

**Flood Control Project Maintenance
Levee Inspections**

Fall 2015 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including USACE Erosion Survey

Sacramento River Basin

RD1600	Overall LMA Rating	Total LMA Miles						
Reclamation District No. 1600 Mull	U	14.69						
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	18.86		18.86	128.37%				
Trim / Thin Trees	0.02		0.02	0.14%				
Encroachments	0.02		0.02	0.14%	0.11			
Animal Control	0.03	0.01	0.07	0.48%				
Slope Stability	0.14		0.14	0.95%				
Erosion / Bank Caving	0.75		0.75	5.11%	0.02			
<i>Supplemental</i>								
2015 USACE Erosion Survey, DRAFT	0.90		0.90	6.13%				
DWR UCIP Field Study					0.07	0.04		
<i>LMA Totals:</i>	20.72	0.01	20.76	141.30%	0.20	0.04	0.00	0.00
Unit No. 01 Sacramento River RB	Overall Unit Rating	Total Unit Miles						
RD1600	U	10.46						
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	14.72		14.72	140.74%				
Trim / Thin Trees	0.02		0.02	0.19%				
Encroachments	0.02		0.02	0.19%	0.11			
Animal Control	0.03	0.01	0.07	0.67%				
Slope Stability	0.13		0.13	1.24%				
Erosion / Bank Caving	0.38		0.38	3.63%	0.02			
<i>Supplemental</i>								
2015 USACE Erosion Survey, DRAFT	0.90		0.90	8.61%				
DWR UCIP Field Study					0.07	0.03		
<i>Unit Totals:</i>	16.20	0.01	16.24	155.27%	0.20	0.03	0.00	0.00
Unit No. 02 Yolo Bypass LB	Overall Unit Rating	Total Unit Miles						
RD1600	U	4.23						
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	4.14		4.14	97.80%				
Slope Stability	0.01		0.01	0.24%				
Erosion / Bank Caving	0.37		0.37	8.74%				
<i>Supplemental</i>								
DWR UCIP Field Study						0.01		
<i>Unit Totals:</i>	4.52	0.00	4.52	106.78%	0.00	0.01	0.00	0.00

**Flood Control Project Maintenance
Levee Inspections**
LMA District Cover Sheet
Fall 2015 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 2015 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)			U	
Date of Inspection	03/24/2015 - 03/24/2015		10/28/2015 - 10/28/2015	
DWR Inspector	Jai Lor		Jai Lor	
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
Levee Inspections**

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

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

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

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_2015_RD1600_191_1_20150914_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_2015_RD1600_191_129_20150914_00032.jpg



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

LM Start	0.10	Rating **	A/W	Issue No.	49
LM End	0.23	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_2015_RD1600_191_49_20150914_00030.jpg



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

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	0.10	Rating **	A/W	Issue No.	49 (cont)
LM End	0.23	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 2 of 2 : FA_2015_RD1600_191_49_20150914_00031.jpg



Revegetation site. Photo taken spring 2012.

LM Start	0.11	Rating **	M	Issue No.	36
LM End	4.49	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.676588 °	38.730903 °
				-121.631297 °	-121.605887 °
DWR ID	DWR_RD1600_01_f_2015_36				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

Photo 1 of 1 : FA_2015_RD1600_191_36_20151103_00060.jpg



View of the vegetation on the waterward side of the levee looking upstream. Fall 2015.

LM Start	0.12	Rating **	M	Issue No.	38
LM End	0.12	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.676654 °	38.676654 °
				-121.631348 °	-121.631348 °
DWR ID	DWR_RD1600_01_f_2015_38				
Action/Comments					
Repair the levee slope damaged by vehicle traffic and prevent access where possible.					

Photo 1 of 1 : FA_2015_RD1600_191_38_20151103_00061.jpg



View of a slope depression on the landward side of the levee looking downstream. Fall 2015.

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	0.13	Rating **	M	Issue No.	1203
LM End	0.13	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.676802 °	38.676802 °
				-121.631442 °	-121.631442 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:15087 DS_ID:21459 EP_NO: 1929 FS_HLM: 0.136 Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: Line should be located with carsonite signs on both sides of levee. FIELD_STRUCT_DESC: Telephone cable through levee 3.0 feet below crown. Telephone line at JP off LS toe (Permit No. 1929, 1959). FS Date: 06/18/2013					

Photo 1 of 1 : UCIP_FA_2015_0825.jpg



Line visible on JP off LS toe. Likely this is the source of crossing.

LM Start	0.21	Rating **	M	Issue No.	39
LM End	0.21	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.677766 °	38.677766 °
				-121.632123 °	-121.632123 °
DWR ID	DWR_RD1600_01_f_2015_39				
Action/Comments					
Repair the levee slope damaged by foot traffic and prevent access where possible.					

Photo 1 of 1 : FA_2015_RD1600_191_39_20151103_00063.jpg



View of the slope stability on the landward side of the levee looking upstream. Fall 2015.

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	0.33	Rating **	M	Issue No.	40
LM End	0.33	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.679472 °	38.679472 °
				-121.633053 °	-121.633053 °
DWR ID	DWR_RD1600_01_f _ 2015_40				
Action/Comments					
No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					

Photo 1 of 1 : FA_2015_RD1600_191_40_20151103_00064.jpg



View of the rodent hole on the landward side of the levee looking upstream. Fall 2015.

LM Start	0.35	Rating **	M	Issue No.	29
LM End	4.49	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.679708 °	38.730904 °
				-121.633178 °	-121.605888 °
DWR ID	DWR_RD1600_01_f _ 2015_29				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

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	Slope Stability			38.682140 °	38.682140 °
				-121.634083 °	-121.634083 °
DWR ID	DWR_RD1600_01_f _ 2013_133				
Action/Comments					
Repair the levee slope damaged by foot traffic and prevent access where possible.					

Photo 1 of 1 : FA_2015_RD1600_191_133_20151103_00065.jpg



View of the slope stability on the landward side of the levee. Fall 2015.

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	0.56	Rating **	M	Issue No.	7
LM End	0.66	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			38.682707 °	38.684106 °
				-121.633830 °	-121.634219 °
DWR ID					
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. 2015: No observed changes. [2015 Site ID: SAC_71-3_R]					

Photo 1 of 1 : USACE2013A_SAC_71-3_R_2.jpg



USACE 2013 Photo #1

LM Start	0.78	Rating **	A/W	Issue No.	624
LM End	0.78	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.685713 °	38.685713 °
				-121.634985 °	-121.634985 °
DWR ID	DWR_RD1600_01_s_2015_624				
Action/Comments					
Trees / Woody Vegetation					

Photo 1 of 1 : FA_2015_RD1600_191_624_20150914_00040.jpg



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

LM Start	0.83	Rating **	A/W	Issue No.	625
LM End	0.83	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.686515 °	38.686515 °
				-121.635134 °	-121.635134 °
DWR ID	DWR_RD1600_01_s_2014_625				
Action/Comments					
Trees / Woody Vegetation					

Photo 1 of 1 : FA_2015_RD1600_191_625_20150914_00041.jpg



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

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	0.94	Rating **	M	Issue No.	1204
LM End	0.94	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					

Action/Comments

Inspector Comments: FS_ID:15285
 DS_ID:21463
 EP_NO: 6100
 FS_HLM: 0.949
 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: 06/18/2013

LM Start	0.94	Rating **	M	Issue No.	1204 (cont)
LM End	0.94	Issue Type +	En	Location *	WS

Photo 1 of 3 : UCIP_FA_2015_0794.jpg



Filters, boost pump, and gate valve down stream from concrete standpipe off LS toe.

Photo 2 of 3 : UCIP_FA_2015_0795.jpg



Pump and gate valve on WS slope.

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	0.94	Rating **	M	Issue No.	1204 (cont)
LM End	0.94	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					
Action/Comments					
Inspector Comments: FS_ID:15285					
DS_ID:21463					
EP_NO: 6100					
FS_HLM: 0.949					
Repair Type: Non-Urgent					
Crossing Status: Found					

Photo 3 of 3 : UCIP_FA_2015_0796.jpg



Siphon breaker in steel riser on LS shoulder and concrete standpipe off LS toe.

LM Start	0.97	Rating **	M	Issue No.	134
LM End	0.97	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 2 : FA_2015_RD1600_191_134_20150914_00034.jpg



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

LM Start	0.97	Rating **	M	Issue No.	134 (cont)
LM End	0.97	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2015_RD1600_191_134_20151103_00067.jpg



View of the depression of the slope on the landward side of the levee looking downstream. Fall 2015.

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	1.01	Rating **	A/W	Issue No.	22
LM End	1.09	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.					

LM Start	1.01	Rating **	A/W	Issue No.	22 (cont)
LM End	1.09	Issue Type +	Ma	Location *	WS

Photo 1 of 2 : FA_2015_RD1600_191_22_20150914_00020.jpg



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

Photo 2 of 2 : FA_2015_RD1600_191_22_20150914_00021.jpg



Revegetation site. Photo taken spring 2012.

LM Start	1.39	Rating **	M	Issue No.	4
LM End	1.39	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.694395 °	38.694395 °
				-121.634376 °	-121.634376 °
DWR ID	DWR_RD1600_01_f _ 2012_4				
Action/Comments					
Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comments: Damage looks like caused by vehicles.					

Photo 1 of 2 : FA_2015_RD1600_191_4_20150914_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 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**

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Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	1.39	Rating **	M	Issue No.	4 (cont)	
LM End	1.39	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Slope Stability			38.694395 °		38.694395
				-121.634376 °		-121.634376
DWR ID	DWR_RD1600_01_f_2012_4					
Action/Comments						
Repair the levee slope damaged by vehicle traffic and prevent access where possible.						
Inspector Comments: Damage looks like caused by vehicles.						

Photo 2 of 2 : FA_2015_RD1600_191_4_20151103_00068.jpg



View of the slope stability caused by vehicles on the landward side of the levee looking upstream. Fall 2015.

LM Start	1.40	Rating **	A/W	Issue No.	5
LM End	1.40	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_2015_RD1600_191_5_20150914_00005.jpg



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

LM Start	1.40	Rating **	A/W	Issue No.	5 (cont)
LM End	1.40	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA_2015_RD1600_191_5_20150914_00006.jpg



Revegetation site. Fall 2012.

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	1.70	Rating **	M	Issue No.	626
LM End	1.70	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.698415 °	38.698415 °
				-121.631850 °	-121.631850 °
DWR ID	DWR_RD1600_01_s _ 2015_626				
Action/Comments					
Debris					

Photo 1 of 1 : FA_2015_RD1600_191_626_20150914_00042.jpg



View of debris on the waterward side of the levee looking downstream. Spring 2015.

LM Start	1.70	Rating **	M	Issue No.	51
LM End	1.70	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.698471 °	38.698471 °
				-121.631836 °	-121.631836 °
DWR ID	DWR_RD1600_01_f _ 2015_51				
Action/Comments					
Tree or limb					

Photo 1 of 1 : FA_2015_RD1600_191_51_20151103_00069.jpg



View of the fallen tree on the landward side of the levee. Fall 2015.

LM Start	1.72	Rating **	A/W	Issue No.	31
LM End	1.72	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_2015_RD1600_191_31_20150914_00025.jpg



A photo of a Elderberry bush in the area.

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	1.72	Rating **	A/W	Issue No.	31 (cont)
LM End	1.72	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 2 of 2 : FA_2015_RD1600_191_31_20150914_00026.jpg



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

LM Start	1.76	Rating **	C	Issue No.	137
LM End	1.76	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			38.699130 °	38.699130 °
				-121.631300 °	-121.631300 °
DWR ID	DWR_RD1600_01_f _ 2013_137				
Action/Comments					
Repair depressions or ruts in the crown or slope.					

No Photos

LM Start	2.01	Rating **	C	Issue No.	17
LM End	2.01	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.701590 °	38.701590 °
				-121.627991 °	-121.627991 °
DWR ID	DWR_RD1600_01_s _ 2015_17				
Action/Comments					
Schedule repair of erosion site prior to the next inspection.					

No Photos

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	2.02	Rating **	M	Issue No.	52
LM End	2.02	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.701753 °	38.701753
				-121.627734 °	-121.627734
DWR ID	DWR_RD1600_01_f_2015_52				
Action/Comments					
Repair the levee slope damaged by vehicle traffic and prevent access where possible.					

Photo 1 of 1 : FA_2015_RD1600_191_52_20151103_00070.jpg



View of the slope stability caused by vehicles on the waterward side of the levee looking upstream. Fall 2015.

LM Start	2.06	Rating **	M	Issue No.	53
LM End	2.06	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.702063 °	38.702063 °
				-121.627214 °	-121.627214 °
DWR ID	DWR_RD1600_01_f_2015_53				
Action/Comments					
No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					

Photo 1 of 1 : FA_2015_RD1600_191_53_20151103_00071.jpg



View of the rodent hole on the waterward side of the levee. Fall 2015.

LM Start	2.10	Rating **	M	Issue No.	55
LM End	2.10	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.702416 °	38.702416 °
				-121.626593 °	-121.626593 °
DWR ID	DWR_RD1600_01_f_2015_55				
Action/Comments					
Repair the levee slope damaged by vehicle traffic and prevent access where possible.					

Photo 1 of 1 : FA_2015_RD1600_191_55_20151103_00072.jpg



View of the slope stability damaged by vehicles on the landward side of the levee. Fall 2015.

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	2.17	Rating **	M	Issue No.	56
LM End	2.17	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.703025 °	38.703025 °
				-121.625605 °	-121.625605 °
DWR ID	DWR_RD1600_01_f_2015_56				
Action/Comments					
Repair slope instability.					

Photo 1 of 1 : FA_2015_RD1600_191_56_20151103_00073.jpg



View of the sloughing on the landward side of the levee looking upstream. Fall 2015.

LM Start	2.34	Rating **	A/W	Issue No.	35
LM End	2.40	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_2015_RD1600_191_35_20150914_00027.jpg



The revegetation site extends almost to the hinge point.

LM Start	2.34	Rating **	A/W	Issue No.	35 (cont)
LM End	2.40	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA_2015_RD1600_191_35_20150914_00028.jpg



Revegetation site, photo taken spring 2012.

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	2.40	Rating **	C	Issue No.	143
LM End	2.40	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.					

No Photos

LM Start	2.81	Rating **	M	Issue No.	1205
LM End	2.81	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					
Action/Comments					
Inspector Comments: FS_ID:15108					
DS_ID:21467					
EP_NO: N/A					
FS_HLM: 2.827					
Repair Type: Non-Urgent					
Crossing Status: Found					

Photo 1 of 3 : UCIP_FA_2015_0826.jpg



Electrical cut to pump.

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	2.81	Rating **	M	Issue No.	1205 (cont)
LM End	2.81	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					

Action/Comments

Inspector Comments: FS_ID:15108
 DS_ID:21467
 EP_NO: N/A
 FS_HLM: 2.827
 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: 06/18/2013

LM Start	2.81	Rating **	M	Issue No.	1205 (cont)
LM End	2.81	Issue Type +	En	Location *	LS

Photo 2 of 3 : UCIP_FA_2015_0827.jpg



Debris buildup at metal platform waterline.

Photo 3 of 3 : UCIP_FA_2015_0828.jpg



Pump on metal platform off WS berm.

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	2.92	Rating **	M	Issue No.	1206
LM End	2.92	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.710497 °	38.710497 °
				-121.615381 °	-121.615381 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:15110 DS_ID:21490 EP_NO: N/A FS_HLM: 2.943 Repair Type: Non-Urgent Crossing Status: Indicator Found					

Photo 1 of 2 : UCIP_FA_2015_0829.jpg



Pipe visible on LS slope.

LM Start	2.92	Rating **	M	Issue No.	1206 (cont)
LM End	2.92	Issue Type +	En	Location *	LS

Photo 2 of 2 : UCIP_FA_2015_0830.jpg



Pipe visible on LS slope.

LM Start	3.04	Rating **	A/W	Issue No.	37
LM End	3.04	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.					

No Photos

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	3.04	Rating **	C	Issue No.	140
LM End	3.04	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.711655 °	38.711655 °
				-121.613871 °	-121.613871 °
DWR ID	DWR_RD1600_01_f_2013_140				
Action/Comments					
Repair the levee slope damaged by vehicle traffic and prevent access where possible.					

No Photos

LM Start	3.06	Rating **	M	Issue No.	64
LM End	3.06	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.711869 °	38.711869 °
				-121.613635 °	-121.613635 °
DWR ID	DWR_RD1600_01_f_2015_64				
Action/Comments					
Repair the levee slope damaged by vehicle traffic and prevent access where possible.					

Photo 1 of 1 : FA_2015_RD1600_191_64_20151103_00077.jpg



View of the slope stability caused by vehicles on the waterward side of the levee looking upstream. Fall 2015.

LM Start	3.57	Rating **	M	Issue No.	627
LM End	3.57	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.717717 °	38.717717 °
				-121.608015 °	-121.608015 °
DWR ID	DWR_RD1600_01_s_2014_627				
Action/Comments					
Debris					

Photo 1 of 2 : FA_2015_RD1600_191_627_20150914_00043.jpg



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

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	3.57	Rating **	M	Issue No.	627 (cont)
LM End	3.57	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.717717 °	38.717717 °
				-121.608015 °	-121.608015 °
DWR ID	DWR_RD1600_01_s _ 2014_627				
Action/Comments					
Debris					

Photo 2 of 2 : FA_2015_RD1600_191_627_20151103_00078.jpg



View of the metal pipe and wood debris on the berm of the waterward side of the levee. Fall 2015.

LM Start	3.58	Rating **	M	Issue No.	3
LM End	3.83	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			38.717770 °	38.721351 °
				-121.607423 °	-121.606414 °
DWR ID					
Action/Comments					
Inspector Comments: 1997 - Steep high bank. 2005 - Some small pockets in the low toe near the waterline. 2006 - Minor slope clearing. 2010 - Minor new erosion. 2011 - Multiple trees have fallen since last year. Some other trees look ready to fall. Significant new erosion since last year. 2012 - Minor new erosion. 2013 - Minor new erosion. 2015: New minor erosion at toe. [2015 Site ID: SAC_74-4_R]					

Photo 1 of 1 : USACE2013A_SAC_74-4_R_3.jpg



USACE 2013 Photo #1

LM Start	3.59	Rating **	M	Issue No.	628
LM End	3.59	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.718080 °	38.718080 °
				-121.607815 °	-121.607815 °
DWR ID	DWR_RD1600_01_s _ 2014_628				
Action/Comments					
Debris					

Photo 1 of 1 : FA_2015_RD1600_191_628_20150914_00044.jpg



Concrete debris is on the waterside berm. Spring 2014

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	3.76	Rating **	M	Issue No.	2
LM End	3.76	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.720417 °	38.720417 °
				-121.606962 °	-121.606962 °
DWR ID	DWR_RD1600_01_s _ 2013_2				
Action/Comments					
Note and monitor erosion site.					
Inspector Comments: Trees have fallen over and created bank erosion.					

Photo 1 of 1 : FA_2015_RD1600_191_2_20150914_00002.jpg



Trees have fallen and the water has created the erosion into the berm.
Spring 2013

LM Start	3.83	Rating **	M	Issue No.	66
LM End	3.83	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.721456 °	38.721456 °
				-121.606855 °	-121.606855 °
DWR ID	DWR_RD1600_01_f _ 2015_66				
Action/Comments					
Tree or limb					

Photo 1 of 1 : FA_2015_RD1600_191_66_20151103_00079.jpg



View of a fallen tree branch on the landward side of the levee looking upstream. Fall 2015.

LM Start	3.89	Rating **	M	Issue No.	67
LM End	3.89	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.722300 °	38.722300 °
				-121.606769 °	-121.606769 °
DWR ID	DWR_RD1600_01_f _ 2015_67				
Action/Comments					
Repair the levee slope damaged by vehicle traffic and prevent access where possible.					

Photo 1 of 1 : FA_2015_RD1600_191_67_20151103_00080.jpg



View of the shoulder damaged by vehicles on the waterward side of the levee looking upstream. Fall 2015.

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	4.34	Rating **	M	Issue No.	8
LM End	4.86	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			38.728684 °	38.736110 °
				-121.605844 °	-121.604153 °
DWR ID					
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. 2015: Dense vegetation made observation difficult. [2015 Site ID: SAC_75-3_R]					

Photo 1 of 1 : USACE2013A_SAC_75-3_R_11.jpg



USACE 2013 Photo #1

LM Start	4.51	Rating **	M	Issue No.	1207
LM End	4.51	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.731143 °	38.731143 °
				-121.605825 °	-121.605825 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:15125 DS_ID:21470 EP_NO: N/A FS_HLM: 4.532 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: 06/18/2013					

Photo 1 of 3 : UCIP_FA_2015_0831.jpg



16-inch pipe ties into 24-inch pipe under pump platform at slide gate.

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	4.51	Rating **	M	Issue No.	1207 (cont)	
LM End	4.51	Issue Type +	En	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			38.731143 °	38.731143 °	
				-121.605825 °	-121.605825 °	
DWR ID						
Action/Comments						
Inspector Comments: FS_ID:15125 DS_ID:21470 EP_NO: N/A FS_HLM: 4.532 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: 06/18/2013						

Photo 2 of 3 : UCIP_FA_2015_0832.jpg



Slant pump on metal pier on WS berm.

Photo 3 of 3 : UCIP_FA_2015_0835.jpg



Pumphouse/distribution box off LS toe.

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	4.52	Rating **	M	Issue No.	1208
LM End	4.52	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.731280 °	38.731280 °
				-121.605825 °	-121.605825 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:41563 DS_ID:21471 EP_NO: N/A FS_HLM: 4.54 Repair Type: Non-Urgent Crossing Status: Found					

LM Start	4.52	Rating **	M	Issue No.	1208 (cont)
LM End	4.52	Issue Type +	En	Location *	WS

Photo 1 of 2 : UCIP_FA_2015_1458.jpg



Pipe and remnants of grouted pipe on LS slope.

Photo 2 of 2 : UCIP_FA_2015_1459.jpg



Pipe and remnants of grouted pipe on LS 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
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	4.66	Rating **	M	Issue No.	41
LM End	4.66	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.733294 °	38.733294 °
				-121.605484 °	-121.605484 °
DWR ID	DWR_RD1600_01_f_ 2015_41				
Action/Comments					
Repair slope instability.					

Photo 1 of 1 : FA_2015_RD1600_191_41_20151103_00081.jpg



View of the bulge at the toe of the levee on the landward side looking downstream. Fall 2015.

LM Start	4.75	Rating **	M	Issue No.	1193
LM End	4.75	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.734557 °	38.734557 °
				-121.605133 °	-121.605133 °
DWR ID	DWR_RD1600_01_s_ 2015_1193				
Action/Comments					
Elderberries are blocking visibility and flood fight capability.					

No Photos

LM Start	4.76	Rating **	M	Issue No.	1194
LM End	4.76	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.734760 °	38.734760 °
				-121.605008 °	-121.605008 °
DWR ID	DWR_RD1600_01_s_ 2015_1194				
Action/Comments					
Elderberries are blocking visibility and flood fight capability.					

No Photos

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	4.77	Rating **	M	Issue No.	141
LM End	4.77	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.734840 °	38.734840 °
				-121.605026 °	-121.605026 °
DWR ID	DWR_RD1600_01_f _ 2013_141				
Action/Comments					
Repair slope instability.					

Photo 1 of 2 : FA_2015_RD1600_191_141_20150914_00038.jpg



The erosion at the shoulder of the levee could be slope instability. Fall 2013

LM Start	4.77	Rating **	M	Issue No.	141 (cont)
LM End	4.77	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2015_RD1600_191_141_20151103_00082.jpg



View of the erosion on the landward side of the levee looking upstream. Fall 2015.

LM Start	4.78	Rating **	M	Issue No.	1195
LM End	4.78	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.734972 °	38.734972 °
				-121.604953 °	-121.604953 °
DWR ID	DWR_RD1600_01_s _ 2015_1195				
Action/Comments					
Elderberries are blocking visibility and flood fight capability.					

No Photos

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	4.80	Rating **	M	Issue No.	1196
LM End	4.80	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.735312 °	38.735312 °
				-121.604890 °	-121.604890 °
DWR ID	DWR_RD1600_01_s _ 2015_1196				
Action/Comments					
Elderberries are blocking visibility and flood fight capability.					

No Photos

LM Start	4.82	Rating **	C	Issue No.	14
LM End	4.82	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.735608 °	38.735608 °
				-121.604794 °	-121.604794 °
DWR ID	DWR_RD1600_01_s _ 2013_14				
Action/Comments					
Tree stumps.					

No Photos

LM Start	4.85	Rating **	M	Issue No.	1197
LM End	4.85	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.736028 °	38.736028 °
				-121.604697 °	-121.604697 °
DWR ID	DWR_RD1600_01_s _ 2015_1197				
Action/Comments					
Elderberries are blocking visibility and flood fight capability.					

No Photos

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	4.87	Rating **	U	Issue No.	1209
LM End	4.87	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.736299 °	38.736299 °
				-121.604582 °	-121.604582 °
DWR ID					

Action/Comments					
Inspector Comments: FS_ID:15130 DS_ID:21487 EP_NO: N/A FS_HLM: 4.896 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: 06/18/2013					

LM Start	4.87	Rating **	U	Issue No.	1209 (cont)
LM End	4.87	Issue Type +	En	Location *	WS

Photo 1 of 3 : UCIP_FA_2015_0651.jpg



Wooden pier off WS toe.

Photo 2 of 3 : UCIP_FA_2015_0652.jpg



2-inch galvanized iron electrical conduit at under pier.

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	4.87	Rating **	U	Issue No.	1209 (cont)
LM End	4.87	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.736299 °	38.736299 °
				-121.604582 °	-121.604582 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:15130 DS_ID:21487 EP_NO: N/A FS_HLM: 4.896 Repair Type: Urgent Crossing Status: Found					

Photo 3 of 3 : UCIP_FA_2015_0653.jpg



Pipe under wooden pier on WS toe.

LM Start	5.01	Rating **	M	Issue No.	42
LM End	5.01	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.738242 °	38.738242 °
				-121.603789 °	-121.603789 °
DWR ID	DWR_RD1600_01_f_2015_42				
Action/Comments					
Tree or limb					

Photo 1 of 1 : FA_2015_RD1600_191_42_20151103_00083.jpg



View of the fallen tree branch on the landward side of the levee looking upstream. The branch was not completely burned. Fall 2015.

LM Start	5.26	Rating **	M	Issue No.	43
LM End	5.26	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.741649 °	38.741649 °
				-121.602500 °	-121.602500 °
DWR ID	DWR_RD1600_01_f_2015_43				
Action/Comments					
Tree or limb					

Photo 1 of 1 : FA_2015_RD1600_191_43_20151103_00084.jpg



View of a fallen tree branch on the waterward side of the levee looking upstream. Fall 2015.

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	5.32	Rating **	M	Issue No.	44
LM End	5.32	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.742547 °	38.742547 °
				-121.602027 °	-121.602027 °
DWR ID	DWR_RD1600_01_f_2015_44				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

No Photos

LM Start	5.41	Rating **	A/W	Issue No.	13
LM End	5.41	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.					

No Photos

LM Start	5.44	Rating **	M	Issue No.	19
LM End	5.77	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

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	5.56	Rating **	M	Issue No.	45
LM End	5.56	Issue Type +	En	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.745605 °	38.745605 °
				-121.599994 °	-121.599994 °
DWR ID	DWR_RD1600_01_f_2015_45				
Action/Comments					
Prunings					

Photo 1 of 1 : FA_2015_RD1600_191_45_20151103_00085.jpg



View of the prunings on the crown of the levee looking upstream. Fall 2015.

LM Start	5.57	Rating **	U	Issue No.	46
LM End	5.57	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.745677 °	38.745677 °
				-121.599944 °	-121.599944 °
DWR ID	DWR_RD1600_01_f_2015_46				
Action/Comments					
No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					

Photo 1 of 1 : FA_2015_RD1600_191_46_20151103_00086.jpg



View of the animal holes on the landward side of the levee. Fall 2015.

LM Start	5.81	Rating **	M	Issue No.	1198
LM End	5.81	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.748648 °	38.748648 °
				-121.597645 °	-121.597645 °
DWR ID	DWR_RD1600_01_s_2015_1198				
Action/Comments					
Debris					

Photo 1 of 1 : FA_2015_RD1600_191_1198_20150914_00048.jpg



View of debris on the waterward side of the levee looking downstream. Spring 2015.

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	5.89	Rating **	M	Issue No.	47
LM End	6.72	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.749765 °	38.761440 °
				-121.596951 °	-121.594331 °
DWR ID	DWR_RD1600_01_f_2015_47				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

No Photos

LM Start	6.01	Rating **	M	Issue No.	48
LM End	6.03	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.751306 °	38.751672 °
				-121.596101 °	-121.595922 °
DWR ID	DWR_RD1600_01_f_2015_48				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

No Photos

LM Start	6.04	Rating **	M	Issue No.	54
LM End	6.04	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.751747 °	38.751747 °
				-121.595886 °	-121.595886 °
DWR ID	DWR_RD1600_01_f_2015_54				
Action/Comments					
Prunings					

Photo 1 of 1 : FA_2015_RD1600_191_54_20151103_00087.jpg



View of the fallen tree branch on the waterward side of the levee looking upstream. Fall 2015.

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	6.07	Rating **	M	Issue No.	57
LM End	6.10	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.752192 °	38.752572 °
				-121.595685 °	-121.595509 °
DWR ID	DWR_RD1600_01_f_2015_57				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

No Photos

LM Start	6.09	Rating **	M	Issue No.	58
LM End	6.09	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.752359 °	38.752359
				-121.595599 °	-121.595599
DWR ID	DWR_RD1600_01_f_2015_58				
Action/Comments					
Repair the levee slope damaged by vehicle traffic and prevent access where possible.					

Photo 1 of 1 : FA_2015_RD1600_191_58_20151103_00088.jpg



View of the slope stability on the waterward side of the levee looking upstream. Fall 2015.

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	6.19	Rating **	U	Issue No.	1210
LM End	6.19	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					

Action/Comments

Inspector Comments: FS_ID:15207
 DS_ID:21476
 EP_NO: N/A
 FS_HLM: 6.224
 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: 06/20/2013

LM Start	6.19	Rating **	U	Issue No.	1210 (cont)
LM End	6.19	Issue Type +	En	Location *	WS

Photo 1 of 3 : UCIP_FA_2015_0741.jpg



Hole in pipe at WS toe.

Photo 2 of 3 : UCIP_FA_2015_0742.jpg



Pipe on WS slope.

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	6.19	Rating **	U	Issue No.	1210 (cont)
LM End	6.19	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					
Action/Comments					
Inspector Comments: FS_ID:15207					
DS_ID:21476					
EP_NO: N/A					
FS_HLM: 6.224					
Repair Type: Urgent					
Crossing Status: Found					

Photo 3 of 3 : UCIP_FA_2015_0743.jpg



6'X6' concrete distribution box on LS toe.

LM Start	6.30	Rating **	A/W	Issue No.	9
LM End	6.36	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			38.755246 °	38.756186 °
				-121.594206 °	-121.594024 °
DWR ID					
Action/Comments					
Inspector Comments: 2011 - Large vertical eroded face from a rotational failure just below pump. 2015: Does not meet critierial. [2015 Site ID: SAC_77-0_R]					

Photo 1 of 1 : USACE2013A_SAC_77-0_R_1.jpg



USACE 2013 Photo #1

LM Start	6.39	Rating **	M	Issue No.	1199
LM End	6.39	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.756612 °	38.756612 °
				-121.594370 °	-121.594370 °
DWR ID	DWR_RD1600_01_s_2015_1199				
Action/Comments					
Inspector Comments: The erosion is caused by the water coming from the siphon breaker.					

Photo 1 of 1 : FA_2015_RD1600_191_1199_20150914_00049.jpg



View of erosion and pipe on the landward side of the levee looking upstream. Spring 2015.

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	6.60	Rating **	M	Issue No.	631
LM End	6.62	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.759633 °	38.760013 °
				-121.594128 °	-121.594148 °
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 2 : FA_2015_RD1600_191_631_20150914_00045.jpg



The tall brush and vegetation blocks visibility. Spring 2014

LM Start	6.60	Rating **	M	Issue No.	631 (cont)
LM End	6.62	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2015_RD1600_191_631_20151103_00090.jpg



View of the brush and vegetation on the landward side of the levee. Fall 2015.

LM Start	6.83	Rating **	M	Issue No.	59
LM End	6.83	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.762936 °	38.762936 °
				-121.594745 °	-121.594745 °
DWR ID	DWR_RD1600_01_f _ 2015_59				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

No Photos

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	6.89	Rating **	M	Issue No.	60
LM End	9.04	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.763805 °	38.782576 °
				-121.595038 °	-121.623267 °
DWR ID	DWR_RD1600_01_f_2015_60				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

No Photos

LM Start	6.95	Rating **	M	Issue No.	6
LM End	6.98	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			38.764801 °	38.765219 °
				-121.594926 °	-121.595049 °
DWR ID					
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. 2015: No observed changes. [2015 Site ID: SAC_77-7_R]					

Photo 1 of 1 : USACE2013A_SAC_77-7_R_3.jpg



USACE 2013 Photo #1

LM Start	6.97	Rating **	M	Issue No.	30
LM End	6.97	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.					

Photo 1 of 2 : FA_2015_RD1600_191_30_20150914_00024.jpg



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

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	6.97	Rating **	M	Issue No.	30 (cont)
LM End	6.97	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.					

Photo 2 of 2 : FA_2015_RD1600_191_30_20151103_00091.jpg



View of the erosion into the berm area that needs to be monitored. Fall 2015.

LM Start	6.97	Rating **	M	Issue No.	27
LM End	6.97	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.					

Photo 1 of 2 : FA_2015_RD1600_191_27_20150914_00022.jpg



The erosion appears to be moving closer to the shoulder.

LM Start	6.97	Rating **	M	Issue No.	27 (cont)
LM End	6.97	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2015_RD1600_191_27_20151103_00092.jpg



The erosion seems to have been fixed. There still seems to be some erosion on the landward side of the levee looking downstream. Fall 2015.

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	7.09	Rating **	M	Issue No.	20
LM End	7.09	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.					

LM Start	7.09	Rating **	M	Issue No.	20 (cont)
LM End	7.09	Issue Type +	Ma	Location *	WS

LM Start	7.09	Rating **	M	Issue No.	20 (cont)
LM End	7.09	Issue Type +	Ma	Location *	WS

Photo 1 of 4 : FA_2015_RD1600_191_20_20150914_00016.jpg



This another view of the site.

Photo 2 of 4 : FA_2015_RD1600_191_20_20150914_00017.jpg



The erosion is eroding away at the berm area.

Photo 3 of 4 : FA_2015_RD1600_191_20_20151103_00094.jpg



View of the erosion in the berm area on the waterward side looking upstream. Fall 2015.

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	7.09	Rating **	M	Issue No.	20 (cont)
LM End	7.09	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 4 of 4 : FA_2015_RD1600_191_20_20151103_00093.jpg



Looking at the erosion site on the berm. Fall 2015.

LM Start	7.21	Rating **	M	Issue No.	61
LM End	7.21	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.768094 °	38.768094 °
				-121.597075 °	-121.597075 °
DWR ID	DWR_RD1600_01_f_2015_61				
Action/Comments					
Note and monitor erosion site.					

Photo 1 of 1 : FA_2015_RD1600_191_61_20151103_00095.jpg



View of the erosion on the landward side of the levee looking downstream. Fall 2015.

LM Start	7.23	Rating **	M	Issue No.	21
LM End	7.23	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 3 : FA_2015_RD1600_191_21_20150914_00018.jpg



The erosion is eroding away the berm area.

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	7.23	Rating **	M	Issue No.	21 (cont)	
LM End	7.23	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 2 of 3 : FA_2015_RD1600_191_21_20150914_00019.jpg



The bank is eroding away and has become very steep.

LM Start	7.23	Rating **	M	Issue No.	21 (cont)
LM End	7.23	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : FA_2015_RD1600_191_21_20151103_00096.jpg



View of the erosion along the waterward berm of the levee. Fall 2015.

LM Start	7.56	Rating **	U	Issue No.	1211
LM End	7.56	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					
Action/Comments					
Inspector Comments: FS_ID:15264 DS_ID:21496 EP_NO: 1596 FS_HLM: 7.595 Repair Type: Urgent Crossing Status: Found					

Photo 1 of 3 : UCIP_FA_2015_0791.jpg



Holes in pipe on LS 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
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	7.56	Rating **	U	Issue No.	1211 (cont)
LM End	7.56	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					

Action/Comments

Inspector Comments: FS_ID:15264
 DS_ID:21496
 EP_NO: 1596
 FS_HLM: 7.595
 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 24-inch pipes found at this location...only a 30-inch.
 FIELD_STRUCT_DESC: 30-inch riveted steel irrigation pipe through the levee 5.5 feet below the crown. Gate valve in pump house on the waterward slope. Slant pump on structure on the bank. Walkway from the pump house to the structure. 2-inch galvanized iron electrical conduit at same location (Permit No. 1596, 1959).
 FS Date: 06/20/2013

LM Start	7.56	Rating **	U	Issue No.	1211 (cont)
LM End	7.56	Issue Type +	En	Location *	WS

Photo 2 of 3 : UCIP_FA_2015_0792.jpg



Pipe and vent on LS shoulder.

Photo 3 of 3 : UCIP_FA_2015_0793.jpg



Pipe on LS shoulder.

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	8.03	Rating **	M	Issue No.	1212
LM End	8.03	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					
Action/Comments					
Inspector Comments: FS_ID:16310					
DS_ID:21480					
EP_NO: 7339					
FS_HLM: 8.072					
Repair Type: Non-Urgent					
Crossing Status: Indicator Found					

Photo 1 of 1 : UCIP_FA_2015_1479.jpg



4-foot diameter steel standpipe at LS toe, may be indicator of pipe location.

LM Start	8.09	Rating **	M	Issue No.	62
LM End	8.84	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.778282 °	38.781790 °
				-121.606606 °	-121.619649 °
DWR ID	DWR_RD1600_01_f _ 2015_62				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

No Photos

LM Start	8.18	Rating **	M	Issue No.	63
LM End	8.18	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.778922 °	38.778922 °
				-121.608075 °	-121.608075 °
DWR ID	DWR_RD1600_01_f _ 2015_63				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	8.21	Rating **	M	Issue No.	1200
LM End	8.21	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.778938 °	38.778938 °
				-121.608595 °	-121.608595 °
DWR ID	DWR_RD1600_01_s _ 2015_1200				
Action/Comments					
Exterminate rodents and backfill and compact or grout burrows.					

No Photos

LM Start	8.88	Rating **	A/W	Issue No.	634
LM End	8.88	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					
Equipment					
Inspector Comments: Most of the equipment has been removed.					
Continue to monitor sight for more placement of equipment.					

LM Start	8.88	Rating **	A/W	Issue No.	634 (cont)
LM End	8.88	Issue Type +	En	Location *	LS

Photo 1 of 2 : FA_2015_RD1600_191_634_20150914_00046.jpg



Irrigation pipe is being stored on the landside. Spring 2014

Photo 2 of 2 : FA_2015_RD1600_191_634_20151103_00097.jpg



View of the equipment on the landward side of the levee looking upstream. Fall 2015.

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	9.04	Rating **	M	Issue No.	65
LM End	10.38	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.782578 °	38.766377 °
				-121.623269 °	-121.634273 °
DWR ID	DWR_RD1600_01_f_2015_65				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

No Photos

LM Start	9.40	Rating **	M	Issue No.	68
LM End	10.38	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.778645 °	38.766372 °
				-121.627156 °	-121.634269 °
DWR ID	DWR_RD1600_01_f_2015_68				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

No Photos

LM Start	9.59	Rating **	M	Issue No.	1201
LM End	9.59	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.776493 °	38.776493 °
				-121.629160 °	-121.629160 °
DWR ID	DWR_RD1600_01_s_2015_1201				
Action/Comments					
Elderberries are blocking visibility and flood fight capability.					

No Photos

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/28/2015 10/28/2015	Jai Lor

LM Start	10.38	Rating **	M	Issue No.	1202
LM End	10.38	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.766363 °	38.766363 °
				-121.634317 °	-121.634317 °
DWR ID	DWR_RD1600_01_s _ 2015_1202				
Action/Comments					
Debris					

Photo 1 of 1 : FA_2015_RD1600_191_1202_20150914_00050.jpg



View of debris on the waterward side of the levee looking upstream.
Spring 2015.

LM Start	10.38	Rating **	M	Issue No.	69
LM End	10.38	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.766293 °	38.766293 °
				-121.634349 °	-121.634349 °
DWR ID	DWR_RD1600_01_f _ 2015_69				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

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

Unit Cover Sheet

Fall 2015 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)			U	
Date of Inspection	03/26/2015 - 04/15/2015		10/29/2015 - 10/29/2015	
DWR Inspector	Jai Lor		Jai Lor	
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
Levee Inspections**

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	10/29/2015 10/29/2015	Jai Lor

LM Start	0.00	Rating **	A	Issue No.	3
LM End	0.39	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.736210 °	38.730609 °
				-121.633662 °	-121.633482 °
DWR ID	DWR_RD1600_02_f_2015_3				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements. Inspector Comments: Levee slope is maintained.					

Photo 1 of 1 : FA_2015_RD1600_192_3_20151103_00020.jpg



View of the vegetation on the waterward side of the levee looking downstream. Fall 2015.

LM Start	0.00	Rating **	A	Issue No.	2
LM End	0.39	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.736210 °	38.730592 °
				-121.633661 °	-121.633481 °
DWR ID	DWR_RD1600_02_f_2015_2				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements. Inspector Comments: Levee slope is maintained.					

Photo 1 of 1 : FA_2015_RD1600_192_2_20151103_00019.jpg



View of the vegetation on the landward side of the levee looking downstream. Fall 2015.

LM Start	0.05	Rating **	C	Issue No.	292
LM End	0.05	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			38.735487 °	38.735487 °
				-121.633622 °	-121.633622 °
DWR ID	DWR_RD1600_02_s_2015_292				
Action/Comments					
Repair depressions or ruts in the crown or slope.					

No Photos

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	10/29/2015 10/29/2015	Jai Lor

LM Start	0.30	Rating **	C	Issue No.	11
LM End	0.79	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.					

No Photos

LM Start	0.36	Rating **	C	Issue No.	293
LM End	0.36	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			38.730972 °	38.730972 °
				-121.633477 °	-121.633477 °
DWR ID	DWR_RD1600_02_s _ 2015_293				
Action/Comments					
Repair depressions or ruts in the crown or slope.					

No Photos

LM Start	0.47	Rating **	M	Issue No.	4
LM End	1.65	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.729402 °	38.712655 °
				-121.633443 °	-121.636309 °
DWR ID	DWR_RD1600_02_f _ 2015_4				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements. Inspector Comments: Vegetation is obstructing access to the levee.					

Photo 1 of 1 : FA_2015_RD1600_192_4_20151103_00021.jpg



View of the vegetation on the landward side of the levee looking downstream. Fall 2015.

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	10/29/2015 10/29/2015	Jai Lor

LM Start	0.49	Rating **	C	Issue No.	294
LM End	0.49	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			38.729167 °	38.729167 °
				-121.633405 °	-121.633405 °
DWR ID	DWR_RD1600_02_s _ 2015_294				
Action/Comments					
Repair depressions or ruts in the crown or slope.					

No Photos

LM Start	0.56	Rating **	C	Issue No.	295
LM End	0.56	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			38.728205 °	38.728205 °
				-121.633428 °	-121.633428 °
DWR ID	DWR_RD1600_02_s _ 2015_295				
Action/Comments					
Repair depressions or ruts in the crown or slope.					

No Photos

LM Start	0.81	Rating **	C	Issue No.	31
LM End	2.16	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.724513 °	38.705577 °
				-121.633425 °	-121.639341 °
DWR ID	DWR_RD1600_02_s _ 2012_31				
Action/Comments					
Keep the crown roadway free of vegetation.					

No Photos

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	10/29/2015 10/29/2015	Jai Lor

LM Start	0.85	Rating **	M	Issue No.	5
LM End	1.02	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.723975 °	38.721426 °
				-121.633378 °	-121.633613 °
DWR ID	DWR_RD1600_02_f _ 2015_5				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

Photo 1 of 1 : FA_2015_RD1600_192_5_20151103_00022.jpg



View of the vegetation on the waterward side of the levee looking downstream. Fall 2015.

LM Start	1.12	Rating **	M	Issue No.	13
LM End	2.41	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.720115 °	38.702218 °
				-121.633862 °	-121.640800 °
DWR ID	DWR_RD1600_02_f _ 2015_13				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

Photo 1 of 1 : FA_2015_RD1600_192_13_20151103_00025.jpg



View of the vegetation on the waterward side of the levee looking downstream. Fall 2015.

LM Start	1.53	Rating **	C	Issue No.	6
LM End	1.53	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			38.714343 °	38.714343 °
				-121.635628 °	-121.635628 °
DWR ID	DWR_RD1600_02_s _ 2013_6				
Action/Comments					
Repair depressions or ruts in the crown or slope.					

No Photos

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	10/29/2015 10/29/2015	Jai Lor

LM Start	1.57	Rating **	M	Issue No.	8
LM End	1.57	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.713733 °	38.713733 °
				-121.635872 °	-121.635872 °
DWR ID	DWR_RD1600_02_f_2015_8				
Action/Comments					
Repair slope instability.					

Photo 1 of 1 : FA_2015_RD1600_192_8_20151103_00023.jpg



View of the slope stability on the waterward side of the levee looking downstream. Fall 2015.

LM Start	1.67	Rating **	C	Issue No.	32
LM End	1.67	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.					

No Photos

LM Start	1.69	Rating **	M	Issue No.	9
LM End	2.32	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.712056 °	38.703463 °
				-121.636556 °	-121.640261 °
DWR ID	DWR_RD1600_02_f_2015_9				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

No Photos

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	10/29/2015 10/29/2015	Jai Lor

LM Start	1.79	Rating **	M	Issue No.	14
LM End	2.05	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	1.79	Rating **	M	Issue No.	14 (cont)
LM End	2.05	Issue Type +	Ma	Location *	WS

LM Start	1.79	Rating **	M	Issue No.	14 (cont)
LM End	2.05	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : FA_2015_RD1600_192_14_20150914_00007.jpg



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

Photo 2 of 3 : FA_2015_RD1600_192_14_20150914_00008.jpg



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

Photo 3 of 3 : FA_2015_RD1600_192_14_20151103_00024.jpg



View of the erosion on the waterward side of the levee looking downstream. Fall 2015.

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	10/29/2015 10/29/2015	Jai Lor

LM Start	2.03	Rating **	C	Issue No.	7
LM End	2.03	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.					

No Photos

LM Start	2.16	Rating **	M	Issue No.	15
LM End	2.27	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 1 of 2 : FA_2015_RD1600_192_15_20150914_00009.jpg



Looking upstream a deeper cut of 2'-3' damage.

LM Start	2.16	Rating **	M	Issue No.	15 (cont)
LM End	2.27	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA_2015_RD1600_192_15_20150914_00010.jpg



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

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	10/29/2015 10/29/2015	Jai Lor

LM Start	3.32	Rating **	M	Issue No.	10
LM End	4.17	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.689471 °	38.677320 °
				-121.645164 °	-121.643705 °
DWR ID	DWR_RD1600_02_f _ 2015_10				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

No Photos

LM Start	3.41	Rating **	M	Issue No.	300
LM End	3.41	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.688243 °	38.688243 °
				-121.645010 °	-121.645010 °
DWR ID	DWR_RD1600_02_s _ 2015_300				
Action/Comments					
Elderberries are blocking visibility and flood fight capability.					

No Photos

LM Start	3.53	Rating **	M	Issue No.	299
LM End	3.53	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.686436 °	38.686436 °
				-121.644799 °	-121.644799 °
DWR ID	DWR_RD1600_02_s _ 2015_299				
Action/Comments					
Elderberries are blocking visibility and flood fight capability.					

No Photos

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	10/29/2015 10/29/2015	Jai Lor

LM Start	3.70	Rating **	U	Issue No.	301
LM End	3.70	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.683971 °	38.683971 °
				-121.644522 °	-121.644522 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:16308					
DS_ID:21501					
EP_NO: 10944					
FS_HLM: 3.692					
Repair Type: Urgent					
Crossing Status: Indicator Found					
UCIP Comments: Need to install gasoline 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: 06/21/2013					

Photo 1 of 2 : UCIP_FA_2015_1477.jpg



Carsonite gasoline marker visible approximately 1,000-feet east of levee crown.

LM Start	3.70	Rating **	U	Issue No.	301 (cont)
LM End	3.70	Issue Type +	En	Location *	LS

Photo 2 of 2 : UCIP_FA_2015_1478.jpg



PG&E marker flag on Crown.

* 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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