

**Meeting of the Central Valley Flood Protection Board  
February 8, 2013**

**Staff Report – Transmittal of Sutter Butte Flood Control Agency’s Letter of Intent for a  
System-Wide Improvement Framework to the U.S. Army Corps of Engineers**

**Butte and Sutter Counties**

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**1.0 – ITEM**

Consider authorizing the Executive Officer to send a letter to the U.S. Army Corps of Engineers (USACE) transmitting a Letter of Intent (LOI) for a System-Wide Improvement Framework (SWIF) prepared by the Sutter Butte Flood Control Agency (SBFCA) for the Feather River – Sutter Basin Protection Area (Basin) as defined by the USACE’s Periodic Inspection dated January 2010.

**2.0 – LOCATION**

The Basin is located in Sutter and Butte Counties and contains Yuba City and the communities of Live Oak, Biggs and Gridley. The Basin is bounded by the Feather River on the east and the Sutter Bypass and Sutter Buttes on the west. It extends from the Thermalito Afterbay in the north to the confluence of the Feather River and the Sutter Bypass in the south.

**3.0 – AGENCY**

SBFCA is the regional flood control agency of the Basin. SBFCA was formed under a joint powers authority agreement between LD1, LD9, Butte County, Sutter County, Biggs, Gridley, Live Oak and Yuba City. While SBFCA has no levee maintenance responsibilities, the agency plays a key role in planning, coordinating, and implementing flood risk reduction activities within the Basin. SBFCA is the local sponsor for the USACE’s Sutter Basin Feasibility Study in partnership with the CVFPB, and is the planning and implementing agency for the Feather River West Levee Early Implementation Project, a locally led and State and locally funded project to implement levee construction in advance of the feasibility study. As the regional flood agency for the Basin, SBFCA will be taking the lead in developing a SWIF plan while coordinating efforts with the local levee maintaining agencies (LMAs).

**4.0 – USACE PERIODIC INSPECTION**

In January 2010 the USACE performed a Periodic Inspection (PI) of the Basin. PI’s are conducted to verify proper operation and maintenance; evaluate operational adequacy and structural stability; identify features to monitor over time; and improve the ability to communicate the overall condition. The Periodic Inspection Report produced by the USACE for the Basin determined that the levee system was “Unacceptable” which resulted with an “Inactive” status for USACE Public Law 84-99 Rehabilitation and Inspection (RIP) assistance.

## **5.0 – PURPOSE OF THE LOI AND SWIF**

If accepted by the USACE, the LOI will allow the Basin's levee system to retain eligibility for RIP assistance for a period of two years while SBFCA develops a SWIF. If the SWIF is accepted by the USACE, the Basin's levee system will retain eligibility for RIP while the local levee maintainers perform the work described in the SWIF. The LOI was also prepared in light of USACE recommendations that the LOI would assist the USACE in processing the pending permits for the Feather River West Levee Early Implementation project and the Sutter Basin Feasibility Study itself (See Attachment 3). In undertaking this effort, SBFCA will be working closely with the CVFPB and the Basin's LMAs (LD1, LD9, State Maintenance Areas 03, 07, and 16).

## **6.0 – STAFF RECOMMENDATION**

As agreed to in the initial operations and maintenance assurances to the USACE, the CVFPB serves as the non-federal sponsor for all of the State-federal project levees within the jurisdiction of the Sacramento-San Joaquin Drainage District, including the Basin's levee system. In this capacity, it is the CVFPB's responsibility to transmit the LOI and subsequent SWIF to the USACE on behalf of the LMA's.

Staff has reviewed the draft LOI (See Attachment 2) submitted by SBFCA and finds that it adequately addresses the six requirements for submitting a LOI for a SWIF as described in the USACE's November 29, 2011 Policy for Development and Implementation of System-Wide Improvement Frameworks (SWIFs) (See Attachment 4).

SBFCA anticipates receiving formal statements of support from each of the basin maintaining agencies by or soon after the February 8, 2013 CVFPB meeting, and will obtain final approval from its Board on February 13, 2013. In order to submit the LOI as soon as possible, SBFCA has requested that the CVFPB authorize the Executive Officer to transmit the LOI once finalized and signed. Staff agrees with this request and is recommending that the CVFPB authorize the Executive Officer to finalize a letter of transmittal to the USACE and forward it with the signed LOI to the USACE.

## **7.0 – ATTACHMENTS**

1. Draft Letter of Transmittal to USACE
2. Draft Letter of Intent Prepared by SBFCA
3. UASCE Memo Dated December 18, 2012
4. Excerpt from USACE Policy for Development and Implementation of System-Wide Improvement Frameworks

Date

Colonel William J. Leady, District Commander  
U.S. Army Corps of Engineers  
1325 J Street  
Sacramento, CA 95814

**Subject: Sutter Butte Basin - Letter of Intent (LOI) for Developing and Implementing a System-Wide Improvement Framework (SWIF) Plan**

Colonel Leady-

The Central Valley Flood Protection Board (CVFPB) wishes to notify USACE by this letter that the local levee maintaining agencies within the Sutter Basin (Basin) intend to develop and implement a System-Wide Improvement Framework (SWIF) plan in order for their levee systems to retain eligibility for rehabilitation assistance authorized under Public Law 84-99. The Sutter Butte Flood Control Agency (SBFCA) is the regional flood control agency for the Basin and will lead the development and implementation of the basin-wide SWIF.

The Basin levees were originally constructed by USACE and subsequently turned over to local agencies for operations and maintenance. At the time the levees were built, construction and encroachment standards were less rigorous than those employed today. Due to these and other factors, some areas of the levee system received unacceptable ratings in USACE's recent periodic inspection reports and under USACE policy will eventually become ineligible for P.L. 84-99 assistance.

The SWIF will allow SBFCA and its partner agencies to implement improvements that address system-wide issues and correct unacceptable inspection items in a prioritized manner to optimize flood risk reduction. SBFCA is requesting a two-year period to develop a SWIF. The attached information supports this notification.

We respectfully submit this Letter of Intent on behalf of SBFCA in accordance with the USACE's *Policy for Development and Implementation of System-Wide Improvement Frameworks* and request a two-year extension of eligibility for P.L. 84-99 rehabilitation assistance for Basin levees while SBFCA develops and implements a SWIF. Following approval of this Letter of Intent, SBFCA will commence efforts to develop a SWIF for USACE approval.

Sincerely,

Jay Punja,  
Executive Office

February 8, 2013

Jay Punia  
Executive Officer  
Central Valley Flood Protection Board  
3310 El Camino Avenue, Room 151  
Sacramento, CA 95821

RE: Sutter Butte Basin – Letter of Intent to Develop and Implement a System-Wide Improvement Framework Plan

Dear Mr. Punia,

The Sutter Butte Flood Control Agency (SBFCA) is the regional flood control agency of the Sutter basin (Basin). SBFCA was formed under a joint powers authority agreement between LD1, LD9, Butte County, Sutter County, Biggs, Gridley, Live Oak and Yuba City. While SBFCA has no levee maintenance responsibilities, the agency plays a vital role in planning, coordinating and implementing flood risk reduction activities within the Basin. SBFCA is the local sponsor for the USACE's Sutter Basin Feasibility Study in partnership with the California Department of Water Resources (DWR), and is the planning and implementing agency for the Feather River West Levee Early Implementation Project, a locally led and State and locally funded project to implement levee construction in advance of the feasibility study.

As the regional flood agency for the Basin, SBFCA will be taking the lead in developing a System-Wide Improvement Framework (SWIF) plan and coordinating with the local levee maintaining agencies (LMAs) in order for the Basin levee system to retain eligibility for rehabilitation assistance authorized under Public Law 84-99. In undertaking this effort, we envision working closely with the Basin's LMAs (LD1, LD9, State Maintenance Areas 03, 07, and 16) and the Central Valley Flood Protection Board.

As the Central Valley Flood Protection Board is the body which provided the initial operations and maintenance assurances to the U.S. Army Corps of Engineers (USACE) for the Basin's levee system, we respectfully request that the CVFPB forward the attached *Letter of Intent to Develop and Implement a System-Wide Improvement Framework Plan* to the USACE on behalf of the Basin's LMAs.

Should you have any questions, please do not hesitate to contact me at 530-755-9869.

Mike Inamine  
Executive Director

cc: LD1, LD9, MA 03, MA 07, MA 16  
Len Marino, Chief Engineer, Central Valley Flood Protection Board  
George Qualley, Department of Water Resources

## **DRAFT**

# **Sutter Butte Basin Letter of Intent Support Information**

### *Identification of Levee System*

All levees to be covered by the SWIF plan are listed in the National Levee Database under two system names:

- Feather River right bank - Sutter Bypass east bank      (*System ID: 5205000521*)
- Interceptor Canal – East    (*System ID: 5205000520*)

The above-mentioned levee systems include 9 levee segments:

- Feather River West Levee
  - Maintenance Area 03    (*Segment ID: 5204000571*)
  - Levee District 1    (*Segment ID: 5204000521*)
  - Levee District 9    (*Segment ID: 5204000551*)
  - Maintenance Area 16    (*Segment ID: 5204000831*)
  - Maintenance Area 07    (*Segment ID: 5204000601*)
  - Feather River – Hamilton West Levee –  
    South of Afterbay Outflow Dam                              (*Segment ID: 5204000472*)
- Sutter Bypass East Levee
  - South of Wadsworth Canal                                      (*Segment ID: 5204001072*)
- Wadsworth Canal
  - Unit 1, Left Bank    (*Segment ID: 5204001091*)
- Interceptor Canal
  - Unit 2, East Canal    (*Segment ID: 5204000502*)

All levees were federally constructed by USACE and subsequently turned over to public sponsors for operations and maintenance.

***Description of Deficiencies***

Deficiencies for the Sutter Butte Basin levees have been identified in USACE’s 2010 Periodic Inspection Report (PIR). Since the PIR was released, a number of the issues have been addressed or repaired as noted in the current “Unacceptable Items List”. Table 1 below summarizes the unresolved deficiencies for each of the maintenance areas which will inform the development of the SWIF plan.

**Table 1.** Levee deficiencies (X) for each maintenance area.

	Hamilton West	MA07	MA16	LD9	LD1	MA03	SBP2	WAD1	INT2
Operations and Maintenance Manuals									
Emergency Supplies and Equipment									
Flood Preparedness and Training									
<b>Unwanted Vegetation Growth</b>	X	X	X	X	X	X	X	X	X
Sod Cover									
<b>Encroachments</b>	X	X	X	X	X	X	X	X	X
<b>Closure Structures</b>									X
<b>Slope Stability</b>		X							
<b>Erosion/Bank Caving</b>		X	X	X	X	X	X	X	X
Settlement									
<b>Depressions/Rutting</b>	X	X		X			X		
Cracking									
Animal Control									
<b>Culverts/Discharge Pipes</b>							X		
Riprap Revetments & Bank Protection									
<b>Revetments other than Riprap</b>				X					
Underseepage Relief Wells/ Toe Drain Systems									
Seepage									
<b>Flap Gates/Flap Valves</b>									X

Unwanted vegetation growth, encroachments, and erosion are all system-wide issues and make up 97% of Sutter Basin’s deficiencies listed in the USACE Unacceptable Items List. Extensive analysis by SBFCA and DWR disclose that the consequences of deep underseepage pose greater hazard to the Basin than vegetation, encroachments, and erosion. Accordingly, because the Sutter Butte Flood Control Agency is currently undertaking a program of underseepage remediation (the Feather River West Levee Project), the Sutter Basin levee systems make ideal candidates for implementing a SWIF. Tackling these issues on a system-wide level will reduce flood hazard and consequences in a risk-prioritized manner over time.

### ***Commitment of Non-Federal Resources towards the SWIF***

The Basin's LMAs are districts formed under California law and are supported by a mixture of ad valorem property taxes and special benefit assessments. These revenues support annual operations and maintenance costs.

In addition, SBFCA and its partner agencies are eligible for state grant funding for flood control efforts through California State Propositions 84 and 1E administered by the California Department of Water Resources (CDWR). SBFCA has already received grant funding from CDWR for the Feather River West Levee Project. Implementation of this levee project will address many of the deficiencies identified in the PIR for the Feather River West Levee.

Also, CDWR has expended significant resources in the Urban Levee Evaluation (ULE) and Nonurban Levee Evaluation (NULE) programs as well as the development of the Central Valley Flood Protection Plan. These efforts have generated substantial volumes of hydrologic, hydraulic, geotechnical, and mapping information which will greatly inform the development of the SWIF. It is expected that the SWIF implementation costs once known, will be funded from a combination of funding sources. In addition to the funding sources for the local maintaining agencies, SBFCA currently collects a benefit assessment from properties within the Basin and CDWR has made funding available from various State programs to manage flood risk.

### ***Interim Risk-Reduction Measures***

An Interim Risk Reduction Measures (IRRM) Plan will be developed by SBFCA as a part of the SWIF. The IRRM Plan will include a risk communication plan that addresses the increased risk to life caused by system-wide deficiencies. It will also include measures to identify, monitor, and communicate specific locations where deficiencies exist that have the potential to increase flood risk. Primary communications will occur with appropriate local officials but will also include outreach to landowners and the public. Finally, in conjunction with the Feather River West Levee Project, SBFCA will create targeted flood fighting plans for any areas with extreme risk.

### ***Interagency Collaborative Efforts***

SBFCA was formed under a joint powers authority agreement between LD1, LD9, Butte County, Sutter County, Biggs, Gridley, Live Oak and Yuba City. As such, SBFCA will coordinate with the respective risk management, emergency response, and land use functions of each of these entities. SBFCA and CDWR have been actively collaborating with the USACE for a number of years in developing the Sutter Basin Feasibility Study (SBFS). SBFCA and CDWR have played key roles in funding and advancing the SBFS to the point where the Draft Feasibility Study Report is now due to be issued in the spring

of 2013. Also, SBFCA has been working with USACE on a Section 408 request for the Feather River West Levee Project.

In addition to the USACE, SBFCA and its partners plan to collaborate with a number of other agencies during the development, implementation and oversight of the SWIF. These agencies, listed with their expected areas of contribution, include:

- Federal Emergency Management Agency (Levee evaluation and future NFIP accreditation)
- U.S. Fish and Wildlife Service (protected species consultation)
- National Marine Fisheries Services (protected species consultation)
- California Department of Fish and Wildlife (protected species consultation and Wildlife Areas)
- California Department of Water Resources (Funding resources, flood risk management, levee evaluations, State maintained areas)
- Central Valley Flood Protection Board (Encroachment permitting and floodway technical assistance)

### ***Anticipated Permitting Requirements***

The development and implementation of the SWIF will require consultation with a number of resource, regulatory, and permitting agencies. The required permits and approvals will likely include:

- Compliance with the California Environmental Quality Act (CEQA).
- California Department of Fish and Wildlife Streambed Alteration Agreement
- Central Valley Flood Protection Board floodway encroachment permits
- Compliance with the National Environmental Policy Act (NEPA).
- U.S. Fish and Wildlife Service (protected species consultation)
- National Marine Fisheries Services (protected species consultation)
- Clean Water Act Section 404 permits.
- USACE approvals under 33 CFR 208.10



REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
SOUTH PACIFIC DIVISION, CORPS OF ENGINEERS  
1455 MARKET STREET  
SAN FRANCISCO, CALIFORNIA 94103-1399

**18 DEC 2012**

CESPD-PDP

MEMORANDUM FOR Commander, Sacramento District, US Army Corps of Engineers, ATTN:  
CESPK-CO-O (Riley)

SUBJECT: Approval to release the Feather River West Levee Project, Sutter 33 USC Section  
408 (Section 408) Draft Environmental Impact Statement/Report (EIS/R).

1. References:

a) Email, CESPK-CO-O, 14 November 2012, subject; Draft Environmental Impact Statement/Report (EIS/R): Feather River West Levee Project, Sutter 408 Submittal for Review and Approval for Public Release (Enclosure 1).

b) Engineering Technical Letter (ETL) 1110-2-571, titled; Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams, and Appurtenant Structures, 10 April 2009.

c) Engineer Regulation 1165-2-208, CECW-PB, 17 February 2012, titled; In-Kind Contribution Credit Provisions Of Section 221 Of The Flood Control Act Of 1970, As Amended.

d) Memorandum for Major Subordinate Commands and Districts, CECW-HS, 29 November 2011, subject: Policy for Development and Implementation of System-Wide Improvement Frameworks (SWIFs).

2. The South Pacific Division District Support Team (DST) reviewed the Feather River West Levee Project Section 408 Draft EIS/R submittal package including; the response to comments on the Draft EIS, Office of Counsel certification, and Quality Control and Assurance certification. The DST find the District has addressed the outstanding comments. Approval is hereby granted to release the Draft EIS/R.

3. The DST comments (Enclosure 2) outline two risks to the release of the Draft EIS/R for the Applicants consideration. They are as follows;

a) Limited Resource Agency (RA) coordination documented in the Draft EIS/R creates uncertainty with their concurrence with the array and analysis of alternatives. The risk is the need for re-release of the Draft EIS/R as a result of additional analysis or requirements from the RA. Prior to submittal of the Final EIS for SPD approval the DST require the Sacramento District (SPK) to verify the significance of the RA comments and their bearing on the Draft EIS/R and provide a determination to SPD on the need for re-release.

b) Per the Draft EIS/R the Section 408 Project the levees will be maintained per the approved USACE O&M manual applicable to each reach. This indicates the Section 408 project will not

result in a project that is compliant with current USACE engineering standards (Reference 1.b). To be eligible for In Kind Contribution credit under ER1165-2-208 (Reference 1.c) the project constructed must be compliant with USACE engineering standards. The DST recommends the Applicant consider entering into a SWIF per Reference 1.d. Although a SWIF is not currently a requirement for the Section 408 it would facilitate approval of the Section 408 and credit eligibility determinations.

4. SPK is further directed to conduct an internal consistency review to ensure the Section 408 and Sutter Basin Pilot Feasibility Study are not in conflict. Publication of the Draft EIS/R should not constrain the Sutter Pilot Project.

5. For any additional information or assistance, contact Karen Berresford, District Support Team Lead, (415) 503-6557, [Karen.G.Berresford@usace.army.mil](mailto:Karen.G.Berresford@usace.army.mil).

***Building Strong From New Mexico All the Way to the Pacific!***

FOR THE COMMANDER

Encls

1. CESPCK-CO-O Email submittal
2. CESPDP-DST Comment Response

  
CLARK F. FRENTZEN  
Chief Planning and Policy Division

SBFCA Draft LOI

CECW-HS

SUBJECT: Policy for Development and Implementation of System-Wide Improvement Frameworks (SWIFs)

c. Transitioning “Acceptable” or “Minimally Acceptable” Levees. Levees sponsors with levees that are “Active” in the rehabilitation assistance program under an existing vegetation variance or deviation from the standard that want to use the SWIF process to transition to a new vegetation inspection standard through the vegetation variance request process, or that would like to systematically improve the condition of participating levees, may maintain their P.L. 84-99 rehabilitation assistance eligibility as long as they continue to meet the milestones set forth in their applicable SWIF.

d. Reinstating Eligibility While Developing and Implementing a SWIF. Levee sponsors that receive an overall levee system inspection rating of “Unacceptable” or have been “Inactive” in the rehabilitation program may regain eligibility for P.L. 84-99 rehabilitation assistance through the SWIF process. Upon approval by USACE of the letter of intent, requirements described below, the levee sponsor will receive an initial of up to two-year reinstatement of eligibility for P.L. 84-99 rehabilitation assistance. Continued eligibility will be determined annually based on milestones described in the subsequent SWIF. Levee sponsors who have never been eligible for rehabilitation assistance under P.L. 84-99 cannot gain P.L. 84-99 rehabilitation assistance eligibility through the SWIF process.

7. Requirements for Development and Submittal of a SWIF. The development of a SWIF is a two-step process consisting of (1) a Letter of Intent from the sponsor briefly describing levee system deficiencies and justification for how a system-wide approach will optimize flood risk reduction, and (2) development of a SWIF for addressing deficiencies and reducing flood risk. Once a Letter of Intent has been approved by USACE, a levee sponsor has up to two years to develop a SWIF plan. Eligibility after this two-year period will be dependent on the levee sponsor’s progress in achieving the milestones defined in the SWIF. The SWIF plan is intended to be a specific document that guides sponsor activities, including anticipated milestones, but may also be adaptable and should be revised if conditions or needs change during implementation. The requirements for the Letter of Intent and SWIF are described as follows:

a. Requirements for Submitting a Letter of Intent for a SWIF. A Letter of Intent must be signed by all associated levee sponsors for each levee system involved in developing the SWIF and must include the following:

(1) Identification of levee system or systems to be covered by the SWIF, including system name and system identification number as listed in the National Levee Database;

(2) Brief description of deficiencies or issues that will be included in the SWIF and discussion of how a system-wide approach will improve and optimize overall flood risk reduction. This includes identifying any conditions not within the control of the levee sponsor(s) that prevents them from correcting “Unacceptable” inspection items in a timely manner;

## SBFCA Draft LOI

CECW-HS

SUBJECT: Policy for Development and Implementation of System-Wide Improvement Frameworks (SWIFs)

- (3) Demonstration that significant non-federal resources have been, or will be, committed for developing and/or implementing the SWIF (e.g., state legislative action, bond financing);
- (4) Anticipated interim risk reduction measures that will be implemented throughout the SWIF process, including overall risk communication approach that addresses the risk to life increased by system-wide deficiencies;
- (5) Brief description of existing or planned interagency collaborative efforts that will contribute positively to SWIF development, implementation and oversight; and
- (6) List of anticipated state and federal permits and consultation requirements, needed to implement the SWIF.

b. Requirements for Submittal of a SWIF. SWIFs are developed and implemented by levee sponsor(s), reviewed and accepted by USACE, and monitored by a USACE district to address system-wide issues in a prioritized way to optimize system-wide risk reduction. As a minimum for acceptance by USACE, the levee sponsor's SWIF must include the following:

- (1) Identification of levee system or systems covered by the system-wide improvement framework, including system name and identification number as listed in the National Levee Database;
- (2) Description of proposed levee improvement and justification on how the SWIF optimizes flood risk reduction;
- (3) A plan and schedule for interagency collaboration, including environmental and/or Tribal consultation if applicable, in the implementation of the SWIF;
- (4) Documentation of specific agreements, such as project specific agreements, between levee sponsors and USACE or other agencies/organizations related to implementation of levee modifications, under Section 408 or other overlapping USACE policies and studies, applicable to the levee systems identified in the system-wide improvement framework;
- (5) Documentation of any regional considerations, approaches, and tools to be used during implementation of the system-wide improvement framework;
- (6) Description of interim maintenance standards that will be implemented during the SWIF to mitigate conditions of uncorrected "Unacceptable" inspection items;