

**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>RD1600</b>	Overall LMA Rating	Total LMA Miles						
<b>Reclamation District No. 1600 Mull</b>	<b>U</b>	<b>14.69</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>								
Vegetation	20.90		20.90	142.25%				
Trim / Thin Trees		0.01	0.04	0.27%				
Encroachments					0.07			
Slope Stability	0.03		0.03	0.20%				
Erosion / Bank Caving	0.78	0.01	0.82	5.58%	0.02			
Crown Surface / Depressions / Rutting	1.40		1.40	9.53%				
<i>Supplemental</i>								
USACE Erosion Survey	0.05		0.05	0.34%				
DWR UCIP Field Study					0.06	0.04		
<i>LMA Totals:</i>	23.16	0.02	23.24	158.18%	0.15	0.04	0.00	0.00

<b>Unit No. 01 Sacramento River RB</b>	Overall Unit Rating	Total Unit Miles						
<b>RD1600</b>	<b>U</b>	<b>10.46</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>								
Vegetation	18.06		18.06	172.67%				
Trim / Thin Trees		0.01	0.04	0.38%				
Encroachments					0.07			
Slope Stability	0.03		0.03	0.29%				
Erosion / Bank Caving	0.40	0.01	0.44	4.21%	0.02			
Crown Surface / Depressions / Rutting	0.01		0.01	0.10%				
<i>Supplemental</i>								
USACE Erosion Survey	0.05		0.05	0.48%				
DWR UCIP Field Study					0.06	0.03		
<i>Unit Totals:</i>	18.55	0.02	18.63	178.12%	0.15	0.03	0.00	0.00

<b>Unit No. 02 Yolo Bypass LB</b>	Overall Unit Rating	Total Unit Miles						
<b>RD1600</b>	<b>U</b>	<b>4.23</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>								
Vegetation	2.84		2.84	67.09%				
Erosion / Bank Caving	0.38		0.38	8.98%				
Crown Surface / Depressions / Rutting	1.39		1.39	32.84%				
<i>Supplemental</i>								
DWR UCIP Field Study						0.01		
<i>Unit Totals:</i>	4.61	0.00	4.61	108.90%	0.00	0.01	0.00	0.00

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

**Reclamation District No. 1600 Mull**

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

\*\* 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**

**Reclamation District No. 1600 Mull**

Waterway			Bank	Unit Miles
Unit No. 01 Sacramento River			Right	10.46
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			<b>U</b>	
Date of Inspection	04/18/2014 - 04/18/2014		11/04/2014 - 11/07/2014	
DWR Inspector	John Williamson		Clay Thomas	
Accompanied By	Kent Lang RD1600		Kent Lang RD 1600	
	Kyle Lang RD 537/ RD 1600		Kyle Lang RD 537/ RD 1600	

**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**

**Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/04/2014 11/07/2014	Clay Thomas

LM Start		Rating **	A	Issue No.	32
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Operations & Maintenance Manuals			°	°
				°	°
DWR ID	DWR_RD1600_01_s _ 2013_32				
Action/Comments					
Inspector Comments: RD 1600 has copies of the O&M manuals.					

No Photos

LM Start		Rating **	A	Issue No.	33
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Emergency Supplies & Equipment			°	°
				°	°
DWR ID	DWR_RD1600_01_s _ 2013_33				
Action/Comments					
Inspector Comments: RD 1600 maintains a stockpile of flood response material.					

No Photos

LM Start		Rating **	A	Issue No.	34
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Flood Preparedness & Training			°	°
				°	°
DWR ID	DWR_RD1600_01_s _ 2013_34				
Action/Comments					
Inspector Comments: RD 1600 has a written flood response plan and flood response 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 2014**

**Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/04/2014 11/07/2014	Clay Thomas

LM Start	0.06	Rating **	M	Issue No.	1
LM End	0.06	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.675998 °	38.675998 °
				-121.630732 °	-121.630732 °
DWR ID	DWR_RD1600_01_s_2012_1				
Action/Comments					
Building					
Inspector Comments: This is the home and pumping plant for RD 2035.					

Photo 1 of 1 : FA\_2014\_RD1600\_191\_1\_20141014\_00001.jpg



The caretakers home for the operator of the pumping plant (RD 2035).  
Fall 2013

LM Start	0.10	Rating **	M	Issue No.	129
LM End	0.10	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.676467 °	38.676467 °
				-121.631217 °	-121.631217 °
DWR ID	DWR_RD1600_01_f_2013_129				
Action/Comments					
Building					
Inspector Comments: This is a well pump house. It is potable water for the house and pumping plant.					

Photo 1 of 1 : FA\_2014\_RD1600\_191\_129\_20141014\_00037.jpg



The small building is a pump house for the well. It services the house with water. Fall 2013

LM Start	0.10	Rating **	M	Issue No.	29
LM End	0.10	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.676480 °	38.676480 °
				-121.631220 °	-121.631220 °
DWR ID	DWR_RD1600_01_s_2012_29				
Action/Comments					
Debris					
Inspector Comments: Pile of concrete.					

Photo 1 of 1 : FA\_2014\_RD1600\_191\_29\_20141014\_00028.jpg



A pile of concrete left over from the drilling of the well. Photo taken spring 2012.

<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**

**Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/04/2014 11/07/2014	Clay Thomas

LM Start	0.10	Rating **	A/W	Issue No.	49
LM End	0.24	Issue Type +	Ob	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.676480 °	38.678140 °
				-121.631220 °	-121.632330 °
DWR ID	DWR_RD1600_01_s_2012_49				
Action/Comments					
Environmental Requirements.					

Photo 1 of 2 : FA\_2014\_RD1600\_191\_49\_20141014\_00035.jpg



The revegetation area is fenced off but nobody has been caring for it.  
Fall 2013

LM Start	<b>0.10</b>	Rating **	A/W	Issue No.	<b>49 (cont)</b>
LM End	<b>0.24</b>	Issue Type +	Ob	Location *	WS

Photo 2 of 2 : FA\_2014\_RD1600\_191\_49\_20141014\_00036.jpg



Revegetation site. Photo taken spring 2012.

LM Start	0.14	Rating **	M	Issue No.	3
LM End	0.14	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.676802 °	38.676802 °
				-121.631442 °	-121.631442 °
DWR ID	DWR_RD1600_01_f_2014_3				
Action/Comments					
Inspector Comments: FS_ID:15087					
EP_NO: 1929					
Repair Type: Non-Urgent					
Crossing Status: Indicator Found					
UCIP Comments: Line should be located with carsonite signs on both sides of levee.					

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**

**Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/04/2014 11/07/2014	Clay Thomas

LM Start	0.22	Rating **	C	Issue No.	132
LM End	0.29	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.677861 °	38.678780 °
				-121.632178 °	-121.632677 °
DWR ID	DWR_RD1600_01_f_2013_132				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					

No Photos

LM Start	0.53	Rating **	M	Issue No.	133
LM End	0.53	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.682140 °	38.682140 °
				-121.634083 °	-121.634083 °
DWR ID	DWR_RD1600_01_f_2013_133				
Action/Comments					
Schedule repair of erosion site prior to the next inspection.					

Photo 1 of 1 : FA\_2014\_RD1600\_191\_133\_20141014\_00040.jpg



The erosion on the landside shoulder is caused by foot traffic. Fall 2013

LM Start	0.57	Rating **	M	Issue No.	6
LM End	0.57	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	USACE Erosion Survey			38.682707 °	38.684106 °
				-121.633830 °	-121.634219 °
DWR ID	DWR_RD1600_01_f_2014_6				
Action/Comments					
Inspector Comments: 2000 - Very cohesive vertical bank. 2003 - Some minor new erosion. 2006 - Some minor erosion in old pockets. 2009 - Minimal new erosion. 2011 - Multiple new erosion pockets and a few new tree popouts. 2013: No observed changes. [2013 Site ID: SAC_71-3_R]					

Photo 1 of 1 : FA\_2014\_RD1600\_191\_6\_20141014\_00007.jpg



USACE 2013 Photo #1

* 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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## Reclamation District No. 1600 Mull

The tree is dying and needs to be monitored so there is no threat to the levee. Spring 2014

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**Flood Control Project Maintenance  
Levee Inspections**

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

**Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/04/2014 11/07/2014	Clay Thomas

LM Start	0.95	Rating **	M	Issue No.	9
LM End	0.95	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.688030 °	38.688030 °
				-121.635367 °	-121.635367 °
DWR ID	DWR_RD1600_01_f _ 2014_9				
Action/Comments					
Inspector Comments: FS_ID:15285 EP_NO: 6100 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Gate valve will not open or close. FIELD_STRUCT_DESC: 12-inch pipe through levee 3.4 feet below crown. Slant pump and gate valve on the waterward- slope. Siphon breaker in 12-inch steel riser on the landward shoulder. Filter, booster pump, and butterfly valve on LS toe. 2.25-inch galvanized iron electrical conduit at same location (Permit No. 6100, 1968). Replaced 8-inch pipe at same location. FS Date: 6/18/2013					

No Photos

LM Start	0.98	Rating **	M	Issue No.	134
LM End	0.98	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.688454 °	38.688454 °
				-121.635528 °	-121.635528 °
DWR ID	DWR_RD1600_01_f _ 2013_134				
Action/Comments					
Repair slope instability.					

Photo 1 of 1 : FA\_2014\_RD1600\_191\_134\_20141014\_00041.jpg



The levee has a deep depression caused by slope stability. Fall 2013

**\* 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

**Flood Control Project Maintenance  
Levee Inspections**

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

**Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/04/2014 11/07/2014	Clay Thomas

LM Start	1.02	Rating **	A/W	Issue No.	22
LM End	1.11	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.689078 °	38.690267 °
				-121.635605 °	-121.635650 °
DWR ID	DWR_RD1600_01_s_2012_22				
Action/Comments					
Environmental Requirements.					

Photo 1 of 2 : FA\_2014\_RD1600\_191\_22\_20141014\_00022.jpg



The revegetation site along the berm and shoulder of the river.

LM Start	<b>1.02</b>	Rating **	A/W	Issue No.	<b>22 (cont)</b>
LM End	<b>1.11</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA\_2014\_RD1600\_191\_22\_20141014\_00023.jpg



Revegetation site. Photo taken spring 2012.

LM Start	1.11	Rating **	A/W	Issue No.	626
LM End	1.11	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.690323 °	38.690323 °
				-121.635666 °	-121.635666 °
DWR ID	DWR_RD1600_01_s_2014_626				
Action/Comments					
Trees / Woody Vegetation					

Photo 1 of 1 : FA\_2014\_RD1600\_191\_626\_20141014\_00051.jpg

Two trees at the waterside berm that may pose a threat to the levee.  
Spring 2014

<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  
Levee Inspections**

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

**Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/04/2014 11/07/2014	Clay Thomas

LM Start	1.19	Rating **	M	Issue No.	41
LM End	5.73	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.691471 °	38.747273 °
				-121.635741 °	-121.598698 °
DWR ID	DWR_RD1600_01_f_2014_41				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

No Photos

LM Start	1.19	Rating **	M	Issue No.	39
LM End	5.88	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.691472 °	38.749167 °
				-121.635740 °	-121.597261 °
DWR ID	DWR_RD1600_01_f_2014_39				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

No Photos

LM Start	1.40	Rating **	M	Issue No.	4
LM End	1.40	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.694395 °	38.694395 °
				-121.634376 °	-121.634376 °
DWR ID	DWR_RD1600_01_f_2012_4				
Action/Comments					
Schedule repair of erosion site prior to the next inspection. Inspector Comments: Damage looks like caused by vehicles.					

Photo 1 of 2 : FA\_2014\_RD1600\_191\_4\_20141014\_00003.jpg



Erosion from vehicles on levee slope. Spring 2013

\* 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



**Flood Control Project Maintenance  
Levee Inspections**

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

**Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/04/2014 11/07/2014	Clay Thomas

LM Start	1.40	Rating **	M	Issue No.	4 (cont)	
LM End	1.40	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Erosion / Bank Caving			38.694395 °	38.694395 °	
				-121.634376 °	-121.634376 °	
DWR ID	DWR_RD1600_01_f_2012_4					
Action/Comments						
Schedule repair of erosion site prior to the next inspection. Inspector Comments: Damage looks like caused by vehicles.						

Photo 2 of 2 : FA\_2014\_RD1600\_191\_4\_20141014\_00004.jpg



Vehicles and people have created some erosion on the levee. Fall 2012

LM Start	1.42	Rating **	A/W	Issue No.	5
LM End	1.42	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.694589 °	38.694589 °
				-121.634286 °	-121.634286 °
DWR ID	DWR_RD1600_01_f_2012_5				
Action/Comments					
Environmental Requirements.					

Photo 1 of 2 : FA\_2014\_RD1600\_191\_5\_20141014\_00005.jpg



Flats of plant material to be planted at the site. Fall 2012

LM Start	<b>1.42</b>	Rating **	A/W	Issue No.	<b>5 (cont)</b>
LM End	<b>1.42</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA\_2014\_RD1600\_191\_5\_20141014\_00006.jpg



Revegetation site. Fall 2012.

<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**

**Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/04/2014 11/07/2014	Clay Thomas

LM Start	1.58	Rating **	M	Issue No.	7
LM End	1.58	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.696748 °	38.696748 °
				-121.633201 °	-121.633201 °
DWR ID	DWR_RD1600_01_f_2012_7				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					

Photo 1 of 2 : FA\_2014\_RD1600\_191\_7\_20141014\_00008.jpg



Willows are starting to come back creeping up on to the shoulder.  
Spring 2013

LM Start	<b>1.58</b>	Rating **	M	Issue No.	<b>7 (cont)</b>
LM End	<b>1.58</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA\_2014\_RD1600\_191\_7\_20141014\_00009.jpg



Willows are growing on the waterside shoulder. They have been grazed by goats. Fall 2012

LM Start	1.70	Rating **	M	Issue No.	40
LM End	10.51	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.749166 °	°
				-121.597261 °	°
DWR ID	DWR_RD1600_01_f_2014_40				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

Photo 1 of 2 : FA\_2014\_RD1600\_191\_40\_20141114\_00067.jpg



Levee mile 5.80, vegetation on the water side slope.

**\* 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



**Flood Control Project Maintenance  
Levee Inspections**

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

**Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/04/2014 11/07/2014	Clay Thomas

LM Start	1.70	Rating **	M	Issue No.	40 (cont)	
LM End	10.51	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Vegetation			38.749166 °		°
				-121.597261 °		°
DWR ID	DWR_RD1600_01_f_2014_40					
Action/Comments						
Control annual grass and weeds on the levee slopes and easements.						

Photo 2 of 2 : FA\_2014\_RD1600\_191\_40\_20141114\_00068.jpg



Levee mile 5.80, vegetation on the land side slope.

LM Start	1.73	Rating **	A/W	Issue No.	31
LM End	1.73	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.698613 °	38.698613 °
				-121.631710 °	-121.631710 °
DWR ID	DWR_RD1600_01_s_2012_31				
Action/Comments					
Environmental Requirements.					

Photo 1 of 2 : FA\_2014\_RD1600\_191\_31\_20141014\_00030.jpg



A photo of a Elderberry bush in the area.

LM Start	<b>1.73</b>	Rating **	A/W	Issue No.	<b>31 (cont)</b>
LM End	<b>1.73</b>	Issue Type +	En	Location *	WS

Photo 2 of 2 : FA\_2014\_RD1600\_191\_31\_20141014\_00031.jpg



Revegetation site with the Elderberry Beetle. Photo taken spring 2012.

<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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# Reclamation District No. 1600 Mull



**Flood Control Project Maintenance  
Levee Inspections**

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

**Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/04/2014 11/07/2014	Clay Thomas

LM Start	2.36	Rating **	A/W	Issue No.	35
LM End	2.42	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.704592 °	38.705152 °
				-121.623067 °	-121.622187 °
DWR ID	DWR_RD1600_01_s_2012_35				
Action/Comments					
Environmental Requirements.					

Photo 1 of 2 : FA\_2014\_RD1600\_191\_35\_20141014\_00032.jpg



The revegetation site extends almost to the hinge point.

LM Start	<b>2.36</b>	Rating **	A/W	Issue No.	<b>35 (cont)</b>
LM End	<b>2.42</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA\_2014\_RD1600\_191\_35\_20141014\_00033.jpg



Revegetation site, photo taken spring 2012.

LM Start	2.42	Rating **	M	Issue No.	143
LM End	2.42	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.705152 °	38.705152 °
				-121.622190 °	-121.622190 °
DWR ID	DWR_RD1600_01_f_2013_143				
Action/Comments					
Repair slope instability.					

Photo 1 of 1 : FA\_2014\_RD1600\_191\_143\_20141014\_00048.jpg



The levee slope appears to have slipped at the shoulder. Fall 2013

**\* 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

**Flood Control Project Maintenance  
Levee Inspections**

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

**Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/04/2014 11/07/2014	Clay Thomas

LM Start	2.83	Rating **	M	Issue No.	15
LM End	2.83	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.709350 °	38.709350 °
				-121.616913 °	-121.616913 °
DWR ID	DWR_RD1600_01_f_2014_15				
Action/Comments					
Inspector Comments: FS_ID:15108					
EP_NO: N/A					
Repair Type: Non-Urgent					
Crossing Status: Found					
UCIP Comments: Appears abandoned and should be done so properly. Debris buildup on pier. Power cut to pump.					
FIELD_STRUCT_DESC: 16-inch pipe through levee 2-feet below crown. Walkway from berm to pump on pile structure in the stream.					
Siphon breaker on the landward slope. 12-inch PVC standpipe off LS toe. Originally included in 1955 O+M manual.					
FS Date: 6/18/2013					

No Photos

LM Start	2.83	Rating **	M	Issue No.	135
LM End	2.83	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.709381 °	38.709381 °
				-121.616869 °	-121.616869 °
DWR ID	DWR_RD1600_01_s_2014_135				
Action/Comments					
Debris					

Photo 1 of 1 : FA\_2014\_RD1600\_191\_135\_20141014\_00042.jpg



Concrete debris is on the waterside berm. Spring 2014

<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**

**Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/04/2014 11/07/2014	Clay Thomas

LM Start	2.94	Rating **	M	Issue No.	16
LM End	2.94	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.710497 °	38.710497 °
				-121.615381 °	-121.615381 °
DWR ID	DWR_RD1600_01_f_2014_16				
Action/Comments					
Inspector Comments: FS_ID:15110					
EP_NO: N/A					
Repair Type: Non-Urgent					
Crossing Status: Indicator Found					
UCIP Comments: Abandoned and should be removed from levee.					
FIELD_STRUCT_DESC: *Abandoned* 10-inch concrete pipe through					
levee 5.0 feet below crown. Pipe visible on LS slope. Originally					
included in the 1955 O&M manual.					
FS Date: 6/18/2013					

No Photos

LM Start	2.98	Rating **	C	Issue No.	136
LM End	3.59	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.710795 °	38.717722 °
				-121.614986 °	-121.608012 °
DWR ID	DWR_RD1600_01_s_2014_136				
Action/Comments					
Keep the crown roadway free of vegetation.					

No Photos

LM Start	3.06	Rating **	A/W	Issue No.	37
LM End	3.06	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.711597 °	38.711597 °
				-121.613890 °	-121.613890 °
DWR ID	DWR_RD1600_01_s_2012_37				
Action/Comments					
Elderberries are blocking visibility and flood fight capability.					

Photo 1 of 1 : FA\_2014\_RD1600\_191\_37\_20141014\_00034.jpg



A large stand of elderberries on the landside slope. Fall 2012

\* 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



## Reclamation District No. 1600 Mull

Metal pipe and wood debris is on the waterside berm. Spring 2014

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## Reclamation District No. 1600 Mull



**Flood Control Project Maintenance  
Levee Inspections**

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

**Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/04/2014 11/07/2014	Clay Thomas

LM Start	4.21	Rating **	M	Issue No.	10
LM End	4.21	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	USACE Erosion Survey			38.728684 °	38.736110 °
				-121.605844 °	-121.604153 °
DWR ID	DWR_RD1600_01_f_2014_10				
Action/Comments					
Inspector Comments: 1997 - Very steep bank. 2005 - Lots of small trees down along the bank at the upstream end. 2006 - Minor new erosion, but slow. 2010 - Almost all of the roots are exposed on the trees, appears ready to fall. 2011 - New erosion and tree popouts. 2012 - Site has become overgrown with vegetation, making it hard to observe. 2013: No observed changes. [2013 Site ID: SAC_75-3_R]					

Photo 1 of 1 : FA\_2014\_RD1600\_191\_10\_20141014\_00011.jpg



USACE 2013 Photo #1

LM Start	4.32	Rating **	C	Issue No.	630
LM End	4.94	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.728028 °	38.736834 °
				-121.606577 °	-121.604393 °
DWR ID	DWR_RD1600_01_s_2014_630				
Action/Comments					
Keep the crown roadway free of vegetation.					

No Photos

LM Start	4.53	Rating **	M	Issue No.	23
LM End	4.53	Issue Type +	En	Location *	CR
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.731143 °	38.731143 °
				-121.605825 °	-121.605825 °
DWR ID	DWR_RD1600_01_f_2014_23				
Action/Comments					
Inspector Comments: FS_ID:15125					
EP_NO: N/A					
Repair Type: Non-Urgent					
Crossing Status: Found					
UCIP Comments: Pumphouse abandoned with deep pit open. Safety issue. If plant is abandoned it should be done so properly.					
FIELD_STRUCT_DESC: 24-inch pipe through the levee 21.4 feet below the crown. 16-inch pipe ties into 24-inch at WS slope. Slant pump on metal platform and gate valve on water side berm. Gate valve in pump house off the landward side. Two power poles at the toe of the landward slope.					
FS Date: 6/18/2013 7:36:00 AM					

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>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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## Reclamation District No. 1600 Mull

**Flood Control Project Maintenance  
Levee Inspections**

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

**Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/04/2014 11/07/2014	Clay Thomas

LM Start	4.89	Rating **	U	Issue No.	25 (cont)
LM End	4.89	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.736250 °	38.736250 °
				-121.604605 °	-121.604605 °
DWR ID	DWR_RD1600_01_f_2012_25				
Action/Comments					
Schedule repair of erosion site prior to the next inspection. Inspector Comments: Hole in pipe causing erosion of levee slope. Replace pipe and repair damage.					

Photo 2 of 2 : FA\_2014\_RD1600\_191\_25\_20141014\_00025.jpg



The concrete collection box across the road. Fall 2012

LM Start	4.90	Rating **	U	Issue No.	24
LM End	4.90	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.736299 °	38.736299 °
				-121.604582 °	-121.604582 °
DWR ID	DWR_RD1600_01_f_2014_24				
Action/Comments					
Inspector Comments: FS_ID:15130					
EP_NO: N/A					
Repair Type: Urgent					
Crossing Status: Found					
UCIP Comments: No pump on pier and pipe open on both ends without a closure device.					
FIELD_STRUCT_DESC: 18-inch steel pipe through levee 6.7-feet below crown. Pump on wooden pier off waterward side. Air vents on WS slope and meter at outlet on LS toe. 6'X14' concrete distribution box off LS toe. 2-inch galvanized iron electrical conduit through the levee at same location. Originally included in the 1955 O&M manual.					
FS Date: 6/18/2013					

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**

**Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/04/2014 11/07/2014	Clay Thomas

LM Start	5.43	Rating **	A/W	Issue No.	13
LM End	5.43	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.743632 °	38.743632 °
				-121.601173 °	-121.601173 °
DWR ID	DWR_RD1600_01_s_2012_13				
Action/Comments					
Elderberries are blocking visibility and flood fight capability.					

Photo 1 of 1 : FA\_2014\_RD1600\_191\_13\_20141014\_00014.jpg



A thick stand of elderberries on the landside. Fall 2012

LM Start	5.48	Rating **	M	Issue No.	19
LM End	5.81	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.744118 °	38.748210 °
				-121.601104 °	-121.598025 °
DWR ID	DWR_RD1600_01_s_2012_19				
Action/Comments					
Note and monitor erosion site. Inspector Comments: Levee district had us add this because of the loss of the berm over years of water flows. Erosion is at the waters edge. Walnut trees are close to edge now.					

No Photos

LM Start	6.22	Rating **	U	Issue No.	26
LM End	6.22	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.753820 °	38.753820 °
				-121.595012 °	-121.595012 °
DWR ID	DWR_RD1600_01_f_2014_26				
Action/Comments					
Inspector Comments: FS_ID:15207					
EP_NO: N/A					
Repair Type: Urgent					
Crossing Status: Found					
UCIP Comments: Pipe is abandoned and open on both ends. It should be abandoned properly.					
FIELD_STRUCT_DESC: 18-inch pipe through levee 4.5 feet below crown. Walkway from berm to pump on pile structure in stream.					
Overhead power line crosses levee, service pole on the waterward slope. 6'X6' Concrete distribution box at the toe of the landward slope.					
Originally included in the 1955 O+M manual at RM 77.					
FS Date: 6/20/2013					

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>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  
Levee Inspections**

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

**Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/04/2014 11/07/2014	Clay Thomas

LM Start	6.23	Rating **	M	Issue No.	11
LM End	6.23	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	USACE Erosion Survey			38.755246 °	38.756186 °
				-121.594206 °	-121.594024 °
DWR ID	DWR_RD1600_01_f_2014_11				
Action/Comments					
Inspector Comments: 2011 - Large vertical eroded face from a rotational failure just below pump. 2013: No observed changes. [2013 Site ID: SAC_77-0_R]					

Photo 1 of 1 : FA\_2014\_RD1600\_191\_11\_20141014\_00012.jpg



USACE 2013 Photo #1

LM Start	6.64	Rating **	M	Issue No.	631
LM End	6.64	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.759685 °	38.759685 °
				-121.594109 °	-121.594109 °
DWR ID	DWR_RD1600_01_s_2014_631				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					

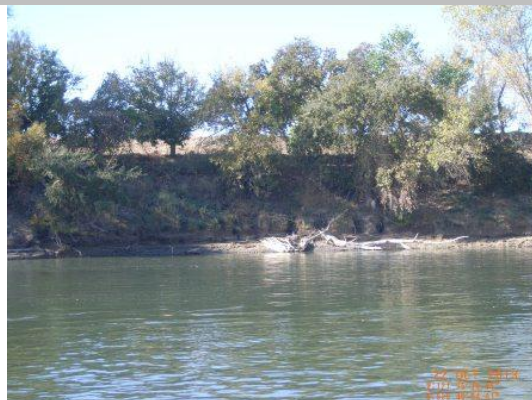
Photo 1 of 1 : FA\_2014\_RD1600\_191\_631\_20141014\_00056.jpg



The tall brush and vegetation blocks visibility. Spring 2014

LM Start	6.98	Rating **	M	Issue No.	12
LM End	6.98	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	USACE Erosion Survey			38.764801 °	38.765219 °
				-121.594926 °	-121.595049 °
DWR ID	DWR_RD1600_01_f_2014_12				
Action/Comments					
Inspector Comments: 2006 - Eddy scour off end of rock causing erosion and scour hole near levee. Sandy silt bank with rock on upstream end. 2010 - Trees are leaning more, minor new erosion. 2011 - Many of the tree roots have scoured out and trees look ready to fall. 2013: No observed changes. [2013 Site ID: SAC_77-7_R]					

Photo 1 of 1 : FA\_2014\_RD1600\_191\_12\_20141014\_00013.jpg



USACE 2013 Photo #1

* 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	

## Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/04/2014 11/07/2014	Clay Thomas

LM Start	7.01	Rating **	M	Issue No.	30
LM End	7.01	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.764943 °	38.764943 °
				-121.595504 °	-121.595504 °
DWR ID	DWR_RD1600_01_s _2013_30				
Action/Comments					
Note and monitor erosion site.					

Erosion is into the berm area and needs to be monitored. Spring 2013

LM Start	7.02	Rating **	M	Issue No.	27
LM End	7.02	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.764974 °	38.764974 °
				-121.595533 °	-121.595533 °
DWR ID	DWR_RD1600_01_s_2012_27				
Action/Comments					
Note and monitor erosion site.					

The erosion appears to be moving closer to the shoulder.

LM Start	7.13	Rating **	M	Issue No.	20
LM End	7.13	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.766505 °	38.766505 °
				-121.596214 °	-121.596214 °
DWR ID	DWR_RD1600_01_s_2012_20				
Action/Comments					
Note and monitor erosion site.					

A photograph of a riverbank. In the foreground, a large, dark, fallen tree trunk lies horizontally across the frame. To the right, a large, standing tree trunk leans heavily towards the water. The background shows a calm river and a line of trees on the opposite bank. The scene is captured in bright daylight, with shadows cast on the ground.

This another view of the site.

* Location	** Rating	+ Issue Type
LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  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 2014**

**Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/04/2014 11/07/2014	Clay Thomas

LM Start	7.13	Rating **	M	Issue No.	20 (cont)	
LM End	7.13	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Erosion / Bank Caving			38.766505 °	38.766505 °	
				-121.596214 °	-121.596214 °	
DWR ID	DWR_RD1600_01_s_2012_20					
Action/Comments						
Note and monitor erosion site.						

Photo 2 of 2 : FA\_2014\_RD1600\_191\_20\_20141014\_00019.jpg



The erosion is eroding away at the berm area.

LM Start	7.27	Rating **	M	Issue No.	21
LM End	7.27	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.768409 °	38.768409 °
				-121.597213 °	-121.597213 °
DWR ID	DWR_RD1600_01_s_2012_21				
Action/Comments					
Note and monitor erosion site.					

Photo 1 of 2 : FA\_2014\_RD1600\_191\_21\_20141014\_00020.jpg



The erosion is eroding away the berm area.

LM Start	<b>7.27</b>	Rating **	M	Issue No.	<b>21 (cont)</b>
LM End	<b>7.27</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA\_2014\_RD1600\_191\_21\_20141014\_00021.jpg



The bank is eroding away and has become very steep.

**\* 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

**Flood Control Project Maintenance  
Levee Inspections**

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

**Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/04/2014 11/07/2014	Clay Thomas

LM Start	7.60	Rating **	U	Issue No.	36
LM End	7.60	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.772560 °	38.772560 °
				-121.600153 °	-121.600153 °
DWR ID	DWR_RD1600_01_f_2014_36				
Action/Comments					
Inspector Comments: FS_ID:15264					
EP_NO: 1596					
Repair Type: Urgent					
Crossing Status: Found					
UCIP Comments: Pipe leaking and causing erosion on LS slope. Likely this pipe has severe internal corrosion and likely needs to be replaced.					

No Photos

LM Start	8.07	Rating **	M	Issue No.	38
LM End	8.07	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.777799 °	38.777799 °
				-121.605763 °	-121.605763 °
DWR ID	DWR_RD1600_01_f_2014_38				
Action/Comments					
Inspector Comments: FS_ID:16310					
EP_NO: 7339					
Repair Type: Non-Urgent					
Crossing Status: Indicator Found					
UCIP Comments: Need to determine disposition of pipe. If abandoned, it should be done so properly.					
FIELD_STRUCT_DESC: 24-inch steel pipe through levee 3.8 feet below crown. Steel plate welded on the waterward end. Pipe not visible on either slope. Pylons in river at WS toe and a 4-foot diameter steel standpipe on the LS toe (Permit No. 7339, 1977) Seepage area at toe of the landward slope.					
FS Date: 6/20/2013					

No Photos

LM Start	8.93	Rating **	M	Issue No.	634
LM End	8.93	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.782002 °	38.782002 °
				-121.620403 °	-121.620403 °
DWR ID	DWR_RD1600_01_s_2014_634				
Action/Comments					
Pipe					

Photo 1 of 1 : FA\_2014\_RD1600\_191\_634\_20141014\_00057.jpg



Irrigation pipe is being stored on the landside. Spring 2014

<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**

**Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/04/2014 11/07/2014	Clay Thomas

<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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**Flood Control Project Maintenance  
Levee Inspections**

**Unit Cover Sheet**

**Fall 2014 Levee Inspection Results**

**Reclamation District No. 1600 Mull**

Waterway			Bank	Unit Miles
Unit No. 02 Yolo Bypass			Left	4.23
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			<b>U</b>	
Date of Inspection	04/18/2014 - 04/18/2014		11/07/2014 - 11/07/2014	
DWR Inspector	John Williamson		Clay Thomas	
Accompanied By	Kent Lang RD 1600		Kent Lang RD 1600	
	Kyle Lang RD 537/ RD 1600		Kyle Lang RD 537/ RD 1600	

**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.*

## Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	11/07/2014 11/07/2014	Clay Thomas

LM Start	0.30	Rating **	A/W	Issue No.	11
LM End	0.77	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting				° 38.724869 °
					° -121.633411 °
DWR ID	DWR_RD1600_02_s _ 2012_11				
Action/Comments					
Add appropriate gravel or road base. Grade and compact.					

This area is soft and needs to have AB added to make an all weather surface.

LM Start	0.79	Rating **	M	Issue No.	31
LM End	2.15	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			38.724513 °	38.705577 °
				-121.633425 °	-121.639341 °
DWR ID	DWR_RD1600_02_s _ 2012_31				
Action/Comments					
Add appropriate gravel or road base. Grade and compact.					

A wide, straight dirt road stretches into the distance under a clear blue sky. The road is flanked by green grass and some trees. In the far distance, a small structure is visible on the horizon.

The crown of the levee needs to be weed free. Fall 2012

LM Start	<b>0.79</b>	Rating **	M	Issue No.	<b>31 (cont)</b>
LM End	<b>2.15</b>	Issue Type +	Ma	Location *	CR

A photograph showing a field of young plants with green leaves and yellow flowers, possibly a cover crop or a young crop field. The plants are arranged in rows, and the field is bordered by a fence in the background. The sky is blue with scattered white clouds.

The crown roadway needs to be free of weeds. Photo taken spring 2012.

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



## Reclamation District No. 1600 Mull

# Reclamation District No. 1600 Mull

Ruts in the all weather road need to be repaired. Spring 2014

Page 3 of 7

**Flood Control Project Maintenance  
Levee Inspections**

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

**Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	11/07/2014 11/07/2014	Clay Thomas

LM Start	1.65	Rating **	M	Issue No.	32
LM End	1.65	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			38.712382 °	38.712382 °
				-121.636417 °	-121.636417 °
DWR ID	DWR_RD1600_02_s_2012_32				
Action/Comments					
Repair depressions or ruts in the crown or slope.					

Photo 1 of 3 : FA\_2014\_RD1600\_192\_32\_20141014\_00014.jpg



The crown has ruts deeper then six inches. Fall 2012

LM Start	<b>1.65</b>	Rating **	M	Issue No.	<b>32 (cont)</b>
LM End	<b>1.65</b>	Issue Type +	Ma	Location *	CR

Photo 2 of 3 : FA\_2014\_RD1600\_192\_32\_20141014\_00015.jpg



Tire ruts are deeper than 6 inches on the crown. Fall 2013

LM Start	<b>1.65</b>	Rating **	M	Issue No.	<b>32 (cont)</b>
LM End	<b>1.65</b>	Issue Type +	Ma	Location *	CR

Photo 3 of 3 : FA\_2014\_RD1600\_192\_32\_20141014\_00016.jpg



Ruts in the all weather road needs to be repaired. Spring 2014

**\* 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



## Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	11/07/2014 11/07/2014	Clay Thomas

LM Start	1.74	Rating **	M	Issue No.	14
LM End	2.01	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.710763 °	38.707116 °
				-121.637147 °	-121.638722 °
DWR ID	DWR_RD1600_02_s _2012_14				
Action/Comments					
Note and monitor erosion site.					

LM Start	<b>1.74</b>	Rating **	M	Issue No.	<b>14 (cont)</b>
LM End	<b>2.01</b>	Issue Type +	Ma	Location *	WS

A photograph of a grassy hillside. A prominent horizontal line of exposed, dark brown soil runs across the middle of the frame, suggesting a plow layer or erosion. The grass is green and dense. The sky is overcast and grey. In the background on the right, there are some bare trees and shrubs.

A closer view of the wave wash damage along the bypass.

Wave wash damage along the slope the cut is 1'-2'.

LM Start	2.02	Rating **	M	Issue No.	7
LM End	2.02	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			38.707403 °	38.707403 °
				-121.638568 °	-121.638568 °
DWR ID	DWR_RD1600_02_s _ 2013_7				
Action/Comments					
Repair depressions or ruts in the crown or slope.					

Ruts in the levee crown. Spring 2013

* Location	** Rating	+ Issue Type
LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  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 2014**

**Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	11/07/2014 11/07/2014	Clay Thomas

LM Start	2.12	Rating **	M	Issue No.	15 (cont)
LM End	2.23	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.705614 °	38.704052 °
				-121.639357 °	-121.640016 °
DWR ID	DWR_RD1600_02_s_2012_15				
Action/Comments					
Note and monitor erosion site. Inspector Comments: This is wave wash damage caused by last high water.					

Photo 2 of 2 : FA\_2014\_RD1600\_192\_15\_20141014\_00011.jpg



This is wave wash damage along the toe of the levee looking downstream.

LM Start	3.69	Rating **	U	Issue No.	1
LM End	3.69	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.683971 °	38.683971 °
				-121.644522 °	-121.644522 °
DWR ID	DWR_RD1600_02_f_2014_1				
Action/Comments					
Inspector Comments: FS_ID:16308					
EP_NO: 10944					
Repair Type: Urgent					
Crossing Status: Indicator Found					
UCIP Comments: Need to install gasline markers on levee.					
FIELD_STRUCT_DESC: 8.625-inch steel gas line through levee 2.0					
feet below crown (Permit No. 10944, 1976).					
FS Date: 6/21/2013					

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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