

**Flood Control Project Maintenance  
Levee Inspections**

**Fall 2019 Levee Maintenance Deficiency Summary Report**

**Overall LMA & Unit Ratings, including USACE Erosion Survey**

**Sacramento River Basin**

‡ Some areas within the LMA are under construction and as such, the contractor has operation and maintenance obligations in those areas during project construction and closeout.

MA0003 Sutter Maintenance Yard Maintenance Area 0003	Overall LMA Rating	Total LMA Miles						
	<b>A</b>	<b>5.11</b>						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Trim / Thin Trees	0.01		0.01	0.20%				
Encroachments					0.01			
<i>Supplemental</i>								
DRAFT DWR UCIP Field Study					0.04	0.01		
DRAFT DWR UCIP LMA Responsibility								
<i>LMA Totals:</i>	0.01	0.00	0.01	0.20%	0.05	0.01	0.00	0.00

Unit No. 01 Feather River RB MA0003	Overall Unit Rating	Total Unit Miles						
	<b>A</b>	<b>5.11</b>						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Trim / Thin Trees	0.01		0.01	0.20%				
Encroachments					0.01			
<i>Supplemental</i>								
DRAFT DWR UCIP Field Study					0.04	0.01		
DRAFT DWR UCIP LMA Responsibility								
<i>Unit Totals:</i>	0.01	0.00	0.01	0.20%	0.05	0.01	0.00	0.00

**Flood Control Project Maintenance  
Levee Inspections  
LMA District Cover Sheet  
Fall 2019 Levee Inspection Results**

**Sutter Maintenance Yard Maintenance Area 0003**

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
† Overall LMA Rating (Fall Only)			<b>A</b>	

\*\* Non-receipt of Summer or Winter Inspection  
Reports may effect overall annual rating.

† **SPRING INSPECTIONS:** Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

**FALL INSPECTIONS:** The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indication of risk.

Comments


**Flood Control Project Maintenance  
Levee Inspections**

**Unit Cover Sheet**

**Fall 2019 Levee Inspection Results**

**Sutter Maintenance Yard Maintenance Area 0003**

Waterway		Bank	Unit Miles	
Unit No. 01 Feather River		Right	5.11	
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			<b>A</b>	
Date of Inspection	4/24/2019 - 4/24/2019		9/4/2019 - 9/4/2019	
DWR Inspector	Sterling York		Sterling York	
Accompanied By	Steve Beckley		Steve Beckley	

**Summer & Winter Inspections**

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

*The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.*

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0003**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	09/04/2019 09/04/2019	Sterling York

LM Start		Rating **	A	Issue No.	<b>4</b>
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Operations & Maintenance Manuals			o	o
				o	o
DWR ID	DWR_MA0003_01_s_2013_4				
Comment Code					
Inspector Comment					
Sutter Yard has a copy of the O&M manuals.					

No Photos

LM Start		Rating **	A	Issue No.	<b>6</b>
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Emergency Supplies & Equipment			o	o
				o	o
DWR ID	DWR_MA0003_01_s_2013_6				
Comment Code					
Inspector Comment					
The Sutter Yard has adequate flood fight supplies and equipment.					

No Photos

LM Start		Rating **	A	Issue No.	<b>7</b>
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Flood Preparedness & Training			o	o
				o	o
DWR ID	DWR_MA0003_01_s_2013_7				
Comment Code					
Inspector Comment					
The Sutter Yard has received flood fight training.					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0003**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	09/04/2019 09/04/2019	Sterling York

LM Start	<b>0.01</b>	Rating **	A	Issue No.	<b>11</b>
LM End	<b>4.11</b>	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.897889°	38.936840°
				-121.617985°	-121.589000°
DWR ID	DWR_MA0003_01_f_2019_11				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					
The annual vegetation is well maintained, Fall 2019.					

Photo 1 of 1 : FA\_2019\_MA0003\_195\_11\_20190912\_00020.jpg



View looking upstream landside at the well maintained vegetation, Fall 2019.

LM Start	<b>0.01</b>	Rating **	A	Issue No.	<b>12</b>
LM End	<b>4.11</b>	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.897889°	38.936840°
				-121.617985°	-121.589000°
DWR ID	DWR_MA0003_01_f_2019_12				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					
The annual vegetation is well maintained, Fall 2019.					

Photo 1 of 1 : FA\_2019\_MA0003\_195\_12\_20190912\_00021.jpg



View looking upstream waterside at the well maintained vegetation, Fall 2019.

LM Start	<b>0.69</b>	Rating **	C	Issue No.	<b>17</b>
LM End	<b>0.69</b>	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.903352°	38.903352°
				-121.607829°	-121.607829°
DWR ID	DWR_MA0003_01_s_2017_17				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					
The existing animal hole that was on the outside edge of the landside patrol road no longer is visible and does not appear to have any recent animal activity, Fall 2019.					

No Photos

<b>* Location</b> LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0003**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	09/04/2019 09/04/2019	Sterling York

LM Start	<b>0.81</b>	Rating **	U	Issue No.	<b>19</b>
LM End	<b>0.81</b>	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP LMA Responsibility			38.903264 °	38.903264 °
				-121.605698 °	-121.605698 °
DWR ID	17092				

Comment Code

Inspector Comment

DS\_ID:17092  
 FS\_ID:54171  
 EP\_NO: N/A  
 Repair Type: Urgent  
 Crossing Status: Found  
 UCIP Comments: 05/01/2019 Same as last inspection, record remains Urgent due to the potential of levee integrity issues on the LS. Dense vegetation on both the WS and LS limits the inspection to determine if sink hole or erosion behind headwall on LS has progressed. No permit has been identified for this structure. Structure has been abandoned. (O. Magana - DWR UCIP)10/04/2018 Sink hole observed between the dual 18-inch pipes located on the LS near the concrete headwall. Erosion was also observed behind the concrete headwall located on the LS. Inlet of dual 18-inch pipes was still covered by filled sandbags. Crossing remains Urgent due to the sink hole and erosion visible on the LS. These crossings were recommended for replacement under the SBFCA project; however, no work has been done to date. Recommend monitoring site and coordinating with SBFCA to determine the status of the project. (O. Magana - DWR UCIP)  
 04/11/2017 Water levels were high on WS during inspection so pipe ends could not be inspected. Believe that the sandbags are still in place and condition of flap gates is unknown. (DWR Sutter Yard - AFreitag)10/10/2016 WS pipe end was underwater for inspection but the sandbags still appear to be in place. (DWR Sutter Yard - afreitag)04/18/2016 No repairs have been made to the pipe yet. (DWR Sutter Yard - afreitag)05/12/2015 Water level high in WS ditch so could not see WS end of crossing. Do not believe that repairs have been made yet. (DWR Sutter Yard - afreitag)11/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)05/14/2014 Same as last inspection. (DWR Sutter Yard - afreitag)10/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)05/21/2013 SBFCA project recommends replacing in accordance with title 23. High water levels in WS ditch have pipe ends underwater but repairs have not yet been completed but are planned for when water levels drop. (DWR Sutter Yard - afreitag)10/10/2012 Flap gates not visible on waterward headwall and it appears as though they have been replaced by sandbags. Slide gates on LS appear to be closed yet water leaks excessively from the WS at the sandbagged headwall. (DWR UCIP - W. Wylie)  
 FIELD\_STRUCT\_DESC: 1 of 2: 18-inch steel drainage pipe through the levee, 32 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end at concrete headwall. Concrete "U" shaped headwall at the WS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 143, August 1955, (Station 982+00)].  
 FS Date: 5/1/2019 2:50:00 PM

Photo 1 of 3 : UCIP\_FA\_2019\_54171\_64649.jpg



Concrete headwall with walkway and slide gates at LS toe.

<b>* Location</b> LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0003**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	09/04/2019 09/04/2019	Sterling York

LM Start	0.81	Rating **	U	Issue No.	19 (cont)
LM End	0.81	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP LMA Responsibility			38.903264 °	38.903264 °
				-121.605698 °	-121.605698 °
DWR ID	17092				
Comment Code					
Inspector Comment					
<p>DS_ID:17092 FS_ID:54171 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: 05/01/2019 Same as last inspection, record remains Urgent due to the potential of levee integrity issues on the LS. Dense vegetation on both the WS and LS limits the inspection to determine if sink hole or erosion behind headwall on LS has progressed. No permit has been identified for this structure. Structure has been abandoned. (O. Magana - DWR UCIP)10/04/2018 Sink hole observed between the dual 18-inch pipes located on the LS near the concrete headwall. Erosion was also observed behind the concrete headwall located on the LS. Inlet of dual 18-inch pipes was still covered by filled sandbags. Crossing remains Urgent due to the sink hole and erosion visible on the LS. These crossings were recommended for replacement under the SBFCA project; however, no work has been done to date. Recommend monitoring site and coordinating with SBFCA to determine the status of the project. (O. Magana - DWR UCIP) 04/11/2017 Water levels were high on WS during inspection so pipe ends could not be inspected. Believe that the sandbags are still in place and condition of flap gates is unknown. (DWR Sutter Yard - AFreitag)10/10/2016 WS pipe end was underwater for inspection but the sandbags still appear to be in place. (DWR Sutter Yard - afreitag)04/18/2016 No repairs have been made to the pipe yet. (DWR Sutter Yard - afreitag)05/12/2015 Water level high in WS ditch so could not see WS end of crossing. Do not believe that repairs have been made yet. (DWR Sutter Yard - afreitag)11/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)05/14/2014 Same as last inspection. (DWR Sutter Yard - afreitag)10/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)05/21/2013 SBFCA project recommends replacing in accordance with title 23. High water levels in WS ditch have pipe ends underwater but repairs have not yet been completed but are planned for when water levels drop. (DWR Sutter Yard - afreitag)10/10/2012 Flap gates not visible on waterward headwall and it appears as though they have been replaced by sandbags. Slide gates on LS appear to be closed yet water leaks excessively from the WS at the sandbagged headwall. (DWR UCIP - W. Wylie) FIELD_STRUCT_DESC: 1 of 2: 18-inch steel drainage pipe through the levee, 32 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end at concrete headwall. Concrete "U" shaped headwall at the WS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&amp;M Manual 143, August 1955, (Station 982+00)]. FS Date: 5/1/2019 2:50:00 PM</p>					

Photo 2 of 3 : UCIP\_FA\_2019\_54171\_64648.jpg



Concrete U shaped headwall on WS toe filled in with Sandbags. 16-inch pipe shown over top of headwall.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	N/A : Not Applicable A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0003**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	09/04/2019 09/04/2019	Sterling York

LM Start	<b>0.81</b>	Rating **	U	Issue No.	<b>20</b>
LM End	<b>0.81</b>	Issue Type +	Ma	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DRAFT DWR UCIP LMA Responsibility		38.903264 °	38.903264 °	
			-121.605698 °	-121.605698 °	
DWR ID	17136				

**Comment Code**

**Inspector Comment**

DS\_ID:17136  
FS\_ID:56067  
EP\_NO: N/A  
Repair Type: Urgent  
Crossing Status: Found  
UCIP Comments: 05/01/2019 Same as last inspection, record remains Urgent due to the potential of levee integrity issues on the LS. Dense vegetation on both the WS and LS limits the inspection to determine if sink hole or erosion behind headwall on LS has progressed. No permit has been identified for this structure. Structure has been abandoned. (O. Magana - DWR UCIP)10/04/2018 Sink hole observed between the dual 18-inch pipes located on the LS near the concrete headwall. Erosion was also observed behind the concrete headwall located on the LS. Inlet of dual 18-inch pipes was still covered by filled sandbags. Crossing remains Urgent due to the sink hole and erosion visible on the LS. These crossings were recommended for replacement under the SBFCA project; however, no work has been done to date. Recommend monitoring site and coordinating with SBFCA to determine the status of the project. (O. Magana - DWR UCIP)  
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FIELD\_STRUCT\_DESC: 2 of 2: 18-inch steel drainage pipe through the levee, 32 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end at concrete headwall. Concrete "U" headwall at the WS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 143, August 1955, (Station 982+00)].  
FS Date: 5/1/2019 2:51:00 PM

Photo 1 of 3 : UCIP\_FA\_2019\_56067\_64662.jpg



Concrete headwall, slidegates, and metal walkway on LS toe.

<b>* Location</b> LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0003**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	09/04/2019 09/04/2019	Sterling York

LM Start	<b>0.81</b>	Rating **	U	Issue No.	<b>20 (cont)</b>
LM End	<b>0.81</b>	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP LMA Responsibility			38.903264 °	38.903264 °
				-121.605698 °	-121.605698 °
DWR ID	17136				

Photo 2 of 3 : UCIP\_FA\_2019\_56067\_64661.jpg



Concrete U shaped headwall on WS toe filled with sandbags.

Comment Code

Inspector Comment

DS\_ID:17136  
 FS\_ID:56067  
 EP\_NO: N/A  
 Repair Type: Urgent  
 Crossing Status: Found  
 UCIP Comments: 05/01/2019 Same as last inspection, record remains Urgent due to the potential of levee integrity issues on the LS. Dense vegetation on both the WS and LS limits the inspection to determine if sink hole or erosion behind headwall on LS has progressed. No permit has been identified for this structure. Structure has been abandoned. (O. Magana - DWR UCIP)10/04/2018 Sink hole observed between the dual 18-inch pipes located on the LS near the concrete headwall. Erosion was also observed behind the concrete headwall located on the LS. Inlet of dual 18-inch pipes was still covered by filled sandbags. Crossing remains Urgent due to the sink hole and erosion visible on the LS. These crossings were recommended for replacement under the SBFCA project; however, no work has been done to date. Recommend monitoring site and coordinating with SBFCA to determine the status of the project. (O. Magana - DWR UCIP)  
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 FS Date: 5/1/2019 2:51:00 PM

<b>* Location</b> LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Levee Inspections**

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**Sutter Maintenance Yard Maintenance Area 0003**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	09/04/2019 09/04/2019	Sterling York

LM Start	<b>0.81</b>	Rating **	U	Issue No.	<b>20 (cont)</b>
LM End	<b>0.81</b>	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP LMA Responsibility			38.903264 °	38.903264 °
				-121.605698 °	-121.605698 °
DWR ID	17136				
Comment Code					
Inspector Comment					
<p>DS_ID:17136                  FS_ID:56067                  EP_NO: N/A                  Repair Type: Urgent                  Crossing Status: Found                  UCIP Comments: 05/01/2019 Same as last inspection, record remains Urgent due to the potential of levee integrity issues on the LS. Dense vegetation on both the WS and LS limits the inspection to determine if sink hole or erosion behind headwall on LS has progressed. No permit has been identified for this structure. Structure has been abandoned. (O. Magana - DWR UCIP)10/04/2018 Sink hole observed between the dual 18-inch pipes located on the LS near the concrete headwall. Erosion was also observed behind the concrete headwall located on the LS. Inlet of dual 18-inch pipes was still covered by filled sandbags. Crossing remains Urgent due to the sink hole and erosion visible on the LS. These crossings were recommended for replacement under the SBFCA project; however, no work has been done to date. Recommend monitoring site and coordinating with SBFCA to determine the status of the project. (O. Magana - DWR UCIP)                  04/11/2017 Water levels were high on WS during inspection so pipe ends could not be inspected. Believe that the sandbags are still in place and condition of flap gates is unknown. (DWR Sutter Yard - AFreitag)10/10/2016 WS pipe end was underwater for the inspection but the sandbags appear to still be in place. (DWR Sutter Yard - afreitag)04/18/2016 No repairs have been made to the pipe yet. (DWR Sutter Yard - afreitag)05/12/2015 Water level high in WS ditch so could not see WS end of crossing. Do not believe that repairs have been made yet. (DWR Sutter Yard - afreitag)11/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)05/14/2014 Same as last inspection. (DWR Sutter Yard - afreitag)10/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)05/21/2013 SBFCA project recommends replacing in accordance with title 23. High water levels in WS ditch have pipe ends underwater but repairs have not yet been completed but are planned for when water levels drop. (DWR Sutter Yard - afreitag)10/10/2012 Flap gates not visible on waterward headwall and it appears as though they have been replaced by sandbags. Slide gates on LS appear to be closed yet water leaks excessively from the WS at the sandbagged headwall. (DWR UCIP - W. Wylie)                  FIELD_STRUCT_DESC: 2 of 2: 18-inch steel drainage pipe through the levee, 32 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end at concrete headwall. Concrete "U" headwall at the WS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&amp;M Manual 143, August 1955, (Station 982+00)].                  FS Date: 5/1/2019 2:51:00 PM</p>					

Photo 3 of 3 : UCIP\_FA\_2019\_56067\_64660.jpg



Flap gates appear to be missing from U shaped headwall. Sandbags fill headwall but water flows heavily from LS.

<p><b>* Location</b>                  LS : Land Side    N/A : Not Applicable                  WS : Water Side                  CR : Crown</p>	<p><b>** Rating</b>                  A : Acceptable                  M : Minimally Acceptable                  U : Unacceptable</p>	<p>N : Not Inspected/Rated                  C : Corrected                  A/W : Acceptable but Monitor &amp; Maintain</p>	<p><b>+ Issue Type</b>                  Ma : Maintenance Deficiency                  Ob : Design &amp; System Obsolescence                  En : Enforcement</p>
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0003**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	09/04/2019 09/04/2019	Sterling York

LM Start	<b>1.84</b>	Rating **	M	Issue No.	<b>21</b>
LM End	<b>1.84</b>	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP Field Study			38.907744 °	38.907744 °
				-121.589344 °	-121.589344 °
DWR ID	17090				
Comment Code					
Inspector Comment					
<p>DS_ID:17090                  FS_ID:54174                  EP_NO: 3511                  Repair Type: Non-Urgent                  Crossing Status: Not Found                  UCIP Comments: 05/01/2019 Record has been updated from No Action Needed to Non-Urgent due to the unknown status of the crossing through the levee. Permit recordation indicates line was not abandoned as of 5-30-1974 (page 3 of 98) notes indicated the following: "App #3511 Comm Cable is in use and not abandoned". However, page 4 of 98, permit records indicate the Board approved abandonment of line and asked the owner to meet certain conditions to properly abandon line. (O. Magana - DWR UCIP)04/11/2017 Unable to locate. (DWR Sutter Yard- AFreitag)10/10/2016 Unable to locate.(DWR Sutter Yard - afreitag)04/18/2016 Unable to locate.05/12/2015 Unable to locate.11/17/2014 Same as last inspection.05/14/2014 Same as last inspection.05/21/2013 SBFCA report claims cable may meet title 23 requirements but will need to be removed for cutoff wall construction and replaced in accordance of title 23. Could not find any signs of crossing.10/30/2013 Same as last inspection.10/10/2012 Unable to locate any indication that crossing exists at old Nicolaus bridge. (DWR UCIP - W. Wylie)                  FIELD_STRUCT_DESC: USA communication cable of an unknown size or material through the levee, 3 feet below the crown. (underground cable authorized under Permit No. 3511, 1961 - U.S. Army Engineer District; ). [Additional Reference(s): DWR Levee Log, 2005].                  FS Date: 5/1/2019 2:52:00 PM</p>					

Photo 1 of 3 : UCIP\_FA\_2019\_54174\_64665.jpg



Old nicolaus bridge location. No indication of crossing.

LM Start	<b>1.84</b>	Rating **	M	Issue No.	<b>21 (cont)</b>
LM End	<b>1.84</b>	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP\_FA\_2019\_54174\_64664.jpg



Old nicolaus bridge location. No indication of crossing.

<p><b>* Location</b>                  LS : Land Side    N/A : Not Applicable                  WS : Water Side                  CR : Crown</p>	<p><b>** Rating</b>                  A : Acceptable                  M : Minimally Acceptable                  U : Unacceptable</p>	<p>N : Not Inspected/Rated                  C : Corrected                  A/W : Acceptable but Monitor &amp; Maintain</p>	<p><b>+ Issue Type</b>                  Ma : Maintenance Deficiency                  Ob : Design &amp; System Obsolescence                  En : Enforcement</p>
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0003**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	09/04/2019 09/04/2019	Sterling York

LM Start	<b>2.17</b>	Rating **	U	Issue No.	<b>22</b>
LM End	<b>2.17</b>	Issue Type +	En	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DRAFT DWR UCIP Field Study		38.911734 °	38.911734 °	
			-121.586106 °	-121.586106 °	
DWR ID	17088				

**Comment Code**

**Inspector Comment**

DS\_ID:17088  
FS\_ID:54185  
EP\_NO: 3284  
Repair Type: Urgent  
Crossing Status: Found  
UCIP Comments: 06/14/2019 Record remains Urgent due to the integrity issues identified during the Aug 2018 internal inspection completed by Odysseus Farms Hamatani. Received PL 84-99 Emergency Levee Repairs Site 0521-41 Plans, from J. Peterson with the CVFPB Enforcement Section, documenting proposed culvert removal and new pipe installation system through levee. Emergency Levee Repairs at this location are expected to start 2020. LMA should be monitoring this site until emergency levee repairs are completed. If any issues arise please contact J. Peterson (Jenna.Peterson@cvflood.ca.gov) with the CVFPB Enforcement Section. Pipe is being tracked under CVFPB Enforcement Case No. 14794. (O. Magana - DWR UCIP)  
05/01/2019 Same as October 2018 inspection. LS ditch filled with water and unable to access LS outlet. As of March 2019, this crossing is under investigation by the CVFPB under CVFPB Enforcement Case No. 14794. (O. Magana - DWR UCIP)01/16/2019 The following DSIDs, 17089 and 17134, are considered duplicate entries for DSID 17088. DWR Levee Log and USACE O&M manual reference 24-inch concrete culvert through levee, permit records indicate 32-inch concrete culvert through levee. Need to measure concrete box through levee to confirm culvert size. Concrete culvert through the levee was referenced in permit records as existing structure (32-inch culvert) back in 1960 under Permit No. 3284. (O. Magana - DWR UCIP)  
10/04/2018 Cavity filled with rock is still intact. Unable to determine cause of cavity collapse. Photos taken from LS show some sediment buildup inside concrete culvert. The pipe is a straight through culvert that goes through a tall levee (about 25 feet tall). Recommend internal inspection to determine integrity condition of culvert through the levee. Crossing remains Urgent due to the cavity collapse observed during 2017 (unknown cause of failure) and the unknown condition of the culvert through the levee. Erosion and potential sink holes visible behind concrete box on the WS toe. (O. Magana - DWR UCIP)  
4/11/2017 There was a cavity collapse above the pipe alignment on the WS slope during January 2017 high water event. Cavity was filled with rock to prevent further levee damage during the high water season. Further inspection will be needed on this crossing to determine the cause of the collapse. Recommend having an internal camera inspection done. Erosion happening around the WS concrete vault. (DWR Sutter Yard- AFreitag)10/10/2016 LS pipe end was mostly submerged so could not verify the connectivity between the LS headwall and WS vault. Blackberries and still overgrown on WS.(DWR Sutter Yard - afreitag)4/18/2016 WS vault is being overgrown with

Photo 1 of 3 : UCIP\_FA\_2019\_54185\_64668.jpg



32X32 box culvert on LS toe in Concrete U shaped channel with slide gate.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0003**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	09/04/2019 09/04/2019	Sterling York

blackberries. They should be sprayed and cleared back. No other problems were noticeable with this crossing.05/12/2015 Only the right flap gate appeared to be abandoned. The left and middle flap gates were flowing water during the last inspection.11/17/2014 Same as last inspection.05/14/2014 Same as last inspection.10/30/2013 Same as last inspection.05/21/2013 Pumping plant was running and filling concrete vault on WS toe through the left flap gate and then flowing through levee pipe and filling irrigation ditch on LS. Left and middle flap gates appear to be connected to pumps and right gate appears abandoned. Recommend contacting owner to get more details.10/10/2012 Pumping plant has been disconnected from levee. Need to determine if abandonment is appropriate or if this is now a gravity drain with flap gate. (DWR UCIP - W. Wylie)  
FIELD\_STRUCT\_DESC: 32-inch by 32-inch reinforced concrete irrigation culvert through the levee, approximately 28 feet below the crown. Transition between vault on the waterside (WS) and box culvert within levee section is made with a 41-inch corrugated metal pipe (CMP). Slide gate located on the landside (LS) at concrete h

LM Start	<b>2.17</b>	Rating **	U	Issue No.	<b>22 (cont)</b>
LM End	<b>2.17</b>	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP\_FA\_2019\_54185\_64667.jpg



8-foot X 14-foot concrete box on WS toe with slide gate and 3 abandoned flap gates.

LM Start	<b>2.17</b>	Rating **	U	Issue No.	<b>22 (cont)</b>
LM End	<b>2.17</b>	Issue Type +	En	Location *	

Photo 3 of 3 : UCIP\_FA\_2019\_54185\_64666.jpg



Pumping plant on WS toe at small slough. Pipes no longer connected to concrete box on WS toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0003**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	09/04/2019 09/04/2019	Sterling York

LM Start	<b>3.78</b>	Rating **	M	Issue No.	<b>25</b>
LM End	<b>3.78</b>	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP Field Study			38.932512°	38.932512°
				-121.590987°	-121.590987°
DWR ID	17086				
Comment Code					
Inspector Comment					
<p>DS_ID:17086                  FS_ID:54191                  EP_NO: 769                  Repair Type: Non-Urgent                  Crossing Status: Not Found                  UCIP Comments: 05/01/2019 Record has been updated from No Action Needed to Non-Urgent due to the modifications made to this crossing. This section of the levee has been upgraded under a levee improvement project however, no records have been received to confirm project or extent of project. Need to contact owner to determine extent of work done through this section of the levee. No records were found to authorize the work through this section of the levee. Need to confirm if this crossing is a new encroachment or if crossing is the existing 10-inch pipe. Levee Mile and coordinates were updated from CLM 3.785 (38.932602, -121.590933) to 3.778 (38.932512, -121.590987). If crossing is not abandoned record will need to be updated to show active line. (O. Magana - DWR UCIP)04/11/2017 Unable to locate. (DWR Sutter Yard- AFreitag)10/10/2016 Unable to locate.(DWR Sutter Yard - afreitag)04/18/2016 Unable to locate.05/12/2015 Unable to locate.11/17/2014 Same as last inspection.05/14/2014 Same as last inspection.10/30/2013 Same as last inspection.05/21/2013 Could not locate any signs of crossing.10/10/2012 Unable to locate. (DWR UCIP - W. Wylie) FIELD_STRUCT_DESC: *ABANDONED* 10-inch steel pipe through the levee, 5.4 feet below the crown. Siphon breaker located on the landside (LS). Pipe appears to be abandoned (recorded in 2005 or earlier). (10-inch pipe authorized under Permit No. 769, 1938 - Garden Highway Mutual Water Co.) [Additional Reference(s): DWR Levee Log, 2005].                  FS Date: 5/1/2019 2:56:00 PM</p>					

Photo 1 of 3 : UCIP\_FA\_2019\_54191\_79824.jpg



Overview of levee crown looking upstream at pipe crossings.

<p><b>* Location</b>                  LS : Land Side    N/A : Not Applicable                  WS : Water Side                  CR : Crown</p>	<p><b>** Rating</b>                  A : Acceptable                  M : Minimally Acceptable                  U : Unacceptable</p>	<p>N : Not Inspected/Rated                  C : Corrected                  A/W : Acceptable but Monitor &amp; Maintain</p>	<p><b>+ Issue Type</b>                  Ma : Maintenance Deficiency                  Ob : Design &amp; System Obsolescence                  En : Enforcement</p>
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0003**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	09/04/2019 09/04/2019	Sterling York

LM Start	<b>3.78</b>	Rating **	M	Issue No.	<b>25 (cont)</b>
LM End	<b>3.78</b>	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP Field Study			38.932512°	38.932512°
				-121.590987°	-121.590987°
DWR ID	17086				
Comment Code					
Inspector Comment					
DS_ID:17086 FS_ID:54191 EP_NO: 769 Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: 05/01/2019 Record has been updated from No Action Needed to Non-Urgent due to the modifications made to this crossing. This section of the levee has been upgraded under a levee improvement project however, no records have been received to confirm project or extent of project. Need to contact owner to determine extent of work done through this section of the levee. No records were found to authorize the work through this section of the levee. Need to confirm if this crossing is a new encroachment or if crossing is the existing 10-inch pipe. Levee Mile and coordinates were updated from CLM 3.785 (38.932602, -121.590933) to 3.778 (38.932512, -121.590987). If crossing is not abandoned record will need to be updated to show active line. (O. Magana - DWR UCIP)04/11/2017 Unable to locate. (DWR Sutter Yard- AFreitag)10/10/2016 Unable to locate.(DWR Sutter Yard - afreitag)04/18/2016 Unable to locate.05/12/2015 Unable to locate.11/17/2014 Same as last inspection.05/14/2014 Same as last inspection.10/30/2013 Same as last inspection.05/21/2013 Could not locate any signs of crossing.10/10/2012 Unable to locate. (DWR UCIP - W. Wylie) FIELD_STRUCT_DESC: *ABANDONED* 10-inch steel pipe through the levee, 5.4 feet below the crown. Siphon breaker located on the landside (LS). Pipe appears to be abandoned (recorded in 2005 or earlier). (10-inch pipe authorized under Permit No. 769, 1938 - Garden Highway Mutual Water Co.) [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 5/1/2019 2:56:00 PM					

Photo 2 of 3 : UCIP\_FA\_2019\_54191\_79825.jpg



WS view: concrete vault located on levee crown. Unknown pipe size or purpose.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0003**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	09/04/2019 09/04/2019	Sterling York

LM Start	<b>3.78</b>	Rating **	M	Issue No.	<b>25 (cont)</b>
LM End	<b>3.78</b>	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP Field Study			38.932512°	38.932512°
				-121.590987°	-121.590987°
DWR ID	17086				
Comment Code					
Inspector Comment					
DS_ID:17086 FS_ID:54191 EP_NO: 769 Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: 05/01/2019 Record has been updated from No Action Needed to Non-Urgent due to the modifications made to this crossing. This section of the levee has been upgraded under a levee improvement project however, no records have been received to confirm project or extent of project. Need to contact owner to determine extent of work done through this section of the levee. No records were found to authorize the work through this section of the levee. Need to confirm if this crossing is a new encroachment or if crossing is the existing 10-inch pipe. Levee Mile and coordinates were updated from CLM 3.785 (38.932602, -121.590933) to 3.778 (38.932512, -121.590987). If crossing is not abandoned record will need to be updated to show active line. (O. Magana - DWR UCIP)04/11/2017 Unable to locate. (DWR Sutter Yard- AFreitag)10/10/2016 Unable to locate.(DWR Sutter Yard - afreitag)04/18/2016 Unable to locate.05/12/2015 Unable to locate.11/17/2014 Same as last inspection.05/14/2014 Same as last inspection.10/30/2013 Same as last inspection.05/21/2013 Could not locate any signs of crossing.10/10/2012 Unable to locate. (DWR UCIP - W. Wylie) FIELD_STRUCT_DESC: *ABANDONED* 10-inch steel pipe through the levee, 5.4 feet below the crown. Siphon breaker located on the landside (LS). Pipe appears to be abandoned (recorded in 2005 or earlier). (10-inch pipe authorized under Permit No. 769, 1938 - Garden Highway Mutual Water Co.) [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 5/1/2019 2:56:00 PM					

Photo 3 of 3 : UCIP\_FA\_2019\_54191\_79826.jpg



WS view: stake located on WS shoulder. Unable to determine if work is still pending.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0003**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	09/04/2019 09/04/2019	Sterling York

LM Start	<b>4.11</b>	Rating **	A/W	Issue No.	<b>15</b>
LM End	<b>5.10</b>	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			38.936840 °	38.950762 °
				-121.589000 °	-121.585810 °
DWR ID	DWR_MA0003_01_f_2019_15				
Comment Code					
C1 : Add appropriate material and re-grade the levee to bring the crown above the design elevation.					
Inspector Comment					
Under construction on this portion of levee, Fall 2019.					

Photo 1 of 1 : FA\_2019\_MA0003\_195\_15\_20190912\_00024.jpg



View looking upstream at the portion of levee that is under construction, Fall 2019.

LM Start	<b>4.15</b>	Rating **	A/W	Issue No.	<b>16</b>
LM End	<b>4.18</b>	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 USACE Erosion Survey			38.937451 °	38.937937 °
				-121.588512 °	-121.588471 °
DWR ID					
Comment Code					
Inspector Comment					
2017 Site ID: FHR 12.3 R Status: Under Construction 2017 Field Notes: Under construction. work in progress. Site History: 2013 - Minor toe scour causing gradual erosion of bank slope. Site is within ecological reserve.					

No Photos

LM Start	<b>4.71</b>	Rating **	A/W	Issue No.	<b>18</b>
LM End	<b>4.76</b>	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 USACE Erosion Survey			38.945188 °	38.945958 °
				-121.586096 °	-121.586394 °
DWR ID					
Comment Code					
Inspector Comment					
2017 Site ID: FHR 12.8 R Status: Under Construction 2017 Field Notes: Under construction. work in progress. Site History: 2013 - Minor toe scour causing gradual erosion into the bank slope.					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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