

**Flood Control Project Maintenance
Levee Inspections**
LMA District Cover Sheet
Spring 2014 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)				

** 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 2014 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0003

Waterway		Bank	Unit Miles	
Unit No. 01 Feather River		Right	5.19	
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	05/01/2014 - 05/01/2014			
DWR Inspector	Matthew Hoffman			
Accompanied By				

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
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Levee Inspection Report By Mile - Spring 2014

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.19	05/01/2014 05/01/2014	Matthew Hoffman

LM Start		Rating **	A	Issue No.	4
LM End		Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start		End
Item	Operations & Maintenance Manuals			°	°
				°	°
DWR ID	DWR_MA0003_01_s_2013_4				
Action/Comments					

No Photos

LM Start		Rating **	A	Issue No.	6
LM End		Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start		End
Item	Emergency Supplies & Equipment			°	°
				°	°
DWR ID	DWR_MA0003_01_s_2013_6				
Action/Comments					

No Photos

LM Start		Rating **	A	Issue No.	7
LM End		Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start		End
Item	Flood Preparedness & Training			°	°
				°	°
DWR ID	DWR_MA0003_01_s_2013_7				
Action/Comments					

No Photos

<p>* Location LS : Land Side WS : Water Side CR : Crown</p>	<p>** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain</p>	<p>+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement</p>
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**Flood Control Project Maintenance
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Levee Inspection Report By Mile - Spring 2014

Sutter Maintenance Yard Maintenance Area 0003

Waterway			Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River			Right	5.19	05/01/2014 05/01/2014	Matthew Hoffman

LM Start	0.00	Rating **	M	Issue No.	8
LM End	1.22	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Vegetation		38.897983 °	38.902244 °	
			-121.617791 °	-121.598182 °	
DWR ID	DWR_MA0003_01_s_2014_8				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

Photo 1 of 1 : mhoffman_s_20140502_499.jpg



This photo was taken from the crown facing east looking down the landward levee slope at vegetation requiring maintenance. Spring 2014.

LM Start	0.00	Rating **	M	Issue No.	9
LM End	5.19	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Vegetation		38.897983 °	38.949554 °	
			-121.617791 °	-121.586043 °	
DWR ID	DWR_MA0003_01_s_2014_9				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

Photo 1 of 1 : mhoffman_s_20140502_500.jpg



This photo was taken from the crown facing east looking down the waterward levee slope at vegetation requiring maintenance. Spring 214.

* Location LS : Land Side 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
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Levee Inspection Report By Mile - Spring 2014

Sutter Maintenance Yard Maintenance Area 0003

Waterway		Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River		Right	5.19	05/01/2014 05/01/2014	Matthew Hoffman

LM Start	0.80	Rating **	M	Issue No.	5
LM End	0.80	Issue Type +	Ma	Location *	LS
Category	Interior Drainage & Piping Systems		GPS Latitude/Longitude		
			Start	End	
Item	Sluice / Slide Gates		38.903291 °	38.903291 °	
			-121.605747 °	-121.605747 °	
DWR ID	DWR_MA0003_01_s_2012_5				
Action/Comments					
Inspector Comments: This pipe leaked during the high water event of 2010/2011.					

Photo 1 of 1 : mhoffman_s_20140401_398.jpg



Levee mile 0.80, this photo is looking at the landside toe, one of these pipes leaked during the high water event of 2010/2011. A flap gate prevents flow from the waterward side to the landward side of the levee.

LM Start	0.80	Rating **	M	Issue No.	1
LM End	0.80	Issue Type +	En	Location *	LS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		38.903264 °	38.903264 °	
			-121.605698 °	-121.605698 °	
DWR ID	DWR_MA0003_01_s_2014_1				
Action/Comments					
Inspector Comments: FS_ID:23683 EP_NO: 13624 Repair Type: Crossing Status: UCIP Comments: 5/21/2013 SBFCA project recommends replacing in accordance with title 23/21/2013 Hole in slope along outside of standpipe thats about 1 foot deep with moisture in the bottom. Dirt inside standpipe around siphon breaker also wet indicating there may be a leak. Need to investigate source or moisture. FIELD_STRUCT_DESC: 20-inch pipe through the levee 3 feet below the crown. Siphon breaker on the waterward shoulder. Open on waterward end. Pump in ditch on landward side. (Permit No. 13624-D & D, Inc.) FS Date: 11/4/2013					

No Photos

* Location LS : Land Side 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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Levee Inspection Report By Mile - Spring 2014

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Waterway		Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River		Right	5.19	05/01/2014 05/01/2014	Matthew Hoffman

LM Start	0.80	Rating **	M	Issue No.	2
LM End	0.80	Issue Type +	En	Location *	LS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		38.903264 °	38.903264 °	
			-121.605698 °	-121.605698 °	
DWR ID	DWR_MA0003_01_s_2014_2				
Action/Comments					
Inspector Comments: FS_ID:23619 EP_NO: N/A Repair Type: Crossing Status: UCIP Comments: 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. 5/21/2013 SBFCA project recommends replacing in accordance with title 23/21/2013 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. 10/30/2013 Same as last inspection. FIELD_STRUCT_DESC: 2 of 2. 18-inch pipe through the levee, 32.0 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end at concrete headwall. Concrete "U" headwall at the waterward toe. Originally included in O+M manual (1955). FS Date: 11/4/2013 2:23:57 PM					

Photo 1 of 1 : UCIP_3559.jpg



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

LM Start	1.82	Rating **	M	Issue No.	20
LM End	1.82	Issue Type +	En	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Encroachments		38.907469 °	38.907469 °	
			-121.589717 °	-121.589717 °	
DWR ID	DWR_MA0003_01_f_2013_20				
Action/Comments					
Tree or limb					

No Photos

<p>* Location LS : Land Side WS : Water Side CR : Crown</p>	<p>** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain</p>	<p>+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement</p>
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Waterway		Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River		Right	5.19	05/01/2014 05/01/2014	Matthew Hoffman

LM Start	2.19	Rating **	M	Issue No.	3
LM End	2.19	Issue Type +	En	Location *	WS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		38.911734 °	38.911734 °	
			-121.586106 °	-121.586106 °	
DWR ID	DWR_MA0003_01_s_2014_3				
Action/Comments					
Inspector Comments: FS_ID:23623 EP_NO: 3284 Repair Type: Crossing Status: UCIP Comments: 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 6/21/2013 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 detail 8/30/2013 Same as last inspection. FIELD_STRUCT_DESC: 32-inch by 32-inch concrete box culvert through the levee approximately 28 feet below the crown. Transition between vault on RS and box culvert within levee section is made with a 41-inch CMP. Slide gate on LS at concrete headwall. Flap Gate in concrete vault on RS at terminal of pipes from pump structure in floodway. Pipes from pump station in creek be no longer connected. (Permit No. 3284) FS Date: 11/4/2013 2:26:19 PM					

Photo 1 of 1 : UCIP_3560.jpg



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

LM Start	3.64	Rating **	M	Issue No.	19
LM End	3.64	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Vegetation		38.930063 °	38.930063 °	
			-121.590211 °	-121.590211 °	
DWR ID	DWR_MA0003_01_f_2013_19				
Action/Comments					
Elderberries are blocking visibility and flood fight capability. Inspector Comments: Elderberries on the landward levee toe.					

Photo 1 of 1 : mhoffman_s_20140401_400.jpg



This photo was taken from the levee crown facing south looking down the landward levee slope at a group of Elderberries. Fall 2013.

* Location LS : Land Side 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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Sutter Maintenance Yard Maintenance Area 0003

Waterway			Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River			Right	5.19	05/01/2014 05/01/2014	Matthew Hoffman

LM Start	4.20	Rating **	M	Issue No.	10
LM End	4.20	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	USACE Erosion Survey			38.937454 °	38.937937 °
				-121.588544 °	-121.588471 °
DWR ID					
Action/Comments					
Inspector Comments: 2013: Minor toe scour causing gradual erosion of bank slope. Site is within ecological reserve. [2013 Site ID: FHR_12-3_R]					

Photo 1 of 2 : USACE2013A_FHR_12-3_R_2.jpg



USACE 2013 Photo #1

LM Start	4.20	Rating **	M	Issue No.	10 (cont)
LM End	4.20	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : USACE2013A_FHR_12-3_R_3.jpg



USACE 2013 Photo #2

LM Start	4.67	Rating **	M	Issue No.	11
LM End	4.67	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	USACE Erosion Survey			38.945190 °	38.945967 °
				-121.586073 °	-121.586328 °
DWR ID					
Action/Comments					
Inspector Comments: 2013: Minor toe scour causing gradual erosion					

Photo 1 of 2 : USACE2013A_FHR_12-8_R_5.jpg



USACE 2013 Photo #1

<p>* Location</p> <p>LS : Land Side WS : Water Side CR : Crown</p>	<p>** Rating</p> <p>A : Acceptable M : Minimally Acceptable U : Unacceptable</p>	<p>N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain</p>	<p>+ Issue Type</p> <p>Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement</p>
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.19	05/01/2014 05/01/2014	Matthew Hoffman

LM Start	4.67	Rating **	M	Issue No.	11 (cont)
LM End	4.67	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	USACE Erosion Survey			38.945190 °	38.945967 °
				-121.586073 °	-121.586328 °
DWR ID					
Action/Comments					
Inspector Comments: 2013: Minor toe scour causing gradual erosion into the bank slope [2013 Site ID: FHR_12-8_R]					

Photo 2 of 2 : USACE2013A_FHR_12-8_R_6.jpg



USACE 2013 Photo #2

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