

**Flood Control Project Maintenance
Levee Inspections****LMA District Cover Sheet****Spring 2016 Levee Inspection Results****Sutter Maintenance Yard Maintenance Area 0012**

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
* Overall LMA Rating (Fall Only)				

** 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

Spring 2016 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0012

Waterway			Bank	Unit Miles
Unit No. 01 Colusa Drain			Left	11.06
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	3/18/2016 - 3/18/2016			
DWR Inspector	Keith Millard			
Accompanied By	Bryan Reniff Sutter Maintenance Yard			

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 - Spring 2016

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	03/18/2016 03/18/2016	Keith Millard

LM Start		Rating **	A	Issue No.	12
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Emergency Supplies & Equipment			°	°
				°	°
DWR ID	DWR_MA0012_01_s _ 2013_12				
Comment Code					
Inspector Comment					
The LMA has adequate flood fight supplies and equipment.					

No Photos

LM Start		Rating **	A	Issue No.	13
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Operations & Maintenance Manuals			°	°
				°	°
DWR ID	DWR_MA0012_01_s _ 2013_13				
Comment Code					
Inspector Comment					
The LMA has the O&M manuals.					

No Photos

LM Start		Rating **	A	Issue No.	14
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Flood Preparedness & Training			°	°
				°	°
DWR ID	DWR_MA0012_01_s _ 2013_14				
Comment Code					
Inspector Comment					
The LMA completed flood fight training in 2014.					

No Photos

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

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	03/18/2016 03/18/2016	Keith Millard

LM Start	0.24	Rating **	M	Issue No.	32
LM End	0.24	Issue Type +	En	Location *	N/A
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.035889 °	39.035889 °
				-121.996882 °	-121.996882 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:48467 DS_ID:17145 EP_NO: 9381 Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: 5/4/2015 Abandoned crossing.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.10/11/2012 Need to verify proper abandonment of pipe. FIELD_STRUCT_DESC: *ABANDONED* 14-inch pipe through levee, 3.0 feet below crown. Open on waterside (WS) end. 3-foot x 6-foot concrete well on WS berm. Siphon breaker in 24-inch pipe riser on landside (LS) shoulder. 36-inch concrete stand pipe on LS berm. The only item identified is the 36-inch standpipe on the LS toe (Permit No. 9381, - Tribble). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959 (Station #####, Drawing No. 50-4-3081)] FS Date: 5/5/2015 8:20:00 AM					

Photo 1 of 1 : UCIP_SP_2016_48467_68970.jpg



36-inch concrete riser on LS toe.

LM Start	0.44	Rating **	M	Issue No.	25
LM End	0.49	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			39.157957 °	39.158226 °
				-122.021950 °	-122.021950 °
DWR ID	DWR_MA0012_01_s_2016_25				
Comment Code					
Inspector Comment					
2011 - Erosion occurring upstream and downstream of an irrigation diversion structure. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: SYC_9-3_L]					

No Photos

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

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	03/18/2016 03/18/2016	Keith Millard

LM Start	0.49	Rating **	U	Issue No.	33
LM End	0.49	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.039413 °	39.039413 °
				-121.997766 °	-121.997766 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:48468
DS_ID:17146
EP_NO: 9382
Repair Type: Urgent
Crossing Status: Found
UCIP Comments: 5/4/2015 WS flap gate is blocked by sediment and unable to open. LS inlet is about 50% plugged with soil. Needs to be cleaned.6/17/2014 Same as last inspection.12/16/2013 Sediment against flapgate has been cleared and it can now function properly.7/16/2013 Sediment is built up against WS flapgate preventing it from opening.10/11/2012 Pipe is partially filled with soil.
FIELD_STRUCT_DESC: 24-inch corrugated metal drain pipe through levee, 13.0 feet below the crown. Flap gate, concrete headwall and grouted cobble spillway on waterside (WS). Concrete headwall on landside (LS). (Permit No. 9382, Baber). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959 (Station #####, Drawing No. 50-4-3081)]
FS Date: 5/5/2015 8:27:00 AM

LM Start	0.49	Rating **	U	Issue No.	33 (cont)
LM End	0.49	Issue Type +	En	Location *	WS

Photo 1 of 2 : UCIP_SP_2016_48468_68973.jpg



Intake at LS toe.

Photo 2 of 2 : UCIP_SP_2016_48468_68972.jpg



Outlet at WS toe.

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	03/18/2016 03/18/2016	Keith Millard

LM Start	1.69	Rating **	U	Issue No.	34
LM End	1.69	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.055711 °	39.055711 °
				-122.003252 °	-122.003252 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:48471
DS_ID:17149
EP_NO: 9382
Repair Type: Urgent
Crossing Status: Found
UCIP Comments: 5/4/2015 WS flapgate is blocked by sediment and unable to open. LS inlet is plugged by silt and wood chippings. Needs to be cleaned.6/17/2014 Flap gate was cleaned out and is fully closed. LS inlet still partially full of soil.12/16/2013 Same as last inspection. WS flapgate still needs to be cleaned out and shut.7/16/2013 Same as last inspection. Make sure flapgate is closed before highwater season.10/11/2012 Inlet on LS filled partially with soil. Outlet blocked with soil and the flap gate wont close.
FIELD_STRUCT_DESC: 24-inch corrugated metal drain pipe through the levee, 13.0 feet below crown. Flap gate, concrete headwall and grouted cobble spillway on waterside (WS). Concrete headwall on landside (LS). (Permit No. 9382, Baber). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959 (Station #####)]
FS Date: 5/5/2015 8:34:00 AM

LM Start	1.69	Rating **	U	Issue No.	34 (cont)
LM End	1.69	Issue Type +	En	Location *	WS

Photo 1 of 2 : UCIP_SP_2016_48471_68984.jpg



Outlet on WS toe.

Photo 2 of 2 : UCIP_SP_2016_48471_68983.jpg



Inlet on LS toe.

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	03/18/2016 03/18/2016	Keith Millard

LM Start	1.77	Rating **	U	Issue No.	35
LM End	1.77	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.056847 °	39.056847 °
				-122.003288 °	-122.003288 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:48474
DS_ID:17150
EP_NO: 9387
Repair Type: Urgent
Crossing Status: Found
UCIP Comments: 5/4/2015 WS flapgate mostly underwater but could tell it was blocked open by something. LS inlet is located about 1/4 mile north along the side of the roadway.6/17/2014 Same as last inspection.12/16/2013 Pipe was flowing water and flap gate was being pushed open. Cannot verify if it will close all the way.7/16/2013 Same as last inspection. Was told inlet is about 1/4 mile down road way next to house. Will try to get coordinates for inlet.10/11/2012 No inlet could be located on LS. Flap gate partially blocked and will not close completely.
FIELD_STRUCT_DESC: 48-inch drain pipe through the levee, 20.0 feet below crown. Slide gate in 60-inch pipe riser on waterside (WS) slope. Flap gate and concrete headwall on WS. (Permit No. 9387, - Christenson). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959 (Station #####)]
FS Date: 5/5/2015 8:45:00 AM

LM Start	1.77	Rating **	U	Issue No.	35 (cont)
LM End	1.77	Issue Type +	En	Location *	WS

Photo 1 of 2 : UCIP_SP_2016_48474_68991.jpg



60-inch standpipe with slide gate on WS slope with outlet in background.

Photo 2 of 2 : UCIP_SP_2016_48474_68990.jpg



Flap gate and concrete headwall at WS toe.

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	03/18/2016 03/18/2016	Keith Millard

LM Start	1.98	Rating **	U	Issue No.	36
LM End	1.98	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.059773 °	39.059773 °
				-122.004391 °	-122.004391 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:48475 DS_ID:17151 EP_NO: 9391 Repair Type: Urgent Crossing Status: Found UCIP Comments: 5/4/2015 LS and WS ends are blocked with soil. Pipe is inoperable as it is.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.7/16/2013 LS inlet is completely filled with soil. Needs to be cleaned out.10/11/2012 Inlet is partially filled with soil. FIELD_STRUCT_DESC: 24-inch corrugated metal drain pipe through levee, 13.0 feet below crown. Flap gate, concrete headwall and grouted cobble spillway on the waterside (WS). Concrete headwall on landside (LS). (Permit No. 9391, Christenson). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959 (Station #####)] FS Date: 5/5/2015 8:58:00 AM					

LM Start	1.98	Rating **	U	Issue No.	36 (cont)
LM End	1.98	Issue Type +	En	Location *	WS

Photo 1 of 2 : UCIP_SP_2016_48475_68994.jpg



WS view of outlet.

Photo 2 of 2 : UCIP_SP_2016_48475_68993.jpg



LS view of inlet.

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

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	03/18/2016 03/18/2016	Keith Millard

LM Start	2.58	Rating **	M	Issue No.	1
LM End	3.68	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.067343 °	39.081684 °
				-122.009611 °	-122.016243 °
DWR ID	DWR_MA0012_01_s_2012_1				
Comment Code					
DT : Ditch					
Inspector Comment					

No Photos

LM Start	3.69	Rating **	U	Issue No.	37
LM End	3.69	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.081949 °	39.081949 °
				-122.016179 °	-122.016179 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:48478 DS_ID:17154 EP_NO: 9388 Repair Type: Urgent Crossing Status: Found UCIP Comments: 5/4/2015 Slide gate stem is still bent. Gate looks to be unable to close all the way.6/17/2014 Same as last inspection.12/16/2013 Slide gate stem is still bent. WS flapgate was closed.7/16/2013 Water flowing through pipe so screw gate definately not closed. Was told NOV's have been sent for owner to replace stem. Flap gate gets closed for flood season.10/11/2012 Slide gate inoperable, but appears to be in closed position. Flap gate held in open position. Good candidate for video inspection when, if ever, dry. FIELD_STRUCT_DESC: 48-inch corrugated metal pipe through the levee, 28.0 feet below the crown. Slide gate in 66-inch pipe riser on the waterside (WS) slope. Concrete headwall on the WS. Grouted cobble spillway from drain ditch to large canal on the landside (LS). (Permit No. 9388, Wallace) [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959 (Station #####)] FS Date: 5/5/2015 1:08:00 PM					

Photo 1 of 2 : UCIP_SP_2016_48478_69005.jpg



Slide gate in corrugated metal riser on WS slope.

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	03/18/2016 03/18/2016	Keith Millard

LM Start	3.69	Rating **	U	Issue No.	37 (cont)
LM End	3.69	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.081949 °	39.081949 °
				-122.016179 °	-122.016179 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:48478 DS_ID:17154 EP_NO: 9388 Repair Type: Urgent Crossing Status: Found UCIP Comments: 5/4/2015 Slide gate stem is still bent. Gate looks to be unable to close all the way.6/17/2014 Same as last inspection.12/16/2013 Slide gate stem is still bent. WS flapgate was closed.7/16/2013 Water flowing through pipe so screw gate definately not closed. Was told NOV's have been sent for owner to replace stem. Flap gate gets closed for flood season.10/11/2012 Slide gate inoperable, but appears to be in closed position. Flap gate held in open position. Good candidate for video inspection when, if ever, dry. FIELD_STRUCT_DESC: 48-inch corrugated metal pipe through the levee, 28.0 feet below the crown. Slide gate in 66-inch pipe riser on the waterside (WS) slope. Concrete headwall on the WS. Grouted cobble spillway from drain ditch to large canal on the landside (LS). (Permit No. 9388, Wallace) [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959 (Station #####)] FS Date: 5/5/2015 1:08:00 PM					

Photo 2 of 2 : UCIP_SP_2016_48478_69004.jpg



Drainage ditch on LS toe.

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

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	03/18/2016 03/18/2016	Keith Millard

LM Start	4.23	Rating **	M	Issue No.	38
LM End	4.23	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.089666 °	39.089666 °
				-122.015248 °	-122.015248 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:48484 DS_ID:20717 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.6/17/2014 Same as last inspection. Pump reinstalled on pier.12/16/2013 Pump has been removed for winter.7/16/2013 Same as last inspection.10/11/2012 No permit identified for this crossing. FIELD_STRUCT_DESC: 24-inch steel pipe though levee, 4.5 feet below crown. Pump in pump house on waterside (WS) bank. Siphon breaker valve installed on landside (LS) shoulder. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959 (Station #####)] FS Date: 5/5/2015 1:23:00 PM					

LM Start	4.23	Rating **	M	Issue No.	38 (cont)
LM End	4.23	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_48484_69023.jpg



Possible siphon breaker for pipe on LS shoulder.

Photo 2 of 2 : UCIP_SP_2016_48484_69022.jpg



Pumping plant on WS toe.

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

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	03/18/2016 03/18/2016	Keith Millard

LM Start	4.72	Rating **	M	Issue No.	4
LM End	4.77	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.096839 °	39.097455 °
				-122.015568 °	-122.015581 °
DWR ID	DWR_MA0012_01_s_2012_4				
Comment Code					
DT : Ditch					
Inspector Comment					

No Photos

LM Start	5.01	Rating **	U	Issue No.	39
LM End	5.01	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.100898 °	39.100898 °
				-122.016078 °	-122.016078 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:48486 DS_ID:17191 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: 5/4/2015 WS flapgate is blocked by sediment and unable to open. LS inlet is hidden by sediment and heavy vegetation and unable to be located. Needs to be cleared.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.10/11/2012 Pipe is clogged at both the inlet and outlet. Good candidate for video inspection. FIELD_STRUCT_DESC: 48-inch corrugated metal pipe through the levee, approximately 15 feet below the crown. Concrete headwalls on both waterside (WS) and (LS) ends with an automatic drainage gate on the WS. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959 (Station #####)] FS Date: 5/5/2015 1:27:00 PM					

Photo 1 of 2 : UCIP_SP_2016_48486_69030.jpg



Apparent inlet clogged with concrete or grout on LS toe in drainage swale.

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

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	03/18/2016 03/18/2016	Keith Millard

LM Start	5.01	Rating **	U	Issue No.	39 (cont)	
LM End	5.01	Issue Type +	En	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			39.100898 °	39.100898 °	
				-122.016078 °	-122.016078 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:48486 DS_ID:17191 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: 5/4/2015 WS flapgate is blocked by sediment and unable to open. LS inlet is hidden by sediment and heavy vegetation and unable to be located. Needs to be cleared.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.10/11/2012 Pipe is clogged at both the inlet and outlet. Good candidate for video inspection. FIELD_STRUCT_DESC: 48-inch corrugated metal pipe through the levee, approximately 15 feet below the crown. Concrete headwalls on both waterside (WS) and (LS) ends with an automatic drainage gate on the WS. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959 (Station #####)] FS Date: 5/5/2015 1:27:00 PM						

Photo 2 of 2 : UCIP_SP_2016_48486_69029.jpg



Outlet on WS toe.

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

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	03/18/2016 03/18/2016	Keith Millard

LM Start	5.98	Rating **	M	Issue No.	40
LM End	5.98	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.114949 °	39.114949 °
				-122.017946 °	-122.017946 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:48489 DS_ID:20715 EP_NO: 13699 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.10/11/2012 Oil leakage around pump. FIELD_STRUCT_DESC: 1 of 2: 20-inch soilproofed steel storn drain pipe through levee, 4.4 feet below crown. Cobble revetted sump on waterside (WS). Siphon breaker in 24-inch metal pipe risers on WS shoulder. Pump house at toe of landside (LS) slope. (Permit No. 13699, 1984). Replaced 18-inch pipe at same location. FS Date: 5/5/2015 1:34:00 PM					

LM Start	5.98	Rating **	M	Issue No.	40 (cont)
LM End	5.98	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_48489_69061.jpg



Pumping plant on LS slope

Photo 2 of 2 : UCIP_SP_2016_48489_69060.jpg



Siphon Breaker on WS shoulder.

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	03/18/2016 03/18/2016	Keith Millard

LM Start	5.98	Rating **	M	Issue No.	41
LM End	5.98	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.114963 °	39.114963 °
				-122.017947 °	-122.017947 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:48492 DS_ID:20716 EP_NO: 13699 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.10/11/2012 Oil leaks at pump head. FIELD_STRUCT_DESC: 2 of 2: 20-inch soilproofed steel storm drain pipe through levee, 4.4 feet below crown. Cobble revetted sump on waterside (WS). Siphon breaker in 24-inch metal pipe risers on WS shoulder. Pump house at toe of landside (LS) slope. (Permit No. 13699, 1984). Replaced 18-inch pipe at same location. FS Date: 5/5/2015 1:36:00 PM					

LM Start	5.98	Rating **	M	Issue No.	41 (cont)
LM End	5.98	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_48492_69064.jpg



Siphon Breaker on WS shoulder.

Photo 2 of 2 : UCIP_SP_2016_48492_69063.jpg



Pumphouse on LS slope.

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

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	03/18/2016 03/18/2016	Keith Millard

LM Start	5.98	Rating **	M	Issue No.	27
LM End	5.98	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.114977 °	39.114977 °
				-122.017947 °	-122.017947 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:48458 DS_ID:17199 EP_NO: 9390 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.10/11/2012 Minor oil leak on pump. FIELD_STRUCT_DESC: 3 of 3: 18-inch pipe through levee, 4.4 feet below crown. Cobble revetted sump on waterward side. Siphon breaker in 16-inch metal pipe risers on waterward shoulder. Pump house at toe of landward slope. (Permit No. 9390 - Profpe) Originally included in O+M manual (1959). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959 (Station #####)] FS Date: 5/5/2015 1:39:00 PM					

LM Start	5.98	Rating **	M	Issue No.	27 (cont)
LM End	5.98	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_48458_69081.jpg



Pump house on LS slope.

Photo 2 of 2 : UCIP_SP_2016_48458_69080.jpg



Siphon breaker on WS shoulder.

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	03/18/2016 03/18/2016	Keith Millard

LM Start	7.58	Rating **	M	Issue No.	28
LM End	7.58	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.137187°	39.137187°
				-122.022793°	-122.022793°
DWR ID					

Comment Code

Inspector Comment

FS_ID:48459
DS_ID:17163
EP_NO: 9390
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.10/11/2012 Rodent burrowing along sides of pipe on LS.
FIELD_STRUCT_DESC: 24-inch steel pipe through levee, 3.0 feet below crown. Both ends capped, terminating on levee slopes. (Permit No. 9390 - Profpe) Originally included in O+M manual (1959).
[Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959 (Station #####)]
FS Date: 5/5/2015 1:39:00 PM

LM Start	7.58	Rating **	M	Issue No.	28 (cont)
LM End	7.58	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_48459_69089.jpg



Pipe on WS.

Photo 2 of 2 : UCIP_SP_2016_48459_69088.jpg



Pipe on LS.

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

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	03/18/2016 03/18/2016	Keith Millard

LM Start	9.03	Rating **	U	Issue No.	29
LM End	9.03	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.158097 °	39.158097 °
				-122.021706 °	-122.021706 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:48461
DS_ID:17166
EP_NO: 9390
Repair Type: Urgent
Crossing Status: Found
UCIP Comments: 5/4/2015 WS concrete headwall tilting away from the levee slope.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.10/11/2012 Concrete Headwall tilting on WS slope.
FIELD_STRUCT_DESC: 36-inch CM drain pipe through the levee, 15.0 feet below crown. Concrete head wall, slide gate and grouted revetment on waterward side. Slide gate and Concrete headwall on landward side. (Permit No. 9390 - Profpe). Originally included in O+M manual (1959). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959 (Station #####)]
FS Date: 5/5/2015 1:41:00 PM

LM Start	9.03	Rating **	U	Issue No.	29 (cont)
LM End	9.03	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_48461_69100.jpg



Tilting headwall on WS toe.

Photo 2 of 2 : UCIP_SP_2016_48461_69099.jpg



Slidegate on WS toe.

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

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	03/18/2016 03/18/2016	Keith Millard

LM Start	9.03	Rating **	M	Issue No.	30
LM End	9.03	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.158124 °	39.158124 °
				-122.021701 °	-122.021701 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:48462
DS_ID:17165
EP_NO: 9390
Repair Type: Non-Urgent
Crossing Status: Indicator Found
UCIP Comments: 5/4/2015 Abandoned crossing.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.10/11/2012 Pipe abandoned. Steel pump platform remains on LS slope, but all appurtances have been removed.
FIELD_STRUCT_DESC: 18-inch steel pipe through levee, 3.0 feet below crown. waterward end open into concrete spill box. Pump on landward side on steel pier.. (Permit No. 9390 - Profpe) Originally included in O+M manual (1959) [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959 (Station #####)]
FS Date: 5/5/2015 1:42:00 PM

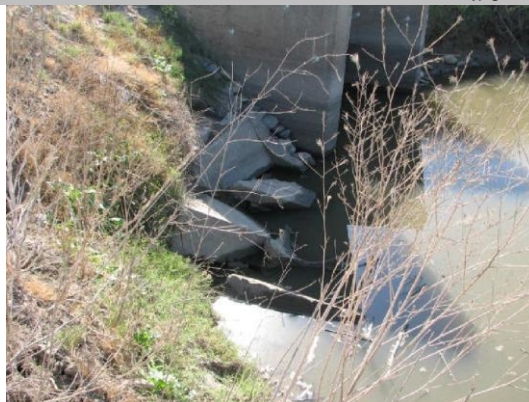
LM Start	9.03	Rating **	M	Issue No.	30 (cont)
LM End	9.03	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_48462_69109.jpg



Pump platform at center left of photo.

Photo 2 of 2 : UCIP_SP_2016_48462_69108.jpg



headwall debris on LS toe showing evidence of 18-inch cmp.

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	03/18/2016 03/18/2016	Keith Millard

LM Start	9.29	Rating **	M	Issue No.	26
LM End	9.29	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Animal Control		39.161847 °	39.161847 °	
			-122.021895 °	-122.021895 °	
DWR ID	DWR_MA0012_01_f_2015_26				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Repair the rodent holes on the landside slope.					

No Photos

LM Start	10.63	Rating **	M	Issue No.	24
LM End	10.63	Issue Type +	Ma	Location *	CR
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Crown Surface / Depressions / Rutting		39.175977 °	39.175977 °	
			-122.014357 °	-122.014357 °	
DWR ID	DWR_MA0012_01_s_2016_24				
Comment Code					
C2 : Repair depressions or ruts in the crown or slope.					
Inspector Comment					
Vehicle tracks and 18" deep deep rut at edge of crown.					

No Photos

LM Start	10.70	Rating **	M	Issue No.	23
LM End	10.70	Issue Type +	Ma	Location *	CR
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Crown Surface / Depressions / Rutting		39.176936 °	39.176936 °	
			-122.014381 °	-122.014381 °	
DWR ID	DWR_MA0012_01_s_2016_23				
Comment Code					
C2 : Repair depressions or ruts in the crown or slope.					
Inspector Comment					

No Photos

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

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	03/18/2016 03/18/2016	Keith Millard

LM Start	10.92	Rating **	U	Issue No.	31
LM End	10.92	Issue Type +	En	Location *	CR
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.180039 °	39.180039 °
				-122.014266 °	-122.014266 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:48465
DS_ID:17157
EP_NO: 9386
Repair Type: Urgent
Crossing Status: Found
UCIP Comments: 5/4/2015 Both pipe ends and slide gate in riser are plugged with soil. Crossing is inoperable.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.10/11/2012 Pipe plugged with soil on both ends as well as at slide gate on WS slope. Slide gate inoperable.
FIELD_STRUCT_DESC: 24-inch Corrugated metal drainpipe through the levee, 8.0 feet below the crown. Slide gate in 36-inch pipe riser on the waterward shoulder. (Permit No. 9386 - Wescott) Levee turns eastward. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959 (Station #####)]
FS Date: 5/5/2015 1:51:00 PM

LM Start	10.92	Rating **	U	Issue No.	31 (cont)
LM End	10.92	Issue Type +	En	Location *	CR

Photo 1 of 2 : UCIP_SP_2016_48465_69115.jpg



cover on 36-inch CMP standpipe on WS slope.

Photo 2 of 2 : UCIP_SP_2016_48465_69114.jpg



Bent and broken actuator on slide gate in 36-inch CMP. Pipe appears to be filled with soil.

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