

Sutter Basin SWIF Status

February 28, 2018

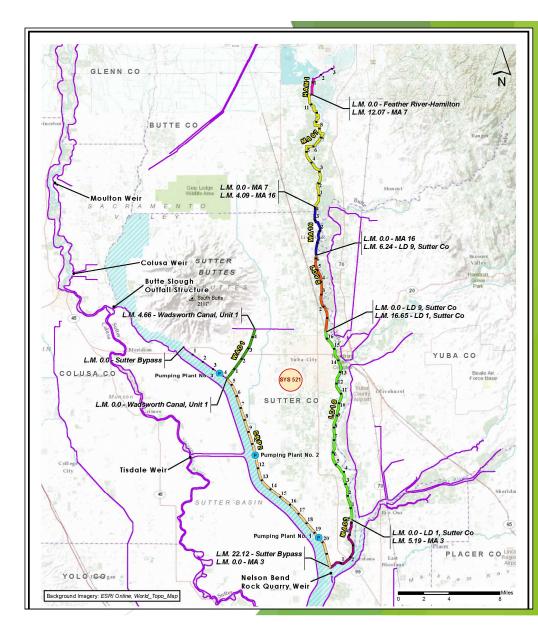
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USACE PL84-99 Program

- Provides federal funding to Sutter Basin LMAs for flood emergency management activities including:
 - Disaster preparedness,
 - Emergency operations, and
 - Rehabilitation of flood control projects following flood events
- To be eligible for this program, USACE conducts periodic inspections of the Sutter Basin levees to ensure they are being properly maintained
- Sutter Basin System includes Wadsworth Canal (DWR), Sutter Bypass (DWR), and Feather River levees (DWR, LD1 & LD9)

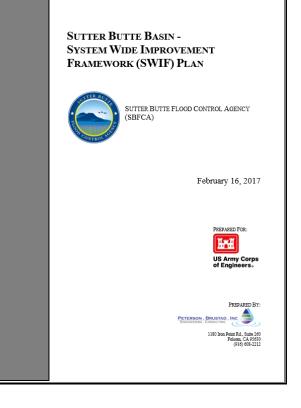


USACE Periodic Inspections

- 2010 Periodic Inspection Report (PIR) listed critical (red) and routine (yellow) deficiencies that need to be corrected
- Deficiencies were spread throughout the Basin
- 4 levee reaches had "red" items that would cause the Sutter Basin to be inactive in the PL84-99 program

Feather River Right Bank – Sutter Bypass East Bank Levee System Unacceptable-Inactive	4.00	ing brut the	In out of the second	and a state of the	b' neo District	5 Super Cont	and Contraction	Inthe Andrew Production of the State of the	D South of S	LI-LA BURK
Operations and Maintenance Manuals	М	М	M	м	М	М	M	М	ļ	
Emergency Supplies and Equipment	A	A	A	м	A	A	A	A	ļ	
Flood Preparedness and Training	A	A	A	м	A	A	A	A	l	
Unwanted Vegetation Growth	U	U	U	U	U	U	U	U		
Sod Cover	N/A	M	М	М	М	М	M	M		
Encroachments	U	U	U	U	U	U	U	U		
Closure Structures	U	N/A	N/A	A	Α	N/A	N/A	Α	I	
Slope Stability	м	U	A	U	М	М	M	Α	l	
Erosion/Bank Caving	А	U	U	U	U	U	U	U		
Settlement	А	Α	A	A	Α	Α	А	Α	I	
Depressions/Rutting	U	U	М	U	М	М	U	М		
Cracking	A	A	A	A	Α	A	A	Α	l	
Animal Control	А	M	M	м	м	М	M	M		
Culverts/Discharge Pipes	N/A	N/A	N/A	N/A	N/A	N/A	U	N/A	I	
Riprap Revetments & Bank Protection	N/A	М	N/A	N/A	М	М	М	N/A	l	
Revetments other than Riprap	А	N/A	N/A	U	М	N/A	М	N/A	I	
Underseepage Relief Wells/Toe Drainage Systems	N/A	N/A	N/A	N/A	U	N/A	N/A	N/A	I	
Seepage	A	Α	A	A	A	A	A	Α	Ι	
Segment & System Ratings/PL 84-99 Eligibility							Legend			
Likely Prevents Performance In Next Flood Event	А	Acceptable								
Serious deficiency noted in past inspections has not been corrected within the established timeframe								Minimally	Acceptable	
Not Likely to Prevent Performance In Next Flood Event								Unaccepta	ble	
The lowest rating is used to determine the overall segm	nent & system	ratings and	PL 84-99 R	ehabilitatio	n Eligibility		N/A	Not Applica	able	

System-Wide Improvement Framework (SWIF) Plan



- A SWIF Plan allows systems to remain active in PL84-99 while developing and implementing a long-term plan to correct the deficiencies listed in the USACE PIR
- SBFCA, on behalf of the Sutter Basin LMAs, submitted a draft SWIF Plan to USACE-SPK in February 2017
- SWIF Plan focuses on and prioritizes fixing the most critical (red) items first

Remaining "Red" Deficiencies

	USACE Inspection ID	Levee Segment	Levee Mile	Category	USACE Remarks	USACE Recommended Action
	USACE_CESPK_LD1S_2010_a_0009	LD1S	0.34	Encroachments	Apparently abandoned irrigation distribution box 15' from LS toe. bottom filled with debris, possible abandoned 24" steel pipe through levee? permit 4666?	Remove or properly abandon, USACE review
	USACE_CESPK_LD1S_2010_a_0014	LD1S	0.38	Encroachments	Toe cut 1 to 3' high for 300' each way. eroding and caving.	Repair
	USACE_CESPK_LD1S_2010_a_0018	LD1S	0.62	Encroachments	Toe cut to approx 3' high for 100'. caving and erosion.	Repair
	USACE_CESPK_LD1S_2010_a_0020	LD1S	0.76	Encroachments	Toe cut about 1 to 3' high for 250' each way. if toe were not cut, walnut trees in orchard would be too close to toe.	Repair, Remove
	USACE_CESPK_LD1S_2010_a_0040	LD1S	1.84	Encroachments	LS: 8" flange steel or cast iron pipe, helical weld. plate cover is bent. through levee. WS pipe end plugged with wood limb.	Video inpsect, Verify permit, USACE review
	USACE_CESPK_LD1S_2010_a_0042	LD1S	2.19	Encroachments	Open 3' square wood box with 18" round concrete pipe (through levee?) perpendicular to levee at 15' from LS toe. 6" round plastic pipe riser at 5' from LS toe. fenced diesel tank and pump at 7.5' from LS	Video inspect, Verify permit, USACE review
	USACE_CESPK_LD1S_2010_a_0043	LD1S	2.2	Encroachments	8" steel or cast iron pipe with gate valve on LS. possible valve inside 24" CMP on LS of crown. on WS, 8" diameter steel pipe in 10" PVC open joint, no flap valve 10" PVC held in place by T-post.	Video inspect, Verify permit, USACE review
	USACE_CESPK_LD1S_2010_a_0075	LD1S	3.41	Encroachments	Abandoned 8" irrigation line through levee. Steel bent and concrete equipment mounts on WS. 8" pipe within about 5' of LS toe.	Video inspect, Properly Abandon, USACE review
	USACE_CESPK_MA16_2010_a_0127	MA16	3.39	Encroachments	Pipeline through levee. no visible gates.	Remove
v - I	USACE_CESPK_MA07_2010_a_0026	MA07	0.91	Encroachments	Over steepened slope, ongoing erosion and caving in irrigation channel.	Repair
	USACE_CESPK_MA07_2010_a_0046	MA07	1.52	Encroachments	Abandoned pipe through levee. 12" diameter	Video inspect, Verify permit, USACE review
	USACE_CESPK_MA07_2010_a_0049	MA07	1.54	Encroachments	Abandoned pipe through levee. 18" diameter steel pipe.	Verify permit for abandonment, USACE review

- Since the PI Report was released in 2010, many of the issues have been or are in the process of being addressed and corrected, primarily through the Feather River West Levee Project (FRWLP)
- As of the SWIF submittal in February 2017, there were 12 remaining "red" deficiencies which are still in the process of being addressed

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State MAs

Status of USACE Review Process

- USACE-SPK's approach is to use one SWIF report (RD1001's) as a pilot study and to go through the USACE-HQ review process prior to reviewing the remaining SWIFs that have been submitted
- Review of Sutter Basin SWIF is on hold until USACE-SPK has received feedback from HQ on the pilot study

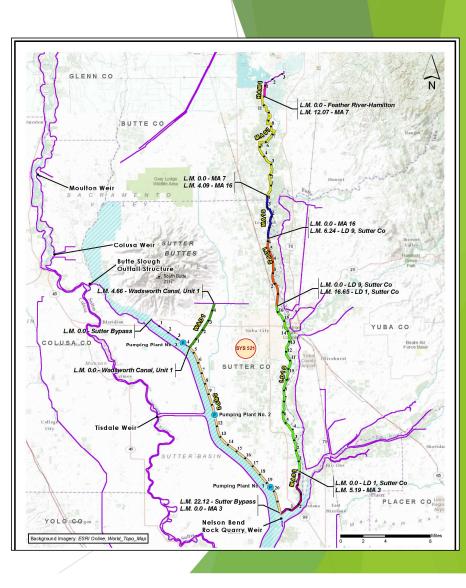


Next Steps

- Sutter Basin SWIF is in Draft form and awaiting USACE review
- At this time:
 - No requirement for SWIF Progress Report submittals
 - ▶ No adopted SWIF timeline to follow for correcting PI items
- Continue routine maintenance and correction of PI items
- Sutter Basin remains eligible for PL84-99 assistance during the USACE review period

Takeaways

- The SWIF addresses items identified in the latest PI
- The SWIF is a living document that can be changed when justified
- Multiple LMAs included in the Sutter Basin SWIF:
 - ► LD1
 - ► LD9
 - State MAs/Sutter Yard
- <u>All</u> LMAs need to correct their "red" deficiencies for the Sutter Basin to remain eligible in the PL84-99 program



Questions?

