

**Flood Control Project Maintenance
Levee Inspections**

Fall 2016 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	5.63	0.04	5.79	39.41%				
Trim / Thin Trees	0.03		0.03	0.20%				
Encroachments	0.04	0.01	0.08	0.54%	0.11	0.01		
Animal Control	0.04		0.04	0.27%				
Slope Stability	0.17		0.17	1.16%				
Erosion / Bank Caving	0.44	0.01	0.48	3.27%				
Seepage / Sandboils								0.17
<i>Supplemental</i>								
2015 USACE Erosion Survey, DRAFT	0.90		0.90	6.13%				
DWR UCIP Field Study					0.08	0.02		
<i>LMA Totals:</i>	7.25	0.06	7.49	50.98%	0.19	0.03	0.00	0.17
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	2.28	0.04	2.44	23.33%				
Trim / Thin Trees	0.03		0.03	0.29%				
Encroachments	0.02	0.01	0.06	0.57%	0.11	0.01		
Animal Control	0.04		0.04	0.38%				
Slope Stability	0.16		0.16	1.53%				
Erosion / Bank Caving	0.06	0.01	0.10	0.96%				
Seepage / Sandboils								0.17
<i>Supplemental</i>								
2015 USACE Erosion Survey, DRAFT	0.90		0.90	8.61%				
DWR UCIP Field Study					0.08	0.01		
<i>Unit Totals:</i>	3.49	0.06	3.73	35.66%	0.19	0.02	0.00	0.17
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	3.35		3.35	79.14%				
Encroachments	0.02		0.02	0.47%				
Slope Stability	0.01		0.01	0.24%				
Erosion / Bank Caving	0.38		0.38	8.98%				
<i>Supplemental</i>								
DWR UCIP Field Study						0.01		
<i>Unit Totals:</i>	3.76	0.00	3.76	88.82%	0.00	0.01	0.00	0.00

**Flood Control Project Maintenance
Levee Inspections**
LMA District Cover Sheet
Fall 2016 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 2016 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	3/24/2016 - 3/24/2016		11/2/2016 - 11/2/2016	
DWR Inspector	Jai Lor		Oleg Yakimov	
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 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

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				
Comment Code					
Inspector Comment					
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				
Comment Code					
Inspector Comment					
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				
Comment Code					
Inspector Comment					
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 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 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	0.06	Rating **	A/W	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				
Comment Code					
BU : Building					
Inspector Comment					
This is the home and pumping plant for RD 2035.					

Photo 1 of 3 : FA_2016_RD1600_191_1_20160913_00001.jpg



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

LM Start	0.06	Rating **	A/W	Issue No.	1 (cont)
LM End	0.06	Issue Type +	En	Location *	WS

Photo 2 of 3 : FA_2016_RD1600_191_1_20161103_00096.jpg



Building was removed due to a new construction. Fall 2016.

LM Start	0.06	Rating **	A/W	Issue No.	1 (cont)
LM End	0.06	Issue Type +	En	Location *	WS

Photo 3 of 3 : FA_2016_RD1600_191_1_20161103_00095.jpg



View of a new pumping plant construction. Fall 2016.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	0.08	Rating **	A	Issue No.	25
LM End	0.08	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.676203 °	38.676203 °
				-121.631024 °	-121.631024 °
DWR ID	DWR_RD1600_01_f_2016_25				
Comment Code					
BU : Building					
Inspector Comment					
Permit 18763 to remove existing RD235 pump station and construct a new one with fish screen.					

LM Start	0.08	Rating **	A	Issue No.	25 (cont)
LM End	0.08	Issue Type +	En	Location *	WS

Photo 1 of 4 : FA_2016_RD1600_191_25_20161103_00097.jpg



Building and transformers on waterward side a part of a new pumping plant construction. Fall 2016.

Photo 2 of 4 : FA_2016_RD1600_191_25_20161103_00098.jpg



Another view of the building and transformers. Fall 2016.

LM Start	0.08	Rating **	A	Issue No.	25 (cont)
LM End	0.08	Issue Type +	En	Location *	WS

Photo 3 of 4 : FA_2016_RD1600_191_25_20161103_00099.jpg



View of construction site. Fall 2016.

* 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 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	0.08	Rating **	A	Issue No.	25 (cont)	
LM End	0.08	Issue Type +	En	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Encroachments			38.676203 °		38.676203 °
				-121.631024 °		-121.631024 °
DWR ID	DWR_RD1600_01_f_2016_25					
Comment Code						
BU : Building						
Inspector Comment						
Permit 18763 to remove existing RD235 pump station and construct a new one with fish screen.						

Photo 4 of 4 : FA_2016_RD1600_191_25_20161103_00100.jpg



View of construction site. Fall 2016.

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				
Comment Code					
BU : Building					
Inspector Comment					
This is a well pump house. It is potable water for the house and pumping plant.					

Photo 1 of 2 : FA_2016_RD1600_191_129_20160913_00055.jpg



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

LM Start	0.10	Rating **	M	Issue No.	129 (cont)
LM End	0.10	Issue Type +	En	Location *	WS

Photo 2 of 2 : FA_2016_RD1600_191_129_20161103_00101.jpg



Updated view of the building. Fall 2016.

* 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 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	0.11	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			38.676577 °	38.678131 °
				-121.631290 °	-121.632324 °
DWR ID	DWR_RD1600_01_s_2012_49				
Comment Code					
V8 : Environmental Requirements.					
Inspector Comment					

LM Start	0.11	Rating **	A/W	Issue No.	49 (cont)
LM End	0.23	Issue Type +	Ob	Location *	WS

Photo 1 of 2 : FA_2016_RD1600_191_49_20160913_00041.jpg



Sign stating revegetation site. Spring 2016.

Photo 2 of 2 : FA_2016_RD1600_191_49_20160913_00042.jpg



View of the revegetation site and fence on the waterward side of the levee looking upstream. Spring 2016.

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				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD1600_191_38_20160913_00035.jpg



View of a slope depression 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 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 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	0.13	Rating **	U	Issue No.	26
LM End	0.13	Issue Type +	En	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.676775 °	38.676775 °
				-121.631435 °	-121.631435 °
DWR ID	DWR_RD1600_01_f_2016_26				
Comment Code					
MA : Material					
Inspector Comment					
Rockpile blocks levee access.					

Photo 1 of 2 : FA_2016_RD1600_191_26_20161103_00102.jpg



Rockpile blocks access to the levee trough the gate. Looking upstream. Fall 2016.

LM Start	0.13	Rating **	U	Issue No.	26 (cont)
LM End	0.13	Issue Type +	En	Location *	CR

Photo 2 of 2 : FA_2016_RD1600_191_26_20161103_00103.jpg



Rockpile blocks access to the levee trough the gate. Looking downstream. Fall 2016.

* 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 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	0.13	Rating **	M	Issue No.	1203
LM End	0.13	Issue Type +	En	Location *	CR
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.676802 °	38.676802 °
				-121.631442 °	-121.631442 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:15087 DS_ID:21459 EP_NO: 1929 Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: Line should be located with carsonite signs on both sides of levee. 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: 6/18/2013					

Photo 1 of 1 : UCIP_FA_2016_15087_24812.jpg



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

LM Start	0.21	Rating **	C	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				
Comment Code					
S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.					
Inspector Comment					

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 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

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				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD1600_191_40_20160913_00037.jpg



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

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				
Comment Code					
S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.					
Inspector Comment					

Photo 1 of 2 : FA_2016_RD1600_191_133_20160913_00056.jpg



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

LM Start	0.53	Rating **	M	Issue No.	133 (cont)
LM End	0.53	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2016_RD1600_191_133_20161103_00106.jpg



Updated view of the slope stability site. Fall 2016.

* 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 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

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	DWR_RD1600_01_s_2016_7				
Comment Code					
Inspector Comment					
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 : FA_2016_RD1600_191_7_20160913_00010.jpg



USACE 2013 Photo #1

LM Start	0.60	Rating **	M	Issue No.	29
LM End	0.62	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.683238 °	38.683415 °
				-121.634388 °	-121.634448 °
DWR ID	DWR_RD1600_01_s_2016_29				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Recommend removal of willow trees.					

Photo 1 of 3 : FA_2016_RD1600_191_29_20160913_00027.jpg



Perspective view of the willows on the waterward side of the levee looking upstream. Spring 2016.

LM Start	0.60	Rating **	M	Issue No.	29 (cont)
LM End	0.62	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : FA_2016_RD1600_191_29_20160913_00028.jpg



Willows are growing on the waterward side of the levee. Spring 2016.

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	0.60	Rating **	M	Issue No.	29 (cont)	
LM End	0.62	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Vegetation			38.683238 °		38.683415 °
				-121.634388 °		-121.634448 °
DWR ID	DWR_RD1600_01_s_2016_29					
Comment Code						
V2 : Remove the wild growth other than native grasses from the levee slopes.						
Inspector Comment						
Recommend removal of willow trees.						

Photo 3 of 3 : FA_2016_RD1600_191_29_20161103_00105.jpg



Updated view of willows on waterward side. Fall 2016.

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				
Comment Code					
V7 : Trees / Woody Vegetation					
Inspector Comment					
The tree is dying and needs to be monitored.					

Photo 1 of 2 : FA_2016_RD1600_191_624_20160913_00061.jpg



View of the dying tree on the waterward side of the levee looking upstream. Spring 2016.

LM Start	0.78	Rating **	A/W	Issue No.	624 (cont)
LM End	0.78	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA_2016_RD1600_191_624_20161103_00104.jpg



Dying tree on waterward side was burnt. Fall 2016.

* 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**

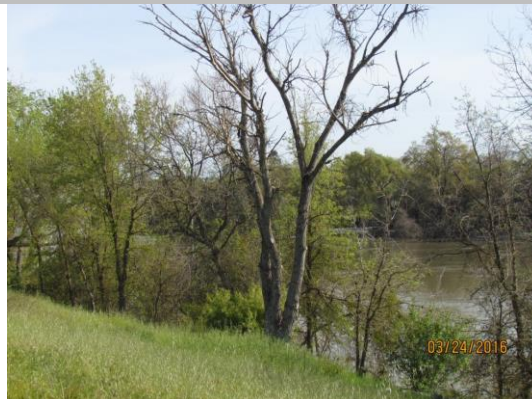
Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

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				
Comment Code					
V7 : Trees / Woody Vegetation					
Inspector Comment					
The tree is dying and needs to be monitored so there is no threat to the levee					

Photo 1 of 1 : FA_2016_RD1600_191_625_20160913_00062.jpg



View of the tree on the waterward side of the levee. Spring 2016.

LM Start	0.94	Rating **	M	Issue No.	1208
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					
Comment Code					
Inspector Comment					
FS_ID:15285 DS_ID:21463 EP_NO: 6100 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Gate valve will not open or close. FIELD_STRUCT_DESC: 12-inch pipe through levee 3.4 feet below crown. Slant pump and gate valve on the waterward- slope. Siphon breaker in 12-inch steel riser on the landward shoulder. Filter, booster pump, and butterfly valve on LS toe. 2.25-inch galvanized iron electrical conduit at same location (Permit No. 6100, 1968). Replaced 8-inch pipe at same location. FS Date: 6/18/2013					

Photo 1 of 2 : UCIP_FA_2016_15285_25088.jpg



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

* 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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Reclamation District No. 1600 Mull

View of large amount of prunings on WS slope. Fall 2016.

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

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				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					

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

Photo 1 of 2 : FA_2016_RD1600_191_134_20160913_00057.jpg



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

Photo 2 of 2 : FA_2016_RD1600_191_134_20160913_00058.jpg



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

LM Start	1.01	Rating **	A/W	Issue No.	22
LM End	1.10	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.689092 °	38.690368 °
				-121.635616 °	-121.635669 °
DWR ID	DWR_RD1600_01_s_2012_22				
Comment Code					
V8 : Environmental Requirements.					
Inspector Comment					

Photo 1 of 2 : FA_2016_RD1600_191_22_20160913_00021.jpg



View of the revegetation site at the berm edge on the waterward side of the levee looking upstream. Spring 2016.

* 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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Reclamation District No. 1600 Mull

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

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					
Comment Code						
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.						
Inspector Comment						
Damage looks like caused by vehicles.						

Photo 2 of 2 : FA_2016_RD1600_191_4_20160913_00006.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 +	Ob	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.694469 °	38.694469 °
				-121.634312 °	-121.634312 °
DWR ID	DWR_RD1600_01_f_2012_5				
Comment Code					
V8 : Environmental Requirements.					
Inspector Comment					

Photo 1 of 2 : FA_2016_RD1600_191_5_20160913_00007.jpg



View of the revegetation site on the berm of the waterward side of the levee looking upstream. Spring 2016.

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

Photo 2 of 2 : FA_2016_RD1600_191_5_20160913_00008.jpg



DWR revegetation site. Spring 2016.

* 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 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	1.53	Rating **	M	Issue No.	50
LM End	1.58	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.696341 °	38.696918 °
				-121.633417 °	-121.633044 °
DWR ID	DWR_RD1600_01_s_2016_50				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Remove willows on waterward side of the levee.					

Photo 1 of 1 : FA_2016_RD1600_191_50_20161103_00109.jpg



View of willows on waterward side of the levee. Recommended removal. Fall 2016.

LM Start	1.70	Rating **	M	Issue No.	70
LM End	1.70	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.698414 °	38.698414 °
				-121.631874 °	-121.631874 °
DWR ID	DWR_RD1600_01_s_2016_70				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD1600_191_70_20161103_00110.jpg



View of slope instability due to vehicular activity. Fall 2016.

LM Start	1.70	Rating **	C	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				
Comment Code					
DE : Debris					
Inspector Comment					

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 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	1.72	Rating **	M	Issue No.	71
LM End	1.72	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.698628 °	38.698628 °
				-121.631694 °	-121.631694 °
DWR ID	DWR_RD1600_01_s_2016_71				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD1600_191_71_20160913_00050.jpg



View of the ruts on the shoulder of the levee on the waterward side. Spring 2016.

LM Start	1.72	Rating **	A/W	Issue No.	31
LM End	1.72	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.698639 °	38.698639 °
				-121.631687 °	-121.631687 °
DWR ID	DWR_RD1600_01_s_2012_31				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

Photo 1 of 2 : FA_2016_RD1600_191_31_20160913_00031.jpg



A photo of a Elderberry bush in the area.

LM Start	1.72	Rating **	A/W	Issue No.	31 (cont)
LM End	1.72	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA_2016_RD1600_191_31_20160913_00032.jpg



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

* Location	** Rating	+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	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 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	2.01	Rating **	U	Issue No.	72
LM End	2.01	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.701605 °	38.701605 °
				-121.627954 °	-121.627954 °
DWR ID	DWR_RD1600_01_s_2016_72				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Erosion seems to be caused by rain runoffs. Slope is graveled. Unsure if it is being used as a ramp.					

Photo 1 of 3 : FA_2016_RD1600_191_72_20160913_00051.jpg



Erosion is on the landward side of the levee about midway from the shoulder of the levee. Spring 2016.

LM Start	2.01	Rating **	U	Issue No.	72 (cont)
LM End	2.01	Issue Type +	Ma	Location *	LS

Photo 2 of 3 : FA_2016_RD1600_191_72_20160913_00052.jpg



Perspective view of the erosion on the landward side of the levee looking upstream. Spring 2016.

LM Start	2.01	Rating **	U	Issue No.	72 (cont)
LM End	2.01	Issue Type +	Ma	Location *	LS

Photo 3 of 3 : FA_2016_RD1600_191_72_20161103_00111.jpg



Updated view of the erosion site. Fall 2016.

* 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 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

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				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD1600_191_52_20160913_00043.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				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD1600_191_53_20160913_00044.jpg



View of the rodent hole on the waterward side of the levee. 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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Reclamation District No. 1600 Mull

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	2.35	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			38.704624 °	38.705152 °
				-121.623034 °	-121.622187 °
DWR ID	DWR_RD1600_01_s_2012_35				
Comment Code					
V8 : Environmental Requirements.					
Inspector Comment					

LM Start	2.35	Rating **	A/W	Issue No.	35 (cont)
LM End	2.40	Issue Type +	Ma	Location *	WS

**ON-SITE REVEGETATION
IN PROGRESS**

To enhance fish and wildlife habitat
for conservation and mitigation
purposes. Mowing, spraying, grazing
and tree cutting is prohibited.
Violators may be subject to penalty or
prosecution. For more information on
the Levee Repair Program go to:
www.levees.water.ca.gov
DEPARTMENT OF WATER RESOURCES
WATER CODE SECTION 8708

03/24/2016

Sign for revegetation site. Spring 2016.

A photograph of a gravel driveway leading towards a house. The driveway is wide and made of light-colored gravel. To the right of the driveway is a grassy area with some weeds and a fence. In the background, there are trees and a utility pole. The sky is blue with some clouds. A date stamp '03/24/2016' is visible in the bottom right corner.

View of the revegetation site on the waterward side of the levee looking upstream. Spring 2016.

LM Start	2.41	Rating **	M	Issue No.	43
LM End	2.41	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.705203 °	38.705203 °
				-121.622184 °	-121.622184 °
DWR ID	DWR_RD1600_01_f_2016_43				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					

LS slope damaged by a vehicle. Fall 2016.

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	2.61	Rating **	A/W	Issue No.	45
LM End	2.61	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.707311 °	38.707311 °
				-121.619517 °	-121.619517 °
DWR ID	DWR_RD1600_01_f _ 2016_45				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD1600_191_45_20161103_00114.jpg



Elderberry tree on landside slope. Fall 2016.

LM Start	2.81	Rating **	M	Issue No.	1204	
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						
Comment Code						
Inspector Comment						
FS_ID:15108						
DS_ID:21467						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: Appears abandoned and should be done so properly. Debris buildup on pier. Power cut to pump.						
FIELD_STRUCT_DESC: 16-inch pipe through levee 2-feet below crown. Walkway from berm to pump on pile structure in the stream.						
Siphon breaker on the landward slope. 12-inch PVC standpipe off LS toe. Originally included in 1955 O+M manual.						
FS Date: 6/18/2013						

Photo 1 of 2 : UCIP_FA_2016_15108_24826.jpg



Pump on metal platform off WS berm.

* 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 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	2.81	Rating **	M	Issue No.	1204 (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						
Comment Code						
Inspector Comment						
FS_ID:15108						
DS_ID:21467						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: Appears abandoned and should be done so properly. Debris buildup on pier. Power cut to pump.						
FIELD_STRUCT_DESC: 16-inch pipe through levee 2-feet below crown. Walkway from berm to pump on pile structure in the stream.						
Siphon breaker on the landward slope. 12-inch PVC standpipe off LS toe. Originally included in 1955 O+M manual.						
FS Date: 6/18/2013						

Photo 2 of 2 : UCIP_FA_2016_15108_24825.jpg



Debris buildup at metal platform waterline.

LM Start	2.93	Rating **	M	Issue No.	1205
LM End	2.93	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					
Comment Code					
Inspector Comment					
FS_ID:15110 DS_ID:21490 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: Abandoned and should be removed from levee. FIELD_STRUCT_DESC: *ABANDONED* 10-inch concrete pipe through levee 5.0 feet below crown. Pipe visible on LS slope. Originally included in the 1955 O&M manual. FS Date: 6/18/2013					

Photo 1 of 2 : UCIP_FA_2016_15110_24828.jpg



Pipe visible on LS 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 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	2.93	Rating **	M	Issue No.	1205 (cont)
LM End	2.93	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					
Comment Code					
Inspector Comment					
FS_ID:15110 DS_ID:21490 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: Abandoned and should be removed from levee. FIELD_STRUCT_DESC: *ABANDONED* 10-inch concrete pipe through levee 5.0 feet below crown. Pipe visible on LS slope. Originally included in the 1955 O&M manual. FS Date: 6/18/2013					

Photo 2 of 2 : UCIP_FA_2016_15110_24827.jpg



Pipe visible on LS slope.

LM Start	2.93	Rating **	M	Issue No.	47
LM End	2.93	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.710518 °	38.710518 °
				-121.615366 °	-121.615366 °
DWR ID	DWR_RD1600_01_f_2016_47				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD1600_191_47_20161103_00115.jpg



LS levee slope damaged by a vehicle. Fall 2016.

* Location
 LS : Land Side N/A : Not Applicable
 WS : Water Side
 CR : Crown

** Rating
 A : Acceptable N : Not Inspected/Rated
 M : Minimally Acceptable C : Corrected
 U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
 Ma : Maintenance Deficiency
 Ob : Design & System Obsolescence
 En : Enforcement

Reclamation District No. 1600 Mull

No Photos

Vegetation on LS slope partially blocks visibility. Fall 2016.

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

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

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					
Comment Code						
DE : Debris						
Inspector Comment						
Some debris has been removed. Fall 2016.						

Photo 2 of 2 : FA_2016_RD1600_191_627_20160913_00065.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	DWR_RD1600_01_s_2016_3				
Comment Code					
Inspector Comment					
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 : FA_2016_RD1600_191_3_20160913_00004.jpg



USACE 2013 Photo #1

* 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 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

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				
Comment Code					
DE : Debris					
Inspector Comment					

LM Start	3.59	Rating **	M	Issue No.	628 (cont)
LM End	3.59	Issue Type +	En	Location *	WS

Photo 1 of 2 : FA_2016_RD1600_191_628_20160913_00066.jpg



Perspective view of the concrete pile looking upstream. Spring 2016.

Photo 2 of 2 : FA_2016_RD1600_191_628_20160913_00067.jpg



View of the concrete pile on the berm of the waterward side of the levee. Spring 2016.

LM Start	3.76	Rating **	M	Issue No.	2
LM End	3.76	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.720385 °	38.720385 °
				-121.606953 °	-121.606953 °
DWR ID	DWR_RD1600_01_s_2013_2				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Trees have fallen over and created bank erosion.					

Photo 1 of 2 : FA_2016_RD1600_191_2_20160913_00002.jpg



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

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	3.76	Rating **	M	Issue No.	2 (cont)	
LM End	3.76	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Erosion / Bank Caving			38.720385 °		38.720385 °
				-121.606953 °		-121.606953 °
DWR ID	DWR_RD1600_01_s_2013_2					
Comment Code						
E1 : Note and monitor erosion site.						
Inspector Comment						
Trees have fallen over and created bank erosion.						

Photo 2 of 2 : FA_2016_RD1600_191_2_20160913_00003.jpg



View of the erosion from the top of the levee. Spring 2016.

LM Start	3.76	Rating **	U	Issue No.	73
LM End	3.93	Issue Type +	Ob	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Seepage / Sandboils			38.720407 °	38.722850 °
				-121.606953 °	-121.606899 °
DWR ID	DWR_RD1600_01_s_2016_73				
Comment Code					
Inspector Comment					
There appears to be a ponding issue and will have to be monitored during next inspection.					

Photo 1 of 2 : FA_2016_RD1600_191_73_20160913_00053.jpg



View taken from the crown of the levee of the seepage. Spring 2016.

LM Start	3.76	Rating **	U	Issue No.	73 (cont)
LM End	3.93	Issue Type +	Ob	Location *	LS

Photo 2 of 2 : FA_2016_RD1600_191_73_20160913_00054.jpg



View of the seepage by the road looking upstream. Spring 2016.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Reclamation District No. 1600 Mull

Prunings on landside slope. Fall 2016.

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

Animal burrows on LS slope near the crown. Fall 2016.

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

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	DWR_RD1600_01_s_2016_8				
Comment Code					
Inspector Comment					
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 : FA_2016_RD1600_191_8_20160913_00011.jpg



USACE 2013 Photo #1

LM Start	4.51	Rating **	M	Issue No.	1206
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					
Comment Code					
Inspector Comment					
FS_ID:15125 DS_ID:21470 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Pumphouse abandoned with deep pit open. Safety issue. If plant is abandoned it should be done so properly. FIELD_STRUCT_DESC: 24-inch pipe through the levee 21.4 feet below the crown. 16-inch pipe ties into 24-inch at WS slope. Slant pump on metal platform and gate valve on water side berm. Gate valve in pump house off the landward side. Two power poles at the toe of the landward slope. FS Date: 6/18/2013 7:36:00 AM					

Photo 1 of 2 : UCIP_FA_2016_15125_24846.jpg



Pumphouse/distribution box off LS toe.

* 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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Reclamation District No. 1600 Mull

Slant pump on metal pier on WS berm.

Pipe and remnants of grouted pipe on LS slope.

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	4.52	Rating **	M	Issue No.	1209 (cont)	
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						
Comment Code						
Inspector Comment						
FS_ID:41563						
DS_ID:21471						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: Pipe should be removed from slope.						
FIELD_STRUCT_DESC: *ABANDONED* 12-inch pipe through the						
levee 5.5 feet below the crown. Grouted in place 1957.						
FS Date: 6/18/2013						

Photo 2 of 2 : UCIP_FA_2016_41563_27473.jpg



Pipe and remnants of grouted pipe on LS slope.

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				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD1600_191_41_20160913_00038.jpg



View of the bulge at the toe of the levee on the landward side 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 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	4.75	Rating **	A/W	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				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

LM Start	4.76	Rating **	A/W	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				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

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				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					

Photo 1 of 2 : FA_2016_RD1600_191_141_20160913_00059.jpg



The erosion at the shoulder of the levee could be slope instability. 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 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	4.77	Rating **	M	Issue No.	141 (cont)	
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					
Comment Code						
S1 : Repair slope instability.						
Inspector Comment						

Photo 2 of 2 : FA_2016_RD1600_191_141_20160913_00060.jpg



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

LM Start	4.78	Rating **	A/W	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				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

LM Start	4.80	Rating **	A/W	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				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

* Location		** Rating		+ Issue Type	
LS : Land Side N/A : Not Applicable		A : Acceptable		Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable		Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable		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 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	4.85	Rating **	A/W	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				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

LM Start	5.40	Rating **	M	Issue No.	44
LM End	5.40	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.743585 °	38.743585 °
				-121.601447 °	-121.601447 °
DWR ID	DWR_RD1600_01_s_2016_44				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD1600_191_44_20161103_00119.jpg



View of WS slope depression. Fall 2016.

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				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

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 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	5.44	Rating **	A/W	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				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Levee district had us add this because of the loss of the berm over years of water flows. Erosion is at the waters edge. Walnut trees are close to edge now.					

No Photos

LM Start	5.57	Rating **	C	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				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

No Photos

LM Start	6.00	Rating **	M	Issue No.	59
LM End	6.11	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.751179 °	38.752670 °
				-121.596173 °	-121.595485 °
DWR ID	DWR_RD1600_01_f_2016_59				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD1600_191_59_20161103_00121.jpg



Vegetation on LS slope partially blocks visibility. Fall 2016.

* 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 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

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			38.752358 °	38.752358 °
				-121.595608 °	-121.595608 °
DWR ID	DWR_RD1600_01_f_2015_58				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD1600_191_58_20160913_00047.jpg



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

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					
Comment Code					
Inspector Comment					
FS_ID:50101 DS_ID:21476 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: 08/15/2016 - no change since previous inspection (T. Hatch/UCIP)06/20/2013 - Pipe is abandoned and open on both ends. It should be abandoned properly. (W. Wylie/UCIP) FIELD_STRUCT_DESC: *ABANDONED* 18-inch steel irrigation pipe through the levee, 4.5 feet below the crown. Pump on pile structure on the waterside (WS), pump not found and only the piles remain. Walkway between levee crown and pile structure on WS, not found. Overhead power line crosses levee, service pole on the WS slope. 6 foot by 6 foot concrete distribution box at the toe of the landside (LS) slope. [Additional Reference(s): DWR Levee Log, 1988. USACE Sacramento O&M Manual 123, August 1955 (RM 77)]. FS Date: 8/15/2016					

Photo 1 of 2 : UCIP_FA_2016_50101_25011.jpg



6'X6' concrete distribution box on LS toe.

* 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 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

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					
Comment Code					
Inspector Comment					
FS_ID:50101 DS_ID:21476 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: 08/15/2016 - no change since previous inspection (T. Hatch/UCIP)06/20/2013 - Pipe is abandoned and open on both ends. It should be abandoned properly. (W. Wylie/UCIP) FIELD_STRUCT_DESC: *ABANDONED* 18-inch steel irrigation pipe through the levee, 4.5 feet below the crown. Pump on pile structure on the waterside (WS), pump not found and only the piles remain. Walkway between levee crown and pile structure on WS, not found. Overhead power line crosses levee, service pole on the WS slope. 6 foot by 6 foot concrete distribution box at the toe of the landside (LS) slope. [Additional Reference(s): DWR Levee Log, 1988. USACE Sacramento O&M Manual 123, August 1955 (RM 77)]. FS Date: 8/15/2016					

Photo 2 of 2 : UCIP_FA_2016_50101_25010.jpg



Pipe on WS slope.

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	DWR_RD1600_01_s_2016_9				
Comment Code					
Inspector Comment					
2011 - Large vertical eroded face from a rotational failure just below pump. 2015: Does not meet criterial. [2015 Site ID: SAC_77-0_R]					

Photo 1 of 1 : FA_2016_RD1600_191_9_20160913_00012.jpg



USACE 2013 Photo #1

* 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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Reclamation District No. 1600 Mull

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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	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	6.60	Rating **	M	Issue No.	631 (cont)	
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					
Comment Code						
V2 : Remove the wild growth other than native grasses from the levee slopes.						
Inspector Comment						

A photograph showing a paved road that curves to the right. The left side of the road is bordered by dense, tall brush and grasses. The right side is lined with mature trees. The sky is blue with some light clouds. A date stamp '10/29/2015' is located in the bottom right corner of the image.

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

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	DWR_RD1600_01_s_2016_6				
Comment Code					
Inspector Comment					
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]					

A photograph of a riverbank. The foreground shows the calm, rippling surface of a river. The middle ground features a dense line of trees and shrubs along the shore. In the background, a small, light-colored structure, possibly a house or shed, is visible through the trees. The sky is clear and blue. In the bottom right corner, there is a red date stamp: 2007-08-26 09:08:00.

USACE 2013 Photo #1

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				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					

The erosion appears to be moving closer to the shoulder.

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	6.97	Rating **	M	Issue No.	27 (cont)	
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					
Comment Code						
E1 : Note and monitor erosion site.						
Inspector Comment						

Photo 2 of 3 : FA_2016_RD1600_191_27_20160913_00024.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.

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

Photo 3 of 3 : FA_2016_RD1600_191_27_20161103_00123.jpg



Updated view of erosion site. Fall 2016.

LM Start	6.97	Rating **	M	Issue No.	30
LM End	6.97	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.764980 °	38.764980 °
				-121.595513 °	-121.595513 °
DWR ID	DWR_RD1600_01_s_2013_30				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					

Photo 1 of 2 : FA_2016_RD1600_191_30_20160913_00029.jpg



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

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	6.97	Rating **	M	Issue No.	30 (cont)	
LM End	6.97	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Erosion / Bank Caving			38.764980 °		38.764980 °
				-121.595513 °		-121.595513 °
DWR ID	DWR_RD1600_01_s _ 2013_30					
Comment Code						
E1 : Note and monitor erosion site.						
Inspector Comment						

Photo 2 of 2 : FA_2016_RD1600_191_30_20160913_00030.jpg



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

LM Start	7.10	Rating **	A/W	Issue No.	20
LM End	7.10	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.766691 °	38.766691 °
				-121.596300 °	-121.596300 °
DWR ID	DWR_RD1600_01_s _ 2012_20				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Erosion present at the berm, and it hasn't got into the levee prism yet.					

Photo 1 of 5 : FA_2016_RD1600_191_20_20160913_00014.jpg



This another view of the site.

LM Start	7.10	Rating **	A/W	Issue No.	20 (cont)
LM End	7.10	Issue Type +	Ma	Location *	WS

Photo 2 of 5 : FA_2016_RD1600_191_20_20160913_00015.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 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 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	7.10	Rating **	A/W	Issue No.	20 (cont)	
LM End	7.10	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start	End	
Item	Erosion / Bank Caving			38.766691 °	38.766691 °	
				-121.596300 °	-121.596300 °	
DWR ID	DWR_RD1600_01_s_ 2012_20					
Comment Code						
E1 : Note and monitor erosion site.						
Inspector Comment						
Erosion present at the berm, and it hasn't got into the levee prism yet.						

Photo 3 of 5 : FA_2016_RD1600_191_20_20160913_00016.jpg



The erosion is eroding away at the berm area.

LM Start	7.10	Rating **	A/W	Issue No.	20 (cont)
LM End	7.10	Issue Type +	Ma	Location *	WS

Photo 4 of 5 : FA_2016_RD1600_191_20_20160913_00017.jpg



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

LM Start	7.10	Rating **	A/W	Issue No.	20 (cont)
LM End	7.10	Issue Type +	Ma	Location *	WS

Photo 5 of 5 : FA_2016_RD1600_191_20_20161103_00124.jpg



Updated view of erosion site. Fall 2016.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

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				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD1600_191_61_20160913_00048.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				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					

Photo 1 of 3 : FA_2016_RD1600_191_21_20160913_00018.jpg



The erosion is eroding away the berm area.

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

Photo 2 of 3 : FA_2016_RD1600_191_21_20160913_00019.jpg



The bank is eroding away and has become very steep.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

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				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					

Photo 3 of 3 : FA_2016_RD1600_191_21_20160913_00020.jpg



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

LM Start	7.56	Rating **	M	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					
Comment Code					
Inspector Comment					
FS_ID:50169 DS_ID:25464 EP_NO: 18849 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 08/15/2016 - Pipe appears in good condition overall. Standing water found in riser for siphon breaker. Pump was not in operation during field visit. (T. Hatch/UCIP) FIELD_STRUCT_DESC: 24-inch welded steel irrigation pipe through the levee, 2 feet below the crown. A positive closure device is located in a steel riser with a lid on the waterside (WS) hinge of the levee. A siphon breaker is located in a steel riser with lid on the landside (LS) hinge of the levee. A distribution box is located on the LS toe of the levee. (installed under Permit No. 18849, 2014 - Bypass Farms). FS Date: 8/15/2016					

Photo 1 of 2 : UCIP_FA_2016_50169_75607.jpg



view along the levee crown looking downstream. WS slope of the levee is visible.

* 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 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	7.56	Rating **	M	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						
Comment Code						
Inspector Comment						
FS_ID:50169 DS_ID:25464 EP_NO: 18849 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 08/15/2016 - Pipe appears in good condition overall. Standing water found in riser for siphon breaker. Pump was not in operation during field visit. (T. Hatch/UCIP) FIELD_STRUCT_DESC: 24-inch welded steel irrigation pipe through the levee, 2 feet below the crown. A positive closure device is located in a steel riser with a lid on the waterside (WS) hinge of the levee. A siphon breaker is located in a steel riser with lid on the landside (LS) hinge of the levee. A distribution box is located on the LS toe of the levee. (installed under Permit No. 18849, 2014 - Bypass Farms). FS Date: 8/15/2016						

Photo 2 of 2 : UCIP_FA_2016_50169_75608.jpg



view of positive closure device in metal riser on WS shoulder of levee.

LM Start	8.03	Rating **	M	Issue No.	1207
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					
Comment Code					
Inspector Comment					
FS_ID:16310 DS_ID:21480 EP_NO: 7339 Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: Need to determine disposition of pipe. If abandoned, it should be done so properly. FIELD_STRUCT_DESC: 24-inch steel pipe through levee 3.8 feet below crown. Steel plate welded on the waterward end. Pipe not visible on either slope. Pylons in river at WS toe and a 4-foot diameter steel standpipe on the LS toe (Permit No. 7339, 1977) Seepage area at toe of the landward slope. FS Date: 6/20/2013					

Photo 1 of 1 : UCIP_FA_2016_16310_27485.jpg



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

* 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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Reclamation District No. 1600 Mull

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

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				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD1600_191_1200_20161103_00127.jpg



Rodent holes on waterside slope. Fall 2016.

LM Start	8.52	Rating **	M	Issue No.	62
LM End	8.82	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.780319 °	38.781726 °
				-121.614069 °	-121.619430 °
DWR ID	DWR_RD1600_01_f_2016_62				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

No Photos

LM Start	8.88	Rating **	C	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				
Comment Code					
EQ : Equipment					
Inspector Comment					
Most of the equipment has been removed. Continue to monitor sight for more placement of equipment.					

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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Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	9.04	Rating **	M	Issue No.	64
LM End	9.57	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.782563 °	38.776643 °
				-121.623188 °	-121.628748 °
DWR ID	DWR_RD1600_01_f_2016_64				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

A photograph of a grassy hillside. In the foreground, there is a large area of dry, brownish-yellow grass. A dirt path leads from the bottom left towards the middle of the hill. On the left side of the path, there are several small, dark-colored animals, possibly cows or sheep, grazing. The hillside is covered in a mix of green and dry grass. At the top of the hill, there is a dense line of trees with green and yellow leaves. A date stamp '11/02/2016' is visible in the bottom right corner of the image.

Vegetation on landside slope partially blocks visibility. Fall 2016.

LM Start	9.50	Rating **	M	Issue No.	66
LM End	10.35	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.777372 °	38.766684 °
				-121.627864 °	-121.633965 °
DWR ID	DWR_RD1600_01_f_2016_66				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Only about 10 ft of WS slope cleared.					

A photograph showing a gravel road or driveway on the left, bordered by a dense line of trees and shrubs on the right. The ground is covered in gravel and sparse green grass. A date stamp '11/02/2015' is visible in the bottom right corner.

Vegetation on WS slope has been cleared only about 10 ft. from the crown. Fall 2016.

LM Start	9.59	Rating **	A/W	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				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

A photograph showing a gravel road or path on the left, curving towards the right. The road is bordered by a dense line of shrubs and trees, some with green leaves and others with brown, dry-looking foliage. The background shows a clear blue sky with a few wispy clouds. A date stamp '11/02/2016' is visible in the bottom right corner of the image.

Elderberry tree on WS slope. Fall 2016.

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	9.86	Rating **	U	Issue No.	68
LM End	9.90	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.773389 °	38.772705 °
				-121.631723 °	-121.631586 °
DWR ID	DWR_RD1600_01_f_2016_68				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD1600_191_68_20161103_00136.jpg



Vegetation on landside slope blocks visibility. Fall 2016.

LM Start	10.38	Rating **	M	Issue No.	1202
LM End	10.45	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.766363 °	38.765402 °
				-121.634317 °	-121.635005 °
DWR ID	DWR_RD1600_01_s_2015_1202				
Comment Code					
DE : Debris					
Inspector Comment					
Concrete pipes and blocks on levee crown.					

Photo 1 of 1 : FA_2016_RD1600_191_1202_20160913_00073.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				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

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 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	10.41	Rating **	M	Issue No.	74
LM End	10.42	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.765905°	38.765774°
				-121.634580°	-121.634661°
DWR ID	DWR_RD1600_01_f _ 2016_74				
Comment Code					
T3 : Trim and thin trees to allow visibility of the ground and room to flood fight.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD1600_191_74_20161103_00132.jpg



Tree thinning on LS slope is needed. Fall 2016.

* 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**

Unit Cover Sheet

Fall 2016 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	3/24/2016 - 3/24/2016		11/2/2016 - 11/2/2016	
DWR Inspector	Jai Lor		Oleg Yakimov	
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 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	0.37	Rating **	M	Issue No.	4
LM End	0.37	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.730872 °	38.730872 °
				-121.633504 °	-121.633504 °
DWR ID	DWR_RD1600_02_f _ 2016_4				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD1600_192_4_20161103_00012.jpg



Landside levee slope erosion at RD1600 pumping plant. Fall 2016.

LM Start	0.39	Rating **	M	Issue No.	5
LM End	0.91	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.730547 °	38.723081 °
				-121.633490 °	-121.633449 °
DWR ID	DWR_RD1600_02_f _ 2016_5				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD1600_192_5_20161103_00013.jpg



View of vegetation on waterside slope. Fall 2016.

LM Start	0.41	Rating **	M	Issue No.	7
LM End	1.01	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.730316 °	38.721685 °
				-121.633472 °	-121.633577 °
DWR ID	DWR_RD1600_02_f_2016_7				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD1600_192_7_20161103_00014.jpg



View of vegetation on landside slope. Fall 2016.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Reclamation District No. 1600 Mull

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	1.79	Rating **	M	Issue No.	14 (cont)	
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					
Comment Code						
E1 : Note and monitor erosion site.						
Inspector Comment						

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

Photo 2 of 4 : FA_2016_RD1600_192_14_20160913_00006.jpg



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

Photo 3 of 4 : FA_2016_RD1600_192_14_20160913_00007.jpg



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

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

Photo 4 of 4 : FA_2016_RD1600_192_14_20161103_00015.jpg



Updated view of erosion site on WS slope. Fall 2016.

* 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 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	11/02/2016 11/02/2016	Oleg Yakimov

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				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
This is wave wash damage caused by last high water.					

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

Photo 1 of 3 : FA_2016_RD1600_192_15_20160913_00008.jpg



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

Photo 2 of 3 : FA_2016_RD1600_192_15_20160913_00009.jpg



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

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

Photo 3 of 3 : FA_2016_RD1600_192_15_20161103_00016.jpg



Updated view of wave wash damage on WS slope. Fall 2016.

* 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 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	2.40	Rating **	M	Issue No.	2
LM End	2.40	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.702366 °	38.702366 °
				-121.640732 °	-121.640732 °
DWR ID	DWR_RD1600_02_s_2016_2				
Comment Code					
TR : Tree or limb					
Inspector Comment					

LM Start	2.40	Rating **	M	Issue No.	2 (cont)
LM End	2.40	Issue Type +	Ma	Location *	LS

Photo 1 of 2 : FA_2016_RD1600_192_2_20160913_00001.jpg



A tree has fallen on the landward side of the levee. Spring 2016.

Photo 2 of 2 : FA_2016_RD1600_192_2_20160913_00002.jpg



View of the fallen tree on the landward side of the levee looking downstream. Spring 2016.

LM Start	2.77	Rating **	A/W	Issue No.	3
LM End	2.77	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.697266 °	38.697266 °
				-121.642952 °	-121.642952 °
DWR ID	DWR_RD1600_02_s_2016_3				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

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	

Reclamation District No. 1600 Mull

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	3.71	Rating **	U	Issue No.	301	
LM End	3.71	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						
Comment Code						
Inspector Comment						
FS_ID:50099						
DS_ID:21501						
EP_NO: 10944						
Repair Type: Urgent						
Crossing Status: Indicator Found						
UCIP Comments: 08/16/2016 - unable to locate pipe. Need to install gas line markers on LS and WS of levee crown to denote location. (T. Hatch/UCIP)06/21/2013 - Need to install gasline markers on levee. (W. Wylie/UCIP)						
FIELD_STRUCT_DESC: 8.625-inch steel gas line through the levee, 2 feet below the crown (Permit No. 10944, 1976 - Shell Oil Company).						
[Additional Reference(s): DWR Levee Logs, 1988].						
FS Date: 8/15/2016						

Photo 1 of 2 : UCIP_FA_2016_50099_27478.jpg



PG&E marker flag on Crown.

LM Start	3.71	Rating **	U	Issue No.	301 (cont)
LM End	3.71	Issue Type +	En	Location *	LS

Photo 2 of 2 : UCIP_FA_2016_50099_27477.jpg



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

* 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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Reclamation District No. 1600 Mull

View of vegetation on waterside slope. Only about 10 ft. from the crown has been cleared. Fall 2016.

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	11/02/2016 11/02/2016	Oleg Yakimov

LM Start	4.19	Rating **	M	Issue No.	6
LM End	4.19	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.677121 °	38.677121 °
				-121.643466 °	-121.643466 °
DWR ID	DWR_RD1600_02_s_2016_6				
Comment Code					
PR : Prunings					
Inspector Comment					

Photo 1 of 2 : FA_2016_RD1600_192_6_20160913_00003.jpg



View of the trees on the landward side of the levee looking downstream.
Spring 2016.

LM Start	4.19	Rating **	M	Issue No.	6 (cont)
LM End	4.19	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2016_RD1600_192_6_20161103_00021.jpg



View of debris on LS slope. Fall 2016.

* 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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