

**Flood Control Project Maintenance
Levee Inspections**

Fall 2015 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including DWR Erosion Survey

San Joaquin River Basin

RD2101 Reclamation District No. 2101 Blewett	Overall LMA Rating	Total LMA Miles						
	M	3.46						
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>								
Trim / Thin Trees	0.01		0.01	0.29%				
Encroachments					1.31			
Animal Control	0.02	0.02	0.10	2.89%				
Erosion / Bank Caving	0.01		0.01	0.29%				
<i>Supplemental</i>								
DWR Erosion Survey		0.08	0.32	9.26%				
DWR UCIP Field Study					0.05	0.02		
<i>LMA Totals:</i>	0.04	0.10	0.44	12.73%	1.36	0.02	0.00	0.00

Unit No. 01 San Joaquin River LB RD2101	Overall Unit Rating	Total Unit Miles						
	M	3.16						
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>								
Trim / Thin Trees	0.01		0.01	0.32%				
Encroachments					1.31			
Animal Control	0.02	0.02	0.10	3.17%				
Erosion / Bank Caving	0.01		0.01	0.32%				
<i>Supplemental</i>								
DWR Erosion Survey		0.08	0.32	10.14%				
DWR UCIP Field Study					0.05	0.02		
<i>Unit Totals:</i>	0.04	0.10	0.44	13.94%	1.36	0.02	0.00	0.00

Unit No. 02 San Joaquin River (Spur Levee) RB RD2101	Overall Unit Rating	Total Unit Miles						
	A	0.30						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
No Items								
<i>Unit Totals:</i>	0.00	0.00	0.00	0.00%				

**Flood Control Project Maintenance
Levee Inspections**
LMA District Cover Sheet
Fall 2015 Levee Inspection Results

Reclamation District No. 2101 Blewett

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

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

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

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

Comments

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Fall 2015 Levee Inspection Results

Reclamation District No. 2101 Blewett

Waterway		Bank	Unit Miles	
Unit No. 01 San Joaquin River		Left	3.16	
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			M	
Date of Inspection	03/26/2015 - 03/26/2015		09/16/2015 - 09/16/2015	
DWR Inspector	Maksim Khashchuk		Maksim Khashchuk	
Accompanied By			Jim Coddington RD2101	

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 2101 Blewett

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	3.16	09/16/2015 09/16/2015	Maksim Khashchuk

LM Start		Rating **	A	Issue No.	2
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Operations & Maintenance Manuals				
DWR ID	DWR_RD2101_01_s_2013_2				
Action/Comments					
Inspector Comments: The LMA has the O&M Manual available electronically.					

Photo 1 of 1 : FA_2015_RD2101_326_2_20150921_00025.jpg



View of the O&M manual and other documentation.

LM Start		Rating **	A	Issue No.	4
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Emergency Supplies & Equipment				
DWR ID	DWR_RD2101_01_s_2013_4				
Action/Comments					
Inspector Comments: LMA has emergency supplies on site at the warehouse.					

Photo 1 of 1 : FA_2015_RD2101_326_4_20150921_00024.jpg



View of the emergency flood fight supplies in the shop.

LM Start		Rating **	A	Issue No.	5
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Flood Preparedness & Training				
DWR ID	DWR_RD2101_01_s_2013_5				
Action/Comments					
Inspector Comments: LMA is current on flood fight 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 2015

Reclamation District No. 2101 Blewett

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	3.16	09/16/2015 09/16/2015	Maksim Khashchuk

LM Start	0.04	Rating **	U	Issue No.	12
LM End	0.04	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.657648 °	37.657648 °
				-121.253812 °	-121.253812 °
DWR ID	DWR_RD2101_01_s_2012_12				
Action/Comments					
No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					

Photo 1 of 1 : FA_2015_RD2101_326_12_20150921_00026.jpg



View of the rodent holes on the waterside levee slope, facing upstream.

LM Start	0.05	Rating **	U	Issue No.	945
LM End	0.05	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.657801 °	37.657801 °
				-121.253745 °	-121.253745 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:26403 DS_ID:20699 EP_NO: N/A FS_HLM: 0.052 Repair Type: Urgent Crossing Status: Found UCIP Comments: Slide gate missing from WS toe. Pipe has heavy sediment buildup. FIELD_STRUCT_DESC: 18-inch corrugated metal pipe through levee 3-feet below crown. Concrete headwall on both ends. Slide gate at headwall on the waterward end. Originally included in the 1968 O&M manual. FS Date: 09/17/2013					

Photo 1 of 3 : UCIP_FA_2015_0599.jpg



Pipe and headwall visible on LS toe.

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 2101 Blewett

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	3.16	09/16/2015 09/16/2015	Maksim Khashchuk

LM Start	0.05	Rating **	U	Issue No.	945 (cont)
LM End	0.05	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.657801 °	37.657801 °
				-121.253745 °	-121.253745 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:26403 DS_ID:20699 EP_NO: N/A FS_HLM: 0.052 Repair Type: Urgent Crossing Status: Found UCIP Comments: Slide gate missing from WS toe. Pipe has heavy sediment buildup. FIELD_STRUCT_DESC: 18-inch corrugated metal pipe through levee 3-feet below crown. Concrete headwall on both ends. Slide gate at headwall on the waterward end. Originally included in the 1968 O&M manual. FS Date: 09/17/2013					

Photo 2 of 3 : UCIP_FA_2015_0600.jpg



Pipe and headwall visible on LS toe.

LM Start	0.05	Rating **	U	Issue No.	945 (cont)
LM End	0.05	Issue Type +	En	Location *	WS

Photo 3 of 3 : UCIP_FA_2015_0601.jpg



Headwall on WS toe.

* 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 - Fall 2015

Reclamation District No. 2101 Blewett

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	3.16	09/16/2015 09/16/2015	Maksim Khashchuk

LM Start	0.08	Rating **	M	Issue No.	16
LM End	0.08	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Animal Control		37.657811 °	37.657811 °	
			-121.253269 °	-121.253269 °	
DWR ID	DWR_RD2101_01_s_2013_16				
Action/Comments					
No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows. Inspector Comments: Continue rodent extermination and backfilling the rodent burrows.					

Photo 1 of 1 : FA_2015_RD2101_326_16_20150910_00008.jpg



View of rodent burrows on the landside levee slope.

LM Start	0.31	Rating **	M	Issue No.	946
LM End	0.31	Issue Type +	En	Location *	LS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		37.658142 °	37.658142 °	
			-121.250047 °	-121.250047 °	
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:20785 DS_ID:20701 EP_NO: N/A FS_HLM: 0.315 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Inlet blocked by soil from beaver activity. Outlet covered in soil. FIELD_STRUCT_DESC: 24-inch corrugated metal pipe through levee 21.0 feet below crown. Headwall and slide gate on the landward end. Concrete "U" headwall and flap gate on the waterward end. Originally included in the 1968 O&M manual. FS Date: 09/19/2013					

Photo 1 of 3 : UCIP_FA_2015_1873.jpg



Outlet covered in soil but likely at willow tree 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 2015

Reclamation District No. 2101 Blewett

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	3.16	09/16/2015 09/16/2015	Maksim Khashchuk

LM Start	0.31	Rating **	M	Issue No.	946 (cont)
LM End	0.31	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.658142 °	37.658142 °
				-121.250047 °	-121.250047 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:20785 DS_ID:20701 EP_NO: N/A FS_HLM: 0.315 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Inlet blocked by soil from beaver activity. Outlet covered in soil. FIELD_STRUCT_DESC: 24-inch corrugated metal pipe through levee 21.0 feet below crown. Headwall and slide gate on the landward end. Concrete "U" headwall and flap gate on the waterward end. Originally included in the 1968 O&M manual. FS Date: 09/19/2013					

Photo 2 of 3 : UCIP_FA_2015_1874.jpg



Slide gate at concrete headwall on LS toe.

LM Start	0.31	Rating **	M	Issue No.	946 (cont)
LM End	0.31	Issue Type +	En	Location *	LS

Photo 3 of 3 : UCIP_FA_2015_1875.jpg



Slide gate at concrete headwall on LS toe.

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 2101 Blewett

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	3.16	09/16/2015 09/16/2015	Maksim Khashchuk

LM Start	0.70	Rating **	A/W	Issue No.	26
LM End	0.70	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Animal Control		37.659907 °	37.659907 °	
			-121.244219 °	-121.244219 °	
DWR ID	DWR_RD2101_01_s_2013_26				
Action/Comments					
Exterminate rodents and backfill and compact or grout burrows.					

Photo 1 of 1 : FA_2015_RD2101_326_26_20150910_00010.jpg



View of the rodent burrows on the waterside levee slope.

LM Start	0.73	Rating **	M	Issue No.	944
LM End	1.76	Issue Type +	En	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Encroachments		37.659827 °	37.651049 °	
			-121.243675 °	-121.231475 °	
DWR ID	DWR_RD2101_01_s_2012_944				
Action/Comments					
Ditch					

Photo 1 of 1 : FA_2015_RD2101_326_944_20150910_00017.jpg



Concrete ditch near landside toe.

LM Start	0.75	Rating **	M	Issue No.	11
LM End	0.75	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Trim / Thin Trees		37.659705 °	37.659705 °	
			-121.243306 °	-121.243306 °	
DWR ID	DWR_RD2101_01_f_2012_11				
Action/Comments					
Trim trees to at least five feet above ground level. Inspector Comments: Trim tree to allow access and visibility.					

Photo 1 of 1 : FA_2015_RD2101_326_11_20150921_00027.jpg



View of tree branches obstructing waterside 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 - Fall 2015

Reclamation District No. 2101 Blewett

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	3.16	09/16/2015 09/16/2015	Maksim Khashchuk

LM Start	0.87	Rating **	C	Issue No.	3
LM End	0.87	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Animal Control		37.658663 °	37.658663 °	
			-121.241750 °	-121.241750 °	
DWR ID	DWR_RD2101_01_s_2012_3				
Action/Comments					
No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					

No Photos

LM Start	1.02	Rating **	N	Issue No.	33
LM End	1.02	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Trim / Thin Trees		37.656745 °	37.656745 °	
			-121.241104 °	-121.241104 °	
DWR ID	DWR_RD2101_01_f_2014_33				
Action/Comments					
Tree stumps.					

Photo 1 of 1 : FA_2015_RD2101_326_33_20150910_00016.jpg



View of the tree stump at the waterside levee toe.

LM Start	1.59	Rating **	M	Issue No.	14
LM End	1.59	Issue Type +	En	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Encroachments		37.651554 °	37.651554 °	
			-121.234319 °	-121.234319 °	
DWR ID	DWR_RD2101_01_s_2012_14				
Action/Comments					
Pole Inspector Comments: Pole needs to be permitted or moved outside of levee easement.					

No Photos

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 2101 Blewett

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	3.16	09/16/2015 09/16/2015	Maksim Khashchuk

LM Start	1.86	Rating **	U	Issue No.	1 (cont)
LM End	1.95	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.650259 °	37.650259 °
				-121.228961 °	-121.228961 °
DWR ID					

Photo 2 of 3 : SJR2015_RD2101U01RM73.92_3.jpg



Action/Comments

Inspector Comments: 08/19/2015: No significant change observed.
 07/17/2014: No significant change observed.
 09/20/2013: Site has been visited. There are signs of further erosion development along the levee slope and toe.
 07/18/2012: The erosion has further developed toward levee crown. Vegetation has been removed.
 08/18/2011: The erosion progressed significantly during the past flood season. The levee toe along the erosion site was washed away, and the erosion has cut the levee structure up to the point about 1/3 of the levee slope. The scarp height is approximately 17 feet. Very dense vegetation and trees are visible.
 10/19/2010: No significant change observed on site. Remaining levee berm topsoil is of silty sand mixture. The erosion is near the downstream transition. An eddy has formed, and has scoured away a 100-foot section of the bank, possibly encroaching into the levee prism. Vegetation on site includes willows, oak, and cotton wood located from the bench to the toe. On the landside are rows of corn crop.
 08/05/2010: Recommended for Repair, per CLRO.
 2009: Site recommended as annual assessment and monitoring if critical erosion site, per CLRO CES Evaluation 2008 Report; an eddy has formed, eroding bank and intruding into the levee prism; Site # is the same as RM76.3, LM1.89; previously rated "U".
 08/30/2007: Recommended for short list of immediate repair sites; silty sand levee material. [2015 Site ID:RD2101U01RM73.92]

Downstream view of the erosion.

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 2101 Blewett

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	3.16	09/16/2015 09/16/2015	Maksim Khashchuk

LM Start	1.86	Rating **	U	Issue No.	1 (cont)
LM End	1.95	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.650259 °	37.650259 °
				-121.228961 °	-121.228961 °
DWR ID					

Photo 3 of 3 : SJR2015_RD2101U01RM73.92_8.jpg



Action/Comments

Inspector Comments: 08/19/2015: No significant change observed.
 07/17/2014: No significant change observed.
 09/20/2013: Site has been visited. There are signs of further erosion development along the levee slope and toe.
 07/18/2012: The erosion has further developed toward levee crown. Vegetation has been removed.
 08/18/2011: The erosion progressed significantly during the past flood season. The levee toe along the erosion site was washed away, and the erosion has cut the levee structure up to the point about 1/3 of the levee slope. The scarp height is approximately 17 feet. Very dense vegetation and trees are visible.
 10/19/2010: No significant change observed on site. Remaining levee berm topsoil is of silty sand mixture. The erosion is near the downstream transition. An eddy has formed, and has scoured away a 100-foot section of the bank, possibly encroaching into the levee prism. Vegetation on site includes willows, oak, and cotton wood located from the bench to the toe. On the landside are rows of corn crop.
 08/05/2010: Recommended for Repair, per CLRO.
 2009: Site recommended as annual assessment and monitoring if critical erosion site, per CLRO CES Evaluation 2008 Report; an eddy has formed, eroding bank and intruding into the levee prism; Site # is the same as RM76.3, LM1.89; previously rated "U".
 08/30/2007: Recommended for short list of immediate repair sites; silty sand levee material. [2015 Site ID:RD2101U01RM73.92]

Close view of the erosion. Levee crest is approximately 8 feet above the erosion.

LM Start	2.36	Rating **	C	Issue No.	30
LM End	2.36	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.645785 °	37.645785 °
				-121.226337 °	-121.226337 °
DWR ID	DWR_RD2101_01_s_2012_30				

No Photos

Action/Comments

Exterminate rodents and backfill and compact or grout burrows.

* 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**

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Reclamation District No. 2101 Blewett

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	3.16	09/16/2015 09/16/2015	Maksim Khashchuk

LM Start	2.71	Rating **	M	Issue No.	947
LM End	2.71	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.641976 °	37.641976 °
				-121.229745 °	-121.229745 °
DWR ID					

Action/Comments
 Inspector Comments: FS_ID:20865
 DS_ID:20711
 EP_NO: N/A
 FS_HLM: 2.743
 Repair Type: Non-Urgent
 Crossing Status: Found
 UCIP Comments: Pipe leaking at pipe/concrete connection on WS slope.
 FIELD_STRUCT_DESC: 2 of 3: 20-inch steel pipe through levee 10.0-feet below crown encased in concrete. Pump on steel pier on WS. Gate valve in 16'X7' concrete vault on WS shoulder. Pipes discharge into concrete canal on LS toe. Originally included in the 1968 O&M manual.
 FS Date: 09/19/2013

Photo 1 of 3 : UCIP_FA_2015_1778.jpg



20-inch steel pipe discharges into concrete channel on LS.

LM Start	2.71	Rating **	M	Issue No.	947 (cont)
LM End	2.71	Issue Type +	En	Location *	LS

Photo 2 of 3 : UCIP_FA_2015_1779.jpg



Gate valve in concrete vault on WS shoulder.

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 2101 Blewett

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	3.16	09/16/2015 09/16/2015	Maksim Khashchuk

LM Start	2.71	Rating **	M	Issue No.	947 (cont)
LM End	2.71	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.641976 °	37.641976 °
				-121.229745 °	-121.229745 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:20865 DS_ID:20711 EP_NO: N/A FS_HLM: 2.743 Repair Type: Non-Urgent Crossing Status: Found					

Photo 3 of 3 : UCIP_FA_2015_1780.jpg



Pump on metal pier on WS.

LM Start	2.72	Rating **	M	Issue No.	948
LM End	2.72	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.641798 °	37.641798 °
				-121.229714 °	-121.229714 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:22915 DS_ID:24679 EP_NO: N/A FS_HLM: 2.756 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: No permit identified for this crossing. FIELD_STRUCT_DESC: 18-inch PVC irrigation pipe through the levee 3.5-feet below the crown. No pump or other appurtances visible. FS Date: 09/19/2013					

Photo 1 of 2 : UCIP_FA_2015_1888.jpg



18-inch PVC pipe visible at outlet to irrigation canal on LS 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 - Fall 2015

Reclamation District No. 2101 Blewett

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	3.16	09/16/2015 09/16/2015	Maksim Khashchuk

LM Start	2.72	Rating **	M	Issue No.	948 (cont)	
LM End	2.72	Issue Type +	En	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
			Start	End		
Item	DWR UCIP Field Study			37.641798 °	37.641798 °	
				-121.229714 °	-121.229714 °	
DWR ID						
Action/Comments						
Inspector Comments: FS_ID:22915 DS_ID:24679 EP_NO: N/A FS_HLM: 2.756 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: No permit identified for this crossing. FIELD_STRUCT_DESC: 18-inch PVC irrigation pipe through the levee 3.5-feet below the crown. No pump or other appurtenances visible. FS Date: 09/19/2013						

Photo 2 of 2 : UCIP_FA_2015_1889.jpg



18-inch PVC pipe visible at LS slope.

LM Start	2.82	Rating **	U	Issue No.	949	
LM End	2.82	Issue Type +	En	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
			Start	End		
Item	DWR UCIP Field Study			37.640566 °	37.640566 °	
				-121.230216 °	-121.230216 °	
DWR ID						
Action/Comments						
Inspector Comments: FS_ID:20872 DS_ID:20705 EP_NO: N/A FS_HLM: 2.858 Repair Type: Urgent Crossing Status: Found UCIP Comments: Flap gate missing from WS headwall. FIELD_STRUCT_DESC: 24-inch corrugated metal drain pipe through levee 11.0 feet below crown. Concrete "U" headwall on both ends. Flap gate on waterward end. Originally included in the 1968 O&M manual. FS Date: 09/19/2013						

Photo 1 of 3 : UCIP_FA_2015_1590.jpg



Concrete headwall visible on WS toe at canal.

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 2101 Blewett

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	3.16	09/16/2015 09/16/2015	Maksim Khashchuk

LM Start	2.82	Rating **	U	Issue No.	949 (cont)
LM End	2.82	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.640566 °	37.640566 °
				-121.230216 °	-121.230216 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:20872 DS_ID:20705 EP_NO: N/A FS_HLM: 2.858 Repair Type: Urgent Crossing Status: Found UCIP Comments: Flap gate missing from WS headwall. FIELD_STRUCT_DESC: 24-inch corrugated metal drain pipe through levee 11.0 feet below crown. Concrete "U" headwall on both ends. Flap gate on waterward end. Originally included in the 1968 O&M manual. FS Date: 09/19/2013					

Photo 2 of 3 : UCIP_FA_2015_1591.jpg



Concrete headwall visible at LS toe in ditch.

LM Start	2.82	Rating **	U	Issue No.	949 (cont)
LM End	2.82	Issue Type +	En	Location *	LS

Photo 3 of 3 : UCIP_FA_2015_1783.jpg



Concrete headwall at 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 2015

Reclamation District No. 2101 Blewett

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	3.16	09/16/2015 09/16/2015	Maksim Khashchuk

LM Start	2.83	Rating **	U	Issue No.	27
LM End	2.83	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.640425 °	37.640425 °
				-121.230139 °	-121.230139 °
DWR ID	DWR_RD2101_01_s_2012_27				
Action/Comments					
No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows. Inspector Comments: Burrows on both sides of levee. Backfill the burrows to restore the levee to original condition.					

Photo 1 of 1 : FA_2015_RD2101_326_27_20150910_00011.jpg



View of multiple rodent holes on the levee slope.

LM Start	2.85	Rating **	M	Issue No.	950
LM End	2.85	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.640185 °	37.640185 °
				-121.230067 °	-121.230067 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:20874 DS_ID:20712 EP_NO: N/A FS_HLM: 2.886 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Leak off LS toe may indicate internal failure. Good candidate for video inspection. FIELD_STRUCT_DESC: 2 of 2: 30-inch concrete pipe through levee 11.0 feet below crown. Pump on metal pier on waterside berm. 12-inch steel riser next to 6'X10.5' concrete box with Screw gate inside on waterward side. Abandoned Pump house on waterward side. Originally included in the 1968 O&M manual. FS Date: 09/19/2013					

Photo 1 of 3 : UCIP_FA_2015_1595.jpg



Leak in pipe off LS toe.

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

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 2101 Blewett

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	3.16	09/16/2015 09/16/2015	Maksim Khashchuk

LM Start	2.85	Rating **	M	Issue No.	950 (cont)
LM End	2.85	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.640185 °	37.640185 °
				-121.230067 °	-121.230067 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:20874 DS_ID:20712 EP_NO: N/A FS_HLM: 2.886 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Leak off LS toe may indicate internal failure. Good candidate for video inspection. FIELD_STRUCT_DESC: 2 of 2: 30-inch concrete pipe through levee 11.0 feet below crown. Pump on metal pier on waterside berm. 12-inch steel riser next to 6'X10.5' concrete box with Screw gate inside on waterward side. Abandoned Pump house on waterward side. Originally included in the 1968 O&M manual. FS Date: 09/19/2013					

Photo 2 of 3 : UCIP_FA_2015_1596.jpg



Leak in pipe off LS toe.

LM Start	2.85	Rating **	M	Issue No.	950 (cont)
LM End	2.85	Issue Type +	En	Location *	WS

Photo 3 of 3 : UCIP_FA_2015_1597.jpg



Gatevalve in concrete vault with standpipe off WS toe.

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 2101 Blewett

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	3.16	09/16/2015 09/16/2015	Maksim Khashchuk

LM Start	2.85	Rating **	M	Issue No.	951
LM End	2.85	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.640185 °	37.640185 °
				-121.230067 °	-121.230067 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:20873 DS_ID:20706 EP_NO: N/A FS_HLM: 2.886 Repair Type: Non-Urgent Crossing Status: Found					

Photo 1 of 3 : UCIP_FA_2015_1592.jpg



12-inch steel riser at concrete box with gatevalve on WS berm.

LM Start	2.85	Rating **	M	Issue No.	951 (cont)
LM End	2.85	Issue Type +	En	Location *	WS

Photo 2 of 3 : UCIP_FA_2015_1593.jpg



Leak in pipe 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 2015

Reclamation District No. 2101 Blewett

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	3.16	09/16/2015 09/16/2015	Maksim Khashchuk

LM Start	2.85	Rating **	M	Issue No.	951 (cont)
LM End	2.85	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.640185 °	37.640185 °
				-121.230067 °	-121.230067 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:20873 DS_ID:20706 EP_NO: N/A FS_HLM: 2.886 Repair Type: Non-Urgent Crossing Status: Found					

Photo 3 of 3 : UCIP_FA_2015_1594.jpg



Leak in pipe off LS toe.

LM Start	2.85	Rating **	A/W	Issue No.	28
LM End	2.85	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.640134 °	37.640134 °
				-121.230019 °	-121.230019 °
DWR ID	DWR_RD2101_01_s_2012_28				
Action/Comments					
No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows. Inspector Comments: Rodent holes were backfilled. Continue to monitor the area and exterminate the rodents.					

Photo 1 of 1 : FA_2015_RD2101_326_28_20150910_00012.jpg



View of numerous rodent holes with bait stations present.

LM Start	2.87	Rating **	M	Issue No.	29
LM End	2.87	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.639852 °	37.639852 °
				-121.229980 °	-121.229980 °
DWR ID	DWR_RD2101_01_s_2012_29				
Action/Comments					
Note and monitor erosion site.					

Photo 1 of 2 : FA_2015_RD2101_326_29_20150910_00013.jpg



View of repaired site, but it appears that erosion is still occurring.
09/25/2012

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 2101 Blewett

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	3.16	09/16/2015 09/16/2015	Maksim Khashchuk

LM Start	2.87	Rating **	M	Issue No.	29 (cont)
LM End	2.87	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.639852 °	37.639852 °
				-121.229980 °	-121.229980 °
DWR ID	DWR_RD2101_01_s_2012_29				
Action/Comments					
Note and monitor erosion site.					

Photo 2 of 2 : FA_2015_RD2101_326_29_20150910_00014.jpg



Levee slope is being eroded at this location. Repair needed to preserve access road.

LM Start	2.88	Rating **	M	Issue No.	8
LM End	3.15	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.639780 °	37.637167 °
				-121.230008 °	-121.233715 °
DWR ID	DWR_RD2101_01_f_2013_8				
Action/Comments					
Ditch					

Photo 1 of 1 : FA_2015_RD2101_326_8_20150910_00004.jpg



View of the ditch at the landside levee toe.

LM Start	2.98	Rating **	M	Issue No.	17
LM End	2.98	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.638760 °	37.638760 °
				-121.231341 °	-121.231341 °
DWR ID	DWR_RD2101_01_s_2012_17				
Action/Comments					
Exterminate rodents and backfill and compact or grout burrows. Inspector Comments: Active burrows with rodents present.					

Photo 1 of 1 : FA_2015_RD2101_326_17_20150910_00009.jpg



Numerous burrows present, some already caving in, others are active.

* 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**

Unit Cover Sheet

Fall 2015 Levee Inspection Results

Reclamation District No. 2101 Blewett

Waterway		Bank	Unit Miles	
Unit No. 02 San Joaquin River (Spur Levee)		Right	0.30	
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			A	
Date of Inspection	03/26/2015 - 03/26/2015		09/16/2015 - 09/16/2015	
DWR Inspector	Maksim Khashchuk		Maksim Khashchuk	
Accompanied By			Jim Coddington RD2101	

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2015

Reclamation District No. 2101 Blewett

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 San Joaquin River (Spur Levee)	Right	0.30	09/16/2015 09/16/2015	Maksim Khashchuk

LM Start	0.03	Rating **	A/W	Issue No.	1
LM End	0.03	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.660251 °	37.660251 °
				-121.243372 °	-121.243372 °
DWR ID	DWR_RD2101_02_f_2015_1				
Action/Comments					
Repair the levee slope damaged by vehicle traffic and prevent access where possible. Inspector Comments: Monitor the slope for potential further erosion. Repair as needed.					

Photo 1 of 1 : FA_2015_RD2101_327_1_20150921_00002.jpg



View of the vehicle tracks on the levee slope.

LM Start	0.23	Rating **	C	Issue No.	2
LM End	0.23	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.662968 °	37.662968 °
				-121.242674 °	-121.242674 °
DWR ID	DWR_RD2101_02_f_2013_2				
Action/Comments					
No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows. Inspector Comments: Backfill and compact the rodent holes to restore the levee to original condition.					

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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