

**Flood Control Project Maintenance
Levee Inspections**
LMA District Cover Sheet
Spring 2016 Levee Inspection Results

Reclamation District No. 0001 Union Island

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

** Non-receipt of Summer or Winter Inspection Reports may effect overall annual rating.

* **SPRING INSPECTIONS:** Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indication of risk.

Comments

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Spring 2016 Levee Inspection Results

Reclamation District No. 0001 Union Island

Waterway		Bank	Unit Miles
Unit No. 01 Old River		Right	1.14

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	3/15/2016 - 3/15/2016			
DWR Inspector	Maksim Khashchuk			
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 - Spring 2016

Reclamation District No. 0001 Union Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.14	03/15/2016 03/15/2016	Maksim Khashchuk

LM Start		Rating **	A	Issue No.	6
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start		End
Item	Flood Preparedness & Training			o	o
DWR ID	DWR_RD0001_01_s_2013_6				
Comment Code					
Inspector Comment					
The LMA has current flood fighting training and an emergency plan.					

No Photos

LM Start		Rating **	A	Issue No.	8
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start		End
Item	Emergency Supplies & Equipment			o	o
DWR ID	DWR_RD0001_01_s_2013_8				
Comment Code					
Inspector Comment					
The LMA has emergency supplies on-site.					

No Photos

LM Start		Rating **	A	Issue No.	9
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start		End
Item	Operations & Maintenance Manuals			o	o
DWR ID	DWR_RD0001_01_s_2013_9				
Comment Code					
Inspector Comment					
The LMA has a copy of the O&M Manual available at the office.					

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 - Spring 2016

Reclamation District No. 0001 Union Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.14	03/15/2016 03/15/2016	Maksim Khashchuk

LM Start	0.00	Rating **	M	Issue No.	1
LM End	0.00	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.822306°	37.822306°
				-121.375304°	-121.375304°
DWR ID	DWR_RD0001_01_s_2016_1				
Comment Code					
Inspector Comment					
06/25/2015: No significant change observed. 07/02/2014: No significant change observed. 08/20/2013: No significant change at this site. 08/07/2012: The erosion is at the confluence of Old River and one of its tributary. [2015 Site ID:RD0001U01RM31.4]					

Photo 1 of 2 : SP_2016_RD0001_23_1_20160229_00001.jpg



Close view of the erosion.

LM Start	0.00	Rating **	M	Issue No.	1 (cont)
LM End	0.00	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : SP_2016_RD0001_23_1_20160229_00002.jpg



Front view of the site. Note the large tree on site.

LM Start	0.17	Rating **	N	Issue No.	12
LM End	0.17	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.821376°	37.821376°
				-121.378044°	-121.378044°
DWR ID	DWR_RD0001_01_s_2014_12				
Comment Code					
T5 : Tree stumps.					
Inspector Comment					
Remove stump when it becomes rotted to prevent possible seepage path along the roots.					

Photo 1 of 1 : SP_2016_RD0001_23_12_20160229_00006.jpg



View of the tree stump on the waterside levee slope.

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

Levee Inspection Report By Mile - Spring 2016

Reclamation District No. 0001 Union Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.14	03/15/2016 03/15/2016	Maksim Khashchuk

LM Start	0.24	Rating **	A/W	Issue No.	11
LM End	0.24	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.820362 °	37.820362 °
				-121.378359 °	-121.378359 °
DWR ID	DWR_RD0001_01_s_2014_11				
Comment Code					
MA : Material					
Inspector Comment					
Stockpiled riprap on levee crown. Keep the stockpile so that a vehicle could maneuver around the pile to facilitate visibility and access of the levee.					

Photo 1 of 1 : SP_2016_RD0001_23_11_20160229_00005.jpg



View of the riprap stockpiled on the levee crown.

LM Start	0.44	Rating **	U	Issue No.	14
LM End	0.44	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.818898 °	37.818898 °
				-121.380332 °	-121.380332 °
DWR ID	DWR_RD0001_01_s_2016_14				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					
Active rodent den a size of a coyote or fox.					

Photo 1 of 1 : SP_2016_RD0001_23_14_20160321_00013.jpg



View of the large rodent hole on the landside levee slope.

LM Start	0.45	Rating **	U	Issue No.	10
LM End	0.45	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.818753 °	37.818753 °
				-121.380249 °	-121.380249 °
DWR ID	DWR_RD0001_01_s_2016_10				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Backfill and compact levee slope with acceptable levee fill.					

Photo 1 of 1 : SP_2016_RD0001_23_10_20160321_00012.jpg



View of the large rodent hole on the landside levee 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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Levee Inspections**

Levee Inspection Report By Mile - Spring 2016

Reclamation District No. 0001 Union Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.14	03/15/2016 03/15/2016	Maksim Khashchuk

LM Start	0.51	Rating **	M	Issue No.	5
LM End	0.51	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Slope Stability		37.818003 °	37.818003 °	
			-121.379845 °	-121.379845 °	
DWR ID	DWR_RD0001_01_f_2015_5				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
About a 1 ft. vertical cut is observed at the landside levee toe. Repair the landside levee toe per O&M standards.					

Photo 1 of 1 : SP_2016_RD0001_23_5_20160229_00004.jpg



View of the vertical cut at the landside levee toe.

LM Start	0.52	Rating **	M	Issue No.	7
LM End	0.52	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Erosion / Bank Caving		37.817825 °	37.817825 °	
			-121.379811 °	-121.379811 °	
DWR ID	DWR_RD0001_01_s_2016_7				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					

Photo 1 of 1 : SP_2016_RD0001_23_7_20160321_00011.jpg



View of the erosion on the landside levee slope.

LM Start	0.76	Rating **	U	Issue No.	4
LM End	0.76	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Animal Control		37.815881 °	37.815881 °	
			-121.382704 °	-121.382704 °	
DWR ID	DWR_RD0001_01_f_2015_4				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					
Large burrow in the landside levee slope. Possible fox den.					

Photo 1 of 1 : SP_2016_RD0001_23_4_20160229_00003.jpg



View of a large rodent hole on the landside levee 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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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.14	03/15/2016 03/15/2016	Maksim Khashchuk

LM Start	0.85	Rating **	M	Issue No.	17
LM End	0.85	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.814601 °	37.814601 °
				-121.382509 °	-121.382509 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:41600 DS_ID:22691 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: - 2" electric conduit on WS- pipe exposed on both sides.- power pole on LS. - erosion on WS hinge near walkway. FIELD_STRUCT_DESC: 14-inch pipe and 2-inch electric conduit through the levee, 6.0 feet below the crown, pump on pile structure in the stream, air valve on the landward shoulder, 30-inch concrete standpipe on the landward toe. O&M Manual LSJR 8, 1968 FS Date: 9/12/2013					

LM Start	0.85	Rating **	M	Issue No.	17 (cont)
LM End	0.85	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_SP_2016_41600_36004.jpg



WS view: exposed pipe, walkway, and pump on pile structure. Soil erosion on levee hinge near walkway.

Photo 2 of 2 : UCIP_SP_2016_41600_36003.jpg



WS view: exposed pipe, walkway, and electric conduit under walkway. Rock revetment on lower levee 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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Levee Inspection Report By Mile - Spring 2016

Reclamation District No. 0001 Union Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.14	03/15/2016 03/15/2016	Maksim Khashchuk

LM Start	1.08	Rating **	M	Issue No.	3
LM End	1.08	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Slope Stability		37.812023 °	37.812023 °	
			-121.383961 °	-121.383961 °	
DWR ID	DWR_RD0001_01_s_2016_3				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					
Repair slope damaged by vehicle by placing and compacting acceptable levee material.					

Photo 1 of 1 : SP_2016_RD0001_23_3_20160321_00010.jpg



View of the landside slope damaged by farm equipment.

* 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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