

**Flood Control Project Maintenance  
Levee Inspections**

**Fall 2014 Levee Maintenance Deficiency Summary Report  
Overall LMA & Unit Ratings, including USACE Erosion Survey**

**Sacramento River Basin**

<b>ST0009</b>		Overall LMA Rating	Total LMA Miles						
<b>Sutter Maintenance Yard Tisdale Bypass</b>		<b>A</b>	<b>8.94</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>									
Encroachments					3.28				
Erosion / Bank Caving	0.03		0.03	0.34%					
<i>Supplemental</i>									
DWR UCIP Field Study					0.03				
<i>LMA Totals:</i>	0.03	0.00	0.03	0.34%	3.31	0.00	0.00	0.00	
<b>Unit No. 01 Tisdale Bypass LB</b>		Overall Unit Rating	Total Unit Miles						
ST0009		<b>A</b>	<b>4.51</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>									
Encroachments					1.92				
<i>Supplemental</i>									
DWR UCIP Field Study					0.01				
<i>Unit Totals:</i>	0.00	0.00	0.00	0.00%	1.93	0.00	0.00	0.00	
<b>Unit No. 02 Tisdale Bypass RB</b>		Overall Unit Rating	Total Unit Miles						
ST0009		<b>A</b>	<b>4.43</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>									
Encroachments					1.36				
Erosion / Bank Caving	0.03		0.03	0.68%					
<i>Supplemental</i>									
DWR UCIP Field Study					0.02				
<i>Unit Totals:</i>	0.03	0.00	0.03	0.68%	1.38	0.00	0.00	0.00	

**Flood Control Project Maintenance  
Levee Inspections**  
**LMA District Cover Sheet**  
**Fall 2014 Levee Inspection Results**

**Sutter Maintenance Yard Tisdale Bypass**

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

\*\* 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 2014 Levee Inspection Results**

**Sutter Maintenance Yard Tisdale Bypass**

Waterway		Bank	Unit Miles
Unit No. 01 Tisdale Bypass		Left	4.51
	Spring (March - May)	Summer (June - August)	(September - November) Fall Winter (December - February)
Unit Maintenance Rating (Fall Only)			<b>A</b>
Date of Inspection	03/06/2014 - 03/06/2014		11/10/2014 - 11/10/2014
DWR Inspector	Bob Duffey		Bob Duffey
Accompanied By	Steve Beckley Sutter Maintenance Yard		Steve Beckley 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 - Fall 2014**

**Sutter Maintenance Yard Tisdale Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Tisdale Bypass	Left	4.51	11/10/2014 11/10/2014	Bob Duffey

LM Start		Rating **	A	Issue No.	2
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start		End
Item	Operations & Maintenance Manuals			o	o
DWR ID	DWR_ST0009_01_s_2013_2				
Action/Comments					
Inspector Comments: Sutter Yard has the O&M manuals.					

No Photos

LM Start		Rating **	A	Issue No.	4
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start		End
Item	Emergency Supplies & Equipment			o	o
DWR ID	DWR_ST0009_01_s_2013_4				
Action/Comments					
Inspector Comments: Sutter Yard has a stockpile of emergency supplies and equipment.					

No Photos

LM Start		Rating **	A	Issue No.	5
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start		End
Item	Flood Preparedness & Training			o	o
DWR ID	DWR_ST0009_01_s_2013_5				
Action/Comments					
Inspector Comments: Sutter Yard had flood fight training October 2014.					

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 2014**

**Sutter Maintenance Yard Tisdale Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Tisdale Bypass	Left	4.51	11/10/2014 11/10/2014	Bob Duffey

LM Start	<b>0.71</b>	Rating **	A	Issue No.	<b>6</b>
LM End	<b>0.71</b>	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Vegetation		39.028345 °	39.028345 °	
			-121.808753 °	-121.808753 °	
DWR ID	DWR_ST0009_01_f_2014_6				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements. Inspector Comments: Sutter Yard has burned and dragged both slopes.					

Photo 1 of 1 : FA\_2014\_ST0009\_286\_6\_20141112\_00002.jpg



View of the levee with no vegetation on both slopes.

LM Start	<b>2.18</b>	Rating **	M	Issue No.	<b>3</b>
LM End	<b>4.10</b>	Issue Type +	En	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Encroachments		39.028173 °	39.028012 °	
			-121.781475 °	-121.745665 °	
DWR ID	DWR_ST0009_01_s_2012_3				
Action/Comments					
Pole					

Photo 1 of 1 : FA\_2014\_ST0009\_286\_3\_20141013\_00001.jpg



View of the PG&E poles along the landside crown of the levee.

<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**

**Unit Cover Sheet**

**Fall 2014 Levee Inspection Results**

**Sutter Maintenance Yard Tisdale Bypass**

Waterway		Bank	Unit Miles	
Unit No. 02 Tisdale Bypass		Right	4.43	
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			<b>A</b>	
Date of Inspection	03/06/2014 - 03/06/2014		11/10/2014 - 11/10/2014	
DWR Inspector	Bob Duffey		Bob Duffey	
Accompanied By	Steve Beckley Sutter Maintenance Yard		Steve Beckley Sutter Maintenance Yard	

**Summer & Winter Inspections**

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**Flood Control Project Maintenance  
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**Levee Inspection Report By Mile - Fall 2014**

**Sutter Maintenance Yard Tisdale Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Tisdale Bypass	Right	4.43	11/10/2014 11/10/2014	Bob Duffey

LM Start	<b>0.11</b>	Rating **	M	Issue No.	<b>1</b>
LM End	<b>0.25</b>	Issue Type +	En	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Encroachments		39.023760 °	39.024559 °	
			-121.818875 °	-121.816344 °	
DWR ID	DWR_ST0009_02_s_2012_1				
Action/Comments					
Ditch					

Photo 1 of 1 : FA\_2014\_ST0009\_287\_1\_20141112\_00006.jpg



View of the agricultural ditch and erosion along the land side toe.

LM Start	<b>0.52</b>	Rating **	M	Issue No.	<b>2</b>
LM End	<b>1.74</b>	Issue Type +	En	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Encroachments		39.025539 °	39.025398 °	
			-121.811540 °	-121.789006 °	
DWR ID	DWR_ST0009_02_s_2012_2				
Action/Comments					
Ditch					

Photo 1 of 1 : FA\_2014\_ST0009\_287\_2\_20141013\_00002.jpg



View of the ag ditch next to the L/S toe.

LM Start	<b>0.66</b>	Rating **	A	Issue No.	<b>8</b>
LM End	<b>0.66</b>	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Vegetation		39.025625 °	39.025625 °	
			-121.808913 °	-121.808913 °	
DWR ID	DWR_ST0009_02_f_2014_8				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements. Inspector Comments: Sutter Yard has burned and dragged both slopes.					

Photo 1 of 1 : FA\_2014\_ST0009\_287\_8\_20141112\_00007.jpg



View of the levee with no vegetation on both slopes.

<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>N : Not Inspected/Rated</b> 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  
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**Levee Inspection Report By Mile - Fall 2014**

**Sutter Maintenance Yard Tisdale Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Tisdale Bypass	Right	4.43	11/10/2014 11/10/2014	Bob Duffey

LM Start	<b>1.01</b>	Rating **	M	Issue No.	<b>3</b>
LM End	<b>1.01</b>	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Erosion / Bank Caving		39.025542 °	39.025542 °	
			-121.802468 °	-121.802468 °	
DWR ID	DWR_ST0009_02_s_2012_3				
Action/Comments					
Note and monitor erosion site. Inspector Comments: Sutter Yard needs to monitor the erosion.					

Photo 1 of 1 : FA\_2014\_ST0009\_287\_3\_20141112\_00008.jpg



View of the erosion along the waterside berm.

LM Start	<b>1.14</b>	Rating **	M	Issue No.	<b>6</b>
LM End	<b>1.14</b>	Issue Type +	En	Location *	WS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		39.025503 °	39.025503 °	
			-121.800053 °	-121.800053 °	
DWR ID	DWR_ST0009_02_f_2014_6				
Action/Comments					
Inspector Comments: FS_ID:35894 EP_NO: 267 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Burrowing along downstream side of concrete vault on WS Toe. May need to be grouted 5/20/2013 Same as last inspection 10/30/2013 Same as last inspection 5/12/2014 Same as last inspection. FIELD_STRUCT_DESC: 54-inch concrete pipe through levee, 29.5 feet below the crown. Slide gates on both ends. Waterward end gate in 5-foot by 6-foot concrete box. Landward end gate in concrete "U" headwall. Siphon pipe under and across bypass, steel concrete encased. (Permit No. 267 & 290 - Sutter Basin Water Co.) FS Date: 5/14/2014 2:58:24 PM					

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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**Levee Inspection Report By Mile - Fall 2014**

**Sutter Maintenance Yard Tisdale Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Tisdale Bypass	Right	4.43	11/10/2014 11/10/2014	Bob Duffey

LM Start	<b>1.29</b>	Rating **	M	Issue No.	<b>4</b>
LM End	<b>1.29</b>	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Erosion / Bank Caving		39.025478 °	39.025478 °	
			-121.797232 °	-121.797232 °	
DWR ID	DWR_ST0009_02_s_ 2013_4				
Action/Comments					
Schedule repair of erosion site prior to the next inspection. Inspector Comments: Sutter Yard needs to monitor the erosion.					

Photo 1 of 1 : FA\_2014\_ST0009\_287\_4\_20141112\_00009.jpg



View of the erosion along the waterside berm.

LM Start	<b>1.50</b>	Rating **	M	Issue No.	<b>5</b>
LM End	<b>1.50</b>	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Erosion / Bank Caving		39.025446 °	39.025446 °	
			-121.793347 °	-121.793347 °	
DWR ID	DWR_ST0009_02_s_ 2013_5				
Action/Comments					
Schedule repair of erosion site prior to the next inspection. Inspector Comments: Sutter Yard needs to monitor the erosion.					

Photo 1 of 1 : FA\_2014\_ST0009\_287\_5\_20141112\_00010.jpg



View of the erosion along the waterside berm.

LM Start	<b>4.21</b>	Rating **	M	Issue No.	<b>7</b>
LM End	<b>4.21</b>	Issue Type +	En	Location *	WS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		39.024079 °	39.024079 °	
			-121.743420 °	-121.743420 °	
DWR ID	DWR_ST0009_02_f_ 2014_7				
Action/Comments					
Inspector Comments: FS_ID:35896 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Need to identify permit for crossing 10/30/2013 Same as last inspection 5/12/2014 Same as last inspection. FIELD_STRUCT_DESC: Natural gas pipeline markers on LS shoulder and toe and WS shoulder and toe. No photos available. FS Date: 5/14/2014 3:00:15 PM					

No Photos

<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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