

**Flood Control Project Maintenance
Levee Inspections****LMA District Cover Sheet****Spring 2013 Levee Inspection Results****Sutter Maintenance Yard Maintenance Area 0013**

	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 2013 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0013

Waterway			Bank	Unit Miles
Unit No. 01 Cherokee Canal			Right	18.87
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	05/10/2013 - 05/10/2013			
DWR Inspector	Bob Duffey			
Accompanied By	Jason Cooper 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 2013

Sutter Maintenance Yard Maintenance Area 0013

Waterway							Bank	Unit Miles	Inspection Start/End	Inspector	
Unit No. 01 Cherokee Canal							Right	18.87	05/10/2013 05/10/2013	Bob Duffey	
LMR No.	Levee Mile		Category	Item	* Location	Rating + -	Action/Comment	GPS Latitude/Longitude		Issue No.	
	Start	End						Start	End	Photo	
1				Operations & Maintenance Manuals	LS	A Ma		° °	° °	1	
											DWR ID: DWR_MA0013_01_s_2013_1
2				Emergency Supplies & Equipment	LS	A Ma		° °	° °	8	
											DWR ID: DWR_MA0013_01_s_2013_8
3				Flood Preparedness & Training	LS	A Ma		° °	° °	16	
											DWR ID: DWR_MA0013_01_s_2013_16
4	0.60	0.60		Slope Stability	WS	M Ma	S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.	39.590173 ° -121.700617 °	39.590173 ° -121.700617 °	19 Y	
											DWR ID: DWR_MA0013_01_s_2013_19
5	0.66	1.20		Encroachments	LS	M En	DT : Ditch	39.589272 ° -121.700599 °	39.581472 ° -121.700518 °	14 Y	
											DWR ID: DWR_MA0013_01_s_2012_14
6	0.76	0.78		Encroachments	LS	M Ma	EQ : Equipment	39.587905 ° -121.700822 °	39.587505 ° -121.700880 °	12 Y	
											DWR ID: DWR_MA0013_01_s_2012_12
7	0.97	0.97		Encroachments	LS	M En	PR : Prunings	39.584885 ° -121.700487 °	39.584885 ° -121.700487 °	20 Y	
											DWR ID: DWR_MA0013_01_s_2013_20
8	4.13	4.20		Encroachments	LS	M En	TR : Tree or limb	39.541660 ° -121.707408 °	39.540651 ° -121.707404 °	18 Y	
											DWR ID: DWR_MA0013_01_s_2013_18
9	6.51	7.09		Encroachments	LS	M En	DT : Ditch	39.508928 ° -121.714842 °	39.501438 ° -121.719715 °	3 Y	
											DWR ID: DWR_MA0013_01_s_2012_3
10	6.63	6.63		Encroachments	LS	M Ma	MA : Material	39.507337 ° -121.715693 °	39.507337 ° -121.715693 °	2 Y	
											DWR ID: DWR_MA0013_01_s_2012_2
11	9.84	9.87		Trim / Thin Trees	LS	M Ma	T1 : Trim trees to at least five feet above ground level.	39.467170 ° -121.743887 °	39.466860 ° -121.744108 °	5 Y	
											DWR ID: DWR_MA0013_01_s_2012_5
12	9.89	9.89		Encroachments	LS	M Ma	MA : Material	39.466635 ° -121.744228 °	39.466635 ° -121.744228 °	10 Y	
											DWR ID: DWR_MA0013_01_s_2012_10
13	11.20	13.47		Encroachments	WS	M En	DT : Ditch	39.449777 ° -121.755103 °	39.421255 ° -121.774893 °	17 Y	
											DWR ID: DWR_MA0013_01_s_2012_17
14	11.75	11.76	Supplemental	USACE Erosion Survey	WS	M Ma	Inspector Comments: 2011 - Small erosion pocket likely caused by irrigation diversion structure. 2012: Site is part of the extended inventory, last inspected 2011. [2012 Site ID: CHK_11-7_R]	39.442821 ° -121.759851 °	39.442738 ° -121.759908 °	11	
											DWR ID: DWR_MA0013_01_s_2013_11

*** 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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2013

Sutter Maintenance Yard Maintenance Area 0013

Waterway						Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal						Right	18.87	05/10/2013 05/10/2013	Bob Duffey

LMR No.	Levee Mile		Category	Item	Location *	Rating ** +	Action/Comment	GPS Latitude/Longitude		Issue No. Photo
	Start	End						Start	End	
15	14.42	14.42		Encroachments	LS	C	GA : Garbage Ma	39.412752 ° -121.788662 °	39.412752 ° -121.788662 °	4
								DWR ID: DWR_MA0013_01_s_2012_4		
16	16.45	17.42		Encroachments	LS	M	DT : Ditch En	39.394523 ° -121.817630 °	39.385580 ° -121.831282 °	7
								DWR ID: DWR_MA0013_01_s_2012_7		
17	17.71	17.75		Encroachments	LS	M	DT : Ditch En	39.382943 ° -121.835447 °	39.382635 ° -121.836012 °	9
								DWR ID: DWR_MA0013_01_s_2012_9		
18	17.72	18.20		Encroachments	LS	M	DT : Ditch En	39.382852 ° -121.835654 °	39.378481 ° -121.842394 °	15
								DWR ID: DWR_MA0013_01_s_2012_15		

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2013

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.87	05/10/2013 05/10/2013	Bob Duffey

Levee Mile Report Line	4
Start Levee Mile	0.60
End Levee Mile	0.60
Location	Water Side
Category	
Item	Slope Stability

View of the vehicle erosion along the waterside slope.

rduffey_s_20130513_395.JPG



Levee Mile Report Line	5
Start Levee Mile	0.66
End Levee Mile	1.20
Location	Land Side
Category	
Item	Encroachments

View of the agricultural ditch along the toe of the levee.

rduffey_s_20130225_107.jpg



Levee Mile Report Line	6
Start Levee Mile	0.76
End Levee Mile	0.78
Location	Land Side
Category	
Item	Encroachments

View of the equipment along the landside toe of the levee.

rduffey_s_20130225_106.jpg



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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2013

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.87	05/10/2013 05/10/2013	Bob Duffey

Levee Mile Report Line	7
Start Levee Mile	0.97
End Levee Mile	0.97
Location	Land Side
Category	
Item	Encroachments

View of the prunings along the landside toe.

rduffey_s_20130513_396.JPG



Levee Mile Report Line	8
Start Levee Mile	4.13
End Levee Mile	4.20
Location	Land Side
Category	
Item	Encroachments

View of the redwood trees along the slope of the levee.

rduffey_s_20130513_394.JPG



Levee Mile Report Line	9
Start Levee Mile	6.51
End Levee Mile	7.09
Location	Land Side
Category	
Item	Encroachments

View of the agricultural ditch along the toe.

rduffey_s_20130225_101.jpg



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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2013

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.87	05/10/2013 05/10/2013	Bob Duffey

Levee Mile Report Line	10
Start Levee Mile	6.63
End Levee Mile	6.63
Location	Land Side
Category	
Item	Encroachments

View of a concrete block along the toe.

rduffey_s_20130225_100.jpg



Levee Mile Report Line	11
Start Levee Mile	9.84
End Levee Mile	9.87
Location	Land Side
Category	
Item	Trim / Thin Trees

View of trees that need to be trimmed along the toe.

rduffey_s_20130225_103.jpg



Levee Mile Report Line	12
Start Levee Mile	9.89
End Levee Mile	9.89
Location	Land Side
Category	
Item	Encroachments

View of a trailer & material along the L/S toe.

rduffey_s_20130225_105.jpg



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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2013

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.87	05/10/2013 05/10/2013	Bob Duffey

Levee Mile Report Line	13
Start Levee Mile	11.20
End Levee Mile	13.47
Location	Water Side
Category	
Item	Encroachments

View of the agricultural ditch along the toe of the levee.

rduffey_s_20130225_108.jpg



Levee Mile Report Line	16
Start Levee Mile	16.45
End Levee Mile	17.42
Location	Land Side
Category	
Item	Encroachments

View of the ag along the toe of the levee.

rduffey_s_20130225_104.jpg



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**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Spring 2013 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0013

Waterway			Bank	Unit Miles
Unit No. 02 Cherokee Canal			Left	23.10
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	05/10/2013 - 05/10/2013			
DWR Inspector	Bob Duffey			
Accompanied By	Jason Cooper Sutter Maintenance Yard			

Summer & Winter Inspections

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Levee Inspections**

Levee Inspection Report By Mile - Spring 2013

Sutter Maintenance Yard Maintenance Area 0013

Waterway				Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal				Left	23.10	05/10/2013 05/10/2013	Bob Duffey

LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	
1	0.05	0.15		Encroachments	WS	M	EQ : Equipment	39.573523 °	39.572455 °	1
					Ma			-121.701387 °	-121.702370 °	
								DWR ID: DWR_MA0013_02_s_2012_1		
2	4.58	5.00		Encroachments	WS	M	GA : Garbage	39.526858 °	39.537468 °	911
					Ma			-121.689360 °	-121.690882 °	Y
								DWR ID: DWR_MA0013_02_s_2012_911		
3	5.15	5.15		Encroachments	WS	C	GA : Garbage	39.526938 °	39.526938 °	9
					Ma			-121.689597 °	-121.689597 °	
								DWR ID: DWR_MA0013_02_s_2012_9		
4	6.23	7.62		Encroachments	LS	M	DT : Ditch	39.520843 °	39.502958 °	12
					En			-121.706345 °	-121.716953 °	Y
								DWR ID: DWR_MA0013_02_s_2012_12		
5	10.14	10.64		Encroachments	LS	M	DT : Ditch	39.471517 °	39.465113 °	13
					En			-121.739433 °	-121.743592 °	Y
								DWR ID: DWR_MA0013_02_s_2012_13		
6	10.70	11.79		Encroachments	LS	M	DT : Ditch	39.464305 °	39.450333 °	18
					En			-121.744172 °	-121.753157 °	Y
								DWR ID: DWR_MA0013_02_s_2012_18		
7	13.55	14.10		Encroachments	LS	M	DT : Ditch	39.428192 °	39.406240 °	19
					En			-121.768443 °	-121.794863 °	Y
								DWR ID: DWR_MA0013_02_s_2012_19		
8	17.05	18.93		Encroachments	LS	M	DT : Ditch	°	39.389187 °	20
					En			°	-121.821233 °	Y
								DWR ID: DWR_MA0013_02_s_2012_20		
9	17.55	17.66		Encroachments	LS	M	TR : Tree or limb	39.401937 °	39.400881 °	5
					En			-121.801512 °	-121.803139 °	Y
								DWR ID: DWR_MA0013_02_s_2013_5		
10	19.58	20.15		Encroachments	LS	M	DT : Ditch	39.383252 °	39.378192 °	21
					En			-121.830565 °	-121.838543 °	Y
								DWR ID: DWR_MA0013_02_s_2012_21		
11	20.72	20.99		Trim / Thin Trees	LS	M	T1 : Trim trees to at least five feet above ground level.	39.372724 °	39.370732 °	6
					Ma			-121.846022 °	-121.850282 °	Y
								DWR ID: DWR_MA0013_02_s_2013_6		
12	22.38	22.38		Vegetation	LS	M	V6 : Landscaping	39.359982 °	39.359982 °	4
					En			-121.871958 °	-121.871958 °	Y
								DWR ID: DWR_MA0013_02_s_2012_4		
13	22.42	22.42		Encroachments	LS	M	PR : Prunings	39.359707 °	39.359707 °	8
					Ma			-121.872555 °	-121.872555 °	Y
								DWR ID: DWR_MA0013_02_s_2012_8		
14	22.83	22.85		Erosion / Bank Caving	WS	M	E1 : Note and monitor erosion site.	39.356498 °	39.356303 °	7
					Ma			-121.879030 °	-121.879417 °	Y
								DWR ID: DWR_MA0013_02_s_2012_7		

*** Location**

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+ Issue Type

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2013

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	05/10/2013 05/10/2013	Bob Duffey

Levee Mile Report Line	2
Start Levee Mile	4.58
End Levee Mile	5.00
Location	Water Side
Category	
Item	Encroachments

View of agricultural ditch along the toe.

rduffey_s_20130225_119.jpg



Levee Mile Report Line	4
Start Levee Mile	6.23
End Levee Mile	7.62
Location	Land Side
Category	
Item	Encroachments

View of the agricultural ditch along the toe.

rduffey_s_20130225_113.jpg



Levee Mile Report Line	5
Start Levee Mile	10.14
End Levee Mile	10.64
Location	Land Side
Category	
Item	Encroachments

View of the agricultural ditch along the toe.

rduffey_s_20130225_114.jpg



* 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
Levee Inspections**

Levee Inspection Report By Mile - Spring 2013

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	05/10/2013 05/10/2013	Bob Duffey

Levee Mile Report Line	6
Start Levee Mile	10.70
End Levee Mile	11.79
Location	Land Side
Category	
Item	Encroachments
View of the agricultural ditch along the toe.	
rduffey_s_20130225_115.jpg	



Levee Mile Report Line	7
Start Levee Mile	13.55
End Levee Mile	14.10
Location	Land Side
Category	
Item	Encroachments
View of the agricultural ditch along the toe.	
rduffey_s_20130225_116.jpg	



Levee Mile Report Line	8
Start Levee Mile	17.05
End Levee Mile	18.93
Location	Land Side
Category	
Item	Encroachments
View of the agricultural ditch along the toe.	
rduffey_s_20130225_117.jpg	



* 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
Levee Inspections**

Levee Inspection Report By Mile - Spring 2013

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	05/10/2013 05/10/2013	Bob Duffey

Levee Mile Report Line	9
Start Levee Mile	17.55
End Levee Mile	17.66
Location	Land Side
Category	
Item	Encroachments

View of the prunings along the landside slope.

rduffey_s_20130513_398.JPG



Levee Mile Report Line	10
Start Levee Mile	19.58
End Levee Mile	20.15
Location	Land Side
Category	
Item	Encroachments

View of the agricultural ditch along the toe.

rduffey_s_20130225_118.jpg



Levee Mile Report Line	11
Start Levee Mile	20.72
End Levee Mile	20.99
Location	Land Side
Category	
Item	Trim / Thin Trees

Trim the trees 5 feet to allow visibility along the landside slope.

rduffey_s_20130513_399.JPG



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Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	05/10/2013 05/10/2013	Bob Duffey

Levee Mile Report Line	12
Start Levee Mile	22.38
End Levee Mile	22.38
Location	Land Side
Category	
Item	Vegetation

View of landscaping along the toe.

rduffey_s_20130225_109.jpg



Levee Mile Report Line	13
Start Levee Mile	22.42
End Levee Mile	22.42
Location	Land Side
Category	
Item	Encroachments

View of the debris & prunings.

rduffey_s_20130225_111.jpg



Levee Mile Report Line	14
Start Levee Mile	22.83
End Levee Mile	22.85
Location	Water Side
Category	
Item	Erosion / Bank Caving

View of the along the canal.

rduffey_s_20130225_110.jpg



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