

**Meeting of the Central Valley Flood Protection Board  
March 25, 2016**

**Staff Report**

**Letter of Support for  
Central Valley Integrated Flood Management Study (CVIFMS) Watershed Plan**

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**1.0 – ITEM**

Consider Central Valley Flood Protection Board approval to send a letter (Attachment A) to the U.S. Army Corps of Engineers Sacramento District supporting the findings and conclusions of the federally-developed Central Valley Integrated Flood Management Study (CVIFMS) Watershed Plan (available for download at: <http://www.cvpfb.ca.gov/meetings/2016/03-25-2016.cfm> ).

**2.0 – SPONSORS**

Federal: U.S. Army Corps of Engineers (USACE)

State: Central Valley Flood Protection Board (Board)  
Department of Water Resources (DWR)

**3.0 – LOCATION**

The study area is the Sacramento River watershed. The Sacramento River Basin occupies nearly 27,000 square miles in the north central part of California. The Sacramento River is the largest river in California, with an average annual runoff of 22 million acre-feet. The Sacramento Valley is the low-lying portion of the basin bounded by the Coastal Range to the west, the Cascade Range to the north and the Sierra Nevada Range to the east. The Sacramento River drains into the largest estuary on the West Coast, the Sacramento-San Joaquin Delta.

**4.0 – PROJECT DESCRIPTION**

CVIFMS is the federal companion document to the State of California's Central Valley Flood Protection Plan (CVFPP) and Conservation Strategy. The watershed study assessed problems, needs, opportunities and potential solutions to flood risk management, ecosystem restoration and water supply in the Sacramento River

watershed through analysis of existing information and collaboration with the sponsors and input from key stakeholders and the public.

## **5.0 – PROJECT BACKGROUND**

CVIFMS is a continuation of the Sacramento and San Joaquin River Basins, California Comprehensive Study (Comp Study) initiated by Board Resolution 1997-17. The Comp Study was a comprehensive evaluation of the Sacramento River and San Joaquin River basins under two existing study authorities: the Flood Control Act (FCA) of 1962 (Pub. L. 87-874), Section 209 and a Resolution of the House Committee on Public Works dated May 8, 1964.

### **5.1 – Estimated Costs**

CVIFMS is being developed under a Federal Cost Share Agreement (FCSA) that the Board and DWR entered into on July 21, 2010 (Attachment B). The agreement was modified for additional cost under Board Resolution No. 2013-17 (Attachment C). Both the Board and DWR are providing in-kind services as their contribution. Board staff Senior Engineer Nancy Moricz is assigned to review and edit documents, and is a member of the federal Project Design Team (PDT) which meets weekly. Study completion is scheduled for April 2016 with no further anticipated budget changes.

### **5.2 – Project Benefits**

The primary benefits of completing the CVIFMS Watershed Plan are:

- Establishes a partnership with USACE which allows necessary coordination of State flood risk management goals outlined in the CVFPP.
- Identification of federal interest will aid DWR in creating a comprehensive multi-year Investment Strategy and Financial Plan for the 2017 CVFPP update.
- Watershed analysis through CVIFMS will inform and advance the Sacramento River General Revaluation Report.

## **6.0 – PROJECT ANALYSIS**

### **6.1 – Consistency of Federal Findings and Conclusions**

There was extensive engagement between the USACE, DWR and CVFPB staff throughout the creation of this joint federal-state plan. Data and information were frequently exchanged and the watershed description is based on the best modeling and information available. The resulting CVIFMS is a federal support-tool which

recommends a wide array of future planning efforts. The study focused on cementing partnerships that could create a flood system that promotes economic sustainability in urban, rural and agricultural areas using both structural and non-structural means, while incorporating multiple benefits. Staff has reviewed this study while reflecting on the themes within the Board's 2012 CVFPP Adoption Resolution No. 2012-25 (available for download at: <http://www.cvpfb.ca.gov/CVFPP/RevAdoptedResolution-8.29.12.pdf>). Unless otherwise noted all "Sections" and "Tables" in parenthesis in this subsection of the Staff Report refer to numbering used in the CVFIMS as released by the Sacramento District to their South Pacific Division office on March 16, 2016.

CVFIMS's content is consistent with the Vision promoted in Resolution No. 2012-25. The first priority of CVIFMS is to reduce both the probability and consequences of flooding, and the CVIFMS team performed an extensive review of measures and alternatives that could accomplish this goal. The document presents a high-level review of DWR's proposed Sacramento River Basinwide Feasibility studies' (BWFS) recommended designs for Yolo Bypass which expands the capacity of the existing system. As such, both CVIFMS and the draft BWFS are reviewing alternatives that would provide a sufficient margin of safety in the event of larger flood events. Further work to incorporate the BWFS into the next level of planning within the Sacramento General Re-evaluation Report is recommended by CVIFMS.

A major focus of CVIFMS was to promote ecosystem function and the team included an extensive array of ecosystem restoration measures as part of the document's alternatives analysis. The ecosystem restoration measures sorted by sub-basin are briefly described in Table D-4 and a detailed table of how those measures are scored against a variety of metrics is also included in the Watershed Study's Appendix D. Indeed, several of the alternatives with ecosystem restoration elements have been deemed suitable for further study by the federal government (Section 3.1.5). The CVIFMS team emphasized cooperation not only with DWR and local maintaining agencies, but reviewed ways the federal government can partner with tribes and non-traditional partners (Section 5.5). The possible effects of climate change and other changes in hydrology are discussed using the best science available (Sections 2.2.1 and 2.2.2).

The recommendations of the Watershed Plan (Sections 5.3 and 5.4): will promote the goals that were outlined in the Board's adopted 2012 CVFPP; do not physically interfere with systemwide improvements developed by DWR; and ignite a new interest to expand water supply options and to support groundwater sustainability. New water supply options are important in light of the three years of drought the state has experienced since 2012. In addition, this Watershed Plan supports the use of multi-benefit projects as a way to improve conditions for the many sensitive species in the watershed,

consistent with the draft Conservation Strategy that the Board requested in their Resolution and that DWR produced in 2015. The studies and analyses that resulted from implementation of the 2012 CVFPP were shared with the USACE and the 2012 CVFPP was used as a framework for the USACE plan.

CVIFMS investigated the same flood risk management, ecosystem restoration and water supply problems and opportunities in the Sacramento River Watershed as the 2012 CVFPP (Section 1.4.2). It identified that two of the largest problems in the watershed are insufficient levee integrity and insufficient capacity to handle large rain events (Section 2.6). It also reviews trends in urban development and provides damage estimates and potential life loss from flood inundation in Appendix E.

In Section 2.4.2, CVIFMS recognized the substantial economic and societal benefits to the region, the nation and the world that agriculture in the Central Valley provides. It also recognized agriculture provides substantial open space and habitat in Section 2.8.3. Above and beyond the 2012 CVFPP planning environment, CVIFMS reviewed opportunities to recharge groundwater on agricultural land using river floodwaters. This floodwater approach has the dual benefit of withdrawing large amounts of water from a river that is at or near flood stage and reducing downstream flood risks (Section 2.5.7). Just like the CVFPP, the CVIFMS calls for protection of agricultural economic needs whenever possible and cost effective.

There was extensive reliance on the 2015 draft of the DWR Conservation Strategy to articulate the biological resources and fisheries problems in the watershed, like lands lost to species and the extent of fish passage barriers. The Watershed Plan also reviewed the lack of habitat connectivity in the system. The many stressors that have degraded habitats and impacted species are described in Section 2.8, and how the hydro-geomorphic processes along the river have changed are described in Section 2.7.

The Central Valley Flood Protection Act of 2008 (Statutes of 2007, Chapter 364, SB5) declares the adopted CVFPP shall not expand the liability of the state beyond the scope of the State Plan of Flood Control (SPFC) and shall not commit the state to provide, to continue to provide, or to maintain at, or increase flood protection to any particular level. CVIFMS did not promote or change this status.

CVIFMS is a federal document which follows federal planning guidelines, and as such, it must remain in compliance with federal policy. While CVIFMS does not specifically call out or emphasize compliance with the federal engineering technical letter (ETL) specifying standards that no vegetation may remain on or near levees, it also cannot

make assumptions about a state-led effort to reach compliance using an alternative to the ETL (vegetation management strategy). It should be noted however that CVIFMS does not include any alternatives where the full compliance with the ETL is assumed. Instead, the possible effects to species and habitat should the system come into compliance with the ETL are discussed within the “Future Without Project” discussion (at the end of Section 2.8.2).

CVFIMS described the current system of single-purpose and multi-purpose reservoirs plus the studies that are reviewing current operations and alternatives (Section 2.5.11). It also reviewed the possible costs and benefits from new on-stream and off-stream reservoirs (Appendix D, Tables D-8 and D-9). The final conclusion recommends that there should be additional state-federal studies of the reservoir operation options and a look at new reservoirs on the Upper American River and its tributaries above Folsom Dam (Section 5.4.2). The alternatives reviewed by CVIFMS included how flood management can be incorporated with multi-benefits storage.

The CVIFMS team undertook a multi-step process to create alternatives as described in the Staff Report for the November 20, 2015 Board meeting. All known options to improve flood management in the watershed were included in the CVIFMS alternatives analysis unless they were already under study through other planning efforts (see Section 1.6) or if designs would not be in compliance with either CVFPP or federal and state laws, regulations, and policies (Section 1.4.5). Because expansion of the Cherokee Canal (or some other Feather River Bypass) is not under study elsewhere and has not been completely removed from consideration in the CVFPP, the various component measures that are necessary to complete this process were included in the Watershed Plan’s alternatives analysis. The challenges identified by the Board in Resolution 2012-25 remain in place for a future bypass project, and they have not been resolved by this federal planning process. CVIFMS does not make a firm stand on the need (or lack thereof) for this measure within the state’s flood management system.

## **6.2 – Public Review and Response**

In order to scope the document there was extensive outreach to stakeholders in the fall of 2015 which is summarized in the Watershed Plan’s Attachment B. The draft CVIFMS was released to the stakeholders on December 9, 2015 and a public meeting was held a week later on December 16, 2015 in Marysville. The level of inclusiveness and transparency used by the USACE models the work done by the CVFPB during their review of the 2012 CVFPP from January through June of that year, as described by Resolution No. 2012-25. Based on stakeholder feedback there appears to be consistent agreement among those involved that the CVIFMS team created a comprehensive and well vetted document.

One letter was received by close of the comment period on January 15, 2016, from the Delta Protection Commission (Attachment D). They support continued coordination on the proposed spin-off studies and suggest their new report on effective multi-benefit habitat designs could be of use to planning staff. Planning staff will communicate with the Commission as studies on projects become available. CVIFMS spin-off studies are expected to consider the potential for hydraulic impacts to the Delta and flood protection for Delta lands not protected by SPFC facilities.

### **6.3 – Next Steps**

- Report approved at federal level in April 2016

### **7.0 – OTHER SPONSOR ENDORSEMENTS**

DWR has sent a similar letter (Attachment E).

### **8.0 – CEQA ANALYSIS**

Board staff has prepared the following California Environmental Quality Act (CEQA) findings:

CVIFMS is a planning study for possible future actions yet to be approved by the Board and has no legally binding effects on later activities. Approval of a draft or final CVIFMS Watershed Study by the Board would be considered Statutorily Exempt from CEQA (Article 18, Section 15262 CCR).

### **9.0 – STAFF RECOMMENDATION**

Staff recommends that the Board:

**Approve:** the Draft Board Support Letter (Attachment A), in substantially the form provided; and

**Direct:** Board staff to send the letter, after signature by the Board president, to the USACE District.

## **10.0 – LIST OF ATTACHMENTS**

- A. Draft Board Letter of Support to USACE
- B. FCSA dated July 21, 2010
- C. Board Resolution No. 2013-17
- D. Comment letter from Delta Protection Commission dated January 15, 2016
- E. DWR's Letter of Support to USACE dated February 2, 2016

DWR Coordination:	Christopher Williams, PE, Senior Engineer
Board Technical Review:	Nancy Moricz, PE, Senior Engineer
Environmental Review:	Natasha Nelson, Program Manager I
Document Review:	Eric Butler, PE, Projects and Environmental Branch Chief
	Leslie Gallagher, Executive Officer
Legal Review:	Jit Dua, Board Counsel

**CENTRAL VALLEY FLOOD PROTECTION BOARD**

3310 El Camino Ave., Rm. 151  
SACRAMENTO, CA 95821  
(916) 574-0609 FAX: (916) 574-0682



March 25, 2016

Colonel Michael J. Farrell  
District Engineer  
Sacramento District  
U.S. Army Corps of Engineers  
1325 J Street  
Sacramento, California 95814-2922

Subject: Letter of Support for the Release of the Central Valley Integrated Flood Management Study, Final Watershed Plan

Dear Colonel Farrell:

The Central Valley Flood Protection Board (Board), as a non-federal sponsor, supports the Central Valley Integrated Flood Management Study (CVIFMS) Watershed Plan for the Sacramento River watershed. CVIFMS is a multipurpose federal study conducted by the U.S. Army Corps of Engineers (USACE) under a federal Cost Share Agreement with the Board and the California Department of Water Resources (DWR) signed on July 21, 2010 and amended on August 30, 2013. As a companion document to the State's Central Valley Flood Protection Plan (CVFPP), the CVIFMS advances the vision for an integrated flood management system in the Central Valley to provide for safe, healthy, and thriving communities while protecting and restoring the environment.

Through extensive partnership and data sharing efforts with DWR and Board staff, USACE has produced an assessment of the Sacramento River watershed that will provide the planning framework and federal perspective to help determine future actions to improve resources in the Central Valley and assess potential federal interest in those actions. This Watershed Plan, through its comprehensive evaluation from a federal perspective, is essential to both the 2017 CVFPP as well as the Sacramento River General Reevaluation study, both efforts which are currently underway. The CVIFMS Watershed Plan lays the foundation for future partnerships between federal and State agencies, tribes, local entities, DWR and the Board on water resources studies that include flood risk management, ecosystem restoration and water supply in the Sacramento River watershed.

The Board supports the release of the CVIFMS Final Watershed Plan and looks forward to ongoing partnership with the USACE and DWR.

If you have any questions, please contact me at (916) 574-0609, or Executive Officer Leslie Gallagher at (916) 574-0291 or [Leslie.Gallagher@water.ca.gov](mailto:Leslie.Gallagher@water.ca.gov).

Sincerely;

William H. Edgar  
President



AGREEMENT  
BETWEEN  
THE DEPARTMENT OF THE ARMY  
AND  
THE CENTRAL VALLEY FLOOD PROTECTION BOARD  
AND  
THE STATE OF CALIFORNIA DEPARTMENT OF WATER RESOURCES  
FOR THE  
CENTRAL VALLEY INTEGRATED FLOOD MANAGEMENT STUDY

THIS AGREEMENT is entered into this 21<sup>st</sup> day of July, 2010 by and between the Department of the Army (hereinafter the "Government"), represented by the Sacramento District Engineer and the Central Valley Flood Protection Board, represented by its President and the State of California Department of Water Resources, represented by the Division Chief of Flood Management (hereinafter the "Non-Federal Sponsors").

WITNESSETH, THAT:

WHEREAS, the Corps of Engineers is authorized to conduct a feasibility study of Sacramento River Basin pursuant to Section 209 of the Flood Control Act of 1962 (Public Law 87-874) and of the San Joaquin River Basin pursuant to May 8, 1964 resolution of the House Committee on Public Works;

WHEREAS, prior to proceeding with such feasibility study, the U.S. Army Corps of Engineers conducted a reconnaissance study and determined that further planning in the nature of a feasibility study should proceed;

WHEREAS, the Government and the Non-federal sponsors desire to enter into an agreement (hereinafter the "Agreement") to conduct such feasibility study (hereinafter the "Study" as defined in Article I.A. of this Agreement);

WHEREAS, Section 105(a) of the Water Resources Development Act of 1986, Public Law 99-662, as amended (33 U.S.C. 2215(a)), specifies the cost-sharing requirements applicable to the Study;

WHEREAS, the Non-Federal Sponsors desire to provide in-kind contributions (hereinafter the "*non-Federal in-kind contributions*" as defined in Article I.K. of this Agreement) that are necessary to prepare the feasibility report and to receive credit for such contributions toward the amount of their required contribution for the Study;

WHEREAS, the Non-Federal Sponsors may provide up to 100 percent of their required contribution for the Study as *non-Federal in-kind contributions*;

WHEREAS, the Government and Non-Federal Sponsors have the full authority and

capability to perform as hereinafter set forth and intend to cooperate in cost-sharing and financing of the *Study* in accordance with the terms of this Agreement; and

WHEREAS, the Government and the Non-Federal Sponsors, in connection with this Agreement, desire to foster a partnering strategy and a working relationship between the Government and the Non-Federal Sponsors through a mutually developed formal strategy of commitment and communication embodied herein, which creates an environment where trust and teamwork prevent disputes, foster a cooperative bond between the Government and the Non-Federal Sponsors, and facilitate the successful *Study*.

NOW, THEREFORE, the Government and the Non-Federal Sponsors agree as follows:

#### ARTICLE I – DEFINITIONS

A. The term “*Study*” shall mean the activities and tasks required to identify and evaluate alternatives and the preparation of a decision document that, when appropriate, recommends a coordinated and implementable solution for an integrated watershed flood management plan to include water supply, ecosystem restoration, water quality and related activities for the Sacramento-San Joaquin River Basins including the Delta, Central Valley of California, as generally described in Sacramento and San Joaquin River Basins, California, Comprehensive Study, Interim Report, approved by Sacramento District on December 20, 2002. The term includes the *non-Federal in-kind contributions* described in paragraph K. of this Article.

B. The term “*total study costs*” shall mean the sum of all costs incurred by the Non-Federal Sponsors and the Government in accordance with the terms of this Agreement directly related to performance of the *Study*. Subject to the provisions of this Agreement, the term shall include, but is not necessarily limited to: the Government’s costs of plan formulation and evaluation, including applicable economic, engineering, real estate, and environmental analyses; the Government’s costs of preparation of the decision document for the *Study*; the costs of the *non-Federal in-kind contributions* determined in accordance with Article II.F. of this Agreement; the Government’s costs of independent technical review and other review processes required by the Government; the Government’s costs of external peer review, if required; the Government’s supervision and administration costs; the Non-Federal Sponsors’ and the Government’s costs of participation in the Study Coordination Team in accordance with Article III of this Agreement; the Government’s costs of contract dispute settlements or awards; and the Non-Federal Sponsors’ and the Government’s costs of audit in accordance with Article VI.B. and Article VI.C. of this Agreement. The term does not include any costs of dispute resolution under Article V of this Agreement; any costs incurred as part of reconnaissance studies; any costs incurred as part of feasibility studies under any other agreement; the Non-Federal Sponsors’ costs of negotiating this Agreement; or any costs of negotiating a design agreement for a project or separable element thereof.

C. The term “*study costs to be shared during the period of study*” shall mean the difference between *total study costs* and *excess study costs*.

D. The term "*excess study costs*" shall mean the difference between the most recent estimate of *total study costs* and the amount of *total study costs* specified in Article IV.A.1. of this Agreement, excluding any increase in *total study costs* that resulted from a change in Federal law or a change in the scope of the *Study* requested by the Non-Federal Sponsors or any increase in *total study costs* that otherwise was agreed upon in writing by the parties.

E. The term "*period of study*" shall mean the time from the effective date of this Agreement to the date that:

1. the Assistant Secretary of the Army (Civil Works) submits the feasibility report to the Office of Management and Budget (OMB) for review for consistency with policies and programs of the Administration, if the project or project modification that is the subject of this *Study* will require further Congressional authorization to implement the recommended plan; or
2. the decision document for the study is duly approved by the Government, if the project or project modification that is the subject of this *Study* will not require further Congressional authorization to implement the recommended plan; or
3. the date that this Agreement is terminated in accordance with Article IX of this Agreement.

F. The term "*financial obligations to be shared during the period of study*" shall mean the financial obligations of the Government and the costs for the *non-Federal in-kind contributions*, as determined by the Government, that result or would result in costs that are or would be included in *study costs to be shared during the period of study*.

G. The term "*non-Federal proportionate share*" shall mean the ratio of the sum of the costs included in *study costs to be shared during the period of study* for the *non-Federal in-kind contributions*, as determined by the Government, and the Non-Federal Sponsors' total contribution of funds required by Article II.C.1.b. of this Agreement to *financial obligations to be shared during the period of study*, as projected by the Government.

H. The term "*Federal program funds*" shall mean funds provided by a Federal agency, other than the Department of the Army, plus any non-Federal contribution required as a matching share therefor.

I. The term "*fiscal year*" shall mean one year beginning on October 1 and ending on September 30.

J. The term "*PMP*" shall mean the project management plan, and any modifications thereto, developed by the Government, and agreed to by the Non-Federal Sponsors, that specifies the scope, cost, and schedule for *Study* activities and guides the performance of the *Study* through the *period of study*.



K. The term "*non-Federal in-kind contributions*" shall mean planning, supervision and administration, services, materials, supplies, and other in-kind services that are performed or provided by the Non-Federal Sponsors after the effective date of this Agreement in accordance with the *PMP* and that are necessary for performance of the *Study*.

## ARTICLE II - OBLIGATIONS OF THE GOVERNMENT AND THE NON-FEDERAL SPONSORS

A. The Government, subject to receiving funds appropriated by the Congress of the United States (hereinafter the "Congress") and using those funds and funds provided by the Non-Federal Sponsors, expeditiously shall conduct the *Study*, applying those procedures usually applied to Federal projects, in accordance with Federal laws, regulations, and policies. The Non-Federal Sponsors expeditiously shall perform or provide the *non-Federal in-kind contributions* in accordance with applicable Federal laws, regulations, and policies.

1. The Government shall not issue the solicitation for the first contract for the *Study* or commence the *Study* using the Government's own forces until the Non-Federal Sponsors has confirmed in writing its willingness to proceed with the *Study*.

2. To the extent possible, the Government and the Non-Federal Sponsors shall conduct the *Study* in accordance with the *PMP*.

3. The Government shall afford the Non-Federal Sponsors the opportunity to review and comment on all products that are developed by contract or by Government personnel during the *period of study*. The Government shall consider in good faith the comments of the Non-Federal Sponsors, but the final approval of all *Study* products shall be exclusively within the control of the Government.

4. The Government shall afford the Non-Federal Sponsors the opportunity to review and comment on the solicitations for all Government contracts, including relevant scopes of work, prior to the Government's issuance of such solicitations. To the extent possible, the Government shall afford the Non-Federal Sponsors the opportunity to review and comment on all proposed contract modifications, including change orders. In any instance where providing the Non-Federal Sponsors with notification of a contract modification is not possible prior to execution of the contract modification, the Government shall provide such notification in writing at the earliest date possible. To the extent possible, the Government also shall afford the Non-Federal Sponsors the opportunity to review and comment on all contract claims prior to resolution thereof. The Government shall consider in good faith the comments of the Non-Federal Sponsors, but the contents of solicitations, award of contracts or commencement of work on the *Study* using the Government's own forces, execution of contract modifications, resolution of contract claims, and performance of all work on the *Study*, except for the *non-Federal in-kind contributions*, shall be exclusively within the control of the Government.

5. At the time the U.S. Army Engineer, Sacramento District (hereinafter the "District Engineer") furnishes the contractor with the Government's Written Notice of Acceptance of Completed Work for each contract awarded by the Government for the *Study*, the District Engineer shall furnish a copy thereof to the Non-Federal Sponsors.

6. The Non-Federal Sponsors shall afford the Government the opportunity to review and comment on the solicitations for all contracts for the *non-Federal in-kind contributions*, including relevant scopes of work, prior to the Non-Federal Sponsors' issuance of such solicitations. To the extent possible, the Non-Federal Sponsors shall afford the Government the opportunity to review and comment on all proposed contract modifications, including change orders. In any instance where providing the Government with notification of a contract modification is not possible prior to execution of the contract modification, the Non-Federal Sponsors shall provide such notification in writing at the earliest date possible. To the extent possible, the Non-Federal Sponsors also shall afford the Government the opportunity to review and comment on all contract claims prior to resolution thereof. The Non-Federal Sponsors shall consider in good faith the comments of the Government but the contents of solicitations, award of contracts or commencement of work on the *Study* using the Non-Federal Sponsors' own forces, execution of contract modifications, resolution of contract claims, and performance of all work on the *non-Federal in-kind contributions* shall be exclusively within the control of the Non-Federal Sponsors.

7. At the time the Non-Federal Sponsors furnishes a contractor with a notice of acceptance of completed work for each contract awarded by the Non-Federal Sponsors for the *non-Federal in-kind contributions*, the Non-Federal Sponsors shall furnish a copy thereof to the Government.

8. Notwithstanding paragraph A.4. and paragraph A.6., if the award of any contract for work on the *Study*, or continuation of work on the *Study* using the Government's or the Non-Federal Sponsors' own forces, would result in *excess study costs*, the Government and the Non-Federal Sponsors agree to defer award of that contract, award of all remaining contracts for work on the *Study*, and continuation of work on the *Study* using the Government's or the Non-Federal Sponsors' own forces until such time as the Government and the Non-Federal Sponsors agree in writing to proceed with further contract awards for the *Study* or the continuation of work on the *Study* using the Government's or the Non-Federal Sponsors' own forces, but in no event shall the award of contracts or the continuation of work on the *Study* using the Government's or the Non-Federal Sponsors' own forces be deferred for more than six months. If the Government and the Non-Federal Sponsors agree to not proceed or fail to reach agreement on proceeding with further contract awards for the *Study*, or the continuation of work on the *Study* using the Government's or the Non-Federal Sponsors' own forces, the parties shall terminate this Agreement and proceed in accordance with Article IX.D. of this Agreement.

9. As of the effective date of this Agreement, \$860,000 of Federal funds is currently projected to be available for the *Study*. The Government makes no commitment to request Congress to provide additional Federal funds for the *Study*. Further, the Government's



financial participation in the *Study* is limited to the Federal funds that the Government makes available to the *Study*.

B. The Government shall allocate *total study costs* between *study costs to be shared during the period of study* and *excess study costs*.

C. The Non-Federal Sponsors shall contribute 50 percent of *study costs to be shared during the period of study* in accordance with the provisions of this paragraph.

1. The Non-Federal Sponsors shall provide a contribution of funds as determined below:

a. If the Government projects at any time that the collective value of the Non-Federal Sponsors' contributions under Article III and Article VI of this Agreement will be less than the Non-Federal Sponsors' required share of 50 percent of *study costs to be shared during the period of study*, the Government shall determine the amount of funds that would be necessary to meet the Non-Federal Sponsors' required share prior to any consideration of the credit the Government projects will be afforded for the *non-Federal in-kind contributions* pursuant to paragraph F. of this Article.

b. The Non-Federal Sponsors shall provide funds in the amount determined by this paragraph in accordance with Article IV.B. of this Agreement. To determine the contribution of funds the Non-Federal Sponsors shall provide, the Government shall reduce the amount determined in accordance with paragraph C.1.a. of this Article by the amount of credit the Government projects will be afforded for the *non-Federal in-kind contributions* pursuant to paragraph F. of this Article.

2. The Government, subject to the availability of funds and as limited by paragraph G. of this Article, shall refund or reimburse to the Non-Federal Sponsors any contributions in excess of 50 percent of *study costs to be shared during the period of study* if the Government determines at any time that the collective value of the following contributions has exceeded 50 percent of *study costs to be shared during the period of study*: (a) the value of the Non-Federal Sponsors' contributions under paragraph C.1.b. of this Article; (b) the amount of credit to be afforded for the *non-Federal in-kind contributions* pursuant to paragraph F. of this Article; and (c) the value of the Non-Federal Sponsors' contributions under Article III and Article VI of this Agreement.

D. The Non-Federal Sponsors shall contribute 50 percent of *excess study costs* in accordance with the provisions of this paragraph.

1. The Government shall determine the amount of funds that would be necessary to meet the Non-Federal Sponsors' required share prior to any consideration of the credit the Government projects will be afforded for the *non-Federal in-kind contributions* pursuant to paragraph F. of this Article.

2. The Non-Federal Sponsors shall provide funds in the amount determined by

this paragraph in accordance with Article IV.C.3. of this Agreement. To determine the contribution of funds the Non-Federal Sponsors shall provide, the Government shall reduce the amount determined in accordance with paragraph D.1. of this Article by the amount of credit the Government projects will be afforded for the *non-Federal in-kind contributions* pursuant to paragraph F. of this Article .

E. The Government shall determine and include in *total study costs* any costs incurred by the Non-Federal Sponsors for *non-Federal in-kind contributions*, subject to the conditions and limitations of this paragraph. The Non-Federal Sponsors in a timely manner shall provide the Government with such documents as are sufficient to enable the Government to determine the amount of costs to be included in *total study costs* for *non-Federal in-kind contributions*.

1. Acceptance by the Government of *non-Federal in-kind contributions* shall be subject to a review by the Government to verify that all economic, engineering, real estate, and environmental analyses or other items performed or provided as *non-Federal in-kind contributions* are accomplished in a satisfactory manner and in accordance with applicable Federal laws, regulations, and policies, and to verify that all analyses, services, materials, supplies, and other in-kind services provided as *non-Federal in-kind contributions* are necessary for the *Study*.

2. The Non-Federal Sponsors' costs for *non-Federal in-kind contributions* that may be eligible for inclusion in *total study costs* pursuant to this Agreement shall be subject to an audit in accordance with Article VI.C. of this Agreement to determine the reasonableness, allocability, and allowability of such costs.

3. The Non-Federal Sponsors' costs for *non-Federal in-kind contributions* that may be eligible for inclusion in *total study costs* pursuant to this Agreement are not subject to interest charges, nor are they subject to adjustment to reflect changes in price levels between the time the *non-Federal in-kind contributions* are provided and the time the costs are included in *total study costs*.

4. The Government shall not include in *total study costs* any costs for *non-Federal in-kind contributions* paid by the Non-Federal Sponsors using *Federal program funds* unless the Federal agency providing the Federal portion of such funds verifies in writing that expenditure of such funds for such purpose is expressly authorized by Federal law.

5. The Government shall not include in *total study costs* any costs for *non-Federal in-kind contributions* in excess of the Government's estimate of the costs of the *non-Federal in-kind contributions* if the services, materials, supplies, and other in-kind services had been provided by the Government.

F. The Government, in accordance with this paragraph, shall afford credit toward the amount of funds determined in accordance with paragraph C.1.a. and paragraph D.1. of this Article for the costs of the *non-Federal in-kind contributions* determined in accordance with paragraph E. of this Article. The credit for *non-Federal in-kind contributions* first shall be



afforded toward the amount of funds determined in accordance with paragraph C.1.a. of this Article. If the amount of credit afforded exceeds the amount of funds determined in accordance with paragraph C.1.a. of this Article, the remaining portion of credit to be afforded shall be afforded toward the amount of funds determined in accordance with paragraph D.1. of this Article. However, the maximum amount of credit that can be afforded for the *non-Federal in-kind contributions* shall not exceed the least of the following amounts as determined by the Government: the amount of funds determined in accordance with paragraph C.1.a. and paragraph D.1. of this Article; the costs of the *non-Federal in-kind contributions* determined in accordance with paragraph E. of this Article; or 50 percent of *total study costs*.

G. Notwithstanding any other provision of this Agreement, the Non-Federal Sponsors shall not be entitled to reimbursement of any costs of *non-Federal in-kind contributions* determined in accordance with paragraph E. of this Article and included in *total study costs* that exceed the amount of credit afforded for the *non-Federal in-kind contributions* determined in accordance with paragraph F. of this Article and the Non-Federal Sponsors shall be responsible for 100 percent of all costs of *non-Federal in-kind contributions* included in *total study costs* that exceed the amount of credit afforded.

H. Upon conclusion of the *period of study*, the Government shall conduct an accounting, in accordance with Article IV.C. of this Agreement, and furnish the results to the Non-Federal Sponsors.

I. The Non-Federal Sponsors shall not use *Federal program funds* to meet any of its obligations for the *Study* under this Agreement unless the Federal agency providing the Federal portion of such funds verifies in writing that expenditure of such funds for such purpose is expressly authorized by Federal law.

J. This Agreement shall not be construed as obligating either party to implement a project. Whether the Government supports a project authorization, if authorization is required, and budgets for implementation of the project depends upon, among other things, the outcome of the *Study* and whether the proposed solution is consistent with the Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies and with the budget priorities of the Administration.

### ARTICLE III - STUDY COORDINATION TEAM

A. To provide for consistent and effective communication, the Non-Federal Sponsors and the Government, not later than 30 calendar days after the effective date of this Agreement, shall appoint named senior representatives to a Study Coordination Team. Thereafter, the Study Coordination Team shall meet regularly until the end of the *period of study*. The Government's Project Manager and a counterpart named by the Non-Federal Sponsors shall co-chair the Study Coordination Team.

B. The Government's Project Manager and the Non-Federal Sponsors' counterpart shall



keep the Study Coordination Team informed of the progress of the *Study* and of significant pending issues and actions, and shall seek the views of the Study Coordination Team on matters that the Study Coordination Team generally oversees.

C. Until the end of the *period of study*, the Study Coordination Team shall generally oversee the *Study*, including matters related to: plan formulation and evaluation, including applicable economic, engineering, real estate, and environmental analyses; scheduling of reports and work products; independent technical review and other review processes required by the Government; external peer review, if required; completion of all necessary environmental coordination and documentation; contract awards and modifications; contract costs; the Government's cost projections; the performance of and scheduling for the *non-Federal in-kind contributions*; determination of anticipated future requirements for real property and relocation requirements and performance of operation, maintenance, repair, rehabilitation, and replacement of the proposed project including anticipated requirements for permits; and other matters related to the *Study*. This oversight of the *Study* shall be consistent with the *PMP*.

D. The Study Coordination Team may make recommendations to the District Engineer on matters related to the *Study* that the Study Coordination Team generally oversees, including suggestions to avoid potential sources of dispute. The Government in good faith shall consider the recommendations of the Study Coordination Team. The Government, having the legal authority and responsibility for performance of the *Study* except for the *non-Federal in-kind contributions*, has the discretion to accept or reject, in whole or in part, the Study Coordination Team's recommendations. On matters related to the *non-Federal in-kind contributions*, that the Study Coordination Team generally oversees, the Study Coordination Team may make recommendations to the Non-Federal Sponsors including suggestions to avoid potential sources of dispute. The Non-Federal Sponsors in good faith shall consider the recommendations of the Study Coordination Team. The Non-Federal Sponsors, having the legal authority and responsibility for the *non-Federal in-kind contributions*, has the discretion to accept or reject, in whole or in part, the Study Coordination Team's recommendations except as otherwise required by the provisions of this Agreement, including compliance with applicable Federal, State, or local laws or regulations.

E. The Non-Federal Sponsors' costs of participation in the Study Coordination Team shall be included in *total study costs* and shared in accordance with the provisions of this Agreement, subject to an audit in accordance with Article VI.C. of this Agreement to determine reasonableness, allocability, and allowability of such costs. The Government's costs of participation in the Study Coordination Team shall be included in *total study costs* and shared in accordance with the provisions of this Agreement.

#### ARTICLE IV - METHOD OF PAYMENT

A. In accordance with the provisions of this paragraph, the Government shall maintain current records and provide to the Non-Federal Sponsors current projections of costs, financial obligations, the contributions provided by the parties, the costs included in *total study costs* for

the *non-Federal in-kind contributions* determined in accordance with Article II.E. of this Agreement, and the credit to be afforded for the *non-Federal in-kind contributions* pursuant to Article II.F. of this Agreement.

1. As of the effective date of this Agreement, *total study costs* are projected to be \$1,720,000; the amount of funds determined in accordance with Article II.C.1.a. of this Agreement is projected to be \$860,000; the costs included in *total study costs* for the *non-Federal in-kind contributions* determined in accordance with Article II.E. of this Agreement are projected to be \$860,000; the credit to be afforded for the *non-Federal in-kind contributions* pursuant to Article II.F. of this Agreement is projected to be \$860,000; the Non-Federal Sponsors' contribution of funds required by Article II.C.1.b. of this Agreement is projected to be \$0; and the *non-Federal proportionate share* is projected to be 50 percent. These amounts and percentage are estimates subject to adjustment by the Government, after consultation with the Non-Federal Sponsors, and are not to be construed as the total financial responsibilities of the Government and the Non-Federal Sponsors.

2. By December 2010 and by each quarterly anniversary thereof until the conclusion of the *period of study* and resolution of all relevant claims and appeals, the Government shall provide the Non-Federal Sponsors with a report setting forth all contributions provided to date and the current projections of the following: *total study costs*; *study costs to be shared during the period of study*; the amount of funds determined in accordance with Article II.C.1.a. of this Agreement; the Non-Federal Sponsors' contribution of funds required by Article II.C.1.b. of this Agreement; *excess study costs*; the amount of funds determined in accordance with Article II.D.1. of this Agreement; the Non-Federal Sponsors' contribution of funds required by Article II.D.2. of this Agreement; the costs included in *total study costs* for the *non-Federal in-kind contributions* determined in accordance with Article II.E. of this Agreement; the credit to be afforded for the *non-Federal in-kind contributions* pursuant to Article II.F. of this Agreement; and the *non-Federal proportionate share*.

B. The Non-Federal Sponsors shall provide the contribution of funds required by Article II.C.1.b. of this Agreement in accordance with the provisions of this paragraph.

1. Not less than 60 calendar days prior to the scheduled date for issuance of the solicitation for the first contract for work on the *Study* or commencement of work on the *Study* using the Government's own forces, the Government shall notify the Non-Federal Sponsors in writing of such scheduled date and the funds the Government determines to be required from the Non-Federal Sponsors to meet: (a) the *non-Federal proportionate share of financial obligations to be shared during the period of study* incurred prior to the commencement of the *period of study*; (b) the projected *non-Federal proportionate share of financial obligations to be shared during the period of study* to be incurred for such contract; and (c) the projected *non-Federal proportionate share of financial obligations to be shared during the period of study* using the Government's own forces through the first quarter. Not later than such scheduled date, the Non-Federal Sponsors shall provide the Government with the full amount of such required funds by delivering a check payable to "FAO, USAED, Sacramento District" to the District Engineer, or verifying to the satisfaction of the Government that the Non-Federal Sponsors has deposited such



required funds in an escrow or other account acceptable to the Government, with interest accruing to the Non-Federal Sponsors, or by presenting the Government with an irrevocable letter of credit acceptable to the Government for such required funds, or by providing an Electronic Funds Transfer of such required funds in accordance with procedures established by the Government.

2. Thereafter, until the work on the *Study* is complete, the Government shall notify the Non-Federal Sponsors in writing of the funds the Government determines to be required from the Non-Federal Sponsors, and the Non-Federal Sponsors shall provide such funds in accordance with the provisions of this paragraph.

a. The Government shall notify the Non-Federal Sponsors in writing, no later than 60 calendar days prior to the scheduled date for issuance of the solicitation for each remaining contract for work on the *Study*, of the funds the Government determines to be required from the Non-Federal Sponsors to meet the projected *non-Federal proportionate share of financial obligations to be shared during the period of study* to be incurred for such contract. No later than such scheduled date, the Non-Federal Sponsors shall make the full amount of such required funds available to the Government through any of the payment mechanisms specified in paragraph B.1. of this Article.

b. The Government shall notify the Non-Federal Sponsors in writing, no later than 60 calendar days prior to the beginning of each quarter in which the Government projects that it will make *financial obligations to be shared during the period of study* using the Government's own forces, of the funds the Government determines to be required from the Non-Federal Sponsors to meet the projected *non-Federal proportionate share of financial obligations to be shared during the period of study* using the Government's own forces for that *fiscal year*. No later than 30 calendar days prior to the beginning of that quarter, the Non-Federal Sponsors shall make the full amount of such required funds for that quarter available to the Government through any of the payment mechanisms specified in paragraph B.1. of this Article.

3. The Government shall draw from the funds provided by the Non-Federal Sponsors such sums as the Government deems necessary, when considered with any credit the Government projects will be afforded for the *non-Federal in-kind contributions* pursuant to Article II.F. of this Agreement, to cover: (a) the *non-Federal proportionate share of financial obligations to be shared during the period of study* incurred prior to the commencement of the *period of study*; and (b) the *non-Federal proportionate share of financial obligations to be shared during the period of study* as *financial obligations to be shared during the period of study* are incurred. If at any time the Government determines that additional funds will be needed from the Non-Federal Sponsors to cover the Non-Federal Sponsors' share of such financial obligations for the current contract or to cover the Non-Federal Sponsors' share of such financial obligations for work performed using the Government's own forces in the current quarter, the Government shall notify the Non-Federal Sponsors in writing of the additional funds required and provide an explanation of why additional funds are required. Within 60 calendar days from receipt of such notice, the Non-Federal Sponsors shall provide the Government with the full amount of such additional required funds through any of the payment mechanisms specified in

paragraph B.I. of this Article.

C. Upon conclusion of the *period of study* and resolution of all relevant claims and appeals, the Government shall conduct a final accounting and furnish the Non-Federal Sponsors with written notice of the results of such final accounting. If outstanding relevant claims and appeals prevent a final accounting from being conducted in a timely manner, the Government shall conduct an interim accounting and furnish the Non-Federal Sponsors with written notice of the results of such interim accounting. Once all outstanding relevant claims and appeals are resolved, the Government shall amend the interim accounting to complete the final accounting and furnish the Non-Federal Sponsors with written notice of the results of such final accounting. The interim or final accounting, as applicable, shall determine *total study costs*, *study costs to be shared during the period of study*, and *excess study costs*. In addition, the interim or final accounting, as applicable, shall determine each party's required share thereof, and each party's total contributions thereto as of the date of such accounting.

1. Should the interim or final accounting, as applicable, show that the Non-Federal Sponsors' total required share of *study costs to be shared during the period of study* exceeds the Non-Federal Sponsors' total contributions provided thereto, the Non-Federal Sponsors, no later than 90 calendar days after receipt of written notice from the Government, shall make a payment to the Government in an amount equal to the difference by delivering a check payable to "FAO, USAED, Sacramento District" to the District Engineer or by providing an Electronic Funds Transfer in accordance with procedures established by the Government.

2. Should the interim or final accounting, as applicable, show that the total contributions provided by the Non-Federal Sponsors for *study costs to be shared during the period of study* exceed the Non-Federal Sponsors' total required share thereof, the Government, subject to the availability of funds and as limited by Article II.G. of this Agreement, shall refund or reimburse the excess amount to the Non-Federal Sponsors within 90 calendar days of the date of completion of such accounting. In the event the Non-Federal Sponsors is due a refund or reimbursement and funds are not available to refund or reimburse the excess amount to the Non-Federal Sponsors, the Government shall seek such appropriations as are necessary to make the refund or reimbursement.

3. Should the final accounting show that the Non-Federal Sponsors' total required share of *excess study costs* exceeds the Non-Federal Sponsors' total contributions provided thereto the Non-Federal Sponsors, within the applicable time frame described below, shall make a payment to the Government in an amount equal to the difference by delivering a check payable to "FAO, USAED, Sacramento District" to the District Engineer or by providing an Electronic Funds Transfer in accordance with procedures established by the Government.

a. If the project or project modification that is the subject of this *Study* will require further Congressional authorization to implement the recommended plan and:

i. the project or project modification is authorized for construction



then the payment shall be made no later than the date on which a Project Cooperation Agreement is entered into for the project or project modification; or

ii. the project or project modification is not authorized for construction within 5 years after the date of the final Report of the Chief of Engineers concerning the project or project modification - then the payment shall be made no later than 5 years after the date of the final Report of the Chief of Engineers; or

iii. the *Study* is terminated and the project or project modification is not authorized for construction - then the payment shall be made no later than 2 years after such termination date.

b. If the project or project modification that is the subject of this *Study* will not require further Congressional authorization to implement the recommended plan, then the payment shall be made:

i. no later than the date on which a Project Cooperation Agreement is entered into for the project or project modification; or

ii. no later than 5 years after the date the decision document is duly approved by the Government; or

iii. no later than 2 years after the date of the termination of the *Study*, whichever is earliest.

#### ARTICLE V - DISPUTE RESOLUTION

As a condition precedent to a party bringing any suit for breach of this Agreement, that party must first notify the other party in writing of the nature of the purported breach and seek in good faith to resolve the dispute through negotiation. If the parties cannot resolve the dispute through negotiation, they may agree to a mutually acceptable method of non-binding alternative dispute resolution with a qualified third party acceptable to both parties. Each party shall pay an equal share of any costs for the services provided by such a third party as such costs are incurred. The existence of a dispute shall not excuse the parties from performance pursuant to this Agreement.

#### ARTICLE VI - MAINTENANCE OF RECORDS AND AUDIT

A. Not later than 60 calendar days after the effective date of this Agreement, the Government and the Non-Federal Sponsors shall develop procedures for keeping books, records, documents, or other evidence pertaining to costs and expenses incurred pursuant to this Agreement. These procedures shall incorporate, and apply as appropriate, the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and

Cooperative Agreements to State and Local Governments at 32 C.F.R. Section 33.20. The Government and the Non-Federal Sponsors shall maintain such books, records, documents, or other evidence in accordance with these procedures and for a minimum of three years after completion of the accounting for which such books, records, documents, or other evidence were required. To the extent permitted under applicable Federal laws and regulations, the Government and the Non-Federal Sponsors shall each allow the other to inspect such books, records, documents, or other evidence.

B. In accordance with 32 C.F.R. Section 33.26, the Non-Federal Sponsors is responsible for complying with the Single Audit Act Amendments of 1996 (31 U.S.C. 7501-7507), as implemented by OMB Circular No. A-133 and Department of Defense Directive 7600.10. Upon request of the Non-Federal Sponsors and to the extent permitted under applicable Federal laws and regulations, the Government shall provide to the Non-Federal Sponsors and independent auditors any information necessary to enable an audit of the Non-Federal Sponsors' activities under this Agreement. The costs of any non-Federal audits performed in accordance with this paragraph shall be allocated in accordance with the provisions of OMB Circulars A-87 and A-133, and such costs as are allocated to the Study shall be included in *total study costs* and shared in accordance with the provisions of this Agreement.

C. In accordance with 31 U.S.C. 7503, the Government may conduct audits in addition to any audit that the Non-Federal Sponsors is required to conduct under the Single Audit Act Amendments of 1996. Any such Government audits shall be conducted in accordance with Government Auditing Standards and the cost principles in OMB Circular No. A-87 and other applicable cost principles and regulations. The costs of Government audits performed in accordance with this paragraph shall be included in *total study costs* and shared in accordance with the provisions of this Agreement.

#### ARTICLE VII - FEDERAL AND STATE LAWS

In the exercise of their respective rights and obligations under this Agreement, the Non-Federal Sponsors and the Government shall comply with all applicable Federal and State laws and regulations, including, but not limited to: Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. 2000d) and Department of Defense Directive 5500.11 issued pursuant thereto and Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army".

#### ARTICLE VIII - RELATIONSHIP OF PARTIES

A. In the exercise of their respective rights and obligations under this Agreement, the Government and the Non-Federal Sponsors each act in an independent capacity, and neither is to be considered the officer, agent, or employee of the other.

B. In the exercise of its rights and obligations under this Agreement, neither party shall



provide, without the consent of the other party, any contractor with a release that waives or purports to waive any rights the other party may have to seek relief or redress against that contractor either pursuant to any cause of action that the other party may have or for violation of any law.

#### ARTICLE IX - TERMINATION OR SUSPENSION

A. Prior to conclusion of the *period of study*, upon 30 calendar days written notice to the other party, either party may elect without penalty to terminate this Agreement or to suspend future performance under this Agreement. In the event that either party elects to suspend future performance under this Agreement pursuant to this paragraph, such suspension shall remain in effect until either the Government or the Non-Federal Sponsors elects to terminate this Agreement.

B. If at any time the Non-Federal Sponsors fails to fulfill its obligations under this Agreement, the Assistant Secretary of the Army (Civil Works) shall terminate this Agreement or suspend future performance under this Agreement unless he determines that continuation of performance of the *Study* is in the interest of the United States or is necessary in order to satisfy agreements with any other non-Federal interests in connection with the *Study*.

C. In the event the Government projects that the amount of Federal funds the Government will make available to the *Study* through the then-current *fiscal year*, or the amount of Federal funds the Government will make available for the *Study* through the upcoming *fiscal year*, is not sufficient to meet the Federal share of *total study costs* that the Government projects to be incurred through the then-current or upcoming *fiscal year*, as applicable, the Government shall notify the Non-Federal Sponsors in writing of such insufficiency of funds and of the date the Government projects that the Federal funds that will have been made available to the *Study* will be exhausted. Upon the exhaustion of Federal funds made available by the Government to the *Study*, future performance under this Agreement shall be suspended. Such suspension shall remain in effect until such time that the Government notifies the Non-Federal Sponsors in writing that sufficient Federal funds are available to meet the Federal share of *total study costs* the Government projects to be incurred through the then-current or upcoming *fiscal year*, or the Government or the Non-Federal Sponsors elects to terminate this Agreement.

D. In the event that one or more of the Non-Federal Sponsors elects to terminate its responsibilities under this Agreement, and the remaining Non-Federal Sponsors elects to continue to participate in the *Study*, the Government shall negotiate in good faith with the remaining Non-Federal Sponsors to effect a timely and productive conclusion to that portion of the *Study* pertaining to the area of statutory authority applicable for the remaining Non-Federal Sponsors. The Government shall prepare a revised *PMP* and revised estimate of *total study costs* to complete that portion of the *Study* of interest to the remaining Non-Federal Sponsors. If the remaining Non-Federal Sponsors elects to complete the *Study*, this Agreement shall be amended to reflect the negotiated revisions to the scope of the *Study* defined in Article I.A. of this Agreement and the estimate of *total study costs* in Article IV.A.1. of this Agreement. Amendments to this Agreement made pursuant to this paragraph shall reflect credits for the contribution of funds and *non-Federal in-kind contributions* provided previously by all of the

*Study* sponsors and shall reflect task reductions made as a result of withdrawal of any *Study* sponsor.

E. In the event that this Agreement is terminated pursuant to this Article, the parties shall conclude their activities relating to the *Study* and conduct an accounting in accordance with Article IV.C. of this Agreement. To provide for this eventuality, the Government may reserve a percentage of total Federal funds made available for the *Study* and an equal percentage of the total funds contributed by the Non-Federal Sponsors in accordance with Article II.C.1.b. of this Agreement as a contingency to pay costs of termination, including any costs of resolution of contract claims and contract modifications. Upon termination of this Agreement, all data and information generated as part of the *Study* shall be made available to the parties to the Agreement.

F. Any termination of this Agreement or suspension of future performance under this Agreement in accordance with this Article shall not relieve the parties of liability for any obligation previously incurred. Any delinquent payment owed by the Non-Federal Sponsors shall be charged interest at a rate, to be determined by the Secretary of the Treasury, equal to 150 per centum of the average bond equivalent rate of the 13 week Treasury bills auctioned immediately prior to the date on which such payment became delinquent, or auctioned immediately prior to the beginning of each additional 3 month period if the period of delinquency exceeds 3 months.

#### ARTICLE X - NOTICES

A. Any notice, request, demand, or other communication required or permitted to be given under this Agreement shall be deemed to have been duly given if in writing and delivered personally or sent by telegram or mailed by first-class, registered, or certified mail, as follows:

If to the Non-Federal Sponsors:  
Central Valley Flood Protection Board  
Attn: Executive Officer  
3310 El Camino Avenue  
Room 160  
Sacramento, CA 95821

Department of Water Resource  
Attn: Chief, Division of Flood Management  
P.O. Box 942836  
Sacramento, CA 94236

Sacramento, CA 95

If to the Government:  
US Army Corps of Engineers, Sacramento District  
Attn: CESPK-PM-C



1325 J Street  
Sacramento, CA 95814

B. 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 Article.

C. Any notice, request, demand, or other communication made pursuant to this Article shall be deemed to have been received by the addressee at the earlier of such time as it is actually received or seven calendar days after it is mailed.

#### ARTICLE XI - CONFIDENTIALITY

To the extent permitted by the laws governing each party, the parties agree to maintain the confidentiality of exchanged information when requested to do so by the providing party.

#### ARTICLE XII - THIRD PARTY RIGHTS, BENEFITS, OR LIABILITIES

Nothing in this Agreement is intended, nor may be construed, to create any rights, confer any benefits, or relieve any liability, of any kind whatsoever in any third person not party to this Agreement.

#### ARTICLE XIII - OBLIGATIONS OF FUTURE APPROPRIATIONS

A. Nothing herein shall constitute, nor be deemed to constitute, an obligation of future appropriations by the Legislature of the State of California.

B. The Non-Federal Sponsors intends to fulfill their obligations under this Agreement. The Non-Federal Sponsors shall include in their budget request or otherwise propose appropriations of funds in amounts sufficient to fulfill these obligations for that year, and shall use all reasonable and lawful means to secure those appropriations. The Non-Federal Sponsors reasonably believes that funds in amounts sufficient to fulfill these obligations lawfully can and will be appropriated and made available for this purpose. In the event funds are not appropriated in amounts sufficient to fulfill these obligations, the Non-Federal Sponsors shall use their best efforts to satisfy any requirements for payments or contributions of funds under this Agreement from any other source of funds legally available for this purpose. Further, if the Non-Federal Sponsors are unable to fulfill these obligations, the Government may exercise any legal rights it has to protect the Government's interests related to this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, which shall become effective upon the date it is signed by the.

DEPARTMENT OF THE ARMY

CENTRAL VALLEY FLOOD

PROTECTION BOARD

BY: 

Thomas C. Chapman  
Colonel, U.S. Army  
District Engineer

BY: 

Benjamin F. Carter, President  
Central Valley Flood Protection Board

DATE: 21 Jul 10

DATE: 6/25/10

CALIFORNIA STATE DEPARTMENT  
OF WATER RESOURCES

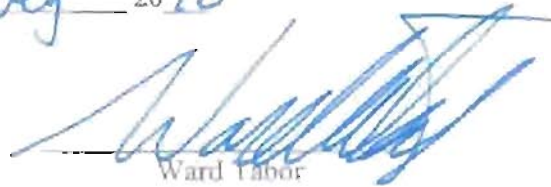
BY: 

Gary Bordin  
Chief, Division of Flood Management  
Department of Water Management

## CERTIFICATE OF AUTHORITY

I, Ward Tabor, do hereby certify that I am the Assistant Chief Counsel for the State of California Department of Water Resources, that the State of California Department of Water Resources is a legally constituted public body with full authority and legal capability to perform the terms of the Agreement between the Department of the Army and the State of California Department of Water Resources in connection with the feasibility study for the Central Valley Integrated Flood Management Study, and to pay damages, if necessary, in the event of the failure to perform in accordance with the terms of this Agreement and that the persons who have executed this Agreement on behalf of the State of California Department of Water Resources have acted within their statutory authority.

IN WITNESS WHEREOF, I have made and executed this certification this  
8<sup>th</sup> day of July 20 10



Ward Tabor  
Counsel for  
The State of California  
Department of Water Resources

## CERTIFICATION REGARDING LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-L.L.F., "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.




Gary Bardim  
Chief, Division of Flood Management  
State of California Department of Water Resources

DATE: 7/15/10

## CERTIFICATE OF AUTHORITY

I, Deborah M. Smith the undersigned, do hereby certify that I am the principal legal officer of the Central Valley Flood Protection Board, a legally constituted public body with full authority and legal capability to perform the terms of the Agreement between the Department of the Army and the Central Valley Flood Protection Board in connection with the feasibility study for the Central Valley Integrated Flood Management Study and to pay damages, if necessary, in the event of the failure to perform in accordance with the terms of this Agreement, and that the persons who have executed this Agreement on behalf of the Central Valley Flood Protection Board have acted within their statutory authority.

IN WITNESS WHEREOF, I have made and executed this certification this  
8<sup>th</sup> day of July 2010.

By   
Deborah Smith, Deputy Attorney General  
Attorney for the Central Valley  
Flood Protection Board



## CERTIFICATION REGARDING LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-L.L.L., "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.



Benjamin F. Carter, President  
Central Valley Flood Protection Board

DATE: 6/25/10

**NON-FEDERAL SPONSOR'S  
SELF-CERTIFICATION OF FINANCIAL CAPABILITY  
FOR AGREEMENTS**

I, Eric Koch, do hereby certify that I am the Chief of the FloodSAFE Program Management Office for the State of California, Department of Water Resources (a "Non-Federal Sponsor"); that I am aware of the financial obligations of the Non-Federal Sponsor for the Central Valley Integrated Flood Management Study; and that the Non-Federal Sponsor has the financial capability to satisfy the Non-Federal Sponsor's obligations under the Agreement between the Department of the Army and the Central Valley Flood Protection Board and the State of California Department of Water Resources for the Central Valley Integrated Flood Management Study.

IN WITNESS WHEREOF, I have made and executed this certification this 7<sup>th</sup> day of June, 2022.

BY: Eric Koch

TITLE: Chief, FloodSAFE Program Management

DATE: 6/7/2022

**NON-FEDERAL SPONSOR'S  
SELF-CERTIFICATION OF FINANCIAL CAPABILITY  
FOR AGREEMENTS**

I, Jay Punia, do hereby certify that I am the Executive Officer of the Central Valley Flood Protection Board (a "Non-Federal Sponsor"); that I am aware of the financial obligations of the Non-Federal Sponsor for the Central Valley Integrated Flood Management Study; and that the Non-Federal Sponsor has the financial capability to satisfy the Non-Federal Sponsor's obligations under the Agreement between the Department of the Army and the Central Valley Flood Protection Board and the State of California Department of Water Resources for the Central Valley Integrated Flood Management Study.

IN WITNESS WHEREOF, I have made and executed this certification this 12 day of June, 2013.

BY: Jay Punia  
TITLE: Executive Officer  
DATE: June 12, 2013





REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO  
CORPS OF ENGINEERS  
1325 J STREET  
SACRAMENTO, CALIFORNIA 95814-2922

MAY 10 2010

CESPK-PM-C

MEMORANDUM FOR Commander, South Pacific Division

SUBJECT: Standard Feasibility Cost Share Agreement (FCSA) for the Central Valley Integrated Flood Management Study, California (Project Number Work Item 154612).

This is to notify you that the District intends to execute the standard FCSA for the Central Valley Integrated Flood Management Study, California. The non-Federal partners, the Flood Protection Board of the State of California and the State Department of Water Resources, have reviewed the standard FCSA and are satisfied that it meets their needs. Please find enclosed:


- Standard Feasibility Cost Share Agreement (Enclosure A);
- Feasibility Cost Share Agreement Checklist (Enclosure B);
- Federal/non-Federal funds allocation table (Enclosure C);
- Certification of Legal Review (Enclosure D);
- Letter of intent from the Non-Federal sponsor (Enclosure E).

For your information I have also attached the draft Project Management Plan. This PMP is currently being routed through the District offices for final signatures both PPMD and Planning have signed off on the PMP.

Please provide approval to send this agreement to the non-Federal sponsor to execute the agreement and to delegate the authority to sign the agreement to the District Engineer.

If you have any question or comments please contact the Project Manager, Tom Karvonen at 916-557-7630.

Encls

  
Kris Mullins, P.M.P.  
Deputy for Project Management

Non-Fed and Fed Allocation Table for  
The Central Valley Intergraded Flood Management Study

Year	Total Project Cost (TPC)	Schedule Expenditures	% TPC	Non-Fed Cash or work-in-kind	Fed Cash
2009			0.00%		
2010		\$1,600,000	93.0%	\$800,000	\$800,000
2011		\$120,000	7.0%	\$60,000	\$60,000
Total	\$1,720,000	\$1,720,000	100.00%	\$860,000	\$860,000

CERTIFICATION OF LEGAL REVIEW  
OF THE  
AGREEMENT  
BETWEEN

THE DEPARTMENT OF THE ARMY  
AND

THE CENTRAL VALLEY FLOOD PROTECTION BOARD  
AND

THE STATE OF CALIFORNIA DEPARTMENT OF WATER RESOURCES  
FOR THE  
CENTRAL VALLEY INTEGRATED FLOOD MANAGEMENT STUDY

The Agreement Between the Department of the Army and the Central Valley Flood Protection Board and the State of California Department of Water Resources for the Central Valley Integrated Flood Management Study has been fully reviewed by the Office of Counsel, Sacramento District, and is approved as legally sufficient.

Susan Azyndar  
Assistant District Counsel

Date 11/11/2011

AMENDMENT NUMBER 1  
TO THE  
AGREEMENT  
BETWEEN  
THE DEPARTMENT OF THE ARMY  
AND  
THE CENTRAL VALLEY FLOOD PROTECTION BOARD  
AND  
THE STATE OF CALIFORNIA DEPARTMENT OF WATER RESOURCES  
FOR THE  
CENTRAL VALLEY INTEGRATED FLOOD MANAGEMENT STUDY

THIS AMENDMENT is entered into this 23<sup>rd</sup> day of August, 2013, by and between the Department of the Army (hereinafter the "Government"), represented by the Sacramento District Engineer and the Central Valley Flood Protection Board, represented by its President and the State of California Department of Water Resources, represented by the Division Chief of Flood Management (hereinafter "Non-Federal Sponsors").

WITNESSTH, THAT:

WHEREAS, the Government and the Non-Federal Sponsor entered into a Feasibility Cost Share Agreement (hereinafter referred to as the "Agreement") on July 21, 2010, for completion of the Study;

WHEREAS, the Government and the Non-Federal Sponsor desire to amend the Agreement to increase the scope and cost of the Study; and

WHEREAS, the Government and Non-Federal Sponsors have the full authority and capability to perform as hereinafter set forth and intend to cooperate in cost sharing and financing of the Study in accordance with the terms of this Amendment;

NOW, THEREFORE, the Government and the Non-Federal Sponsor agree to amend the Agreement as follows:

1. ARTICLE IV – METHOD OF PAYMENT is amended by replacing Paragraph A.1. with the following paragraph:

"1. As of the effective date of this Agreement, *total study costs* are projected to be \$5,000,000; the amount of funds determined in accordance with Article II.C.1.a. of this Agreement is projected to be \$0; the costs included in *total study costs* for the *non-Federal in-kind contributions* determined in accordance with Article II.E. of this Agreement are projected to be \$2,417,000; the credit to be afforded for the *non-Federal in-kind contributions* pursuant to Article II.F. of this Agreement is projected to be

\$2,417,000; the Non-Federal Sponsor's contribution of funds required by Article II.C.1.b. of this Agreement is projected to be \$0; and the non-Federal proportionate share is projected to be 48.34 percent. These amounts and percentage are estimates subject to adjustment by the Government, after consultation with the Non-Federal Sponsors, and are not to be construed as the total financial responsibilities of the Government and the Non-Federal Sponsors."

IN WITNESS WHEREOF, the parties hereto have executed this amendment to the Agreement, which shall become effective upon the date it is signed by the authorized representative of the Government.

DEPARTMENT OF THE ARMY

CENTRAL VALLEY FLOOD  
PROTECTION BOARD

BY: \_\_\_\_\_  
Michael J. Farrell, P.E.  
Colonel, U.S. Army  
District Commander

BY: William H. Edgar  
William H. Edgar  
President  
Central Valley Flood  
Protection Board

DATE: \_\_\_\_\_

DATE: August 23, 2013

CALIFORNIA STATE DEPARTMENT  
OF WATER RESOURCES

BY: Keith Swanson 8/23/13  
Keith Swanson *FWKS*  
Chief, Division of Flood Management  
Department of Water Management



STATE OF CALIFORNIA  
THE RESOURCES AGENCY  
THE CENTRAL VALLEY FLOOD PROTECTION BOARD

RESOLUTION NUMBER: 2013-17  
CENTRAL VALLEY INTEGRATED FLOOD MANAGEMENT STUDY (CVIFMS)  
APPROVE THE FEASIBILITY COST SHARING AGREEMENT AMENDMENT 1

WHEREAS, on August 28, 2009, the Central Valley Flood Protection Board (Board) and the Department of Water Resources (DWR) entered into a *Memorandum of Understanding between The Central Valley Flood Protection Board and the Department of Water Resources Regarding Central Valley Integrated Flood Management Plan* to jointly participate with the U.S. Army Corps of Engineers (USACE) in the Central Valley Integrated Flood Management Study (CVIFMS - formerly the Sacramento and San Joaquin River Basins Comprehensive Study) as the non-federal partner under CVIFMS; and

WHEREAS, the purpose of the CVIFMS, as originally scoped, was to conduct a comprehensive investigation of flood and related ecosystem issues of the Sacramento and San Joaquin River Basins and to develop a comprehensive approach to flood management for the river basins through a three-party Feasibility Cost Share Agreement (FCSA) among the USACE, DWR, and the Board; and

WHEREAS, on July 21, 2010, the Board and the DWR entered into an FCSA with the USACE for the CVIFMS Programmatic Implementation Framework Document and Programmatic Feasibility Study of Sacramento River Basin under the authority pursuant to Section 209 of the Flood Control Act of 1962 (Public Law 87-874) and of the San Joaquin River Basin pursuant to May 8, 1964 resolution of the House Committee on Public Works; and

WHEREAS, it is recognized and agreed that the State's funding contribution and participation may be in the form of up to 100% "in-kind" work; and

WHEREAS, the FCSA for CVIFMS was subsequently amended in 2011, but execution was halted upon implementation of USACE Planning Modernization Initiative; and

WHEREAS, the USACE has conducted two planning charettes, one in August 2012 and another in December 2012 with direct Board and DWR involvement to focus and refine the goals of the study and re-scope the CVIFMS to comply with the Planning Modernization Initiative; and

WHEREAS, the re-scoped CVIFMS will produce a watershed plan rather than a formal feasibility report, will focus on system-based solutions identified in the 2012 Central Valley Flood Protection Plan (CVFPP), and will be limited to the Sacramento Basin and not the San Joaquin Basin; and

WHEREAS, the CVIFMS Watershed Study will provide a vehicle for on-going participation by the USACE in the State's Basin Wide Feasibility Studies identified in the 2012 CVFPP and make recommendation for further actions including potential feasibility studies; and

WHEREAS, the USACE has completed an update to the Project Management Plan (PMP) for the CVIFMS and has requested that the FCSA be amended based on the PMP findings reached in collaboration with DWR and Board staff to show an updated total study cost of \$5,000,000 with non-federal proportionate share estimated at \$2,417,000, to conduct the watershed study; and

WHEREAS, as documented in Board Resolution No. 2012-25, Resolved No. 23, *"The Board has serious concerns that the proposed Feather River Bypass (including the enlargement of the Cherokee Canal) (a) could have adverse, unmitigated hydraulic effects on downstream landowners, and (b) is unlikely to be found economically justifiable. In addition, the Board is aware of existing flood-carrying capacity limitations in the Cherokee Canal attributed to its original design, further diminished by channel vegetation and sediment management challenges, possibly compromising critical flood protection at the local level. Therefore, the proposed Feather River Bypass is removed from the CVFPP. The Board thus advises DWR to: (1) consider improving the Canal to its original design capacity; (2) consider alternatives to expansion of the Canal, with alternatives evaluated on an equal footing, and (3) if DWR concludes that expansion is necessary it will fully and carefully evaluate the hydraulic and environmental effects and associated benefits, all with considered public input. This bypass may be brought forward in the 2017 update of the CVFPP";* it is DWR's and the Board's intent to participate in the CVIFMS consistent with the following: With close coordination with local flood control agencies, landowners, and other interested parties participating in the ongoing Feather River Regional Flood Management Planning process, the BWFS and CVIFMS shall carefully evaluate, in parallel and on equal footing, all reasonable alternatives related to addressing the existing operation and maintenance and channel capacity issues of the Cherokee Canal, as well as the proposed Feather River Bypass; as CVIFMS progresses, in coordination with the BWFS and Regional Flood Management Planning, it will be important to give careful attention to impacts of any proposed actions and the sequencing of program implementation to address those impacts.



NOW, THEREFORE, LET IT BE RESOLVED that the Central Valley Flood Protection Board:

1. Approves the Amendment Number 1 to the Agreement among the Board, DWR and the USACE for the Central Valley Integrated Flood Management Study in substantially the form attached hereto.
2. Delegates to the Board President the authority to execute the Amendment.

BY: William H. Edgar Date: August 23, 2013  
William H. Edgar, President  
Central Valley Flood Protection Board

BY: Jane Dolan Date: August 23, 2013  
Jane Dolan, Secretary  
Central Valley Flood Protection Board

Approved as to Legal Form and Sufficiency:

Nicole Rinke  
Nicole Rinke  
Deputy Attorney General  
Attorney for the Central Valley Flood Protection Board



**CENTRAL VALLEY FLOOD PROTECTION BOARD**

3310 El Camino Ave., Rm. 151  
SACRAMENTO, CA 95821  
(916) 574-0609 FAX: (916) 574-0682  
PERMITS: (916) 574-2380 FAX: (916) 574-0682



August 26, 2013

Colonel Michael Farrell  
District Engineer  
Sacramento District  
U.S. Army Corps of Engineers  
1325 J Street  
Sacramento, California 95814

Subject: Central Valley Integrated Flood Management Study

Dear Colonel Farrell:

This letter is to inform you that the Central Valley Flood Protection Board (Board) has considered and approved the Amendment Number 1 to the agreement between the U.S. Army Corps of Engineers (USACE), the Department of Water Resources (DWR/Department), and the Central Valley Flood Protection Board (Board) for the Central Valley Integrated Flood Management Study (CVIFMS) during its August 23, 2013 meeting. A copy of the resolution approving the amendment is attached for your reference.

As part of the Amendment approval process, the Board and the Department of Water Resources have reviewed the Project Management Plan (PMP) and the scope of study for the CVIFMS and are generally in concurrence with its contents. However, the Board and the Department want the USACE to know that the Sutter Butte Flood Control Agency (SBFCA) and many property owners along the Cherokee Canal have expressed significant concerns regarding the proposed Feather River Bypass (via an enlargement of the Cherokee Canal) due to potential economic, agricultural, and environmental impacts. Similar concerns were expressed by local property owners and regional flood management agencies when the Board considered and adopted the Central Valley Flood Protection Plan (CVFPP) on June 29, 2012.

During the adoption process for the CVFPP, the Board held many public hearings at which there were extensive discussions among DWR staff, the local property owners along the Cherokee Canal, and the Board. After lengthy and sometimes contentious debates, a consensus was reached among all the interested parties regarding the proposed study of the Feather River Bypass. The Board's Resolution Number 2012-25 (Resolved 23) for approving the CVFPP captured the consensus reached for the Feather River Bypass study and is reflected below.

*"23. RESOLVED, The Board has serious concerns that the proposed Feather River Bypass (including the enlargement of the Cherokee Canal) (a) could have adverse, unmitigated hydraulic effects on downstream landowners, and (b) is unlikely to be found economically justifiable. In addition, the Board is aware of existing flood-carrying capacity limitations in the Cherokee Canal attributed to its original design, further diminished by channel vegetation and sediment management challenges, possibly compromising critical flood protection at the local level. Therefore, the proposed Feather River Bypass is removed from the CVFPP. The Board thus advises DWR to: (1)*

Colonel Michael Farrell  
August 26, 2013  
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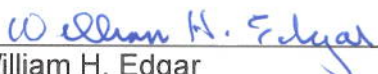
*consider improving the Canal to its original design capacity; (2) consider alternatives to expansion of the Canal, with alternatives evaluated on an equal footing, and (3) if DWR concludes that expansion is necessary it will fully and carefully evaluate the hydraulic and environmental effects and associated benefits, all with considered public input. This bypass may be brought forward in the 2017 update of the CVFPP."*


The proposed Feather River Bypass remains as a very sensitive issue for local landowners. The Board and the Department understand the current operation and maintenance issues with the Cherokee Canal and the local concerns about the proposed Feather River Bypass. The Board and the Department also understand that the State has a responsibility to evaluate all possible alternatives, on equal footing, to divert high flood flows away from urban areas, as stated in Senate Bill 5.

To achieve this legislated objective, the proposed Feather River Bypass is one of several "system elements" identified in the CVFPP as having potential benefits for achieving flexibility and resiliency in the flood protection system. Therefore, the Board and the Department are requesting that the USACE work with local flood control agencies, landowners, and other interested parties participating in the ongoing Feather River Regional Flood Management Planning process to carefully evaluate, in parallel and on equal footing, all reasonable alternatives related to addressing the existing operation and maintenance and channel capacity concerns of the Cherokee Canal, as well as the proposed Feather River Bypass. As you conduct the CVIFMS in coordination with the Basin-Wide Feasibility Studies and Regional Flood Management Planning, it will be important to give careful attention to impacts of any proposed actions and the sequencing of program implementation to address those impacts.

Should you have any further questions regarding this matter, you may contact me or Mr. Jay Punia, Board Executive Officer, at (916) 574-0609, or Jeremy Arrich of the Department at (916) 574-2550.

Sincerely,

  
William H. Edgar  
President  
Central Valley Flood Protection Board

  
Keith Swanson  
Chief, Division of Flood Management  
Department of Water Resources

cc: (via electronic file)

Mr. Gary Bardini, DWR  
Mr. Keith Swanson, DWR  
Mr. Mike Inamine, SBFCA  
Mr. Lewis Bair, Reclamation District 108  
CVFPB Board members





## DELTA STEWARDSHIP COUNCIL

*A California State Agency*

980 NINTH STREET, SUITE 1500  
SACRAMENTO, CALIFORNIA 95814  
HTTP://DELTACOUNCIL.CA.GOV  
(916) 445-5511

January 15, 2016

**Chair**  
Randy Fiorini

**Members**  
Aja Brown  
Frank C. Damrell, Jr.  
Phil Isenberg  
Patrick Johnston  
Mary Piepho  
Susan Tatayon

**Executive Officer**  
Jessica R. Pearson

Ms. Rhiannon Kucharski  
U.S. Army Corps of Engineers, Sacramento District  
1325 J Street  
Sacramento, CA 95814  
[rhiannon.l.kucharski@usace.army.mil](mailto:rhiannon.l.kucharski@usace.army.mil)

### **RE: Comments on Draft Central Valley Integrated Flood Management Study Watershed Plan**

Dear Ms. Kucharski:

Thank you for the opportunity to comment on the Draft Central Valley Integrated Flood Management Study (CVIFMS) Watershed Plan. The Delta Stewardship Council (Council) appreciates the effort by the U.S. Army Corps of Engineers (USACE) to conduct this assessment of the Sacramento River Basin to identify key watershed issues; develop conceptual alternatives that integrate flood risk management, ecosystem restoration, and water supply goals to address these issues; and to help make findings of Federal interest.

The mission of the Council is to promote the coequal goals of water supply reliability and Delta ecosystem restoration in a manner that protects and enhances the unique values of the Delta as an evolving place (California Water Code section 85054). The Council has a legally enforceable management framework for the Delta and Suisun Marsh called the Delta Plan. The Delta Plan applies a common sense approach based on the best available science to restore habitat, increase the diversity and efficiency of California's water supplies, improve the Delta's risk management, and preserve the Delta's agricultural values. In many cases, the Delta Plan calls for projects in the Delta to provide multiple benefits, where feasible (e.g., increasing floodplains and riparian habitats while reducing flood risk). Since the proposed activities of the Draft CVIFMS will address Delta-related flood risk management and ecosystem restoration objectives, and the Federal Energy and Water Development Appropriations Act of 2012 states that the Federal policy on California's water supply and environmental issues related to the Delta should be consistent with the State's coequal goals, it is essential that both our agencies coordinate closely.

*"Coequal goals" means the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place."*

– CA Water Code §85054

Rhiannon Kucharski, U.S. Army Corps of Engineers, Sacramento  
January 15, 2016  
Page 2

### **Coordination with State Programs and Plans**

The Draft CVIFMS includes planning goals of reducing flood risk to public safety and damage to property and critical infrastructure, restoring aquatic habitat and stream processes in the Sacramento River system, and increasing reliability and availability of water supplies for the watershed. We applaud USACE's effort to coordinate and align with State planning initiatives for the Sacramento Valley, particularly the 2012 Central Valley Flood Protection Plan and the Draft Central Valley Flood System Conservation Strategy, and for recognizing the importance of seeking opportunities to integrate habitat improvements and water conservation into flood risk management strategies. Additionally, we encourage USACE to coordinate and integrate with the State's other ongoing programs and planning efforts, including the Delta Plan, the California Department of Water Resources (DWR) Urban Flood Risk Reduction Program, the DWR Small Community Flood Risk Reduction Program, the DWR Delta Levees Program, and the California Water Action Plan.

### **Delta Levees Investment Strategy**

The Delta Reform Act of 2009 called on the Council to lead a multi-agency effort, in consultation with the Central Valley Flood Protection Board, to establish and adopt, as a part of the Delta Plan, priorities for State investments in levee operation, maintenance and improvement for both project and non-project levees in the Delta (California Water Code section 85306). Currently, the Delta Plan includes interim priorities for State investment in Delta levees (Delta Plan Policy RR P1 [23 California Code of Regulations Section 5012]) and the Council now is engaged in updating these priorities through development of the Delta Levees Investment Strategy. As USACE further evaluates Federal interest in the Delta and makes progress on completing feasibility studies for the region (e.g., Sacramento River General Reevaluation Project), we encourage USACE to coordinate with Council staff to ensure collaboration amongst our agencies and identify a shared vision for flood risk reduction for the Delta.

### **Ecosystem Restoration**

As described in the Draft CVIFMS, there are considerable net benefits that can be achieved when integrating habitat restoration with regional flood risk management strategies. In January 2016, Council staff will release a proposed final version of its report, *Improving Habitats along Delta Levees: A Review of Past Projects and Recommended Next Steps*, which assesses the effectiveness of different habitat improvement options associated with levee projects in the Delta and nearby upstream areas in benefitting native species (available at <http://bit.ly/IHaDL>). One of the findings of the report is that vegetated benches constructed along levee repair sites can provide habitat benefits for rearing salmon to naturally vegetated nearshore habitat. This finding was based on post-construction monitoring of the multitude of mid-2000's Delta emergency levee repairs implemented by USACE and DWR. As the USACE finalizes



Rhiannon Kucharski, U.S. Army Corps of Engineers, Sacramento  
 January 15, 2016  
 Page 3

the CVIFMS and begins progress on the associated off-shoot and spin-off studies, we recommend that USACE review this report to gain insights into effective approaches for integrating habitat features that benefit salmon and other native species into Delta levee projects.

### **Delta Plan Policies and Recommendations**

The CVIFMS defines 50 opportunity areas as study regions and it also finds that there are several potential Federal interests in the Delta. We are pleased with these findings and we further recommend that any analysis within the Delta should consider the unique cultural, recreational, natural resource, and agricultural values of the Delta. The Delta Plan includes several relevant policies and recommendations for achieving the State's coequal goals in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place, which include:

- Use of best available science and develop adaptive management plans (Delta Plan Policy G P1);
- Prioritize habitat restoration within six priority habitat restoration areas (Delta Plan Recommendation ER R2);
- Expand floodplains and riparian habitats in levee projects (Delta Plan Policy ER P4);
- Respect local land use when siting water or flood facilities or restoring habitats (Delta Plan Policy DP P2);
- Plan for the vitality and preservation of legacy communities (Delta Plan Recommendation DP R3);
- Provide new and protect existing recreation opportunities (Delta Plan Recommendation DP R11); and
- Protect floodways (Delta Plan Policy RR P3) and floodplains (Delta Plan Policy RR P4).

During the future development of the CVIFMS and its subsequent activities (e.g., USACE San Joaquin River Watershed Study), Council staff can provide guidance as needed on how to align USACE's efforts with the Delta Plan.

### **Final Remarks**

Council staff looks forward to continuing to work with USACE to explore and identify additional State-federal joint interests. Additionally, we would like to offer our support to USACE in further developing the proposed studies and activities described in the CVIFMS. If you have questions or would like to discuss the comments presented here, please feel free to contact my staff, You Chen (Tim) Chao (916-445-0143) at [YouChen.Chao@deltacouncil.ca.gov](mailto:YouChen.Chao@deltacouncil.ca.gov) or Daniel Huang (916-445-5339) at [Daniel.Huang@deltacouncil.ca.gov](mailto:Daniel.Huang@deltacouncil.ca.gov).

Rhiannon Kucharski, U.S. Army Corps of Engineers, Sacramento  
January 15, 2016  
Page 4

Sincerely,



Cindy Messer  
Deputy Executive Officer  
Delta Stewardship Council

cc Christopher Williams, California Department of Water Resources  
Nancy Moricz, Central Valley Flood Protection Board

**DEPARTMENT OF WATER RESOURCES**

DIVISION OF FLOOD MANAGEMENT  
P.O. BOX 219000  
SACRAMENTO, CA 95821-9000



February 2, 2016

Colonel Michael J. Farrell  
District Engineer  
Sacramento District  
U.S. Army Corps of Engineers  
1325 J Street  
Sacramento, California 95814-2922

Subject: Letter of Support for the Release of the Central Valley Integrated Flood Management Study, Final Watershed Plan

Dear Colonel Farrell:

The California Department of Water Resources (DWR), as a non-federal sponsor, supports the Central Valley Integrated Flood Management Study (CVIFMS) Watershed Plan for the Sacramento River watershed. CVIFMS is a multipurpose federal study conducted by the U.S. Army Corps of Engineers (USACE) under a federal Cost Share Agreement with the Central Valley Flood Protection Board (Board) and the DWR signed on July 21, 2010 and amended on August 30, 2013. As a companion document to the State's Central Valley Flood Protection Plan (CVFPP), the CVIFMS advances the vision for an integrated flood management system in the Central Valley to provide for safe, healthy, and thriving communities while protecting and restoring the environment.

Through extensive partnership and data sharing efforts with DWR and Board staff, USACE has produced an assessment of the Sacramento River watershed that will provide the planning framework and federal perspective to help determine future actions to improve resources in the Central Valley and assess potential federal interest in those actions. This Watershed report, through its comprehensive evaluation from a federal perspective, is essential to both the 2017 CVFPP as well as the Sacramento River General Reevaluation study, both efforts which are currently underway. The CVIFMS Watershed Plan lays the foundation for future partnerships between federal and State agencies, tribes, local entities, DWR and the Board on water resources studies that include flood risk management, ecosystem restoration and water supply in the Sacramento River watershed.

The DWR supports the release of the CVIFMS Watershed Plan and looks forward to future partnership with the USACE and the Board.

If you have any questions, please contact me at (916) 574-0601 or [Keith.Swanson@water.ca.gov](mailto:Keith.Swanson@water.ca.gov), or Christopher Williams at (916) 574-2375 or [Christopher.Williams@water.ca.gov](mailto:Christopher.Williams@water.ca.gov).

Sincerely,

A handwritten signature in cursive script, appearing to read "Keith Swanson".

Keith Swanson, Chief  
Division of Flood Management