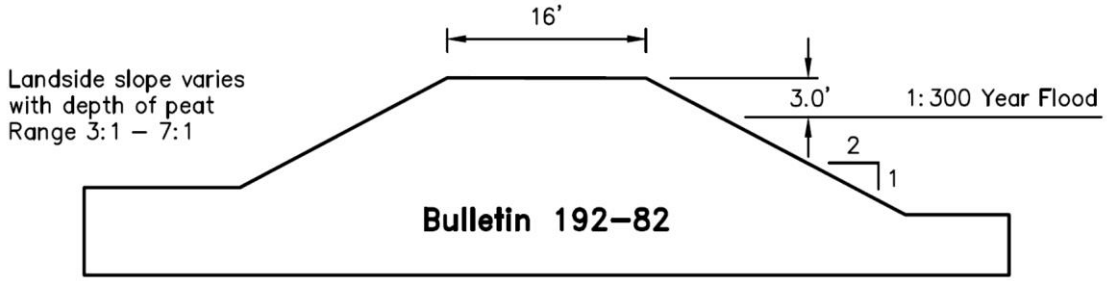
(e) Construction of levees on a new alignment (levee setback) to have a minimum crown width of 12 feet and slopes of 2 horizontal to 1 vertical on both the landside and waterside.

A.2 Delta Levee Standards Cross Sections



Urban


16' or more
Landside slope variable:
Proof of structural
stability required
3.0'
1:100 Year Flood
2
1
FEMA


16'
Landside slope varies
with depth of peat
Range 3:1 – 7:1
3.0'
1:300 Year Flood
2
1
Bulletin 192–82

Appendix B

1 Procedure for Requesting Advance Funding

2. CDFW Advance Payment Form

This page intentionally left blank.

Appendix B

Appendix B.1 Procedure for Requesting Advance Funding

CA Water Code § 12987.5 allows for advancing funds to applicants upon submission of plans for maintenance and improvement of Delta levees. Advance funding can provide needed cash flow to the local maintaining agencies so the necessary work can proceed without impacting reserved funds or require the borrowing of additional funds.

The Department of Water Resources (DWR) makes advance funding available to eligible local agencies for work above and beyond the routine maintenance work provided the proposed plans comply with the following requirements:

- California Environmental Quality Act guidelines
- California Endangered Species Act
- Public Contract Code competitive bidding requirements
- Bond funding labor compliance program requirements
- All applicable federal, State and local laws and regulations

Additionally, local agencies applying for advance funding must meet the Delta Levees Maintenance Subventions Program's "no net loss" and "net habitat improvement" requirements. Routine annual maintenance work will not be considered for advance funding. The specific requirements for advance funding for specific rehabilitation projects are as follows:

(a) Signed Work Agreement – A work agreement must be executed between the local agency and the Central Valley Flood Protection Board (CDFPB) before DWR can process any requests for advance funding.

(b) Project Description – A project description detailing the proposed work has to be included in the package requesting advance funding as part of the submittal to DWR. The description should clearly show that the proposed work is above and beyond the routine maintenance work. All plans, maps, and specifications should accompany the project description. A work schedule must be included providing enough detail to show the work can be completed prior to July 1, the beginning of the next fiscal year.

(c) Labor Compliance Requirements – The local agency must provide evidence indicating that they will enforce a Labor Compliance Program pursuant to Labor Code § 1771.5, as long as the local agency is requesting funding in whole or in part under Proposition 50, Proposition 84, or any other source of funding requiring enforcement of a Labor Compliance Program.

(d) Projects Performed Under Contract – Where work is performed under contract, the local agency is responsible for compliance with competitive bidding, contract administration laws, and all applicable labor laws including, but not limited to,

Public Contract Code § 20920*, et seq*., Labor Code § 1720 *et seq*., and § 1770 et seq.

(e) Advance funding is only applicable to the districts that are ready to proceed with their projects and have a signed construction contract in place. Requests for advance funding will only be considered for projects qualified as non-routine maintenance work. Advance amounts are based on the contract amount as outlined below; however, it will not exceed the approved amount by CVFPB.

Contract Amount ($)	Advance Amount (%)
Up to $500,000	75
$500,000–$1,000,000	50
Over $1,000,000	35

(f) Local Agency Projects – A request for advance for levee rehabilitation performed with local agency forces will be evaluated on a case-by-case basis. These projects must include a Scope of Work prepared, signed, and managed by a Civil Engineer licensed by the California Board for Professional Engineers, Land Surveyors, and Geologists. This is to ensure that the materials used meet construction standards and work is to be accomplished in an efficient and effective manner. The Civil Engineer's estimated cost of the "Scope of Work" will be treated the same as the "Contract Amount" as described in the paragraph above for limiting the advance amount. Limitations to the maximum amount reimbursed for local agencies' equipment costs will be determined in accordance with the equipment rates established by Caltrans and the Delta Levees Maintenance Subventions Program.

(g) Environmental Compliance – Each application for advance funding must include evidence that the project complies with the California Environmental Quality Act. In addition, each project must be compliant with the California Endangered Species Act, the Federal Endangered Species Act, and the Clean Water Act and the Rivers and Harbors Act, as administered by the U.S. Army Corps of Engineers. The accompanying "AB 360 Program Advance Payment Form" must be filled out and accompany the advance request to ensure that all expenditures of program funds are consistent with "no net long-term loss" and "net habitat improvement" requirements. An electronic version of the form can be obtained from DWR or the California Department of Fish and Wildlife (CDFW). Please attach all necessary documents to support the form.

(h) Submittal Timeline – An eligible maintaining agency may submit a request for advance funds any time during the current State fiscal year. Local agencies are eligible for advances only after a minimum deductible of $1,000 per levee mile in costs have been incurred.

Prepare two copies of the package and submit one copy each to DWR and CDFW.

Appendix B.2 CDFW Advance Payment Form[1]

AB 360 Program
Advance Payment Form

This form must accompany all Subvention Advance Payment requests for flood control work. The AB 360 Program (CA Water Code Section 12987) requires the Department of Fish and Game (DFG) to ensure that all expenditures of Program funds are consistent with no net long-term loss and net habitat improvement. As part of the advance approval process, DFG will review all information below as provided by the reclamation district. As needed, DFG will perform site inspections to ensure net habitat improvement.

Claimant Information

Reclamation District Name/Number			
Engineer/ Engineering Company			
Person Familiar with Project			
Email		Phone Number	
Fiscal Year of Proposed Work			

Work Description

Provide detailed descriptions of proposed work to be paid for under the advance: include work dates, locations by levee station, whether waterside or landside, width of work area, and provide pre-project photos of all work locations. The work descriptions should be identified by the following categories: Annual Routine Maintenance (Road Work, Erosion/Subsidence Control, Drainage Control, Water Control Devices, Rodent Control, Vegetation Control) and Levee Rehabilitation Work.

Mapping

Attach topographical maps, aerial photos, and/or engineering drawings showing the locations and dimensions of the area where project activities will occur. These include, but are not limited to, borrow areas, dredged areas, areas to be sprayed, disced, burned, or mechanically cleared, and areas where revetment must be replaced.

[1] AB 360 Program Advance Payment Form available upon request from CDFW.

Potential Impacts and Avoidance

Are there any AB360 habitat types (riparian forest, scrub shrub, freshwater marsh, SRA) present within any of the work locations?

Yes ☐ No ☐

Are there any sensitive natural communities and plants or wetlands recognized by DFG or Federal Agencies present?

Yes ☐ No ☐

Are there any candidate, sensitive, or special status species recognized by DFG or Federal Agencies potentially present?

Yes ☐ No ☐

By levee station number, describe how impacts to habitat and sensitive species will be avoided.

Mitigation / Enhancement

Are there any unavoidable impacts to habitat or sensitive species? Yes ☐ No ☐

Please describe all proposed mitigation for unavoidable impacts. All potential impacts to special status species will require consultation under CESA and/or FESA and may require mitigation beyond that needed by the AB 360 Program.

To comply with the net long-term habitat improvement program and have a net benefit to aquatic species as required by Water Code Sections 12987 and 79050, the District agrees to participate in DWR and DFG sponsored programmatic habitat improvement projects.

CEQA Notification

CEQA documentation is necessary for any work which may cause a direct physical change or reasonably foreseeable indirect change in the environment.

Which of the following may be necessary for the work to be completed:

NOE ☐ Neg. Dec. ☐ Mit. Neg. Dec. ☐ EIR ☐

Is the documentation already complete?: Yes ☐ No ☐

If yes, please attach a copy of the documentation.

Required Permits

The Reclamation District is responsible for all environmental compliance related to the above work and must comply with all applicable federal, state, and local laws and regulations.

Notification under Section 1602 of the Fish and Game Code is required for all waterside work, including but not limited to flood control, habitat creation, and dredging. If there are any listed species in or near the work area, DFG should be consulted. Permitting under CESA is required if "take" of a state listed species may occur while undertaking any part of the project.

Which of the following may be necessary for the work to be completed:

Streambed Alteration Agreement ☐ Incidental Take Permit ☐

List all permits required to complete the above work (including other governmental agencies) and the date each permit was approved or roughly when you expect it to be approved.

Signature

Reclamation District Name and Number _____

District Representative (Printed) _____

District Representative (Signature) _____

Date Form Completed _____

Appendix C

This Appendix intentionally left blank.

This page intentionally left blank.

Appendix D

Local Agency Project and Nonproject Levee Maintenance Inspection

This page intentionally left blank.

Appendix D.

Local Agency Project and Nonproject Levee Maintenance Inspection

Local agencies should conduct routine levee maintenance inspections frequently to ensure that adequate maintenance is being carried out and that dangerous conditions are discovered early and emergencies are prevented. The Department of Water Resources (DWR) recommends that local agencies should, at a minimum, conduct such inspections before and after flood season and during and after periods of high water and high winds. Frequent inspections will assist local agencies to discover deficiencies, such as voids, erosion, cracking, subsidence, and seepage that could result in levee damage or failure.

Annual inspections for planning routine maintenance and repair should be completed prior to July 1 to allow time to include corrective measures in the local agency's application under the Subventions Program.

(a) Reporting Guidelines – Routine levee maintenance inspection reports should include sufficient data to support the local agency's claim for reimbursement. Such reports should include, but not necessarily be limited to, the following information:

(1) Local agency name and district number;
(2) Local agency engineer and levee inspector;
(3) A map of the entire levee system that shows levee stationing or levee miles, adjacent water courses, and the locations of areas of concern;
(4) Photographs with sensible captions documenting conditions of problem areas;
(5) Date(s) of inspection(s); and
(6) A narrative description that summarizes the local agency's inspection efforts and includes recommendations for proposed maintenance.

(b) DWR recommends that local agency routine levee maintenance inspections should, at a minimum, identify the following conditions as applicable:

(1) Evidence of burrowing rodents;
(2) Evidence that the levee crown does not drain run-off freely;
(3) The condition of patrol and access roads on the levee crown;
(4) Signs of sloughing, erosion, cracking, or subsidence of the levee;
(5) Presence of drift deposits, debris, and litter on the levee berms and slopes;
(6) Presence of seepage and boils including comparison with historical data as applicable;
(7) The condition of drains and toe ditches that are adjacent to the landside levee toe—this may include measurement of flow, if any, and comparison with historical data where applicable;
(8) The presence of vegetative growth (such as weeds, brush, and trees) that obstructs visual inspection of the levee;

(9) The presence and condition of suitable ground cover, such as grass, intended to minimize erosion on levee berms and slopes;
(10) The presence and condition of rock armor on the waterside slope;
(11) Existing field conditions that may impede the delivery or use of supplies and equipment during a flood fight event;
(12) Encroachments which endanger the levee or interfere with maintenance;
(13) Signs of obvious changes in the levee profile or cross section that indicate the need for levee repair and/or updating of topographical surveying data;
(14) Signs of obvious changes in the adjacent channel cross section that indicate the need for updating the local agency's bathymetric data;
(15) The need for repair or replacement of damaged gates, guard rails, and other items intended to control traffic on the levee; and
(16) The need for repair or replacement of damaged or missing levee stations or mile markers.

The information herein is provided to encourage consistency in levee maintenance inspections and to ensure that Subvention Program funds are properly expended. This information is not intended to address all conditions and components that may be required in a flood control system. Local agencies should consult with a Civil Engineer licensed by the California Board of Registration for Professional Engineers, Land Surveyors and Geologists for guidance regarding their specific inspection, maintenance and rehabilitation needs.