Meeting of the Central Valley Flood Protection Board
August 22, 2014

Staff Report – Transmittal of San Joaquin County Flood Control & Water Conservation District: Letters of Intent to Submit a System-Wide Improvement Framework to the U.S. Army Corps of Engineers

San Joaquin County

1.0 – ITEM

Consider authorizing the Acting Executive Officer to send a letter to the U.S. Army Corps of Engineers (USACE) transmitting a Letter of Intent (LOI) to develop and implement a System-Wide Improvement Framework (SWIF) prepared by the San Joaquin County Flood Control & Water Conservation District for nine Bear Creek and five Mormon Slough levee systems (Levee Systems) as defined by the USACE's Periodic Inspection Reports released in April of 2012.

2.0 – LOCATION

The Levee Systems are located wholly within San Joaquin County. The nine Bear Creek levee systems include State-federal Project levees (Project levees) that begin upstream just east of Highway 12 near Jack Tone Road, run west along Bear Creek through the northern part of the city of Stockton, ending just west of Interstate Highway 5. There are approximately 48 total miles of levee that run along Bear Creek, Paddy Creek, Middle Paddy Creek, South Paddy Creek, and Pixley Slough. The Bear Creek Project levees protect both urban and rural areas of Stockton and Lodi, including a population of approximately 45,000.

The five Mormon Slough levee systems include Project levees that begin upstream near Escalon-Bellota Road, extend west along Mormon Slough and part of Potter Creek, meet up with the Stockton Diverting Canal near Main Street in eastern Stockton, continue through Stockton to connect with the Calaveras River, and end at the San Joaquin River in western Stockton. There are approximately 35 miles of levee that run along the Calaveras River, Stockton Diverting Canal, Mormon Slough, and Potter Creek. The Mormon Slough Project levees protect both urban and rural areas of the city of Stockton, including a population of approximately 163,000.

3.0 – AGENCIES

The Central Valley Flood Protection Board (CVFPB) is the non-federal sponsor for the Project levees in the nine Bear Creek and five Mormon Slough Levee Systems. CVFPB shares sponsorship of one Mormon Slough levee systems with Reclamation District No. 2074 (RD 2074). CVFPB also shares sponsorship with the San Joaquin Area Flood Control Agency

(SJAFCA) for four of the Bear Creek and one of the Mormon Slough levee systems. The Local Maintaining Agency (LMA), San Joaquin County Flood Control & Water Conservation District, has agreements with the CVFPB to operate and maintain all of the Project levees in the Bear Creek and Mormon Slough Levee Systems.

In addition to operations and maintenance, the County plays a key role in planning, coordinating, and implementing flood risk reduction activities within the Levee Systems. The County is a key stakeholder in the Lower San Joaquin Regional Flood Management Plan effort, a component of which is to develop plans to maximize funding opportunities for system repairs and improvements. SJAFCA is also funding the effort to re-certify levees in the Levee Systems in FEMA.

The County will be taking the lead in developing a SWIF plan with the support and assistance of CVFPB, SJAFCA, and RD 2074 staff, and will collaborate with the USACE and environmental resource agencies.

4.0 – USACE PERIODIC INSPECTION

In the summer and fall of 2010, the USACE performed Periodic Inspections (PI) of the Levee Systems. PIs 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 levee conditions.

The PI Reports produced in April 2012 by the USACE determined that eight of the nine Bear Creek and four of the five Mormon Slough levee systems were active in the Public Law 84-99 rehabilitation program (PL 84-99) under the California Central Valley Flood System Improvement Framework agreement (Framework). Upon the expiration of the Framework in August 2012, one of the nine Bear Creek and none of the five Mormon Slough levee systems remained active in PL 84-99.

The County's continued work to address PI issues throughout the years since the PIs were performed has resulted in successful re-inspections of six of the Bear Creek and three of the Mormon Slough levee systems. Currently, seven of the nine Bear Creek and three of the five Mormon Slough levee systems are active in PL 84-99.

5.0 – PURPOSE OF THE LOI AND SWIF

USACE approval of the LOI will allow the County to move forward with the preparation of a SWIF that is intended to meet the policy and public safety objectives of USACE and the State of California, concurrent with making improvements that address system-wide issues and correct

unacceptable inspection items in a prioritized manner to optimize flood risk reduction. USACE approval of the LOI will allow the Levee Systems to become or remain active in PL 84-99 for a period of two years while the SWIF is developed.

The County is aware of the USACE interim policy effective March 21, 2014 (Interim Policy) that established a subset of inspection categories used to determine PL 84-99 eligibility. The SWIF will include plans to address all of the inspection categories, but will place the subset of inspection categories as higher priority.

If the SWIF is accepted by the USACE, the Levee Systems will remain active in PL84-99 while the local levee maintainers perform the work described in the SWIF.

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 the State-federal Project levees within the jurisdiction of the Sacramento-San Joaquin Drainage District, including the Bear Creek and Mormon Slough Levee Systems. In this capacity it is a CVFPB responsibility to transmit the LOI and subsequent SWIF to the USACE on behalf of the County. As fellow non-federal sponsors of portions of the Levee Systems, RD 2074 and SJAFCA endorse the LOI and its transmittal to USACE, and staff has received formal statements of support from both agencies (see Attachments 2 and 3).

Staff has reviewed the draft LOI (see Attachment 2) submitted by the County, 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).

In order to submit the LOI as soon as possible, the County has requested that the CVFPB authorize the Acting Executive Officer to transmit the LOI. Staff agrees with this request and is recommending that the CVFPB authorize the Acting Executive Officer to finalize a letter of transmittal (see Attachment 1) to the USACE and forward it with the LOI to the USACE.

7.0 – ATTACHMENTS

1. Draft Letter of Transmittal to USACE.
2. Letter of Intent prepared by the San Joaquin County Flood Control and Water Conservation District, Letter of Support from RD 2074
3. Letter of support from SJAFCA for an LOI to develop and implement a SWIF.
4. Excerpt from USACE Policy for Development and Implementation of System-Wide Improvement Frameworks, dated November 29, 2011.

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY **EDMUND G. BROWN JR.,** GOVERNOR

CENTRAL VALLEY FLOOD PROTECTION BOARD
3310 El Camino Ave., Rm. 151
SACRAMENTO, CA 95821
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August 22, 2014

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

Subject: San Joaquin County Flood Control and Water Conservation District Letter of Intent to Develop and Implement a System-Wide Improvement Framework Plan for the Bear Creek and Mormon Slough Levee Systems

Colonel Farrell:

The Central Valley Flood Protection Board (CVFPB) and fellow non-Federal sponsors, Reclamation District No. 2074 and the San Joaquin Area Flood Control Agency, wish to notify the U.S. Army Corps of Engineers (USACE) by this letter that the local maintaining agencies (LMA) for the Bear Creek and Mormon Slough levee systems (Levee Systems) intend to develop and implement a System-Wide Improvement Framework (SWIF) plan in order for the Levee Systems to regain or retain eligibility for rehabilitation assistance as authorized under Public Law 84-99 (PL 84-99). The LMA, the San Joaquin County Flood Control & Water Conservation District (County), will lead the SWIF effort.

The Levee Systems consist of about 48 miles of levee embankments along Bear Creek, Paddy Creek, Middle Paddy Creek, South Paddy Creek, and Pixley Slough, and approximately 35 miles of levee embankments along the Calaveras River, Stockton Diverting Canal, Mormon Slough, and Potter Creek. These levees were originally constructed by local interests and USACE, and improvements and remedial measures were implemented over the course of their existence to bring the levees up to federal standards. Due to the less rigorous State and Federal encroachment permitting standards of the past, however, some of the levee systems are ineligible in the PL 84-99 Rehabilitation Program.

Currently, two of the nine Bear Creek and two of the five Mormon Slough levee systems are inactive in PL 84-99. The Levee Systems all have Unacceptable ratings for issues that will require a long-term, worst-first plan to resolve efficiently. The County has been actively working with CVFPB staff to address the Levee Systems' Unacceptable ratings, and the issues in the Levee Systems have been monitored, researched, or addressed on an ongoing basis. These actions, along with routine operations & maintenance (O&M) activities, will continue in the interim of developing and implementing the SWIF plan.

The average annual O&M budget for the County is approximately $4.6 million. The County is investigating the potential for creating new assessments if additional funding becomes necessary to reconcile unacceptable issues over the duration of implementation of a SWIF plan.

The County will continue levee maintenance under California Water Code Section 12642, and as guided by the USACE's Standard O&M Manual for the San Joaquin River Flood Control Project, integrating the levee vegetation management approach embodied in the Central Valley Flood Protection

Colonel Farrell
August 22, 2014

Plan. SWIF development will provide a pathway for reaching functional compatibility between USACE policy and CVFPB levee vegetation management strategy during the two-year SWIF development period.

The County is aware of the USACE interim policy effective March 21, 2014 (Interim Policy) that established a subset of inspection categories used to determine PL 84-99 eligibility. The SWIF will include plans to address all of the inspection categories, but will place the subset of inspection categories as higher priority.

USACE approval of this LOI will allow the County to move forward with preparation of a SWIF intended to meet the policy and public safety objectives of USACE, the State of California, and the local agencies, concurrent with making improvements that address system-wide issues and correct unacceptable inspection items in a prioritized manner to optimize flood risk reduction.

We respectfully submit this LOI on behalf of the County in accordance with the USACE November 29, 2011 *Policy for Development and Implementation of System-Wide Improvement Frameworks,* and request reinstatement and extension of eligibility in the PL 84-99 Rehabilitation Program for the Levee Systems while the County develops a SWIF. Upon approval of this LOI the County will commence efforts to develop a SWIF for USACE approval.

Sincerely,

Leslie Gallagher
Acting Executive Officer

Attachments:

1. San Joaquin County Flood Control & Water Conservation District Letter of Intent to Develop and Implement a System-Wide Improvement Framework and Reclamation District 2074 Letter of Support
2. San Joaquin Area Flood Control Agency Letter of Support for the LOI to Develop and Implement a SWIF

cc: Mr. John Maguire, San Joaquin County Public Works
P.O. Box 1810
1810 East Hazelton Avenue
Stockton, California 95201

Mr. George Hartmann, Reclamation District 2074
Mr. Jim Giottonini, San Joaquin Area Flood Control Agency
Mr. Michael Rossiter, Peterson Brustad, Inc.

Mr. Len Marino
Mr. Michael Wright
Ms. Alison Tang
Central Valley Flood Protection Board

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July 18, 2014

Ms. Leslie Gallagher
Acting Executive Officer
Central Valley Flood Protection Board
3310 El Camino Avenue, Room 151
Sacramento, California 95821

SUBJECT: BEAR CREEK AND CALAVERAS RIVER SYSTEM PROJECT LEVEES
LETTER OF INTENT TO DEVELOP AND IMPLEMENT A SYSTEM-WIDE
IMPROVEMENT FRAMEWORK PLAN

Dear Ms. Gallagher:

San Joaquin County Department of Public Works (County) has taken the lead in developing the supporting materials for a Letter of Intent for a System-Wide Improvement Framework plan, in order for the Bear Creek and Calaveras River System Project levees to regain eligibility for rehabilitation assistance authorized under Public Law 84-99. In undertaking this effort, the County is working closely with its neighboring levee maintaining agency, Reclamation District 2074 who is responsible for a portion of the system.

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 for the levee system, the County respectfully requests that the Central Valley Flood Protection Board forward this package to the U.S. Army Corps of Engineers on behalf of San Joaquin County Department of Public Works.

This submittal reflects the updated system ratings received by the United States Army Corps of Engineers for the Bear Creek-Units 7 West and 21 Levee System, and supersedes the July 3, 2014 submittal.

Should you have any questions, please do not hesitate to contact me at (209)953-7617.
Sincerely,

JOHN I. MAGUIRE. P.E.
Engineering Services Manager

JIM:MW:me
FM-14G005-ME1

c: George Hartmann, Reclamation District 2074
Jim Giottonini, San Joaquin Area Flood Control Agency
Michael Rossiter, Peterson Brustad, Inc.

Attachments:

1. Bear Creek and Calaveras River System Project Levees-Project Letter of Intent Support Information

2. Letter of Support from RD 2074

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ATTACHMENT 1 – SUPPORT INFORMATION
Bear Creek Levee System Letter of Intent

I. Introduction

Through the non-federal sponsor, the Central Valley Flood Protection Board (CVFPB), San Joaquin County is requesting approval of this System-Wide Improvement Framework (SWIF) Letter of Intent (LOI) for continued rehabilitation eligibility under P.L. 84-99 while it develops a SWIF for levees along Bear Creek, Pixley Slough, Mosher Creek, Paddy Creek, South Paddy Creek, and Middle Paddy Creek (the "Bear Creek system"). This attachment describes unacceptable deficiencies in the levee system and system-wide issues that will be addressed under the SWIF, and justifies how a system-wide approach will optimize flood risk reduction (i.e., will correct deficiencies in a manner that provides the largest flood risk reduction in the most efficient and economical manner).

The Bear Creek system includes approximately 48 miles of levees as summarized below:

- Bear Creek: approximately 32 miles
- Paddy Creek: approximately 8 miles
- Middle Paddy Creek: approximately 3 miles
- South Paddy Creek: approximately 2 miles
- Pixley Slough: approximately 3 miles

All levees are federally authorized, non-federally operated and maintained flood protection projects. The CVFPB is the non-federal sponsor while the San Joaquin County Flood Control and Water Conservation District (SJCFC&WCD) operates and maintains all of the segments.

II. Identification of Levee System

The Bear Creek system to be covered by the SWIF is listed in the National levee Database (NLD) under 9 System IDs and 18 Segment IDs. Table 1 provides a summary of the systems and their current PL 84-99 status.

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Table 1. Summary of Bear Creek levee segments.

System	NLD System ID	Segment	Description/Area	Length (miles)	NLD Segment ID	PL84-99 Status
1	5205000041	BC01	Unit 7 West - Bear Creek right bank below Pixley Slough	1.72	5204000041	Active per 7/31/2013 re-inspection notice[a]
		BC09	Unit 21 - Pixley Slough right bank	1.56	5204000049	
2	5205000042	BC02	Unit 7 - Bear Creek right bank above Pixley Slough	6.02	5204000042	Active per 10/17/2012 re-inspection notice[a]
		BC10	Unit 22 - Pixley Slough left bank	2.19	5204000050	
		BC11	Unit 23 - Spur Levee along railroad tracks, Bear Creek right bank	0.81	5204000051	
3	5205000043	BC03	Unit 7 East - Bear Creek right bank	6.54	5204000043	Active per 10/17/2012 re-inspection notice[a]
4	5205000431	BC18	Unit 8 - Bear Creek left bank west of Interstate 5	0.85	5204000040	Inactive as of 2009
5	5205000044	BC04	Unit 8 - Bear Creek left bank below Mosher Creek	9.39	5204000044	Inactive as of 2012
		BC12	Units 25 and 27 - Mosher Creek left bank	1.46	5204000052	
6	5205000045	BC05	Unit 8 - Bear Creek left bank above Mosher Creek	2.45	5204000045	Active per 10/17/2012 re-inspection notice[a]
		BC14	Unit 9 - Paddy Creek left bank above Paddy Creek	1.11	5204000053	
		BC13	Units 24 and 26 - Mosher Creek right bank	1.77	5204000054	
7	5205000046	BC06	Unit 8 East - Bear Creek left bank above Paddy Creek	3.39	5204000046	Active per 10/17/2012 re-inspection notice[a]
		BC15	Units 10 and 11 - Paddy Creek right bank	3.86	5204000055	
8	5205000048	BC16	Unit 10 East - South Paddy Creek right bank	0.98	5204000048	Active per 5/8/2013 re-inspection notice[a]
		BC17	Unit 12 South - Paddy Creek left bank	1.33	5204000056	
		BC08	Unit 13 - Middle Paddy Creek Left bank	1.36	5204000057	
9	5205000047	BC07	Unit 12 - North Paddy Creek left bank above Middle Paddy Creek	1.3	5204000047	Active
			Total Levee Miles:	**48.09**		

[a]The re-inspection notices set a 4/23/2014 maintenance deadline which will result in the noted systems becoming inactive upon the next USACE inspection.

The systems listed as "Active as of 10/17/2012" were initially removed from the PL 84-99 program as a result of unacceptable items found in USACE's 2010 Periodic Inspection (PI). These systems were then reinstated into the PL 84-99 program following the County's correction of some of the most critically unacceptable items. Once these deficiencies were corrected, a re-inspection request was sent by the CVFPB to USACE dated October 17, 2012. Sysyem 1 followed the same scenario with a reinstatement date of July 31, 2013, as well as System 8 which has a reinstatement date of May 8, 2013.

These systems still have remaining unacceptable items that need to be corrected before the next USACE inspection in order to remain active in the program. System 9 is rated as minimally acceptable and is currently active, but has a few non-critical unacceptable items. San Joaquin County therefore intends for all Bear Creek levee segments to be included in this SWIF LOI.

A map of the Bear Creek systems is included in Figure 1.

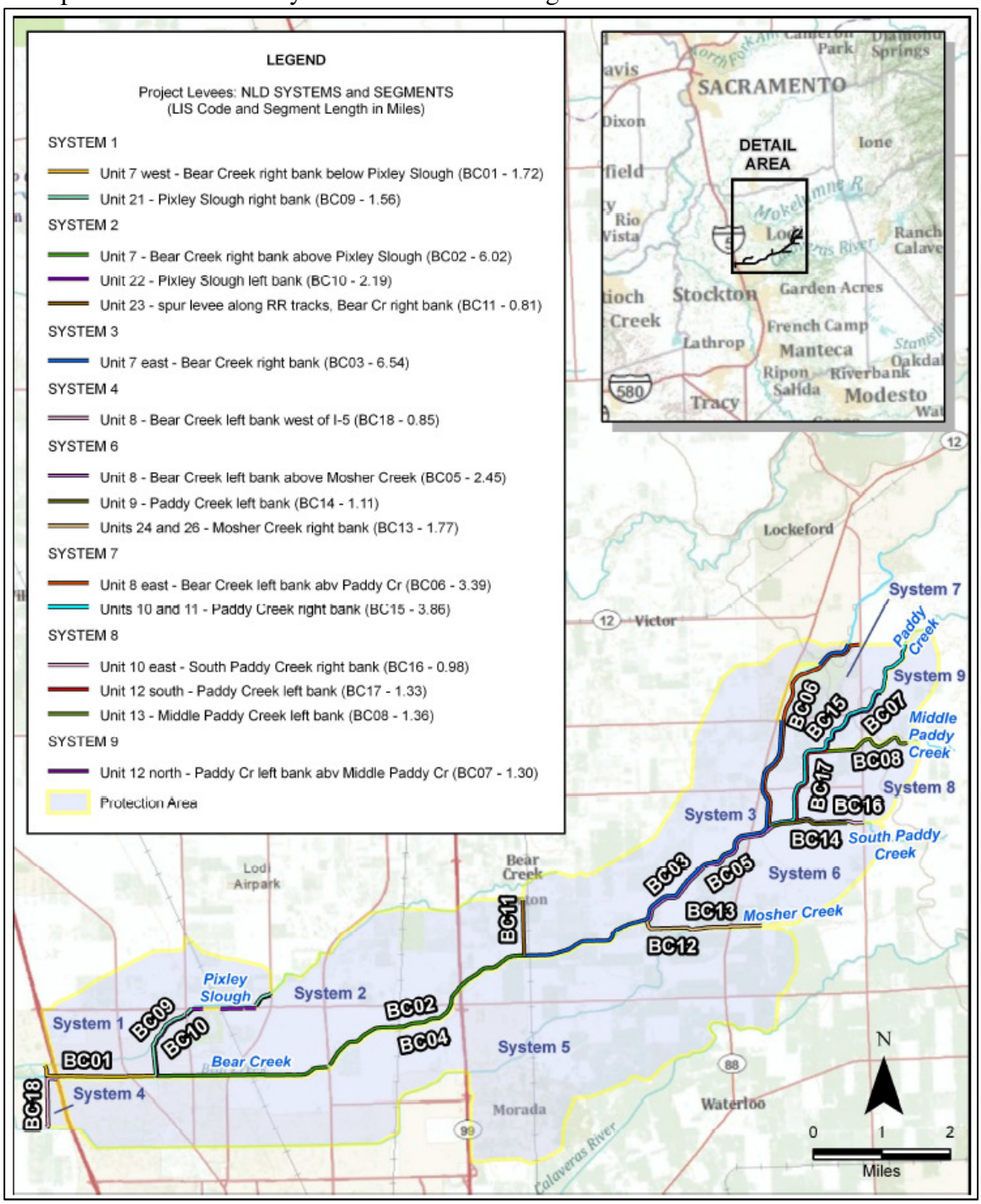

Figure 1. Bear Creek Levee System Location Map (Source: USACE 2010 PIR)

History of Levee System

The Bear Creek Project was authorized on December 22, 1944, by the Flood Control Act in Public Law 534. Levees for the Bear Creek system were developed in two phases: the 1960s Bear Creek project and the 1990s levee improvements. USACE designed the Bear Creek project in the early 1960s and completed it in the mid-1960s.

Performance of the Bear Creek system during major flood events range from overtopping that flooded 15,800 acres in 1958 (before the Federal levees were complete) to successfully containing all flood events since construction with no reported geotechnical distress. Table 2 summarizes USACE reports on flood history for the system. The reports included in this summary were prepared before the 1990s flood improvement project.

Table 2. History of Bear Creek Flooding (Source: USACE 2010 PIR).

Document	Date	Summary
Report on November-December 1950 Floods, Sacramento-San Joaquin River Basins, California, & Truckee, Carson & Walker Rivers, California & Nevada (USACE, 1951)	March 1951	"The flooded area of Bear Creek during the November and December floods was an irregular-shaped area between Jacktone Road and United States Highway 99, extending along both distributary branches of Bear Creek and up the left bank of the South Fork tributary. Approximately 2,100 acres of land were inundated to depths varying from a few inches to 2 feet."
Report on December 1955 Floods, Sacramento-San Joaquin River Basins, California, & Truckee, Carson & Walker Rivers, California & Nevada (USACE, 1956).	May 1956	"Bear Creek overflowed its banks to flood about 7,000 acres of land, from a point above Jack Tone Road down to the Davis Road northwest of Stockton. West of Alpine Road, the flooded area was nearly 2 miles wide. Floodwaters stood in depths from a few inches to 3 feet, for durations of a few days to 2 weeks."
Report on Floods of February-June 1958, Sacramento-San Joaquin-Tulare Lake Basins, California (USACE, 1958).	November 1958	"Bear Creek overflowed its banks during April, inundating about 15,800 acres… The flood plain extended from above the town of Clements and west to the San Joaquin Delta in the vicinity of Lincoln Village, north of Stockton… The depth of flooding ranged from a few inches to 3 feet, with durations varying from 12 hours to 3 weeks. Small private levees along the creek channel were ineffective in protecting against the high flows."
Report on Floods of Dec. 1964 and Jan. 1965, Sacramento-San Joaquin Basins, California, and Western Great Basin, California and Nevada (USACE, 1965b).	October 1965	"A total of 200 acres was flooded by Stockton area streams (Calaveras River and Morrison Slough, Littlejohn Creek, Duck Creek, and Bear Creek) probably due to inadequate local storm drainage facilities."
Report on Floods, Central Valley of California, 1966-67 Flood Season (USACE, 1967).	December 1967	Flooding of Bear Creek is not reported.
Report on Floods, Central Valley of California, 1968-69 Flood Season (USACE, 1970).	August 1970	Flooding of Bear Creek is not reported.

Before Levees

Following regional flooding in the early 1990s, FEMA prepared draft revised flood insurance rate maps (FIRMs) for the Stockton area in 1994. The San Joaquin Area Flood Control Agency (SJAFCA) then took the lead role in the levee improvement project for the Bear Creek system.

In 1998, USACE Sacramento District and the California State Reclamation Board reviewed plans for the Bear Creek levee system improvement project. The goal for this project was to restore 100-year flood protection within the urban areas in and around the City of Stockton including portions of unincorporated San Joaquin County. The improvements consisted of raising and strengthening existing earthen levees, as well as construction of new floodwalls and detention basins. The system was re-designed to contain the 100-year high water event with a minimum of 3 feet of freeboard.

In 1999, the Bear Creek levee improvement project was completed under SJAFCA contracts. The USACE certified the levees per 44CFR65.10(e), and FEMA then finalized its new FIRMs, recognizing the levees as accredited. Since then, there have been no major flood performance deficiencies reported.

Population at Risk

The Bear Creek levee system protects both rural and urban areas between Stockton and Lodi. Table 3 summarizes the population protected by these levees which totals over 45,000 residents.

Table 3. Population protected by the Bear Creek levee system (Source: CVFPB PL84-99 Eligibility Goal Forms, 2013).

Levee Segment	Population Protected
Bear Creek - Units 7 west and 21	2,996
Bear Creek - Units 8, 25, and 27	38,246
Bear Creek - Units 8 west of I-5	1,074
Bear Creek - Unit 12 north	55
Bear Creek - Unit 7 east	504
Bear Creek - Units 12 south, 10, and 13	139
Bear Creek - Units 7, 22, and 23	1,332
Bear Creek - Units 8, 10, and 11	240
Bear Creek - Units 8, 24, 26, and 9	537
Total Population Protected	45,123

In addition to the population, surrounding residential, commercial, and agricultural infrastructure which are vital to the local economy are also protected by the levee system.

Status of Vegetation Variance

An approved vegetation variance is currently not in place. Once the SWIF process is underway, it will be determined if a variance is necessary.

III. Description of Deficiencies

Deficiencies for Bear Creek levees have been identified in USACE's April 2012 Periodic Inspection Report (PIR) and subsequent re-inspection notices. Table 4 summarizes the deficiencies for each of the levee segments which will inform the development of the SWIF plan. Many of the most critical deficiencies have already been corrected as detailed in Section IV.

Table 4 illustrates that there are a variety of issues identified throughout the Bear Creek system. The following unacceptable items were wide-spread, systematic issues identified in the latest USACE PI: unwanted vegetation growth, sod cover, encroachments, depressions/rutting, cracking, animal control, and bank protection. Of those issues, encroachments and animal control are part of USACE's interim policy issued on March 21, 2014. Given the complexity of the deficiencies and associated corrective actions, such efforts would be best completed through a SWIF process.

Resolving these issues within the Bear Creek system will reduce flood hazards and consequences in a risk-prioritized manner over time, on a system-wide basis with the objective to correct the worst/highest risk deficiencies first. A SWIF will be a way to coordinate this effort into one coherent plan.

It is the intent of the non-Federal sponsor to repair deficiencies in accordance with USACE Operation and Maintenance (O&M) standards.

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Table 4. Unacceptable items listed for each Bear Creek levee segment (Source: USACE 2012 PI Report).

	Levee Embankment Item	System 1		System 2			System 3	System 4	System 5		System 6			System 7		System 8			System 9
		BC01	BC09	BC02	BC10	BC11	BC03	BC18	BC04	BC12	BC05	BC13	BC14	BC06	BC15	BC08	BC16	BC17	BC07
General	Operations and Maintenance Manuals	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
	Emergency Supplies and Equipment	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
	Flood Preparedness and Training	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Items Affecting PL84-99 Eligibility	Encroachments	M	M	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
	Closure Structures	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Slope Stability	M	M	M	M	M	M	A	M	M	M	M	M	U	M	A	A	A	A
	Erosion/Bank Caving	M	M	M	U	A	M	M	M	U	M	M	M	M	M	M	A	M	M
	Animal Control	A	A	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
	Culverts/Discharge Pipes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Underseepage Relief Wells/Toe Drainage Systems	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Other Items	Unwanted Vegetation Growth	M	M	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
	Sod Cover	U	U	M	U	N/A	U	M	U	U	M	U	U	U	U	N/A	N/A	N/A	M
	Settlement	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
	Depressions/Rutting	M	U	U	M	U	U	M	U	U	U	U	U	U	U	A	A	A	A
	Cracking	A	U	U	M	M	U	A	U	U	U	U	A	A	A	A	A	A	A
	Riprap Revetments & Bank Protection	U	U	U	U	N/A	U	N/A	U	A	U	A	U	U	U	U	U	U	U
	Revetments other than Riprap	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Seepage	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
	Notes: A = acceptable; M = minimally acceptable; U = unacceptable; N/A = not applicable.																		

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IV. Commitment of Non-Federal Resources towards the SWIF

San Joaquin County will secure all funding necessary for correction of unacceptable items. The Bear Creek levee system O&M is funded by a mixture of property taxes and assessment revenue from San Joaquin County Flood Control Zone 9 and San Joaquin Area Flood Control Agency (SJAFCA) which collects revenue under Assessment District No. 96-1 (AD 96-1). Table 5 summarizes the consistent revenue streams available to San Joaquin County as the acting levee maintaining agency (LMA).

Table 5. Past and current revenue available for levee maintenance activities (Source: San Joaquin County annual budget summaries).

	Fiscal Year			
Source	'11-'12	'12-'13	'13-'14	AVERAGE
San Joaquin County	$3,874,983	$3,708,517	$3,781,533	$3,788,344
SJAFCA	$768,304	$887,668	$900,000	$851,991
TOTAL	$4,643,287	$4,596,185	$4,681,533	$4,640,335

The combined annual O&M income for the County averages approximately $4.6 million. Typically 25%-35% of this is dedicated specifically to the Bear Creek system. These revenues have supported, and will continue to support, 100% of the annual O&M activities for the levee system. San Joaquin County is currently investigating the potential for creating new assessments under Zone 9 and SJAFCA's AD 96-1 if additional funding becomes necessary to implement the SWIF plan.

The County has already spent an estimated $300,000 to correct some of the most critical "Red" and "Orange" unacceptable items that were identified in the original 2010 USACE PI. "Red" and "Orange" items are recognized by USACE as "likely to prevent performance in the next flood event".

"Red" deficiencies that were corrected were detailed in the County's April 19, 2011 letter to the CVFPB and include:

- Animal Control: 57 unacceptable items across 5 levee systems
- Encroachments: 1 unacceptable item in Bear Creek System 2
- Slope Stability: 1 unacceptable item in Bear Creek System 7

"Orange" deficiencies that were corrected were detailed in the County's March 9, 2012 letter to the CVFPB and include:

- Erosion/Bank Caving: 21 unacceptable items across 3 Bear Creek levee systems
- Encroachments: 1 unacceptable item in Bear Creek System 2
- Slope Stability: 1 unacceptable item in Bear Creek System 5

The CVFPB then sent a re-inspection request to USACE dated October 17, 2012. USACE responded in February 2013 and reinstated 4 of Bear Creek's inactive levee systems on the condition that the County continued work to address the remaining unacceptable items.

The estimated cost to correct all remaining unacceptable items is $35 million. This cost estimate is conservative and is considered an "order of magnitude" estimate which will be refined during development of the SWIF. No funding shortfalls for this work are foreseen.

In addition to the activities listed above, the following flood protection projects are currently underway and are funded at the State and local levels:

- Lower San Joaquin Regional Flood Management Plan (RFMP):
  San Joaquin County is a key stakeholder in the Lower San Joaquin RFMP which is a $1.65M effort funded by State bonds made available through California State Proposition 1E and administered by the California Department of Water Resources (California DWR). An important component of this comprehensive regional flood management planning effort is the development of a regional funding plan to address funding deficiencies and identify mechanisms to maximize future funding opportunities for system repairs and improvements. The RFMP is scheduled to be completed in Fall 2014.

- FEMA Levee Re-Certification Projects for the Bear Creek Levee System:
  SJAFCA is currently funding the effort to re-certify levees in the Bear Creek system along Bear Creek, Pixley Slough, Paddy Creek, Mosher Diversion, and Upper Mosher Creek. This includes analyses required per 44CFR65.10, such as freeboard, interior drainage, embankment protection, geotechnical issues, closures, and O&M information. The recertification effort for the Bear Creek system totals $637K and is scheduled to be completed in December 2014.

V. Interim Risk-Reduction Measures

An Interim Risk Reduction Measures Plan (IRRMP) will be in place during the development and implementation of San Joaquin County's SWIF. The IRRMP will include an emergency response (ER) plan that addresses the increased risk to public safety caused by deficiencies within the levee system. This will involve close coordination with County emergency managers to improve communication and evacuation planning and to update emergency operations to address areas of increased interim risk.

The IRRM will also include monitoring of unacceptable deficiencies and flood readiness equipment/materials.

San Joaquin County is set to participate in the following ER projects which are funded by State grants through Proposition 1E and Proposition 84:

- Statewide Flood ER Grant
  - San Joaquin County has been awarded $180K for developing ER plans and upgrading the ALERT 2 stream gage system

- Delta Flood ER Grant
  - San Joaquin County has been awarded $1.6M for developing ER plans/maps and for ER training
  - San Joaquin County FC&WCD has been awarded $250K for upgrading the ALERT 2 stream gage system

- Delta Emergency Communications Equipment Grant
  - San Joaquin County has been awarded $1M for upgrading regional communication systems in the Delta region for effective response to high water and flood emergencies

The above projects total over $3M and will play a key role in developing a comprehensive IRRMP as San Joaquin County goes through the SWIF process.

Finally, San Joaquin County is currently implementing actions to reduce flood risk including:

- Routine maintenance activities: the County continues to reduce risk by repairing items that are listed as unacceptable in the USACE PIR.

- Campaigns for public awareness of flood risk: the County continually educates the public through website updates and the release of informational brochures.

VI. *Interagency Collaborative Efforts*

San Joaquin County will coordinate with the respective risk management, emergency response, and land use agencies in the region.

Collaboration with a number of agencies, including USACE, is planned for the development, implementation, and oversight of the SWIF. These agencies 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)

VII. Anticipated Permitting Requirements

The development and implementation of the SWIF will require consultation with a number of resource, regulatory, and permitting agencies. For example, several endangered and threatened species are found in the region. Species in or adjacent to the Bear Creek system include:

- Valley Elderberry Longhorn Beetle (USFWS)
- Giant Garter Snake (USFWS)
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- Central Valley steelhead (NMFS)
- North American Green Sturgeon (NMFS)

The required permits and approvals to implement the SWIF will likely include:

- Compliance with the California Environmental Quality Act (CEQA)
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- Central Valley Flood Protection Board encroachment permits
- Compliance with the National Environmental Policy Act (NEPA)
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- National Marine Fisheries Services (protected species consultation)
- Clean Water Act Section 404 permits
- USACE approvals under 33 USC 408

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ATTACHMENT 1 – SUPPORT INFORMATION
Mormon Slough Project Letter of Intent

I. Introduction

Through the non-federal sponsors, the Central Valley Flood Protection Board (CVFPB) and Reclamation District No. 2074 (RD 2074), San Joaquin County requests approval of this System-Wide Improvement Framework (SWIF) Letter of Intent (LOI) for continued rehabilitation eligibility under Public Law (PL) 84-99 while it develops a SWIF for levee systems along the Calaveras River, Stockton Diverting Canal, Mormon Slough, Potter Creek A, the Stockton Deepwater Ship Channel and Tenmile Slough. This attachment describes unacceptable deficiencies in the levee systems and system-wide issues that will be addressed under the SWIF, and justifies how a system-wide approach will optimize flood risk reduction (i.e., will correct deficiencies in a manner that provides the largest flood risk reduction in the most efficient and economical manner.)

The "Mormon Slough Project" is made up of 5 levee systems and 13 levee segments. It includes approximately 35 miles of levees which are all non-federally operated and maintained. All segments are federally authorized with the exception of 3.56 miles along RD 2074 (segments SBT1, SBT2, and SBT3). RD 2074 levees were accepted into the USACE Rehabilitation and Inspection Program on September 25, 2000. All the federally authorized levees are sponsored by the CVFPB, and the non-federally authorized levees are sponsored by RD 2074

II. Identification of Levee System

The Mormon Slough Project levees to be covered by the SWIF are listed in the National levee Database (NLD) under 5 System IDs and 13 Segment IDs. Table 1 provides a summary of the systems and their current PL 84-99 status.

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Table 1. Summary of the Mormon Slough Project levee segments.

System	NLD System ID	Segment	Description/Area	Levee Miles	Sponsor(s)	Maintenance Authority	NLD Segment ID	PL84-99 Status
1	5205000281	SBT1	Sargent-Barnhardt Tract Unit 1—Stockton Deep Water Channel	0.72	RD 2074	RD 2074	5204000351	Inactive as of 2012
		SBT2	Sargent-Barnhardt Tract Unit 2—Tenmile Slough	1.43	RD 2074	RD 2074	5204000352	
		SBT3	Sargent-Barnhardt Tract Unit 3—Fourteenmile Slough	1.41	RD 2074	RD 2074	5204000353	
		MSL1	Unit 15 west – Calaveras River right bank	6.27	CVFPB	SJCFC&WCD	5204000281	
2	5205000283	MSL2	Unit 15—Calaveras River left bank above Stockton Diverting Canal	0.7	CVFPB	SJCFC&WCD	5204000283	Active per 10/17/2012 re-inspection notice[a]
		MSL3	Unit 15 – Stockton Diverting Canal right bank	4.8	CVFPB	SJCFC&WCD	5204000288	
		MSL4	Unit 15 – Mormon Slough right bank above Diverting Canal	2.13	CVFPB	SJCFC&WCD	5204000289	
3	5205000282	MSL6	Unit 16 – Calaveras River left bank below Diverting Canal	4.79	CVFPB	SJCFC&WCD	5204000280	Inactive as of 2009
		MSL7	Unit 16 – Stockton Diverting Canal left bank	4.81	CVFPB	SJCFC&WCD	5204000282	
		MSL8	Unit 16 – Mormon Slough left bank above Diverting Canal	2.21	CVFPB	SJCFC&WCD	5204000286	
		MSLP	Unit 18 – Potter Creek left bank	0.91	CVFPB	SJCFC&WCD	5204000287	
4	5205000285	MSL9	Unit 16 east – Mormon Slough left bank at railroad tracks	0.46	CVFPB	SJCFC&WCD	5204000285	Active per 10/17/2012 re-inspection notice[a]
5	5205000284	MSL5	Unit 15 east –Mormon Slough right bank	3.71	CVFPB	SJCFC&WCD	5204000284	Active per 10/17/2012 re-inspection notice[a]
			Total Levee Miles:	**34.35**				

RD = Reclamation District
SJCFC&WCD = San Joaquin County Flood Control & Water Conservation District
CVFPB = Central Valley Flood Protection Board
SJAFCA = San Joaquin Area Flood Control Agency

[a]The re-inspection notices set a 4/23/2014 maintenance deadline which will result in the noted systems becoming inactive upon the next USACE inspection.

The systems listed as "Active as of 10/17/2012" were initially removed from the PL 84-99 program as a result of unacceptable items found in USACE's 2010 Periodic Inspection (PI). These systems were then reinstated into the PL 84-99 program following the County's correction of some of the most critically unacceptable items. Once these deficiencies were corrected, a re-inspection request was sent by the CVFPB to USACE dated October 17, 2012. These segments still have remaining unacceptable items that need to be corrected before the next USACE inspection in order to remain active in the program. San Joaquin County and RD 2074 therefore intend for all Mormon Slough Project levee segments to be included in this SWIF LOI.

A map of the Mormon Slough Project systems is included in Figure 1.

History of Levee System

The Mormon Slough Project levees were developed during four periods:

- Pre-1965 improvements- Levees were developed as part of the Stockton Deep Water Channel harbor. Local landowners had also constructed discontinuous levees.
- The Mormon Slough Project of the 1960s- Authorized on October 23, 1962, by the Flood Control Act in Public Law 87-874
- Emergency Bank Protection in 1984- Along the right bank of Mormon Slough at Jack Tone Road
- Levee Improvements in the 1990s- Mormon Slough and Potter Creek Levee Improvements, Stockton Diverting Canal Levee Improvements, and Upper Calaveras River Levee Improvements

For the original 1960s project, the sponsor was the Central Valley Flood Protection Board (CVFPB).

In 1998, USACE Sacramento District and the California State Reclamation Board reviewed plans for the Mormon Slough/Calaveras River levee system improvement project. The goal for this project was to restore 100-year flood protection within the urban areas in and around the City of Stockton including portions of unincorporated San Joaquin County. The improvements consisted of raising and strengthening existing earthen levees, as well as construction of new floodwalls. The system was re-designed to contain the 100-year high water event with a minimum of 3 feet of freeboard.

In 1999, the levee improvement project was completed under SJAFCA contracts. The USACE certified the levees per 44CFR65.10(e), and FEMA then finalized its new FIRMs, recognizing the levees as accredited. Since then, there have been no major flood performance deficiencies reported.

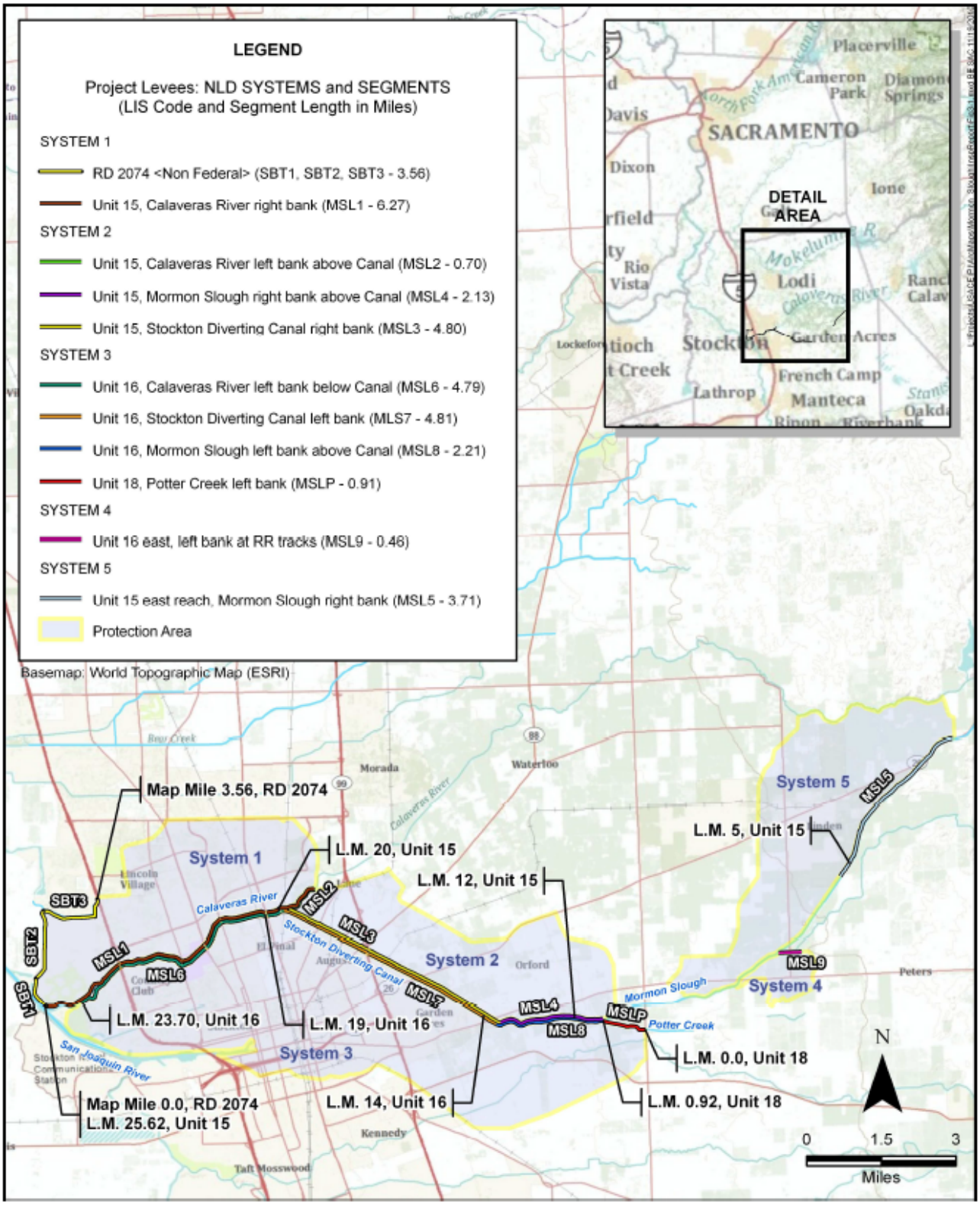

Figure 1. Mormon Slough Levee System Location Map (Source: USACE PI Report)

Population at Risk

The Mormon Slough Project levees protect both rural and urban areas in and around the City of Stockton. Table 2 summarizes the population protected by these levees which totals approximately 163,000 residents.

Table 2. Population protected by the Mormon Slough Project levees (Source: CVFPB PL84-99 Eligibility Goal Forms, 2013).

Levee System	Population Protected
Mormon Slough - Calaveras River - Diverting Canal Left Banks	93,065
Mormon Slough - Diverting Canal Right Banks	50,564
Mormon Slough - Left Bank along RR tracks- Unit 16	19
Mormon Slough - Right Bank - Unit 15 East	19,196
Total Population Protected by Mormon Slough Project	**162,844**

In addition to the population, surrounding residential, commercial, and agricultural infrastructure which are vital to the local economy are also protected by the levee system.

Status of Vegetation Variance

An approved vegetation variance is currently not in place. Once the SWIF process is underway, it will be determined if a variance is necessary.

III. Description of Deficiencies

Deficiencies for the Mormon Slough Project levees have been identified in USACE's April 2012 Periodic Inspection Report (PIR). Table 3 summarizes the deficiencies for each of the levee segments which will inform the development of the SWIF plan. Many of the most critical deficiencies have already been corrected as detailed in Section IV.

Table 3 illustrates that there are a variety of issues identified throughout the Mormon Slough system. The following unacceptable items were wide-spread, systematic issues identified in the latest USACE PI: unwanted vegetation growth, sod cover, encroachments, depressions/rutting, and animal control. Of those issues, encroachments and animal control are part of USACE's interim policy issued on March 21, 2014. Given the complexity of the deficiencies and associated corrective actions, such efforts would be best completed through a SWIF process.

Resolving these issues throughout the Mormon Slough Project levees will reduce flood hazards and consequences in a risk-prioritized manner over time, on a system-wide basis with the objective to correct the worst/highest risk deficiencies first. A SWIF will be a way to coordinate this effort into one coherent plan.

It is the intent of the non-Federal sponsor to repair deficiencies in accordance with USACE Operation and Maintenance (O&M) standards.

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Table 3. Unacceptable items listed for each Mormon Slough Project levee segment (Source: 2012 USACE PI Report).

Levee Embankment Item	System 1				System 2			System 3				System 4	System 5
	MSL1	SBT1	SBT2	SBT3	MSL2	MSL3	MSL4	MSL6	MSL7	MSL8	MSLP	MSL9	MSL5
Operations and Maintenance Manuals	M	M	M	M	M	M	M	M	M	M	M	M	M
Emergency Supplies and Equipment	M	M	M	M	M	M	M	M	M	M	M	M	M
Flood Preparedness and Training	M	M	M	M	M	M	M	M	M	M	M	M	M
Unwanted Vegetation Growth	U	U	U	U	U	U	U	U	U	U	U	U	U
Sod Cover	U	U	U	U	M	U	U	U	U	M	M	M	U
Encroachments	U	U	U	U	U	U	U	U	U	U	U	U	U
Closure Structures	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Slope Stability	M	A	A	A	A	M	M	M	A	A	A	M	U
Erosion/Bank Caving	U	A	A	A	U	A	A	U	A	A	A	A	A
Settlement	M	A	A	A	A	A	A	A	A	A	A	A	A
Depressions/Rutting	U	M	M	A	U	U	M	U	U	U	M	U	M
Cracking	U	A	M	M	A	M	A	M	U	U	M	U	U
Animal Control	U	U	M	M	U	U	U	U	U	U	M	M	U
Culverts/Discharge Pipes	N/A	N/A	N/A	N/A	N/A	U	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Riprap Revetments & Bank Protection	U	N/A	N/A	N/A	N/A	U	U	A	U	U	N/A	N/A	N/A
Revetments other than Riprap	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	U
Underseepage Relief Wells/Toe Drainage Systems	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Seepage	A	A	A	A	A	A	A	A	A	A	A	A	A
Pump Station	-	-	-	-	N/A	U	N/A	-	-	-	-	-	-
Notes: A = acceptable; M = minimally acceptable; U = unacceptable; N/A = not applicable; - = no data.													

IV. Commitment of Non-Federal Resources towards the SWIF

San Joaquin County will secure all funding necessary for correction of unacceptable items. Ninety percent (90%) of the Mormon Slough Project O&M is funded by a mixture of property taxes and assessment revenue from San Joaquin County Flood Control Zone 9 and San Joaquin Area Flood Control Agency (SJAFCA) which collects revenue under Assessment District No. 96-1 (AD 96-1). Table 4 summarizes the consistent revenue streams available to San Joaquin County as the acting levee maintaining agency (LMA).

Table 4. Past and current revenue available for levee maintenance activities (Source: San Joaquin County annual budget summaries).

	Fiscal Year			
Source	'11-'12	'12-'13	'13-'14	AVERAGE
San Joaquin County	$3,874,983	$3,708,517	$3,781,533	$3,788,344
SJAFCA	$768,304	$887,668	$900,000	$851,991
TOTAL	$4,643,287	$4,596,185	$4,681,533	$4,640,335

The combined annual O&M income for the County averages approximately $4.6 million. Typically 25% of this is dedicated specifically to the Mormon Slough Project.

RD 2074 also collects assessments for the 3.56 miles of levees that they maintain.

Combined, these revenues have supported, and will continue to support the annual O&M activities for the levee system. San Joaquin County is currently investigating the potential for creating new assessments under Zone 9 and SJAFCA's AD 96-1 if additional funding becomes necessary to implement the SWIF plan.

The County has already spent an estimated $375,000 to correct some of the most critical "Red" and "Orange" unacceptable items that were identified in the original 2010 USACE PI Report. "Red" and "Orange" items are recognized by USACE as "likely to prevent performance in the next flood event".

"Red" deficiencies that were corrected were detailed in the County's April 19, 2011 letter to the CVFPB and include:

- Animal Control: 40 unacceptable items across 7 levee systems
- Encroachments: 4 unacceptable items within 3 levee systems
- Slope Stability: 1 unacceptable item in System 5
- Erosion/Bank Caving: 5 unacceptable items within 2 levee systems
- Intake and Discharge Piping: 3 unacceptable items in System 2
- Flap Gates: 2 unacceptable items in System 2
- Sod Cover: 2 unacceptable items in System 4
- Revetments Other than Rip Rap: 1 unacceptable item in System 5

"Orange" deficiencies that were corrected were detailed in the County's March 9, 2012 letter to the CVFPB and include:

- Erosion/Bank Caving: 5 unacceptable items in System 1
- Encroachments: 2 unacceptable items in System 1

The CVFPB then sent a re-inspection request to USACE dated October 17, 2012. USACE responded in February 2013 and reinstated 3 of the Mormon Slough Project's inactive levee systems on the condition that the County continued work to address the remaining unacceptable items.

In addition, RD 2074 has already spent an estimated $75,000 to correct some of the most critical "red" and "orange" unacceptable items that were identified in the 2012 PIR.

"Red" deficiencies that were corrected were detailed in the RD 2074's April 19, 2011 Corrective Action Summary and include 6 unacceptable items related to Animal Control.

"Orange" deficiencies that were corrected were detailed in RD 2074's November 29, 2012 Corrective Action Summary and include 2 erosion items, 3 permitting items, and 1 flap gate item.

The estimated cost to correct all remaining unacceptable items is $25 million. This cost estimate is conservative and is considered an "order of magnitude" estimate which will be refined during development of the SWIF. No funding shortfalls for this work are foreseen.

In addition to the activities listed above, the following flood protection projects are currently underway and are funded at the State and local levels:

- <u>Lower San Joaquin Regional Flood Management Plan (RFMP):</u>
  San Joaquin County is a key stakeholder in the Lower San Joaquin RFMP which is a $1.65M effort funded by State bonds made available through California State Proposition 1E and administered by the California Department of Water Resources (California DWR). An important component of this comprehensive regional flood management planning effort is the development of a regional funding plan to address funding deficiencies and identify mechanisms to maximize future funding opportunities for system repairs and improvements. The RFMP is scheduled to be completed in Fall 2014.

- <u>FEMA Levee Re-Certification Projects for the Calaveras River Levee System:</u>
  SJAFCA is currently funding the effort to re-certify levees along the Upper Calaveras River, the Stockton Diverting Canal, Mormon Slough, and Potter Creek A. This includes analyses required per 44CFR65.10, such as freeboard, interior drainage, embankment protection, geotechnical issues, closures, and O&M information. The recertification effort for the Calaveras River system totals $489K and is scheduled to be completed in December 2014.

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- National Marine Fisheries Services (protected species consultation)
- Clean Water Act Section 404 permits
- USACE approvals under 33 USC 408

RECLAMATION DISTRICT NO. 2074 - BROOKSIDE

a political subdivision of the State of California

3425 Brookside Road, Suite A
Stockton, California 95219
Telephone (209).956.9940

July 3, 2014

Mr. John I. Maguire, P.E.
Engineering Services Manager
San Joaquin County Department of Public Works
Flood Management Division
1810 East Hazelton Avenue
Stockton, California 95205

Re: Fourteen Mile Slough Project Levee – PL84-99 Reinstatement.

Dear Mr. Maguire

I am writing to you as District Counsel for Reclamation District No. 2074 (Brookside) to express the District's support for San Joaquin County undertaking all steps required as lead agency relative to submission of a Letter of Intent (LOI) and preparation of a SWIF document that result in re-activation of PL84-99 status for the Calaveras River system including System 1.

RD 2074 presently maintains, per agreement with the County, the portion of the Calaveras River levee on the North bank that extends from the Eastward boundary of the District Westerly to the confluence of the Calaveras and San Joaquin Rivers, and which includes the reach of Project Levee that is subject to joint Corps, State and County. In addition, RD 2074 is a non-federal sponsor of the subject levee system – again per agreement with the County of San Joaquin.

We understand that System 1 is currently considered inactive by USACE, although working in cooperation with your engineer we submitted a request for reinspection to the USACE last year to have this system reinstated in PL 84-99. Unfortunately, this got caught up in the USACE's temporary suspension of PL-84-99 actions last year, and so it was never reinstated.

The LOI, when approved, will result in this system being reinstated in active status in the PL 84-99 program. However, this reinstatement will only be temporary as a SWIF will have to be

completed and submitted within two years to retain active status. Our intent is to continue working with the County to complete this effort.

Very Truly Yours,

Reclamation District No. 2074 - Brookside,

By: GEORGE V. HARTMANN, District Counsel

cc: Trustees, Siegfried Engineering

SJAFCA
San Joaquin Area FLOOD CONTROL Agency

July 31, 2014

E-mailed: jmaguire@sjgov.org

Mr. John I. Maguire, P.E.
Engineering Services Manager
San Joaquin County Department of Public Works
Flood Management Division
1810 East Hazelton Avenue
Stockton, CA 95205

LETTERS OF INTENT FOR THE BEAR CREEK AND MORMON SLOUGH LEVEE SYSTEMS

The San Joaquin Area Flood Control Agency hereby supports San Joaquin County's submission of Letters of Intent to prepare System-Wide Improvement Frameworks for Systems 1, 2, 4 and 5 of the Bear Creek System, and System 3 of the Mormon Slough System.

JAMES B. GIOTTONINI
EXECUTIVE DIRECTOR

JBG:md

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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;

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(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;