

**Flood Control Project Maintenance
Levee Inspections**

Fall 2018 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including USACE Erosion Survey

Sacramento River Basin

RD2104	Overall LMA Rating	Total LMA Miles						
Reclamation District No. 2104 Peters Pocket Tract	U	6.85						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Vegetation	4.14	0.04	4.30	62.79%				
Encroachments	0.02		0.02	0.29%				
Slope Stability	0.02	0.01	0.06	0.88%				
Erosion / Bank Caving	0.10		0.10	1.46%				
Crown Surface / Depressions / Rutting	2.52		2.52	36.80%				
Flood Preparedness & Training	0.07		0.07	1.02%				
<i>Supplemental</i>								
DWR UCIP Field Study					0.07			
DWR UCIP LMA Responsibility								
<i>LMA Totals:</i>	6.87	0.05	7.07	103.24%	0.07	0.00	0.00	0.00

Unit No. 01 Cache Slough/Unit No. 02 Haas Slough LB	Overall Unit Rating	Total Unit Miles						
RD2104	U	6.85						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Vegetation	4.14	0.04	4.30	62.79%				
Encroachments	0.02		0.02	0.29%				
Slope Stability	0.02	0.01	0.06	0.88%				
Erosion / Bank Caving	0.10		0.10	1.46%				
Crown Surface / Depressions / Rutting	2.52		2.52	36.80%				
<i>Supplemental</i>								
DWR UCIP Field Study					0.07			
DWR UCIP LMA Responsibility								
<i>Unit Totals:</i>	6.80	0.05	7.00	102.21%	0.07	0.00	0.00	0.00

**Flood Control Project Maintenance
Levee Inspections**
LMA District Cover Sheet
Fall 2018 Levee Inspection Results

Reclamation District No. 2104 Peters Pocket Tract

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

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

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

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

Comments

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Fall 2018 Levee Inspection Results

Reclamation District No. 2104 Peters Pocket Tract

Waterway			Bank	Unit Miles
Unit No. 01 Cache Slough/Unit No. 02 Haas Slough			Left	6.85
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			U	
Date of Inspection	3/20/2018 - 3/20/2018		11/1/2018 - 11/1/2018	
DWR Inspector	Keith Millard		David Julian	
Accompanied By	Chris Niederhauser RD 2104		Chris Niederhauser RD 2104	

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 2018

Reclamation District No. 2104 Peters Pocket Tract

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cache Slough/Unit No. 02 Haas Slough	Left	6.85	11/01/2018 11/01/2018	David Julian

LM Start		Rating **	M	Issue No.	12
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Flood Preparedness & Training			°	°
				°	°
DWR ID	DWR_RD2104_01_s_2012_12				
Comment Code					
Inspector Comment					
District coordinates with adjacent district 2068 for flood fighting, but needs to have their staff flood fight trained.					

No Photos

LM Start		Rating **	A	Issue No.	14
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Operations & Maintenance Manuals			°	°
				°	°
DWR ID	DWR_RD2104_01_f_2012_14				
Comment Code					
Inspector Comment					
District has the O+M Manual on hand.					

No Photos

LM Start		Rating **	A	Issue No.	40
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Emergency Supplies & Equipment			°	°
				°	°
DWR ID	DWR_RD2104_01_s_2012_40				
Comment Code					
Inspector Comment					
District has soil and sand on site, and coordinates with adjacent district 2068 for other materials.					

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 2018

Reclamation District No. 2104 Peters Pocket Tract

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cache Slough/Unit No. 02 Haas Slough	Left	6.85	11/01/2018 11/01/2018	David Julian

LM Start	0.02	Rating **	A/W	Issue No.	18
LM End	1.45	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.308053 °	38.295298 °
				-121.758557 °	-121.741413 °
DWR ID	DWR_RD2104_01_f_2016_18				
Comment Code					
V9 : Keep the crown roadway free of vegetation.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD2104_249_18_20180925_00007.jpg



Spring 2018 - Crown road should be kept free of vegetation.

LM Start	0.17	Rating **	M	Issue No.	20
LM End	1.72	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			38.306052 °	38.293465 °
				-121.757582 °	-121.737780 °
DWR ID	DWR_RD2104_01_f_2016_20				
Comment Code					
C1 : Add appropriate material and re-grade the levee to bring the crown above the design elevation.					
Inspector Comment					
Add appropriate material, re-grade and compact for proper drainage. (where needed, AND keep live stock off the crown roadway particularly during rainy weather)					

No Photos

LM Start	1.06	Rating **	M	Issue No.	28	
LM End	1.32	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Vegetation			38.297423 °		38.295770 °
				-121.747770 °		-121.743577 °
DWR ID	DWR_RD2104_01_f_2018_28					
Comment Code						
V1 : Control annual grass and weeds on the levee slopes and easements.						
Inspector Comment						
Maintain vegetation on land side slope						

Photo 1 of 1 : FA_2018_RD2104_249_28_20181102_00035.jpg



View looking downstream of vegetation on the land side slope (November 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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Levee Inspection Report By Mile - Fall 2018

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cache Slough/Unit No. 02 Haas Slough	Left	6.85	11/01/2018 11/01/2018	David Julian

Photo 1 of 1 : FA_2018_RD2104_249_22_20180925_00009.jpg



This previous erosion site should be monitored for future erosion from cattle.

Photo 1 of 1 : FA_2018_RD2104_249_29_20181102_00036.jpg



View of tree branches on the water side slope (November 2018).

Photo 1 of 1 : FA_2018_RD2104_249_23_20180925_00010.jpg



Spring 2018 - Trees should be trimmed and deadwood removed, and erosion from cattle repaired.

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2104 Peters Pocket Tract

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cache Slough/Unit No. 02 Haas Slough	Left	6.85	11/01/2018 11/01/2018	David Julian

LM Start	1.42	Rating **	A/W	Issue No.	56	
LM End	1.42	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			38.295668 °	38.295668 °	
				-121.741779 °	-121.741779 °	
DWR ID	24711					
Comment Code						
Inspector Comment						
FS_ID:24984 DS_ID:24711 EP_NO: 10185 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 09/14/2017 Permit is unavailable, missing page 3 official permit documentation. (DWR UCIP - O. Magana) FIELD_STRUCT_DESC: 16-inch steel drainage pipe through the levee, 5.7 feet below the crown. Pump in an irrigation ditch on the landside (LS). Siphon breaker on the waterside (WS) slope. (Automatic Board Order (ABO) issued as Permit No. 10185, 1964 - Erwin E. and Lucy G. Vasser, limited details available electronic permit unavailable). [Additional Reference(s): DWR Levee Log, 2006. USACE Sacramento O&M Manual 108, April 1964, (HLM 1.52), Drawing Nos. 50-04-1977 and 50-04-3379]. FS Date: 12/4/2013						

LM Start	1.42	Rating **	A/W	Issue No.	56 (cont)
LM End	1.42	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2018_24984_45042.jpg



Pipe on LS slope with pump in irrigation ditch off LS toe visible in background.

Photo 2 of 3 : UCIP_FA_2018_24984_45041.jpg



Siphon breaker on pipe at WS slope.

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

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2104 Peters Pocket Tract

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cache Slough/Unit No. 02 Haas Slough	Left	6.85	11/01/2018 11/01/2018	David Julian

LM Start	1.42	Rating **	A/W	Issue No.	56 (cont)	
LM End	1.42	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			38.295668 °	38.295668 °	
				-121.741779 °	-121.741779 °	
DWR ID	24711					
Comment Code						
Inspector Comment						
FS_ID:24984						
DS_ID:24711						
EP_NO: 10185						
Repair Type: No Action Needed						
Crossing Status: Found						
UCIP Comments: 09/14/2017 Permit is unavailable, missing page 3 official permit documentation. (DWR UCIP - O. Magana)						
FIELD_STRUCT_DESC: 16-inch steel drainage pipe through the levee, 5.7 feet below the crown. Pump in an irrigation ditch on the landside (LS). Siphon breaker on the waterside (WS) slope. (Automatic Board Order (ABO) issued as Permit No. 10185, 1964 - Erwin E. and Lucy G. Vasser, limited details available electronic permit unavailable).						
[Additional Reference(s): DWR Levee Log, 2006. USACE Sacramento O&M Manual 108, April 1964, (HLM 1.52), Drawing Nos. 50-04-1977 and 50-04-3379].						
FS Date: 12/4/2013						

Photo 3 of 3 : UCIP_FA_2018_24984_45040.jpg



Pump in wooden distribution box off LS toe.

LM Start	1.44	Rating **	U	Issue No.	11
LM End	1.48	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.295487°	38.294947°
				-121.741530°	-121.741215°
DWR ID	DWR_RD2104_01_f_2017_11				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD2104_249_11_20180925_00002.jpg



Remove wild growth to 20 feet from 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 2018

Reclamation District No. 2104 Peters Pocket Tract

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cache Slough/Unit No. 02 Haas Slough	Left	6.85	11/01/2018 11/01/2018	David Julian

LM Start	1.45	Rating **	A/W	Issue No.	13
LM End	4.72	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.295298 °	38.318398 °
				-121.741413 °	-121.744603 °
DWR ID	DWR_RD2104_01_f_2017_13				
Comment Code					
V9 : Keep the crown roadway free of vegetation.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD2104_249_13_20180925_00003.jpg



Crown vegetation should be reduced to facilitate inspection and access.

LM Start	1.54	Rating **	M	Issue No.	30
LM End	1.54	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.294170 °	38.294170 °
				-121.740883 °	-121.740883 °
DWR ID	DWR_RD2104_01_f_2018_30				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

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 2018

Reclamation District No. 2104 Peters Pocket Tract

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cache Slough/Unit No. 02 Haas Slough	Left	6.85	11/01/2018 11/01/2018	David Julian

LM Start	1.64	Rating **	A/W	Issue No.	26
LM End	5.72	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 USACE Erosion Survey, DRAFT			38.293779 °	38.324495 °
				-121.739262 °	-121.758096 °
DWR ID	DWR_RD2104_01_f_2018_26				
Comment Code					
Inspector Comment					
2017 Site ID: CHS 1.8 L Status: Critical 2017 Field Notes: Deep cracking aobserved along the ENTIRE LEVEE; risk of total levee failure; vertical cracking is on both the waterside and landside, eminent slump failure expected. Site History: Fall 2018 Notes: Checked for cracking every quarter mile and found multiple deep cracks at each stop. Grass govered a lot of the slope so hard to see. LMA said it filled in many of the cracks. Levee does not seem to be at risk of complete failure. Keep monitoring.					

No Photos

LM Start	1.72	Rating **	A/W	Issue No.	15
LM End	1.72	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Cracking			38.293465 °	38.293465 °
				-121.737778 °	-121.737778 °
DWR ID	DWR_RD2104_01_f_2017_15				
Comment Code					
CR1 : Monitor and have inspected by geotechnical engineer.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD2104_249_15_20180925_00004.jpg



Curved cracks in crown indicate possible slope instability on waterside slope. Cracks are 8 feet long x up to 6 inches wide x 3 feet deep. No other indications of slope instability observed. Levee toe is approx 40 feet from channel/slough edge.

* 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 2018

Reclamation District No. 2104 Peters Pocket Tract

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cache Slough/Unit No. 02 Haas Slough	Left	6.85	11/01/2018 11/01/2018	David Julian

LM Start	1.93	Rating **	M	Issue No.	16
LM End	1.94	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.292027°	38.291947°
				-121.734575°	-121.734453°
DWR ID	DWR_RD2104_01_s_2012_16				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD2104_249_16_20180925_00005.jpg



Scalloped bank erosion along slough is approaching levee toe.

LM Start	2.40	Rating **	M	Issue No.	57	
LM End	2.40	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			38.291579 °	38.291579 °	
				-121.726159 °	-121.726159 °	
DWR ID	24726					
Comment Code						
Inspector Comment						
FS_ID:41347						
DS_ID:24726						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Indicator Found						
UCIP Comments: 24-inch CMP debris on WS berm may indicate pipe was abandoned.						
FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through the levee, 18 feet below the crown. Flap gate on the waterside (WS) toe. [Additional Reference(s): USACE Sacramento O&M Manual 108, April 1964, (HLM 2.60)].						
FS Date: 12/4/2013						

Photo 1 of 1 : UCIP_FA_2018_41347_45043.jpg



Pipe debris on WS berm.

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

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2104 Peters Pocket Tract

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cache Slough/Unit No. 02 Haas Slough	Left	6.85	11/01/2018 11/01/2018	David Julian

LM Start	2.90	Rating **	A/W	Issue No.	58
LM End	2.90	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			38.297380 °	38.297380 °
				-121.730166 °	-121.730166 °
DWR ID	24708				
Comment Code					
Inspector Comment					
FS_ID:24990 DS_ID:24708 EP_NO: 10185 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 09/14/2017 Permit is unavailable, missing page 3 official permit documentation. (DWR UCIP - O. Magana) FIELD_STRUCT_DESC: 12-inch steel drainage pipe through the levee, 4 feet below the crown. Pump on pile structure in drainage canal on the landside (LS). Siphon breaker in a 12-inch steel riser on the waterside (WS) slope. (Automatic Board Order (ABO) issued as Permit No. 10185, 1964 - Erwin E. and Lucy G. Vasser, limited information available electronic version of permit missing. Replaced under Permit No. 4412, 1963 - Ervin E. and Lucy G. Vassar, limited details available electronic permit copy unavailable). [Additional Reference(s): DWR Levee Log, 2006. USACE Sacramento O&M Manual 108, April 1964, (HLM 3.12), Drawing No. 50-04-3379]. FS Date: 12/4/2013					

LM Start	2.90	Rating **	A/W	Issue No.	58 (cont)
LM End	2.90	Issue Type +	Ma	Location *	

Photo 1 of 2 : UCIP_FA_2018_24990_45047.jpg



Siphon breaker in steel riser on WS slope with pipe and flap gate visible in background at WS berm.

Photo 2 of 2 : UCIP_FA_2018_24990_45046.jpg



Pump on pier in ditch 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 2018

Reclamation District No. 2104 Peters Pocket Tract

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cache Slough/Unit No. 02 Haas Slough	Left	6.85	11/01/2018 11/01/2018	David Julian

LM Start	3.04	Rating **	M	Issue No.	59	
LM End	3.04	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			38.299447 °		38.299447 °
				-121.730444 °		-121.730444 °
DWR ID	24720					
Comment Code						
Inspector Comment						
FS_ID:41834						
DS_ID:24720						
EP_NO: 14184						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: Signs in disrepair and need proper markings.						
FIELD_STRUCT_DESC: 6-inch steel gas line through the levee, 3 feet below the crown. Signs on both toes of the levee.						
FS Date: 12/4/2013						

Photo 1 of 3 : UCIP_FA_2018_41834_45069.jpg



Sign on WS berm.

LM Start	3.04	Rating **	M	Issue No.	59 (cont)
LM End	3.04	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP_FA_2018_41834_45068.jpg



Sign post 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 2018

Reclamation District No. 2104 Peters Pocket Tract

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cache Slough/Unit No. 02 Haas Slough	Left	6.85	11/01/2018 11/01/2018	David Julian

LM Start	3.04	Rating **	M	Issue No.	59 (cont)	
LM End	3.04	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			38.299447 °		38.299447 °
				-121.730444 °		-121.730444 °
DWR ID	24720					
Comment Code						
Inspector Comment						
FS_ID:41834 DS_ID:24720 EP_NO: 14184 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Signs in disrepair and need proper markings. FIELD_STRUCT_DESC: 6-inch steel gas line through the levee, 3 feet below the crown. Signs on both toes of the levee. FS Date: 12/4/2013						

Photo 3 of 3 : UCIP_FA_2018_41834_45070.jpg



Broken sign marker on LS toe.

LM Start	3.12	Rating **	M	Issue No.	60	
LM End	3.12	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			38.300605 °		38.300605 °
				-121.730440 °		-121.730440 °
DWR ID	24707					
Comment Code						
Inspector Comment						
FS_ID:24992 DS_ID:24707 EP_NO: 4412 Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: Heavy vegetation at concrete headwall on LS toe and at possible outlet area on WS toe. If possible, vegetation should be cleared to check if this is an accurate location. Erosion around backside of headwall at LS toe. FIELD_STRUCT_DESC: 48-inch by 48-inch reinforced concrete box drainage culvert through the levee, 17 feet below the crown. Concrete headwall on the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 2006. USACE Sacramento O&M Manual 108, April 1964, (HLM 3.37)]. FS Date: 12/4/2013						

Photo 1 of 3 : UCIP_FA_2018_24992_45051.jpg



Vegetation covering possible location for 4X4 concrete culvert 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 2018

Reclamation District No. 2104 Peters Pocket Tract

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cache Slough/Unit No. 02 Haas Slough	Left	6.85	11/01/2018 11/01/2018	David Julian

LM Start	3.12	Rating **	M	Issue No.	60 (cont)	
LM End	3.12	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			38.300605 °	38.300605 °	
				-121.730440 °	-121.730440 °	
DWR ID	24707					
Comment Code						
Inspector Comment						
FS_ID:24992 DS_ID:24707 EP_NO: 4412 Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: Heavy vegetation at concrete headwall on LS toe and at possible outlet area on WS toe. If possible, vegetation should be cleared to check if this is an accurate location. Erosion around backside of headwall at LS toe. FIELD_STRUCT_DESC: 48-inch by 48-inch reinforced concrete box drainage culvert through the levee, 17 feet below the crown. Concrete headwall on the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 2006. USACE Sacramento O&M Manual 108, April 1964, (HLM 3.37)]. FS Date: 12/4/2013						

LM Start	3.12	Rating **	M	Issue No.	60 (cont)
LM End	3.12	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP_FA_2018_24992_45050.jpg



Vegetation covering possible location for 4X4 concrete culvert at LS toe.

Photo 3 of 3 : UCIP_FA_2018_24992_45049.jpg



Some erosion on levee side of 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 2018

Reclamation District No. 2104 Peters Pocket Tract

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cache Slough/Unit No. 02 Haas Slough	Left	6.85	11/01/2018 11/01/2018	David Julian

LM Start	3.74	Rating **	M	Issue No.	27
LM End	3.83	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.307703 °	38.308355 °
				-121.734130 °	-121.735493 °
DWR ID	DWR_RD2104_01_f_2017_27				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

No Photos

LM Start	4.00	Rating **	M	Issue No.	21
LM End	4.00	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.310672 °	38.310672 °
				-121.736155 °	-121.736155 °
DWR ID	DWR_RD2104_01_f_2018_21				
Comment Code					
S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD2104_249_21_20180925_00008.jpg



Repair landside slope eroded by livestock, and prevent future erosion.

LM Start	4.05	Rating **	M	Issue No.	17
LM End	4.30	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.311335 °	38.313822 °
				-121.736643 °	-121.739757 °
DWR ID	DWR_RD2104_01_s_2018_17				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Maintain vegetation on the water side slope					

Photo 1 of 2 : FA_2018_RD2104_249_17_20181102_00037.jpg



View looking upstream at vegetation on the water side slope (November 2018).

*** 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 2018

Reclamation District No. 2104 Peters Pocket Tract

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cache Slough/Unit No. 02 Haas Slough	Left	6.85	11/01/2018 11/01/2018	David Julian

LM Start	4.05	Rating **	M	Issue No.	17 (cont)	
LM End	4.30	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Vegetation			38.311335 °		38.313822 °
				-121.736643 °		-121.739757 °
DWR ID	DWR_RD2104_01_s_2018_17					
Comment Code						
V2 : Remove the wild growth other than native grasses from the levee slopes.						
Inspector Comment						
Maintain vegetation on the water side slope						

Photo 2 of 2 : FA_2018_RD2104_249_17_20180925_00006.jpg



Waterside (right) vegetation should be managed to 20 feet from crown to allow inspection and access.

LM Start	4.25	Rating **	M	Issue No.	10
LM End	4.30	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.313253 °	38.313822 °
				-121.739152 °	-121.739757 °
DWR ID	DWR_RD2104_01_s_2018_10				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Maintain vegetation on the land side slope					

Photo 1 of 2 : FA_2018_RD2104_249_10_20181102_00038.jpg



View looking upstream at vegetation on the land side slope (November 2018).

LM Start	4.25	Rating **	M	Issue No.	10 (cont)
LM End	4.30	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2018_RD2104_249_10_20180925_00001.jpg



Landside (left) vegetation should be managed to allow inspection and access to slope and 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 2018

Reclamation District No. 2104 Peters Pocket Tract

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cache Slough/Unit No. 02 Haas Slough	Left	6.85	11/01/2018 11/01/2018	David Julian

LM Start	4.31	Rating **	M	Issue No.	61
LM End	4.31	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			38.313955°	38.313955°
				-121.739930°	-121.739930°
DWR ID	24705				

Comment Code

Inspector Comment

FS_ID:51459
DS_ID:24705
EP_NO: 10182
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 12/06/2016 Crossing has been downgraded from "Urgent" to "Non-Urgent" no signs of leaks observed along pipe alignment (limited inspection on WS toe). According to LMA representative, this crossing was replaced 6 years ago (2010) at WS concrete apron. Recommend conducting internal inspection of pipe through the levee and LS to determine pipe integrity. (O. Magana - DWR UCIP) 12/04/2013 Vegetation and soil buildup throughout pipe preventing flapgate from closing. Remove vegetation to allow gate to close properly. (W. Wylie - DWR UCIP)
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 15 feet below the crown. 36-inch concrete standpipe on the landside (LS) toe. Flap gate on the waterside (WS) toe. Two corrugated metal cutoff walls installed. (24-inch pipe [HLM 4.65] authorized under Automatic Board Order (ABO) issued as Permit No. 10182, 1974 - Julia Trust Machado). [Additional Reference(s): DWR Levee Log, 2006. USACE Sacramento O&M Manual 108, April 1964, (HLM 4.65), Drawing No. 50-04-3379].
FS Date: 12/6/2016

LM Start	4.31	Rating **	M	Issue No.	61 (cont)
LM End	4.31	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2018_51459_45062.jpg



CMP pipe and flapgate off WS toe.

Photo 2 of 3 : UCIP_FA_2018_51459_45061.jpg



36-inch concrete riser on LS toe at channel.

* 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 2018

Reclamation District No. 2104 Peters Pocket Tract

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cache Slough/Unit No. 02 Haas Slough	Left	6.85	11/01/2018 11/01/2018	David Julian

LM Start	4.31	Rating **	M	Issue No.	61 (cont)							
LM End	4.31	Issue Type +	Ma	Location *								
Category	Supplemental		GPS Latitude/Longitude									
			Start	End								
Item	DWR UCIP LMA Responsibility		38.313955 °	38.313955 °								
			-121.739930 °	-121.739930 °								
DWR ID	24705											
Comment Code												
Inspector Comment												
FS_ID:51459 DS_ID:24705 EP_NO: 10182 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 12/06/2016 Crossing has been downgraded from "Urgent" to "Non-Urgent" no signs of leaks observed along pipe alignment (limited inspection on WS toe). According to LMA representative, this crossing was replaced 6 years ago (2010) at WS concrete apron. Recommend conducting internal inspection of pipe through the levee and LS to determine pipe integrity. (O. Magana - DWR UCIP)12/04/2013 Vegetation and soil buildup throughout pipe preventing flapgate from closing. Remove vegetation to allow gate to close properly. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 15 feet below the crown. 36-inch concrete standpipe on the landside (LS) toe. Flap gate on the waterside (WS) toe. Two corrugated metal cutoff walls installed. (24-inch pipe [HLM 4.65] authorized under Automatic Board Order (ABO) issued as Permit No. 10182, 1974 - Julia Trust Machado). [Additional Reference(s): DWR Levee Log, 2006. USACE Sacramento O&M Manual 108, April 1964, (HLM 4.65), Drawing No. 50-04-3379]. FS Date: 12/6/2016												

Photo 3 of 3 : UCIP_FA_2018_51459_45060.jpg



36-inch concrete riser with vegetation buildup inside.

LM Start	4.57	Rating **	A/W	Issue No.	25							
LM End	4.65	Issue Type +	Ma	Location *	CR							
Category	Earthen Levee		GPS Latitude/Longitude									
			Start	End								
Item	Crown Surface / Depressions / Rutting		38.316984 °	38.317904 °								
			-121.742751 °	-121.743461 °								
DWR ID	DWR_RD2104_01_s_2018_25											
Comment Code												
C2 : Repair depressions or ruts in the crown or slope.												
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 2018

Reclamation District No. 2104 Peters Pocket Tract

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cache Slough/Unit No. 02 Haas Slough	Left	6.85	11/01/2018 11/01/2018	David Julian

LM Start	4.65	Rating **	M	Issue No.	62	
LM End	4.65	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			38.317941 °	38.317941 °	
				-121.743503 °	-121.743503 °	
DWR ID	24704					
Comment Code						
Inspector Comment						
FS_ID:25003						
DS_ID:24704						
EP_NO: 10182						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: Sign on WS toe needs repair.						
FIELD_STRUCT_DESC: 8-inch steel gas line through the levee, at the high elevation. Signs on both toes of the levee. (Automatic Board Order (ABO) issued as Permit No. 10182, 1974 - Julia Trust Machado).						
[Additional Reference(s): DWR Levee Log, 2006. USACE Sacramento O&M Manual 108, April 1964, Drawing No. 50-04-3379].						
FS Date: 12/4/2013						

Photo 1 of 2 : UCIP_FA_2018_25003_45081.jpg



Gasline marker on LS toe.

LM Start	4.65	Rating **	M	Issue No.	62 (cont)
LM End	4.65	Issue Type +	En	Location *	

Photo 2 of 2 : UCIP_FA_2018_25003_45080.jpg



Sign pole on WS toe missing sign.

* 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 2018

Reclamation District No. 2104 Peters Pocket Tract

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cache Slough/Unit No. 02 Haas Slough	Left	6.85	11/01/2018 11/01/2018	David Julian

LM Start	4.67	Rating **	M	Issue No.	63	
LM End	4.67	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			38.318119 °		38.318119 °
				-121.743730 °		-121.743730 °
DWR ID	24703					
Comment Code						
Inspector Comment						
FS_ID:25005 DS_ID:24703 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Good candidate for video inspection. FIELD_STRUCT_DESC: 18-inch steel irrigation pipe through the levee, 13.5 feet below the crown. Pump on pile structure in the stream. Slide gate in a 36-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Two cutoff walls. Concrete U-shaped headwall and air vent at the landside (LS) toe. Electrical conduit through the levee at the same location. [Additional Reference(s): DWR Levee Log, 2006. USACE Sacramento O&M Manual 108, April 1964, (HLM 5.06), Drawing No. 50-04-3379]. FS Date: 12/4/2013						

LM Start	4.67	Rating **	M	Issue No.	63 (cont)
LM End	4.67	Issue Type +	En	Location *	

Photo 1 of 2 : UCIP_FA_2018_25005_45083.jpg



Concrete headwall on LS toe at irrigation ditch.

Photo 2 of 2 : UCIP_FA_2018_25005_45082.jpg



Slide gate in CMP riser on WS slope with pump on pier in background.

* 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 2018

Reclamation District No. 2104 Peters Pocket Tract

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cache Slough/Unit No. 02 Haas Slough	Left	6.85	11/01/2018 11/01/2018	David Julian

LM Start	4.71	Rating **	M	Issue No.	31
LM End	4.71	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.318407 °	38.318407 °
				-121.744495 °	-121.744495 °
DWR ID	DWR_RD2104_01_f_2018_31				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Remove tree limb on land side slope					

Photo 1 of 1 : FA_2018_RD2104_249_31_20181102_00039.jpg



View of down tree limb on the land side slope (November 2018).

LM Start	4.72	Rating **	M	Issue No.	64	
LM End	4.72	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			38.318432 °	38.318432 °	
				-121.744540 °	-121.744540 °	
DWR ID	24702					
Comment Code						
Inspector Comment						
FS_ID:25006						
DS_ID:24702						
EP_NO: 10182						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: Minor erosion of base under headwall on WS toe.						
Heavy corrosion of pipe at WS toe. Further evaluation of pipe integrity needed.						
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 13.5 feet below the crown. Concrete U-shaped headwalls on both ends. Two corrugated metal cutoff walls. Flap gate on the waterside (WS) end. (Automatic Board Order (ABO) issued as Permit No. 10182, 1974 - Julia Trust Machado). [Additional Reference(s): DWR Levee Log, 2006].						
FS Date: 12/4/2013						

Photo 1 of 3 : UCIP_FA_2018_25006_45086.jpg



Concrete U shaped headwall on WS 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 2018

Reclamation District No. 2104 Peters Pocket Tract

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cache Slough/Unit No. 02 Haas Slough	Left	6.85	11/01/2018 11/01/2018	David Julian

LM Start	4.72	Rating **	M	Issue No.	64 (cont)	
LM End	4.72	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			38.318432 °	38.318432 °	
				-121.744540 °	-121.744540 °	
DWR ID	24702					
Comment Code						
Inspector Comment						
FS_ID:25006 DS_ID:24702 EP_NO: 10182 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Minor erosion of base under headwall on WS toe. Heavy corrosion of pipe at WS toe. Further evaluation of pipe integrity needed. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 13.5 feet below the crown. Concrete U-shaped headwalls on both ends. Two corrugated metal cutoff walls. Flap gate on the waterside (WS) end. (Automatic Board Order (ABO) issued as Permit No. 10182, 1974 - Julia Trust Machado). [Additional Reference(s): DWR Levee Log, 2006]. FS Date: 12/4/2013						

Photo 2 of 3 : UCIP_FA_2018_25006_45085.jpg



Concrete U shaped headwall on LS toe.

LM Start	4.72	Rating **	M	Issue No.	64 (cont)
LM End	4.72	Issue Type +	En	Location *	

Photo 3 of 3 : UCIP_FA_2018_25006_45084.jpg



Concrete U shaped headwall 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 2018

Reclamation District No. 2104 Peters Pocket Tract

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cache Slough/Unit No. 02 Haas Slough	Left	6.85	11/01/2018 11/01/2018	David Julian

LM Start	4.72	Rating **	M	Issue No.	19
LM End	6.16	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.318437°	38.318179°
				-121.744572°	-121.758200°
DWR ID	DWR_RD2104_01_s_2018_19				
Comment Code					
V9 : Keep the crown roadway free of vegetation.					
Inspector Comment					

No Photos

LM Start	4.96	Rating **	U	Issue No.	24
LM End	4.96	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.320382°	38.320382°
				-121.748155°	-121.748155°
DWR ID	DWR_RD2104_01_f_2017_24				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD2104_249_24_20180925_00011.jpg



Landside levee slope has slumped leaving a 2-foot vertical scarp at the shoulder. Site should be repaired.

LM Start	5.04	Rating **	M	Issue No.	41
LM End	5.04	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.321582 °	38.321582 °
				-121.748546 °	-121.748546 °
DWR ID	DWR_RD2104_01_s_2012_41				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Note and monitor the erosion site.					

No Photos

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

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2104 Peters Pocket Tract

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cache Slough/Unit No. 02 Haas Slough	Left	6.85	11/01/2018 11/01/2018	David Julian

LM Start	5.07	Rating **	M	Issue No.	55
LM End	5.14	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.321883 °	38.322872 °
				-121.748527 °	-121.748700 °
DWR ID	DWR_RD2104_01_s_2013_55				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Livestock are causing erosion and slumping at landside levee shoulder. Access should be prevented. Site should be monitored.					

No Photos

LM Start	5.09	Rating **	U	Issue No.	65	
LM End	5.09	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP LMA Responsibility			38.322215 °		38.322215 °
				-121.748418 °		-121.748418 °
DWR ID	24701					
Comment Code						
Inspector Comment						
FS_ID:53387 DS_ID:24701 EP_NO: 10182 Repair Type: Urgent Crossing Status: Found UCIP Comments: 10/12/2018 Same as last inspection; concrete headwall on WS still being undermined so crossing remains Urgent (D. Sanoski - DWR UCIP).12/06/2016 same as last inspection--pipe remains "Urgent" CMP shows holes through wall and concrete headwall is undermined. Need to contact owner. Owner will need to work with the CVFPB to comply with Title 23. (O. Magana - DWR UCIP)12/04/2013 Footing under headwall on WS toe severely undermined. Pipe rusted heavily with holes at WS and may need replacement. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 13 feet below the crown. Two cutoff walls. Concrete U-shaped headwalls on both ends. Flap gate on the waterside (WS). (24-inch pipe [HLM 5.50] authorized under Automatic Board Order (ABO) issued as Permit No. 10182, 1974 - Julia Trust Machado). [Additional Reference(s): DWR Levee Log, 2006. USACE Sacramento O&M Manual 108, April 1964, (HLM 5.5), listed as a 12-inch pipe, Drawing No. 50-04-3379, listed as an 18-inch pipe]. FS Date: 10/12/2018 5:06:00 PM						

Photo 1 of 3 : UCIP_FA_2018_53387_45090.jpg



Concrete U-shaped headwall on WS toe. Note erosion scarp around headwall.

* 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 2018

Reclamation District No. 2104 Peters Pocket Tract

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cache Slough/Unit No. 02 Haas Slough	Left	6.85	11/01/2018 11/01/2018	David Julian

LM Start	5.09	Rating **	U	Issue No.	65 (cont)	
LM End	5.09	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			38.322215 °	38.322215 °	
				-121.748418 °	-121.748418 °	
DWR ID	24701					
Comment Code						
Inspector Comment						
FS_ID:53387 DS_ID:24701 EP_NO: 10182 Repair Type: Urgent Crossing Status: Found UCIP Comments: 10/12/2018 Same as last inspection; concrete headwall on WS still being undermined so crossing remains Urgent (D. Sanoski - DWR UCIP).12/06/2016 same as last inspection--pipe remains "Urgent" CMP shows holes through wall and concrete headwall is undermined. Need to contact owner. Owner will need to work with the CVFPB to comply with Title 23. (O. Magana - DWR UCIP)12/04/2013 Footing under headwall on WS toe severely undermined. Pipe rusted heavily with holes at WS and may need replacement. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 13 feet below the crown. Two cutoff walls. Concrete U-shaped headwalls on both ends. Flap gate on the waterside (WS). (24-inch pipe [HLM 5.50] authorized under Automatic Board Order (ABO) issued as Permit No. 10182, 1974 - Julia Trust Machado). [Additional Reference(s): DWR Levee Log, 2006. USACE Sacramento O&M Manual 108, April 1964, (HLM 5.5), listed as a 12-inch pipe, Drawing No. 50-04-3379, listed as an 18-inch pipe]. FS Date: 10/12/2018 5:06:00 PM						

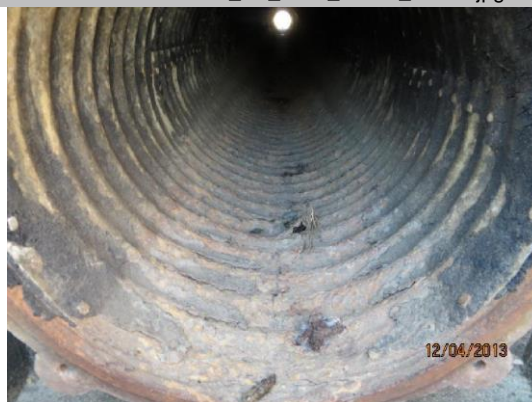
LM Start	5.09	Rating **	U	Issue No.	65 (cont)
LM End	5.09	Issue Type +	Ma	Location *	

Photo 2 of 3 : UCIP_FA_2018_53387_45089.jpg



Headwall undermined on WS toe.

Photo 3 of 3 : UCIP_FA_2018_53387_45088.jpg



Corrosion through pipe with holes on WS 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 2018

Reclamation District No. 2104 Peters Pocket Tract

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cache Slough/Unit No. 02 Haas Slough	Left	6.85	11/01/2018 11/01/2018	David Julian

LM Start	5.20	Rating **	M	Issue No.	32
LM End	5.28	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.323325 °	38.323277 °
				-121.749567 °	-121.751105 °
DWR ID	DWR_RD2104_01_f_2018_32				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Maintain vegetation on the land side slope					

Photo 1 of 1 : FA_2018_RD2104_249_32_20181102_00040.jpg



View looking upstream at vegetation on the land side slope (November 2018).

LM Start	5.35	Rating **	M	Issue No.	33
LM End	5.36	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.323595 °	38.323730 °
				-121.752295 °	-121.752430 °
DWR ID	DWR_RD2104_01_s_2012_33				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Note and monitor the erosion site.					

No Photos

LM Start	5.52	Rating **	M	Issue No.	34
LM End	6.50	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.325048°	38.313285°
				-121.754573°	-121.758182°
DWR ID	DWR_RD2104_01_f_2018_34				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

No Photos

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2104 Peters Pocket Tract

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cache Slough/Unit No. 02 Haas Slough	Left	6.85	11/01/2018 11/01/2018	David Julian

LM Start	5.52	Rating **	M	Issue No.	35
LM End	6.50	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Vegetation		38.325048°	38.313285°	
			-121.754573°	-121.758182°	
DWR ID	DWR_RD2104_01_f_2018_35				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

No Photos

LM Start	5.64	Rating **	M	Issue No.	36
LM End	6.61	Issue Type +	Ma	Location *	CR
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Crown Surface / Depressions / Rutting		38.324625°	38.311678°	
			-121.756715°	-121.758172°	
DWR ID	DWR_RD2104_01_f_2018_36				
Comment Code					
C2 : Repair depressions or ruts in the crown or slope.					
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 2018

Reclamation District No. 2104 Peters Pocket Tract

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cache Slough/Unit No. 02 Haas Slough	Left	6.85	11/01/2018 11/01/2018	David Julian

LM Start	6.84	Rating **	M	Issue No.	66	
LM End	6.84	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			38.308404 °	38.308404 °	
				-121.758585 °	-121.758585 °	
DWR ID	24699					
Comment Code						
Inspector Comment						
FS_ID:53385 DS_ID:24699 EP_NO: 10184 Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: 10/12/2018 Crossing downgraded to Non-Urgent due to reclassification of gas lines. Need to contact owner to determine current status of crossing (D. Sanoski - DWR UCIP).12/06/2016 No indicators were found. According to LMA representative, the gas line has been abandoned and markers have been removed about 10-15 years ago. Solano County was performing work on the LS toe approximately 700 feet from LS toe and according to their underground service alert (USA) survey completed for their construction site no PGE line was identified. Need to contact owner to determine abandoned as-builts for 8-inch line. (O. Magana - DWR UCIP)12/04/2013 Pump station visible to north on LS toe. Good indicator of location. Need PG+E to mark pipe location. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: 8-inch iron gas line through the levee, 2 feet below the crown. (8-inch gas line authorized under Automatic Board Order (ABO) issued as Permit No. 10184, 1974 - Pacific Gas and Electric Company [PG&E]. 8-inch gas line first referenced in the USACE O&M as-built drawings from 1956). [Additional Reference(s): DWR Levee Log, 2006. USACE Sacramento O&M Manual 108, April 1964, Drawing No. 50-04-3379A, Sheet 3379/2, Page 2 of 7, (Station 82+30)]. FS Date: 10/12/2018 5:13:00 PM						

Photo 1 of 3 : UCIP_FA_2018_53385_76913.jpg



No signs present at ramp to enter RD2104.

LM Start	6.84	Rating **	M	Issue No.	66 (cont)
LM End	6.84	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP_FA_2018_53385_76914.jpg



No signs present of gas line.

* 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 2018

Reclamation District No. 2104 Peters Pocket Tract

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cache Slough/Unit No. 02 Haas Slough	Left	6.85	11/01/2018 11/01/2018	David Julian

LM Start	6.84	Rating **	M	Issue No.	66 (cont)	
LM End	6.84	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			38.308404 °	38.308404 °	
				-121.758585 °	-121.758585 °	
DWR ID	24699					
Comment Code						
Inspector Comment						
FS_ID:53385 DS_ID:24699 EP_NO: 10184 Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: 10/12/2018 Crossing downgraded to Non-Urgent due to reclassification of gas lines. Need to contact owner to determine current status of crossing (D. Sanoski - DWR UCIP).12/06/2016 No indicators were found. According to LMA representative, the gas line has been abandoned and markers have been removed about 10-15 years ago. Solano County was performing work on the LS toe approximately 700 feet from LS toe and according to their underground service alert (USA) survey completed for their construction site no PGE line was identified. Need to contact owner to determine abandoned as-builts for 8-inch line. (O. Magana - DWR UCIP)12/04/2013 Pump station visible to north on LS toe. Good indicator of location. Need PG+E to mark pipe location. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: 8-inch iron gas line through the levee, 2 feet below the crown. (8-inch gas line authorized under Automatic Board Order (ABO) issued as Permit No. 10184, 1974 - Pacific Gas and Electric Company [PG&E]. 8-inch gas line first referenced in the USACE O&M as-built drawings from 1956). [Additional Reference(s): DWR Levee Log, 2006. USACE Sacramento O&M Manual 108, April 1964, Drawing No. 50-04-3379A, Sheet 3379/2, Page 2 of 7, (Station 82+30)]. FS Date: 10/12/2018 5:13:00 PM						

Photo 3 of 3 : UCIP_FA_2018_53385_76915.jpg



Photo of where the line is estimated to cross 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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