

Flood Control Project Maintenance Levee Inspections

Fall 2021 Levee Maintenance Deficiency Summary Report

Sacramento River Basin

RD1600	Overall LMA Rating	Total LMA Miles	* Overall LMA Threshold Percent is less than 10.00%; however, U Rated Miles are present, so the Overall LMA Rating is M instead of A.					
Reclamation District No. 1600 Mull	M *	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	0.05		0.05	0.34%				
Encroachments	0.08	0.01	0.12	0.82%	0.12			
Slope Stability	0.10		0.10	0.68%				
Erosion / Bank Caving	0.79	0.02	0.87	5.92%				
Crown Surface / Depressions / Rutting	0.01		0.01	0.07%				
<i>Supplemental</i>								
2018 USACE Erosion Survey	0.03		0.03	0.20%				
DWR UCIP Field Study					0.10			
<i>LMA Totals:</i>	1.06	0.03	1.18	8.03% *	0.22	0.00	0.00	0.00
Unit No. 01 Sacramento River RB	Overall Unit Rating	Total Unit Miles	* Overall Unit Threshold Percent is less than 10.00%; however, U Rated Miles are present, so the Overall Unit Rating is M instead of A.					
RD1600	M *	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	0.05		0.05	0.48%				
Encroachments	0.08	0.01	0.12	1.15%	0.12			
Slope Stability	0.10		0.10	0.96%				
Erosion / Bank Caving	0.05	0.02	0.13	1.24%				
Crown Surface / Depressions / Rutting	0.01		0.01	0.10%				
<i>Supplemental</i>								
2018 USACE Erosion Survey	0.03		0.03	0.29%				
DWR UCIP Field Study					0.09			
<i>Unit Totals:</i>	0.32	0.03	0.44	4.21% *	0.21	0.00	0.00	0.00
Unit No. 02 Yolo Bypass LB	Overall Unit Rating	Total Unit Miles						
RD1600	M	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>								
Erosion / Bank Caving	0.74		0.74	17.48%				
<i>Supplemental</i>								
DWR UCIP Field Study					0.01			
<i>Unit Totals:</i>	0.74	0.00	0.74	17.48%	0.01	0.00	0.00	0.00

**Flood Control Project Maintenance
Levee Inspections
Unit Cover Sheet**

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)			M *	
Date of Inspection	4/20/2021 - 4/20/2021		10/27/2021 - 10/27/2021	
DWR Inspector	Zach Jojola		Zach Jojola	
Accompanied By				

* Overall LMA Threshold Percent is less than 10.00%; however, U Rated Miles are present, so the Overall LMA Rating is M instead of A.

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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

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_2019_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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

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_s_2020_129				
Comment Code					
BU : Building					
Inspector Comment					
Well pump house.					

Photo 1 of 1 : FA_2021_RD1600_191_129_20210907_00025.jpg



View of pump house on the waterside shoulder. Spring 2021.

LM Start	0.11	Rating **	A/W	Issue No.	1
LM End	0.11	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.676524 °	38.676524 °
				-121.631243 °	-121.631243 °
DWR ID	DWR_RD1600_01_f_2018_1				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Rills forming on overbuilt section of levee. Not within the prism. Recommend monitoring.					

No Photos

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					

Photo 1 of 1 : FA_2021_RD1600_191_49_20210907_00018.jpg



Sign stating 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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	0.13	Rating **	M	Issue No.	1203	
LM End	0.13	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			38.676802 °		38.676802 °
				-121.631442 °		-121.631442 °
DWR ID	21459					
Comment Code						
Inspector Comment						
DS_ID:21459 FS_ID:15087 EP_NO: 1929 Repair Type: Non-Urgent EVAL Issue: Crossing Status: Indicator Found UCIP Comments: Line should be located with carsonite signs on both sides of levee. FIELD_STRUCT_DESC: Telephone conduit of an unknown size or material through the levee, 3 feet below the crown. Telephone line at joint pole (JP) off the landside (LS) toe. (Permit No. 1929, 1954 - Pacific Telephone and Telegraph Company [PT&T]). [Additional Reference(s): DWR Levee Log, 1988]. FS Date: 6/18/2013						

Photo 1 of 1 : UCIP_FA_2021_15087_24812.jpg



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

LM Start	0.52	Rating **	M	Issue No.	44
LM End	0.52	Issue Type +	En	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.682046 °	38.682046 °
				-121.634064 °	-121.634064 °
DWR ID	DWR_RD1600_01_s_2020_44				
Comment Code					
PO : Pole					
Inspector Comment					
Telephone pole over the levee crown.					

Photo 1 of 1 : FA_2021_RD1600_191_44_20210907_00014.jpg



View of telephone line over levee crown. Fall 2018.

* 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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

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					
There appears to be a footpath and settlement on landside slope over pipe crossing.					

Photo 1 of 1 : FA_2021_RD1600_191_133_20211102_00053.jpg



View of settlement and footpath on landside slope. Fall 2021.

LM Start	0.56	Rating **	A/W	Issue No.	26
LM End	0.66	Issue Type +	Ob	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.682661 °	38.684099 °
				-121.634238 °	-121.634625 °
DWR ID	DWR_RD1600_01_s_2020_26				
Comment Code					
V8 : Environmental Requirements.					
Inspector Comment					
USACE, DWR, and RD 1600 revegetation site.					

Photo 1 of 1 : FA_2021_RD1600_191_26_20210907_00010.jpg



View of revegetation sign on the waterside berm. Spring 2020.

LM Start	0.78	Rating **	N	Issue No.	624
LM End	0.78	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.685713 °	38.685713 °
				-121.634985 °	-121.634985 °
DWR ID	DWR_RD1600_01_s_2017_624				
Comment Code					
T5 : Tree stumps.					
Inspector Comment					
Burnt stump on waterside slope.					

Photo 1 of 1 : FA_2021_RD1600_191_624_20210907_00028.jpg



View of burnt tree on waterside 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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	0.88	Rating **	M	Issue No.	14
LM End	0.88	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.687192 °	38.687192 °
				-121.635169 °	-121.635169 °
DWR ID	DWR_RD1600_01_s_2021_14				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					
Ruts on the landside slope due to vehicles coming up on the levee.					

Photo 1 of 1 : FA_2021_RD1600_191_14_20210907_00003.jpg



View of ruts on the landside slope. Spring 2021.

LM Start	0.94	Rating **	M	Issue No.	1204	
LM End	0.94	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			38.688030 °	38.688030 °	
				-121.635367 °	-121.635367 °	
DWR ID	21463					
Comment Code						
Inspector Comment						
DS_ID:21463 FS_ID:15285 EP_NO: 6100 Repair Type: Non-Urgent EVAL Issue: Crossing Status: Found UCIP Comments: Gate valve will not open or close. FIELD_STRUCT_DESC: 12-inch steel irrigation pipe through the levee, 3.4 feet below the crown. Slant pump and gate valve on the waterside (WS) slope. Siphon breaker in a 12-inch steel riser on the landside (LS) shoulder. Filter, booster pump, and butterfly valve on the LS toe. 2.25-inch galvanized iron electrical conduit at the same location. (Permit No. 6100, 1968 - Charles Plumb Jr., replaced 8-inch pipe at same location). [Additional Reference(s): DWR Levee Log, 1988]. FS Date: 6/18/2013						

Photo 1 of 3 : UCIP_FA_2021_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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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	0.94	Rating **	M	Issue No.	1204 (cont)
LM End	0.94	Issue Type +	En	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		38.688030 °	38.688030 °	
			-121.635367 °	-121.635367 °	
DWR ID	21463				

Photo 2 of 3 : UCIP_FA_2021_15285_25087.jpg



Pump and gate valve on WS slope.

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

Photo 3 of 3 : UCIP_FA_2021_15285_25086.jpg



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

LM Start	0.97	Rating **	M	Issue No.	134
LM End	0.97	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.688454 °	38.688454 °
				-121.635528 °	-121.635528 °
DWR ID	DWR_RD1600_01_f_2021_134				
Comment Code					
S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.					
Inspector Comment					

Photo 1 of 1 : FA_2021_RD1600_191_134_20210907_00027.jpg



View of the foot traffic on the landside slope. Fall 2020.

* 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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

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_f_2017_22				
Comment Code					
V8 : Environmental Requirements.					
Inspector Comment					

Photo 1 of 1 : FA_2021_RD1600_191_22_20210907_00008.jpg



Sign stating revegetation site. Spring 2016.

LM Start	1.10	Rating **	C	Issue No.	40
LM End	1.10	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.690393 °	38.690393 °
				-121.635688 °	-121.635688 °
DWR ID	DWR_RD1600_01_f_2019_40				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					

No Photos

LM Start	1.17	Rating **	M	Issue No.	25
LM End	1.17	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.691308 °	38.691308 °
				-121.635628 °	-121.635628 °
DWR ID	DWR_RD1600_01_s_2021_25				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Fallen tree on the waterside slope.					

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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	1.22	Rating **	M	Issue No.	24
LM End	1.22	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.692090 °	38.692090 °
				-121.635495 °	-121.635495 °
DWR ID	DWR_RD1600_01_f_2021_24				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Tree limbs on crown.					

No Photos

LM Start	1.40	Rating **	M	Issue No.	4
LM End	1.40	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.694452 °	38.694452 °
				-121.634292 °	-121.634292 °
DWR ID	DWR_RD1600_01_s_2017_4				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					
Tire ruts on the landside slope adjacent to ramp.					

Photo 1 of 1 : FA_2021_RD1600_191_4_20210907_00001.jpg



View of tire ruts on the landside slope. Fall 2020.

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 1 : FA_2021_RD1600_191_5_20210907_00002.jpg



View of the revegetation site on the berm of 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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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	1.42	Rating **	A/W	Issue No.	52
LM End	1.42	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.694728 °	38.694728 °
				-121.634224 °	-121.634224 °
DWR ID	DWR_RD1600_01_f_2018_52				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					
Previously a vehicle access ramp. The district has placed barriers to prevent access. Recommend monitoring for future erosion.					

Photo 1 of 1 : FA_2021_RD1600_191_52_20210907_00020.jpg



View of ruts on landside shoulder. Spring 2019.

LM Start	1.65	Rating **	M	Issue No.	46
LM End	1.65	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.697799 °	38.697799 °
				-121.632396 °	-121.632396 °
DWR ID	DWR_RD1600_01_f_2019_46				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					
Erosion on landside slope near district gate.					

Photo 1 of 1 : FA_2021_RD1600_191_46_20210907_00015.jpg



View of erosion on the landside slope. Fall 2020.

LM Start	1.70	Rating **	A/W	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_f_2017_70				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					
Footpath and vehicle access on landside slope. Recommend monitoring.					

Photo 1 of 1 : FA_2021_RD1600_191_70_20210907_00023.jpg



View of slope instability. 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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

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					

No Photos

LM Start	2.01	Rating **	M	Issue No.	72
LM End	2.01	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.701605 °	38.701605 °
				-121.627954 °	-121.627954 °
DWR ID	DWR_RD1600_01_s_2018_72				
Comment Code					
S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.					
Inspector Comment					
Foot traffic on the landside slope.					

Photo 1 of 1 : FA_2021_RD1600_191_72_20210907_00024.jpg



View of foot traffic on the landside slope. Fall 2020.

LM Start	2.14	Rating **	M	Issue No.	18
LM End	2.14	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.702730 °	38.702730 °
				-121.626038 °	-121.626038 °
DWR ID	DWR_RD1600_01_f_2020_18				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					
Vehicle traffic on the landside slope.					

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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	2.18	Rating **	M	Issue No.	30
LM End	2.18	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.703143 °	38.703143 °
				-121.625415 °	-121.625415 °
DWR ID	DWR_RD1600_01_s_2021_30				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					
Vehicle traffic on the landside slope.					

No Photos

LM Start	2.22	Rating **	M	Issue No.	27
LM End	2.22	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.703468 °	38.703468 °
				-121.624861 °	-121.624861 °
DWR ID	DWR_RD1600_01_f_2021_27				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Tree limb on crown.					

No Photos

LM Start	2.35	Rating **	A/W	Issue No.	35
LM End	2.40	Issue Type +	Ob	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					

Photo 1 of 1 : FA_2021_RD1600_191_35_20210907_00012.jpg



Sign for 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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	2.40	Rating **	C	Issue No.	43
LM End	2.40	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.705154 °	38.705154 °
				-121.622231 °	-121.622231 °
DWR ID	DWR_RD1600_01_s_2019_43				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					

No Photos

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					

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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	2.81	Rating **	M	Issue No.	1205	
LM End	2.81	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			38.709350 °	38.709350 °	
				-121.616913 °	-121.616913 °	
DWR ID	21467					
Comment Code						
Inspector Comment						
DS_ID:21467 FS_ID:15108 EP_NO: N/A Repair Type: Non-Urgent EVAL Issue: Crossing Status: Not Found UCIP Comments: Pipe removed and replaced with a pipe dsid 25565 - permit 18852. Appears abandoned and should be done so properly. Debris buildup on pier. Power cut to pump. FIELD_STRUCT_DESC: *REMOVED* 16-inch steel irrigation pipe through the levee, 2 feet below the crown. Walkway from berm to pump on pile structure in the stream. Siphon breaker on the landside (LS) slope. 12-inch polyvinyl chloride (PVC) standpipe off the LS toe. [Additional Reference(s): DWR Levee Log, 1988. USACE Sacramento O&M Manual 123, August 1955, (RM 73.4) (18-inch pipe listed)]. FS Date: 6/18/2013						

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

Photo 1 of 3 : UCIP_FA_2021_15108_24826.jpg



Pump on metal platform off WS berm.

Photo 2 of 3 : UCIP_FA_2021_15108_24825.jpg



Debris buildup at metal platform waterline.

* 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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	2.81	Rating **	M	Issue No.	1205 (cont)
LM End	2.81	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.709350 °	38.709350 °
				-121.616913 °	-121.616913 °
DWR ID	21467				

Photo 3 of 3 : UCIP_FA_2021_15108_24824.jpg



Electrical cut to pump.

LM Start	2.84	Rating **	M	Issue No.	28
LM End	2.84	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.709672 °	38.709672 °
				-121.616529 °	-121.616529 °
DWR ID	DWR_RD1600_01_f_2021_28				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Fallen tree on the landside slope.					

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	2.93	Rating **	M	Issue No.	1206
LM End	2.93	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.710497 °	38.710497 °
				-121.615381 °	-121.615381 °
DWR ID	21490				
Comment Code					
Inspector Comment					
DS_ID:21490 FS_ID:15110 EP_NO: N/A Repair Type: Non-Urgent EVAL Issue: Crossing Status: Indicator Found UCIP Comments: Abandoned and should be removed from levee. FIELD_STRUCT_DESC: *ABANDONED* 10-inch reinforced concrete pipe of an unknown purpose through the levee, 5 feet below the crown. Pipe visible on the landside (LS) slope. [Additional Reference(s): USACE Sacramento O&M Manual 123, August 1955, (RM 73.5)]. FS Date: 6/18/2013					

Photo 1 of 2 : UCIP_FA_2021_15110_24828.jpg



Pipe visible on LS slope.

LM Start	2.93	Rating **	M	Issue No.	1206 (cont)
LM End	2.93	Issue Type +	En	Location *	

Photo 2 of 2 : UCIP_FA_2021_15110_24827.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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	2.93	Rating **	M	Issue No.	56
LM End	2.93	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.710533 °	38.710533 °
				-121.615358 °	-121.615358 °
DWR ID	DWR_RD1600_01_f_2021_56				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Large tree trunk on landside slope.					

No Photos

LM Start	2.99	Rating **	A/W	Issue No.	15
LM End	3.37	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2018 USACE Erosion Survey			38.710874 °	38.715134 °
				-121.614239 °	-121.609566 °
DWR ID					
Comment Code					
Inspector Comment					
2018 Site ID: SAC 74.0 R					
Status: Eroding					
2018 Field Notes: Bank toe continues to erode.					
Site History: 2017 - Significant toe erosion. Erosion along entire bank.					
Tree popouts observed.					

Photo 1 of 2 : FA_2021_RD1600_191_15_20211218_4.jpg



USACE 2018 Erosion Photo #1

LM Start	2.99	Rating **	A/W	Issue No.	15 (cont)
LM End	3.37	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA_2021_RD1600_191_15_20211218_5.jpg



USACE 2018 Erosion Photo #2

* 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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	3.04	Rating **	A/W	Issue No.	37
LM End	3.04	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.711597 °	38.711597 °
				-121.613890 °	-121.613890 °
DWR ID	DWR_RD1600_01_s_2012_37				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

LM Start	3.09	Rating **	M	Issue No.	29
LM End	3.09	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.712205 °	38.712205 °
				-121.613212 °	-121.613212 °
DWR ID	DWR_RD1600_01_f_2020_29				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Erosion pocket on the waterside slope. There is approximately 20' of berm before a vertical drop that cuts into the prism.					

Photo 1 of 1 : FA_2021_RD1600_191_29_20210907_00011.jpg



View of erosion location on the waterside berm. Fall 2020.

LM Start	3.20	Rating **	M	Issue No.	51
LM End	3.20	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.713393 °	38.713393 °
				-121.611828 °	-121.611828 °
DWR ID	DWR_RD1600_01_s_2017_51				
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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	3.33	Rating **	M	Issue No.	68
LM End	3.33	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.714861 °	38.714861 °
				-121.610340 °	-121.610340 °
DWR ID	DWR_RD1600_01_f_2019_68				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Remove blackberries on the landside slope.					

No Photos

LM Start	3.39	Rating **	M	Issue No.	42
LM End	3.39	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.715595 °	38.715595 °
				-121.609654 °	-121.609654 °
DWR ID	DWR_RD1600_01_f_2020_42				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Fallen tree on the waterside slope.					

No Photos

LM Start	3.40	Rating **	M	Issue No.	77
LM End	3.40	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.715681 °	38.715681 °
				-121.609555 °	-121.609555 °
DWR ID	DWR_RD1600_01_f_2019_77				
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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	3.58	Rating **	A/W	Issue No.	16
LM End	3.83	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2018 USACE Erosion Survey			38.717770 °	38.721351 °
				-121.607423 °	-121.606414 °
DWR ID					

Comment Code

Inspector Comment

2018 Site ID: SAC 74.4 R

Status: Eroding

2018 Field Notes: Minor new erosion.

Site History: 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 - Minor new toe erosion. 2017 - Significant erosion at toe in the past year. Fresh tree popout.

LM Start	3.58	Rating **	A/W	Issue No.	16 (cont)
LM End	3.83	Issue Type +	Ma	Location *	WS

Photo 1 of 2 : FA_2021_RD1600_191_16_20211218_9.jpg



USACE 2018 Erosion Photo #1

Photo 2 of 2 : FA_2021_RD1600_191_16_20211218_13.jpg



USACE 2018 Erosion Photo #2

* 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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	3.59	Rating **	M	Issue No.	47
LM End	3.59	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.718047 °	38.718047 °
				-121.607840 °	-121.607840 °
DWR ID	DWR_RD1600_01_f_2020_47				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Erosion pocket on waterside slope. Approximately 15 feet of berm until vertical drop into prism.					

Photo 1 of 1 : FA_2021_RD1600_191_47_20210907_00016.jpg



View of erosion location on waterside berm. Fall 2020.

LM Start	3.62	Rating **	M	Issue No.	48
LM End	3.62	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.718449 °	38.718449 °
				-121.607591 °	-121.607591 °
DWR ID	DWR_RD1600_01_f_2020_48				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Erosion pocket on waterside slope. Approximately 8 feet of berm until vertical drop into prism.					

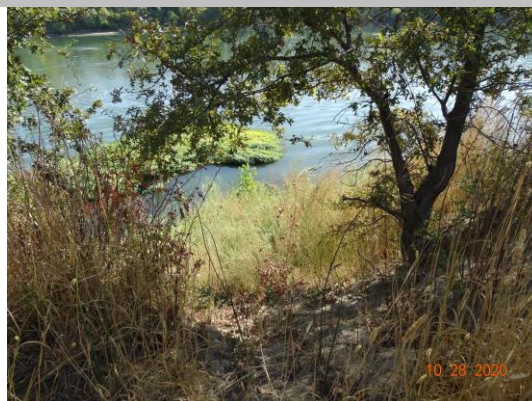
Photo 1 of 1 : FA_2021_RD1600_191_48_20210907_00017.jpg



View of erosion location on waterside berm. Fall 2020.

LM Start	3.76	Rating **	M	Issue No.	50
LM End	3.76	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.720447 °	38.720447 °
				-121.606946 °	-121.606946 °
DWR ID	DWR_RD1600_01_f_2020_50				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Erosion pocket on waterside slope. Approximately 10 feet of berm until vertical drop into prism.					

Photo 1 of 1 : FA_2021_RD1600_191_50_20210907_00019.jpg



View of erosion on the waterside slope. Fall 2020.

* 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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	3.85	Rating **	M	Issue No.	38
LM End	3.85	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.721665 °	38.721665 °
				-121.606814 °	-121.606814 °
DWR ID	DWR_RD1600_01_s_2021_38				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					
Vehicle traffic on the landside slope.					

No Photos

LM Start	4.34	Rating **	A/W	Issue No.	17
LM End	4.86	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2018 USACE Erosion Survey			38.728684 °	38.736110 °
				-121.605844 °	-121.604153 °
DWR ID					
Comment Code					
Inspector Comment					
2018 Site ID: SAC 75.3 R Status: Eroding 2018 Field Notes: Minor new toe erosion. Site History: 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 the site difficult to observe. 2017 - Fresh erosion along lower bank in sections.					

Photo 1 of 2 : FA_2021_RD1600_191_17_20211218_22.jpg



USACE 2018 Erosion 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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	4.34	Rating **	A/W	Issue No.	17 (cont)
LM End	4.86	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2018 USACE Erosion Survey			38.728684 °	38.736110 °
				-121.605844 °	-121.604153 °
DWR ID					

Photo 2 of 2 : FA_2021_RD1600_191_17_20211218_26.jpg



USACE 2018 Erosion Photo #2

LM Start	4.51	Rating **	M	Issue No.	1207
LM End	4.51	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.731143 °	38.731143 °
				-121.605825 °	-121.605825 °
DWR ID	21470				

Comment Code

Inspector Comment

DS_ID:21470
 FS_ID:15125
 EP_NO: N/A
 Repair Type: Non-Urgent
 EVAL Issue:
 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 steel irrigation pipe through the levee, 21.4 feet below the crown. 16-inch pipe ties into 24-inch pipe at the waterside (WS) slope. Slant pump on metal platform and gate valve on the WS berm. Gate valve in pump house off the landside (LS). Two power poles at the LS toe. [Additional Reference(s): DWR Levee Log, 1988. USACE Sacramento O&M Manual 123, August 1955, (RM 75.2) (20-inch pipe listed)].
 FS Date: 6/18/2013 7:36:00 AM

Photo 1 of 3 : UCIP_FA_2021_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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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	4.51	Rating **	M	Issue No.	1207 (cont)	
LM End	4.51	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			38.731143 °	38.731143 °	
				-121.605825 °	-121.605825 °	
DWR ID	21470					

Photo 2 of 3 : UCIP_FA_2021_15125_24845.jpg



Slant pump on metal pier on WS berm.

LM Start	4.51	Rating **	M	Issue No.	1207 (cont)
LM End	4.51	Issue Type +	En	Location *	

Photo 3 of 3 : UCIP_FA_2021_15125_24844.jpg



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

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable 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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	4.52	Rating **	M	Issue No.	1208
LM End	4.52	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.731280 °	38.731280 °
				-121.605825 °	-121.605825 °
DWR ID	21471				
Comment Code					
Inspector Comment					
DS_ID:21471 FS_ID:41563 EP_NO: N/A Repair Type: Non-Urgent EVAL Issue: 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 1 of 2 : UCIP_FA_2021_41563_27474.jpg



Pipe and remnants of grouted pipe on LS slope.

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

Photo 2 of 2 : UCIP_FA_2021_41563_27473.jpg



Pipe and remnants of grouted pipe on LS slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable 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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	4.66	Rating **	M	Issue No.	36
LM End	4.66	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.733296 °	38.733296 °
				-121.605472 °	-121.605472 °
DWR ID	DWR_RD1600_01_s _ 2020_36				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Runoff on the landside slope.					

No Photos

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			38.734561 °	38.734561 °
				-121.605113 °	-121.605113 °
DWR ID	DWR_RD1600_01_f _ 2021_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			38.734784 °	38.734784 °
				-121.605048 °	-121.605048 °
DWR ID	DWR_RD1600_01_s _ 2015_1194				
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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	4.79	Rating **	A/W	Issue No.	1195
LM End	4.79	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.735111 °	38.735111 °
				-121.604923 °	-121.604923 °
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			38.735275 °	38.735275 °
				-121.604863 °	-121.604863 °
DWR ID	DWR_RD1600_01_f_2019_1196				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

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			38.736095 °	38.736095 °
				-121.604642 °	-121.604642 °
DWR ID	DWR_RD1600_01_s_2015_1197				
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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	5.02	Rating **	U	Issue No.	57
LM End	5.02	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.738320 °	38.738320 °
				-121.603671 °	-121.603671 °
DWR ID	DWR_RD1600_01_f _ 2021_57				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Large fallen tree on crown.					

Photo 1 of 1 : FA_2021_RD1600_191_57_20211102_00054.jpg



View of fallen tree on the crown. Fall 2021.

LM Start	5.37	Rating **	M	Issue No.	58
LM End	5.37	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.743186 °	38.743186 °
				-121.601659 °	-121.601659 °
DWR ID	DWR_RD1600_01_f_2021_58				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Fallen tree on the waterside slope.					

No Photos

LM Start	5.42	Rating **	A/W	Issue No.	13
LM End	5.42	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.743805 °	38.743805 °
				-121.601319 °	-121.601319 °
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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

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					
Gradual loss of the berm over many years. Erosion is at the waters edge. Walnut trees are close to edge now. Recommend monitoring.					

No Photos

LM Start	5.77	Rating **	M	Issue No.	54
LM End	5.77	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.748258 °	38.748258 °
				-121.598000 °	-121.598000 °
DWR ID	DWR_RD1600_01_s_2020_54				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					
Ruts on the landside slope.					

No Photos

LM Start	5.80	Rating **	M	Issue No.	39
LM End	5.80	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.748639 °	38.748639 °
				-121.597662 °	-121.597662 °
DWR ID	DWR_RD1600_01_f _ 2017_39				
Comment Code					
DE : Debris					
Inspector Comment					
Abandoned pipes on waterside slope.					

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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	5.85	Rating **	A/W	Issue No.	41
LM End	5.85	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.749163 °	38.749163 °
				-121.597267 °	-121.597267 °
DWR ID	DWR_RD1600_01_s_2021_41				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Minor rills forming on the landside slope. Recommend monitoring.					

No Photos

LM Start	5.85	Rating **	M	Issue No.	63
LM End	5.85	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.749253 °	38.749253 °
				-121.597203 °	-121.597203 °
DWR ID	DWR_RD1600_01_f _ 2018_63				
Comment Code					
DE : Debris					
Inspector Comment					
Abandoned pipes on the waterside berm.					

No Photos

LM Start	6.07	Rating **	M	Issue No.	59
LM End	6.07	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.752149 °	38.752149 °
				-121.595706 °	-121.595706 °
DWR ID	DWR_RD1600_01_f_2021_59				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Tree cuttings on the waterside shoulder.					

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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	6.19	Rating **	M	Issue No.	1209	
LM End	6.19	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			38.753820 °	38.753820 °	
				-121.595012 °	-121.595012 °	
DWR ID	21476					
Comment Code						
Inspector Comment						
DS_ID:21476 FS_ID:53410 EP_NO: N/A Repair Type: Non-Urgent EVAL Issue: Crossing Status: Found UCIP Comments: 07/17/2018 No integrity issue observed, therefore crossing downgraded to "Non-Urgent". Needs proper abandonment or removal. Fall hazard: one of two standpipes on LS is broken to the ground level and uncovered which is a safety issue. (O.Yakimov-DWR UCIP)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 the WS, not found. Overhead power line crosses the levee. Service pole on the WS slope. 6-foot by 6-foot concrete distribution box at the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 1988. USACE Sacramento O&M Manual 123, August 1955, (RM 77.0)]. FS Date: 7/17/2018 7:56:22 AM						

LM Start	6.19	Rating **	M	Issue No.	1209 (cont)
LM End	6.19	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP_FA_2021_53410_25011.jpg



6'X6' concrete distribution box on LS toe.

Photo 2 of 3 : UCIP_FA_2021_53410_25010.jpg



Pipe on WS slope.

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

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	6.19	Rating **	M	Issue No.	1209 (cont)
LM End	6.19	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.753820 °	38.753820 °
				-121.595012 °	-121.595012 °
DWR ID	21476				

Photo 3 of 3 : UCIP_FA_2021_53410_25012.jpg



Pump missing from pier on WS toe.

LM Start	6.51	Rating **	M	Issue No.	78
LM End	6.51	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			38.758447 °	38.758447 °
				-121.594139 °	-121.594139 °
DWR ID	DWR_RD1600_01_s_2020_78				
Comment Code					
C2 : Repair depressions or ruts in the crown or slope.					
Inspector Comment					

No Photos

LM Start	6.56	Rating **	M	Issue No.	80
LM End	6.56	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.759131 °	38.759131 °
				-121.594092 °	-121.594092 °
DWR ID	DWR_RD1600_01_s_2017_80				
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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	6.95	Rating **	M	Issue No.	23
LM End	6.98	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2018 USACE Erosion Survey			38.764801 °	38.765219 °
				-121.594926 °	-121.595049 °
DWR ID					

Comment Code

Inspector Comment

2018 Site ID: SAC 77.7 R
 Status: Eroding
 2018 Field Notes: Minor new erosion.
 Site History: 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. 2017 - Minor new erosion.

LM Start	6.95	Rating **	M	Issue No.	23 (cont)
LM End	6.98	Issue Type +	Ma	Location *	WS

Photo 1 of 2 : FA_2021_RD1600_191_23_20211218_30.jpg



USACE 2018 Erosion Photo #1

Photo 2 of 2 : FA_2021_RD1600_191_23_20211218_31.jpg



USACE 2018 Erosion Photo #2

* 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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

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_f _ 2021_20				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Continued erosion within the waterside berm. Not within the prism.					

Photo 1 of 1 : FA_2021_RD1600_191_20_20210907_00006.jpg



View of erosion on the waterside berm.

LM Start	7.21	Rating **	A/W	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					
Runoff erosion on landside slope. Recommend monitoring.					

No Photos

LM Start	7.23	Rating **	A/W	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_f _ 2019_21				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Erosion on waterside berm. Not within the prism.					

Photo 1 of 1 : FA_2021_RD1600_191_21_20210907_00007.jpg



The erosion is eroding away the berm area.

* 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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	7.38	Rating **	M	Issue No.	81
LM End	7.38	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.770338 °	38.770338 °
				-121.598542 °	-121.598542 °
DWR ID	DWR_RD1600_01_s_2019_81				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

LM Start	7.56	Rating **	M	Issue No.	1210
LM End	7.56	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.772560 °	38.772560 °
				-121.600153 °	-121.600153 °
DWR ID	25464				
Comment Code					
Inspector Comment					
DS_ID:25464 FS_ID:50169 EP_NO: 18849 Repair Type: Non-Urgent EVAL Issue: 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. Positive closure device in a steel riser with a lid on the waterside (WS) hinge of the levee. Siphon breaker in a steel riser with lid on the landside (LS) hinge of the levee. Distribution box on the LS toe. (Installed under Permit No. 18849, 2014 - Bypass Farms). FS Date: 8/15/2016					

Photo 1 of 3 : UCIP_FA_2021_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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Reclamation District No. 1600 Mull

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	8.03	Rating **	U	Issue No.	55
LM End	8.03	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.777785 °	38.777785 °
				-121.605761 °	-121.605761 °
DWR ID	DWR_RD1600_01_s_2021_55				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Large rill on landside slope.					

Photo 1 of 1 : FA_2021_RD1600_191_55_20210907_00021.jpg



View of rill on the landside slope. Spring 2021.

LM Start	8.03	Rating **	M	Issue No.	1211	
LM End	8.03	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			38.777799 °	38.777799 °	
				-121.605763 °	-121.605763 °	
DWR ID	21480					
Comment Code						
Inspector Comment						
DS_ID:21480 FS_ID:64693 EP_NO: 7339 Repair Type: Non-Urgent EVAL Issue: Abandoned encroachment Crossing Status: Indicator Found UCIP Comments: 05/04/2021 Record remains Non-Urgent. Crossing appears abandoned. Pipe looks abandoned inside of a steel riser on landside. Sinkhole that measures 3'x 4'x 2'- deep located 4 feet downstream of approximate pipe alignment, runoff erosion goes down the slope. (O.Yakimov - DWR UCIP) 04/26/2021 Large sinkhole near this crossing reported by levee inspector Zach Jojola. Further investigation and observance is needed. (O.Yakimov - DWR UCIP) 06/20/2013 Need to determine disposition of pipe. If abandoned, it should be done so properly. (G.Wylie - DWR UCIP) FIELD_STRUCT_DESC: 24-inch steel irrigation pipe through the levee, 3.8 feet below the crown. Steel plate welded on the waterside (WS) end. Pipe not visible on either slope. Pylons in river at the WS toe, and a 4-foot-diameter steel standpipe on the landside (LS) toe. Seepage area at the landside (LS) toe. (Permit No. 7339, 1971 - Layton Knaggs). [Additional Reference(s): DWR Levee Log, 1988]. FS Date: 5/4/2021 1:06:16 PM						

Photo 1 of 3 : UCIP_FA_2021_64693_97036.jpg



Top of Levee: View of levee crown at crossing

* 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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	8.03	Rating **	M	Issue No.	1211 (cont)
LM End	8.03	Issue Type +	En	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		38.777799 °	38.777799 °	
			-121.605763 °	-121.605763 °	
DWR ID	21480				

Photo 2 of 3 : UCIP_FA_2021_64693_97034.jpg



Land-Side: View of levee slope looking from crown. Steel riser and plastic standpipe at levee toe

LM Start	8.03	Rating **	M	Issue No.	1211 (cont)
LM End	8.03	Issue Type +	En	Location *	

Photo 3 of 3 : UCIP_FA_2021_64693_97040.jpg



Water-Side: View of levee slope looking from crown. Pipe not found on waterside

LM Start	8.19	Rating **	M	Issue No.	79
LM End	8.19	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.778945 °	38.778945 °
				-121.608198 °	-121.608198 °
DWR ID	DWR_RD1600_01_s_2020_79				
Comment Code					
EQ : Equipment					
Inspector Comment					
Beehives on the waterside shoulder.					

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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

LM Start	10.25	Rating **	M	Issue No.	53
LM End	10.25	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.767944 °	38.767944 °
				-121.633032 °	-121.633032 °
DWR ID	DWR_RD1600_01_f_2020_53				
Comment Code					
EQ : Equipment					
Inspector Comment					
Beehives on the landside shoulder.					

No Photos

LM Start	10.35	Rating **	M	Issue No.	1202
LM End	10.38	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.766652 °	38.766363 °
				-121.634002 °	-121.634317 °
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_2021_RD1600_191_1202_20210907_00029.jpg



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

LM Start	10.39	Rating **	M	Issue No.	85
LM End	10.42	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.766195 °	38.765877 °
				-121.634412 °	-121.634640 °
DWR ID	DWR_RD1600_01_s_2020_85				
Comment Code					
EQ : Equipment					
Inspector Comment					
Beehives on the landside shoulder.					

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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	10/27/2021 10/27/2021	Zach Jojola

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

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)			M	
Date of Inspection	4/20/2021 - 4/20/2021		10/27/2021 - 10/27/2021	
DWR Inspector	Zach Jojola		Zach Jojola	
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.

Reclamation District No. 1600 Mull

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	10/27/2021 10/27/2021	Zach Jojola

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

LM Start	3.71	Rating **	M	Issue No.	24	
LM End	3.71	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			38.683971 °	38.683971 °	
				-121.644522 °	-121.644522 °	
DWR ID	21501					
Comment Code						
Inspector Comment						
DS_ID:21501 FS_ID:52738 EP_NO: 10944 Repair Type: Non-Urgent EVAL Issue: Crossing Status: Indicator Found UCIP Comments: 07/17/2018 Gas line markers are not installed. Unable to determine exact location of pipe. Crossing has been downgraded to "Non-Urgent" due to reclassification of gas lines. (O.Yakimov-DWR UCIP)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, 1975 - Shell Oil Company). [Additional Reference(s): DWR Levee Log, 1988]. FS Date: 7/17/2018 3:18:28 PM						

Photo 1 of 3 : UCIP_FA_2021_52738_27478.jpg



PG&E marker flag on 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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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	10/27/2021 10/27/2021	Zach Jojola

LM Start	3.71	Rating **	M	Issue No.	24 (cont)
LM End	3.71	Issue Type +	En	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		38.683971 °	38.683971 °	
			-121.644522 °	-121.644522 °	
DWR ID	21501				

Photo 2 of 3 : UCIP_FA_2021_52738_27477.jpg



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

LM Start	3.71	Rating **	M	Issue No.	24 (cont)
LM End	3.71	Issue Type +	En	Location *	

Photo 3 of 3 : UCIP_FA_2021_52738_77709.jpg



View of levee crown at potential crossing looking upstream.

* 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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	10/27/2021 10/27/2021	Zach Jojola

LM Start	4.17	Rating **	A/W	Issue No.	25	
LM End	4.17	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP LMA Responsibility			38.677286 °	38.677286 °	
				-121.643683 °	-121.643683 °	
DWR ID	21502					
Comment Code						
Inspector Comment						
DS_ID:21502 FS_ID:15303 EP_NO: N/A Repair Type: No Action Needed EVAL Issue: Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: 72-inch by 72-inch reinforced concrete box drainage culvert through the levee, 26 feet below the crown. Slide gate on the waterside (WS) slope in a 9-foot by 10-foot concrete box. Culvert passes under the bypass canal, the railroad, and County Road 22 and terminates in the canal on the southwest side of the County Road 22 bridge. [Additional Reference(s): DWR Levee Log, 1988. USACE Sacramento O&M Manual 123, August 1955, (Station 155+00)]. FS Date: 6/21/2013						

Photo 1 of 3 : UCIP_FA_2021_15303_25158.jpg



Concrete intake structure on LS.

LM Start	4.17	Rating **	A/W	Issue No.	25 (cont)
LM End	4.17	Issue Type +	Ma	Location *	

Photo 2 of 3 : UCIP_FA_2021_15303_25157.jpg



Concrete intake structure on LS.

* 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 2021

Reclamation District No. 1600 Mull

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	10/27/2021 10/27/2021	Zach Jojola

LM Start	4.17	Rating **	A/W	Issue No.	25 (cont)
LM End	4.17	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			38.677286 °	38.677286 °
				-121.643683 °	-121.643683 °
DWR ID	21502				

Photo 3 of 3 : UCIP_FA_2021_15303_25156.jpg



Slide gate in 9'X10' concrete box on WS slope.

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