

Flood Control Project Maintenance Levee Inspections

Fall 2021 Levee Maintenance Deficiency Summary Report

Sacramento River Basin

RD2098	Overall LMA Rating	Total LMA Miles						
Reclamation District No. 2098 Cache and Haas Slough	U	10.91						
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	6.60		6.60	60.52%				
Encroachments	0.02	0.16	0.66	6.05%	0.01	0.01		
Animal Control	1.71		1.71	15.68%				
Slope Stability	0.01		0.01	0.09%				
Erosion / Bank Caving	0.84	0.19	1.60	14.67%				
<i>Supplemental</i>								
2018 USACE Erosion Survey	0.68	0.30	1.88	17.24%				
DWR UCIP Field Study					0.13	0.03		
DWR UCIP LMA Responsibility								
<i>LMA Totals:</i>	9.86	0.65	12.46	114.25%	0.14	0.04	0.00	0.00
Unit No. 01 Yolo Bypass RB	Overall Unit Rating	Total Unit Miles						
RD2098	U	3.60						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Vegetation	3.02		3.02	83.94%				
Encroachments	0.01		0.01	0.28%		0.01		
Erosion / Bank Caving	0.80	0.15	1.40	38.91%				
<i>Supplemental</i>								
DWR UCIP Field Study					0.06			
DWR UCIP LMA Responsibility								
<i>Unit Totals:</i>	3.83	0.15	4.43	123.13%	0.06	0.01	0.00	0.00
Unit No. 01A Cross Levee RB	Overall Unit Rating	Total Unit Miles						
RD2098	U	0.53						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Vegetation	0.33		0.33	62.78%				
<i>Unit Totals:</i>	0.33	0.00	0.33	62.78%	0.00	0.00	0.00	0.00

Flood Control Project Maintenance Levee Inspections

Fall 2021 Levee Maintenance Deficiency Summary Report

Sacramento River Basin (cont.)

Unit No. 02 Cache Slough LB		Overall Unit Rating	Total Unit Miles						
RD2098		U	1.89						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence		
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles	
Earthen Levee									
Vegetation	0.36		0.36	19.00%					
Encroachments					0.01				
Slope Stability	0.01		0.01	0.53%					
Erosion / Bank Caving	0.04	0.04	0.20	10.56%					
Supplemental									
DWR UCIP Field Study					0.02				
DWR UCIP LMA Responsibility									
Unit Totals:	0.41	0.04	0.57	30.09%	0.03	0.00	0.00	0.00	

Unit No. 03 Haas Slough RB		Overall Unit Rating	Total Unit Miles						
RD2098		U	1.94						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence		
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles	
Earthen Levee									
Vegetation	1.69		1.69	87.28%					
Animal Control	0.57		0.57	29.44%					
Supplemental									
2018 USACE Erosion Survey	0.68		0.68	35.12%					
DWR UCIP Field Study					0.01				
Unit Totals:	2.94	0.00	2.94	151.84%	0.01	0.00	0.00	0.00	

Unit No. 04 Back Levee LB		Overall Unit Rating	Total Unit Miles						
RD2098		U	2.95						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence		
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles	
Earthen Levee									
Vegetation	1.20		1.20	40.65%					
Encroachments	0.01	0.16	0.65	22.02%					
Animal Control	1.14		1.14	38.62%					
Supplemental									
2018 USACE Erosion Survey		0.30	1.20	40.65%					
DWR UCIP Field Study					0.04	0.03			
Unit Totals:	2.35	0.46	4.19	141.93%	0.04	0.03	0.00	0.00	

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

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.

[illegible]

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

Reclamation District No. 2098 Cache and Haas Slough

Waterway			Bank	Unit Miles
Unit No. 01 Yolo Bypass			Right	3.60
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			U	
Date of Inspection	3/19/2021 - 3/19/2021		10/1/2021 - 10/1/2021	
DWR Inspector	David Julian		David Julian	
Accompanied By				

Summer & Winter Inspections

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

DWR must be informed on the:

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

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

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

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

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

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/01/2021 10/01/2021	David Julian

LM Start		Rating **	A	Issue No.	3
LM End		Issue Type +	Ma	Location *	
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Operations & Maintenance Manuals			°	°
				°	°
DWR ID	DWR_RD2098_01_f_2014_3				
Comment Code					
Inspector Comment					
RD 2098 has on file O+M Manual.					

No Photos

LM Start		Rating **	A	Issue No.	4
LM End		Issue Type +	Ma	Location *	
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Emergency Supplies & Equipment			°	°
				°	°
DWR ID	DWR_RD2098_01_f_2014_4				
Comment Code					
Inspector Comment					
RD 2098 has emergency supplies in storage along with equipment.					

No Photos

LM Start		Rating **	A	Issue No.	5
LM End		Issue Type +	Ma	Location *	
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Flood Preparedness & Training			°	°
				°	°
DWR ID	DWR_RD2098_01_f_2014_5				
Comment Code					
Inspector Comment					
RD 2098 has their team well prepared for a flood fight.					

No Photos

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

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/01/2021 10/01/2021	David Julian

LM Start	0.04	Rating **	M	Issue No.	14
LM End	1.55	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.328525 °	38.306602 °
				-121.694073 °	-121.693611 °
DWR ID	DWR_RD2098_01_f _ 2021_14				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

LM Start	0.15	Rating **	M	Issue No.	16
LM End	0.55	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.326933 °	38.321040 °
				-121.694071 °	-121.694056 °
DWR ID	DWR_RD2098_01_f _ 2021_16				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

LM Start	0.57	Rating **	M	Issue No.	13
LM End	1.06	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.320755 °	38.313700 °
				-121.693982 °	-121.693639 °
DWR ID	DWR_RD2098_01_s_2017_13				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
There is erosion on the waterside slope.					

No Photos

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

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/01/2021 10/01/2021	David Julian

LM Start	0.81	Rating **	M	Issue No.	17
LM End	0.97	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.317304 °	38.314977 °
				-121.694040 °	-121.694030 °
DWR ID	DWR_RD2098_01_f _ 2021_17				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

LM Start	0.96	Rating **	A/W	Issue No.	19
LM End	0.96	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.315200 °	38.315100 °
				-121.694100 °	-121.694100 °
DWR ID	DWR_RD2098_01_s_2021_19				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
This was a 2017 Storm Damage site. The damage consists of cracking and sloughing of the lower landside levee slope. Site ID No:414 Site Designation:LMA-241 4/24/2020 Field Notes: Vegetation is to thick to see. Verify in fall when vegetation less.					

Photo 1 of 1 : LEVAL_FA_2021_414_3596.jpg



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

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

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/01/2021 10/01/2021	David Julian

LM Start	1.06	Rating **	M	Issue No.	21
LM End	1.56	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.313714 °	38.306537 °
				-121.693691 °	-121.693647 °
DWR ID	DWR_RD2098_01_f _ 2021_21				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

LM Start	1.72	Rating **	U	Issue No.	12
LM End	1.72	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.304209 °	38.304209 °
				-121.693997 °	-121.693997 °
DWR ID	DWR_RD2098_01_f _ 2021_12				
Comment Code					
DE : Debris					
Inspector Comment					

Photo 1 of 1 : FA_2021_RD2098_244_12_20211014_00034.jpg



View of demolition debris on the landside toe (Fall 2021).

LM Start	1.76	Rating **	M	Issue No.	18
LM End	1.76	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.303611 °	38.303611 °
				-121.693607 °	-121.693607 °
DWR ID	DWR_RD2098_01_s_2018_18				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
There is erosion at the waterside toe.					

Photo 1 of 1 : FA_2021_RD2098_244_18_20210830_00003.jpg



View of erosion.

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

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/01/2021 10/01/2021	David Julian

LM Start	1.82	Rating **	M	Issue No.	38	
LM End	1.82	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			38.302770 °	38.302770 °	
				-121.693640 °	-121.693640 °	
DWR ID	20965					
Comment Code						
Inspector Comment						
DS_ID:20965 FS_ID:32197 EP_NO: 10168 Repair Type: Non-Urgent EVAL Issue: Crossing Status: Found UCIP Comments: 12/22/2016 Met with Mike Hadesty, LMA Superintendent, and Brian Bush, LMA General Manager, to go over the list of pipes in RD2098. Per LMA records, this pipe has a different owner. (O. Magana - DWR UCIP) 03/18/2014 Erosion under pipe at WS toe. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: 10-inch steel drainage pipe through the levee, 2.8 feet below the crown. Pump in pump house off the landside (LS). (This pipe was retained under Automatic Board Order (ABO) issued as Permit No. 10168, 1974 - Moresco Brothers). [Additional Reference(s): DWR Levee Log, 2003. USACE Sacramento O&M Manual 109, April 1962, (HLM 1.80)]. FS Date: 3/18/2014						

LM Start	1.82	Rating **	M	Issue No.	38 (cont)
LM End	1.82	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2021_32197_58662.jpg



Pipe on WS slope.

Photo 2 of 3 : UCIP_FA_2021_32197_58661.jpg



Pumphouse at lowpoint off LS toe.

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

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/01/2021 10/01/2021	David Julian

LM Start	1.82	Rating **	M	Issue No.	38 (cont)
LM End	1.82	Issue Type +	Ma	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP LMA Responsibility		38.302770 °	38.302770 °	
			-121.693640 °	-121.693640 °	
DWR ID	20965				

Photo 3 of 3 : UCIP_FA_2021_32197_58660.jpg



Erosion under pipe at WS toe.

LM Start	1.83	Rating **	M	Issue No.	39
LM End	1.83	Issue Type +	En	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		38.302552 °	38.302552 °	
			-121.693653 °	-121.693653 °	
DWR ID	20966				

Comment Code

Inspector Comment

DS_ID:20966
 FS_ID:32207
 EP_NO: 10168
 Repair Type: Non-Urgent
 EVAL Issue:
 Crossing Status: Found
 UCIP Comments: 12/22/2016 Met with Mike Hadesty, LMA Superintendent, and Brian Bush, LMA General Manager, to go over the list of pipes in RD2098. Per LMA records, this pipe is a drainage pipe. Need to coordinate with owner to obtain records to confirm line integrity. (O. Magana - DWR UCIP)
 03/18/2014 Slide gate actuator bent but appears to be in closed position. No lid on standpipe. Appears abandoned and if so should be done so properly. (W. Wylie - DWR UCIP)
 FIELD_STRUCT_DESC: 24-inch drainage pipe of an unknown material through the levee, 24.5 feet below the crown. Two corrugated metal cutoff walls around the pipe at the center of the levee. Slide gate in a 36-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete saddle and apron on the WS end. Flap gate and U-shaped headwall on the landside (LS) end. (This pipe was retained under Automatic Board Order (ABO) issued as Permit No. 10168, 1974 - Moresco Brothers). [Additional Reference(s): DWR Levee Log, 2003].
 FS Date: 3/18/2014

Photo 1 of 3 : UCIP_FA_2021_32207_58665.jpg



36-inch CMP riser with bent slide gate actuator on WS slope.

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

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/01/2021 10/01/2021	David Julian

LM Start	1.83	Rating **	M	Issue No.	39 (cont)
LM End	1.83	Issue Type +	En	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		38.302552 °	38.302552 °	
			-121.693653 °	-121.693653 °	
DWR ID	20966				

Photo 2 of 3 : UCIP_FA_2021_32207_58664.jpg



No lid on CMP riser that is 24-feet deep.

LM Start	1.83	Rating **	M	Issue No.	39 (cont)
LM End	1.83	Issue Type +	En	Location *	

Photo 3 of 3 : UCIP_FA_2021_32207_58663.jpg



bent actuator on WS slope.

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

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/01/2021 10/01/2021	David Julian

LM Start	2.00	Rating **	M	Issue No.	40
LM End	2.00	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.300152 °	38.300152 °
				-121.693626 °	-121.693626 °
DWR ID	20967				
Comment Code					
Inspector Comment					
DS_ID:20967 FS_ID:32225 EP_NO: 10168 Repair Type: Non-Urgent EVAL Issue: Crossing Status: Found UCIP Comments: 12/22/2016 Met with Mike Hadesty, LMA Superintendent, and Brian Bush, LMA General Manager, to go over the list of pipes in RD2098. Per LMA, line has been abandoned. New property owner is Anderson. (O. Magana - DWR UCIP) 03/18/2014 Pipe appears abandoned and if so should be done so properly. Pipe open on WS at pumphouse as there is no connection to pump. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: *ABANDONED* 2-inch galvanized iron irrigation pipe through the levee, 10 feet below the crown. Pump in pump house on the waterside (WS) slope next to fishing dock. Power pole and meter at the landside (LS) toe, next to hose bib. 1-inch steel electrical conduit at the same location. (This pipe was retained under Automatic Board Order (ABO) issued as Permit No. 10168, 1974 - Moresco Brothers). [Additional Reference(s): DWR Levee Log, 2003]. FS Date: 3/18/2014					

Photo 1 of 3 : UCIP_FA_2021_32225_58687.jpg



Pumphouse next to fishing dock on WS slope.

LM Start	2.00	Rating **	M	Issue No.	40 (cont)
LM End	2.00	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP_FA_2021_32225_58686.jpg



Power pole and meter next to spigot on 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 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/01/2021 10/01/2021	David Julian

LM Start	2.00	Rating **	M	Issue No.	40 (cont)
LM End	2.00	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.300152 °	38.300152 °
				-121.693626 °	-121.693626 °
DWR ID	20967				

Photo 3 of 3 : UCIP_FA_2021_32225_58685.jpg



Power pole and meter next to spigot on LS toe.

LM Start	2.20	Rating **	A/W	Issue No.	15
LM End	2.24	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2018 USACE Erosion Survey			38.297232 °	38.296678 °
				-121.693200 °	-121.693223 °
DWR ID					

Comment Code

Inspector Comment

2018 Site ID: YOL 2.2 R
 Status: Eroding
 2018 Field Notes: Last observed in 2017.
 Site History: POTENTIALLY UNDER REPAIR; full landslide from levee crown down, revetment failure , additional slumping ds and slump cracks observed.

No Photos

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

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/01/2021 10/01/2021	David Julian

LM Start	2.29	Rating **	U	Issue No.	27
LM End	2.32	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.295900 °	38.295468 °
				-121.693500 °	-121.693619 °
DWR ID	LMA-248				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
This was a 2017 Storm Damage site. The damage consists of scour and sloughing of the waterside levee slope. Site ID No:421 Site Designation:LMA-248					

Photo 1 of 1 : FA_2021_RD2098_244_27_20210830_00006.jpg



View looking upstream at erosion in the waterside slope (Spring 2020).

LM Start	2.35	Rating **	U	Issue No.	28
LM End	2.39	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.295100 °	38.294500 °
				-121.693400 °	-121.693400 °
DWR ID	LMA-250				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
This was a 2017 Storm Damage site. The damage consists of scour, sloughing, and cracking of the lower and mid waterside levee slope. Site ID No:423 Site Designation:LMA-250					

Photo 1 of 1 : FA_2021_RD2098_244_28_20210830_00007.jpg



View looking upstream at erosion into the waterside slope (Spring 2020).

LM Start	2.75	Rating **	U	Issue No.	34
LM End	2.81	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.289200 °	38.288405 °
				-121.693500 °	-121.693617 °
DWR ID	LMA-256				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
This was a 2017 Storm Damage site. The damage consists of scour and sloughing of the waterside levee slope. Site ID No:429 & 430 Site Designation:LMA-256, LMA-257					

Photo 1 of 1 : FA_2021_RD2098_244_34_20210830_00008.jpg



View looking downstream at erosion into the waterside slope (Spring 2020).

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

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/01/2021 10/01/2021	David Julian

LM Start	2.91	Rating **	U	Issue No.	36
LM End	2.93	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.286900 °	38.286700 °
				-121.693500 °	-121.693500 °
DWR ID	LMA-258				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
This was a 2017 Storm Damage site. The damage consists of scour and sloughing of the waterside levee slope. Site ID No:431 Site Designation:LMA-258					

Photo 1 of 1 : FA_2021_RD2098_244_36_20210830_00009.jpg



View looking upstream at erosion into the waterside slope (Spring 2020).

LM Start	2.99	Rating **	M	Issue No.	37
LM End	3.29	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.285700 °	38.281500 °
				-121.693500 °	-121.694300 °
DWR ID	LMA-259				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
This was a 2017 Storm Damage site. The damage consists of scour and sloughing of the waterside levee slope. Site ID No:432 Site Designation:LMA-259					

Photo 1 of 1 : FA_2021_RD2098_244_37_20210830_00010.jpg



View of erosion on the waterside slope. Photo was taken in 2017.

LM Start	3.00	Rating **	M	Issue No.	11
LM End	3.45	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.285613 °	38.279482 °
				-121.693638 °	-121.695643 °
DWR ID	DWR_RD2098_01_f_2021_11				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

Photo 1 of 1 : FA_2021_RD2098_244_11_20211014_00035.jpg



View looking downstream at vegetation on the landside toe (Fall 2021).

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

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

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/01/2021 10/01/2021	David Julian

LM Start	3.01	Rating **	M	Issue No.	41	
LM End	3.01	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			38.285525 °	38.285525 °	
				-121.693640 °	-121.693640 °	
DWR ID	20969					
Comment Code						
Inspector Comment						
DS_ID:20969 FS_ID:32227 EP_NO: 13222 Repair Type: Non-Urgent EVAL Issue: Crossing Status: Found UCIP Comments: 03/18/2014 Pipe rusted through at outlet on WS slope, may indicate further degradation of pipe within levee. Good candidate for video inspection. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: 20-inch steel drainage pipe through the levee, 7.5 feet below the crown. Siphon breaker on the waterside (WS) shoulder. Pump on pile structure in drainage ditch on the landside (LS). (This pipe was retained under Automatic Board Order (ABO) issued as Permit No. 10168, 1974 - Moresco Brothers. Pipe removed and replaced with a 19-inch steel pipe under the crown and along the LS slope under Permit No. 13222, 1981 - Prudential Insurance Company of America). [Additional Reference(s): DWR Levee Log, 2003. USACE Sacramento O&M Manual 109, April 1962, (HLM 2.98)]. FS Date: 3/18/2014						

LM Start	3.01	Rating **	M	Issue No.	41 (cont)
LM End	3.01	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP_FA_2021_32227_58692.jpg



Pump on pile structure in drainage channel on LS toe.

Photo 2 of 3 : UCIP_FA_2021_32227_58691.jpg



Siphon breaker in steel riser on WS slope.

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

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/01/2021 10/01/2021	David Julian

LM Start	3.01	Rating **	M	Issue No.	41 (cont)
LM End	3.01	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.285525 °	38.285525 °
				-121.693640 °	-121.693640 °
DWR ID	20969				

Photo 3 of 3 : UCIP_FA_2021_32227_58690.jpg



Pipe rusted through at outlet on WS slope.

LM Start	3.13	Rating **	M	Issue No.	20
LM End	3.13	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.283800 °	38.283800 °
				-121.693618 °	-121.693618 °
DWR ID	DWR_RD2098_01_s_2020_20				
Comment Code					
TR : Tree or limb					
Inspector Comment					

Photo 1 of 1 : FA_2021_RD2098_244_20_20210830_00005.jpg



View of tree limb on the landside slope (Fall 2020).

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

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

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/01/2021 10/01/2021	David Julian

LM Start	3.49	Rating **	M	Issue No.	42
LM End	3.49	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.278879 °	38.278879 °
				-121.695957 °	-121.695957 °
DWR ID	20970				
Comment Code					
Inspector Comment					
DS_ID:20970 FS_ID:32243 EP_NO: 10168 Repair Type: Non-Urgent EVAL Issue: Crossing Status: Found UCIP Comments: 03/18/2014 Walkway to slidegate on WS toe is in poor structural condition and may not be safe for accessing the slide gate actuator. Pipe appears abandoned and if so should be done so properly. Outlet on LS toe may be buried. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: 24-inch steel irrigation pipe through the levee, 22.3 feet below the crown. Slide gate on the waterside (WS) end. Walkway from the WS shoulder to the slide gate control. Flap gate on the landside (LS) end. (This pipe was retained under Automatic Board Order (ABO) issued as Permit No. 10168, 1974 - Moresco Brothers). [Additional Reference(s): DWR Levee Log, 2003]. FS Date: 3/18/2014					

LM Start	3.49	Rating **	M	Issue No.	42 (cont)
LM End	3.49	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP_FA_2021_32243_58702.jpg



Walkway to slide gate actuator on WS toe.

Photo 2 of 3 : UCIP_FA_2021_32243_58701.jpg



Walkway may not be structurally sound.

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

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/01/2021 10/01/2021	David Julian

LM Start	3.49	Rating **	M	Issue No.	42 (cont)
LM End	3.49	Issue Type +	En	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		38.278879 °	38.278879 °	
			-121.695957 °	-121.695957 °	
DWR ID	20970				

Photo 3 of 3 : UCIP_FA_2021_32243_58700.jpg



Slidegate on WS toe at pipe.

LM Start	3.50	Rating **	M	Issue No.	43
LM End	3.50	Issue Type +	En	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		38.278770 °	38.278770 °	
			-121.696050 °	-121.696050 °	
DWR ID	20971				

Comment Code

Inspector Comment

DS_ID:20971
 FS_ID:41717
 EP_NO: 15169
 Repair Type: Non-Urgent
 EVAL Issue:
 Crossing Status: Found
 UCIP Comments: 12/22/2016 Met with Mike Hadesty, LMA Superintendent, and Brian Bush, LMA General Manager, to go over the list of pipes in RD2098. Per LMA, pipe is a drainage pipe. New property owner is John Anderson. (O. Magana - DWR UCIP)
 03/18/2014 Debris and soil buildup in riser may prevent proper function of siphon breaker. (W. Wylie - DWR UCIP)
 FIELD_STRUCT_DESC: 1 of 2: 24-inch coated steel drainage pipe through the levee, 5.6 feet below the crown. Cutoff wall around the pipe at the center of the levee. Siphon breaker at the waterside (WS) shoulder. Flap gate on the WS end. Pump in pump house on piling structure on the landside (LS). (Permit No. 15169, 1989 - Maxim Development). [Additional Reference(s): DWR Levee Log, 2003].
 FS Date: 3/18/2014

Photo 1 of 3 : UCIP_FA_2021_41717_58704.jpg



Pump in pumphouse 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 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/01/2021 10/01/2021	David Julian

LM Start	3.50	Rating **	M	Issue No.	43 (cont)
LM End	3.50	Issue Type +	En	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		38.278770 °	38.278770 °	
			-121.696050 °	-121.696050 °	
DWR ID	20971				

Photo 2 of 3 : UCIP_FA_2021_41717_58703.jpg



Pump in pumphouse on LS toe.

LM Start	3.50	Rating **	M	Issue No.	43 (cont)
LM End	3.50	Issue Type +	En	Location *	

Photo 3 of 3 : UCIP_FA_2021_41717_58707.jpg



Siphon breaker in 24-inch steel riser on WS shoulder.

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

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/01/2021 10/01/2021	David Julian

LM Start	3.50	Rating **	M	Issue No.	44
LM End	3.50	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.278759 °	38.278759 °
				-121.696059 °	-121.696059 °
DWR ID	20959				

Comment Code

Inspector Comment

DS_ID:20959
FS_ID:32245
EP_NO: 15169
Repair Type: Non-Urgent
EVAL Issue:
Crossing Status: Found
UCIP Comments: 12/22/2016 Met with Mike Hadesty, LMA Superintendent, and Brian Bush, LMA General Manager, to go over the list of pipes in RD2098. Per LMA, pipe is a drainage pipe. New property owner is John Anderson. (O. Magana - DWR UCIP)
03/18/2014 Soil and debris buildup in steel riser on WS shoulder may prevent proper function of siphon breaker. (W. Wylie - DWR UCIP)
FIELD_STRUCT_DESC: 2 of 2: 24-inch coated steel drainage pipe through the levee, 5.6 feet below the crown. Cutoff wall around the pipe at the center of the levee. Siphon breaker on the waterside (WS) shoulder. Flap gate on the WS end. Pump in pump house on piling structure on the landside (LS). (Permit No. 15169, 1989 - Maxim Development). [Additional Reference(s): DWR Levee Log, 2003].
FS Date: 3/18/2014

LM Start	3.50	Rating **	M	Issue No.	44 (cont)
LM End	3.50	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP_FA_2021_32245_58710.jpg



Pump in pumphouse on LS toe.

Photo 2 of 3 : UCIP_FA_2021_32245_58709.jpg



Pump in pumphouse on 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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/01/2021 10/01/2021	David Julian

LM Start	3.50	Rating **	M	Issue No.	44 (cont)
LM End	3.50	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.278759 °	38.278759 °
				-121.696059 °	-121.696059 °
DWR ID	20959				

Photo 3 of 3 : UCIP_FA_2021_32245_58708.jpg



Siphon breaker in steel riser 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
Unit Cover Sheet**

Reclamation District No. 2098 Cache and Haas Slough

Waterway			Bank	Unit Miles
Unit No. 01A Cross Levee			Right	0.53
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			U	
Date of Inspection	3/19/2021 - 3/19/2021		10/1/2021 - 10/1/2021	
DWR Inspector	David Julian		David Julian	
Accompanied By				

Summer & Winter Inspections

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

DWR must be informed on the:

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

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

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

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

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

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01A Cross Levee	Right	0.53	10/01/2021 10/01/2021	David Julian

LM Start	0.18	Rating **	M	Issue No.	1
LM End	0.51	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.276840 °	38.275739 °
				-121.699438 °	-121.705456 °
DWR ID	DWR_RD2098_01A_f_2021_1				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

Photo 1 of 1 : FA_2021_RD2098_245_1_20211014_00001.jpg



View looking upstream at vegetation on the landside slope (Fall 2021).

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

Reclamation District No. 2098 Cache and Haas Slough

Waterway			Bank	Unit Miles
Unit No. 02 Cache Slough			Left	1.89
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			U	
Date of Inspection	3/19/2021 - 3/19/2021		10/1/2021 - 10/1/2021	
DWR Inspector	David Julian		David Julian	
Accompanied By				

Summer & Winter Inspections

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

DWR must be informed on the:

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

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

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

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

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

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	10/01/2021 10/01/2021	David Julian

LM Start	5.71	Rating **	M	Issue No.	21	
LM End	5.71	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			38.280788 °	38.280788 °	
				-121.709617 °	-121.709617 °	
DWR ID	20973					
Comment Code						
Inspector Comment						
DS_ID:20973 FS_ID:32287 EP_NO: 10172 Repair Type: Non-Urgent EVAL Issue: Crossing Status: Found UCIP Comments: 12/22/2016 Met with Mike Hadesty, LMA Superintendent, and Brian Bush, LMA General Manager, to go over the list of pipes in RD2098. Per LMA, pipe is a drainage pipe. (O. Magana - DWR UCIP) 03/18/2014 Pipe appears abandoned and if so should be done so properly. Slide gate appears to be open and should be closed for the season. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 22.8 feet below the crown. Two cutoff walls around the pipe at the levee shoulders. Slide gate in 36-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Flap gate and concrete U-shaped headwall on the landside (LS) end. (This pipe was retained under Automatic Board Order (ABO) issued as Permit No. 10172, 1974 - Moresco Brothers). [Additional Reference(s): DWR Levee Log, 2003]. FS Date: 3/18/2014						

LM Start	5.71	Rating **	M	Issue No.	21 (cont)
LM End	5.71	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP_FA_2021_32287_58755.jpg



LS - no pipe visible.

Photo 2 of 3 : UCIP_FA_2021_32287_58754.jpg



Slide gate in 36-inch standpipe on WS slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Levee Inspection Report By Mile - Fall 2021

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	10/01/2021 10/01/2021	David Julian

LM Start	5.71	Rating **	M	Issue No.	21 (cont)
LM End	5.71	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.280788 °	38.280788 °
				-121.709617 °	-121.709617 °
DWR ID	20973				

Slide gate in 36-inch standpipe on WS slope.

LM Start	5.88	Rating **	U	Issue No.	11
LM End	5.88	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.282946 °	38.282946 °
				-121.710902 °	-121.710902 °
DWR ID	DWR_RD2098_02 f _ 2020_11				

Comment Code

E2 : Schedule repair of erosion site prior to the next inspection.

Inspector Comment

This waterside slump site is not new, and is somewhat protected by riprap and thick brushy vegetation, but it has the potential to erode to crown during high water with a strong south wind. It currently has a two-foot vertical scarp at the levee shoulder.

Photo 1 of 1 : FA_2021_RD2098_246_11_20210830_00002.jpg



View looking upstream at erosion into waterside slope (Fall 2020).

LM Start	6.46	Rating **	U	Issue No.	15
LM End	6.48	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.288700 °	38.289061 °
				-121.717000 °	-121.716885 °
DWR ID	LMA-267				

Comment Code

E2 : Schedule repair of erosion site prior to the next inspection.

Inspector Comment

This was a 2017 Storm Damage site.
The damage consists of scour of the lower and mid waterside levee slope.

Site ID No:440 & 441

Site Designation: LMA-267 & LMA-268

Photo 1 of 1 : FA_2021_RD2098_246_15_20210830_00004.jpg



View looking upstream at erosion into the waterside slope (Fall 2020).

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	10/01/2021 10/01/2021	David Julian

LM Start	6.53	Rating **	M	Issue No.	6
LM End	6.62	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.289824 °	38.290914 °
				-121.716794 °	-121.716189 °
DWR ID	DWR_RD2098_02_f _ 2021_6				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Blackberries on the landside toe.					

Photo 1 of 1 : FA_2021_RD2098_246_6_20211014_00023.jpg



View of vegetation on the landside toe (Fall 2021).

LM Start	6.64	Rating **	U	Issue No.	18
LM End	6.65	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.291300 °	38.291400 °
				-121.716100 °	-121.716000 °
DWR ID	LMA-269				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
This was a 2017 Storm Damage site. The damage consists of scour, cracking, instability, and sloughing of the waterside levee slope. Site ID No:442 Site Designation:LMA-269					

Photo 1 of 1 : FA_2021_RD2098_246_18_20210830_00005.jpg



View looking upstream at erosion into the waterside slope (Fall 2020).

LM Start	6.70	Rating **	M	Issue No.	10
LM End	6.70	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.292076 °	38.292076 °
				-121.715792 °	-121.715792 °
DWR ID	DWR_RD2098_02_s_2014_10				
Comment Code					
MA : Material					
Inspector Comment					
Large concrete slab partially buried on waterside slope should be removed.					

Photo 1 of 1 : FA_2021_RD2098_246_10_20210830_00001.jpg



There is some slope damage at this location under this concrete.

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

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

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	10/01/2021 10/01/2021	David Julian

LM Start	6.71	Rating **	M	Issue No.	22
LM End	6.71	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			38.292194 °	38.292194 °
				-121.715853 °	-121.715853 °
DWR ID	20976				

Comment Code

Inspector Comment

DS_ID:20976
FS_ID:33784
EP_NO: 10172
Repair Type: Non-Urgent
EVAL Issue:
Crossing Status: Found
UCIP Comments: 03/18/2014 Headwalls on WS toe failing at outlet. It is unclear if these were permanent installations or something that was installed as a temporary fix. (W. Wylie - DWR UCIP)
FIELD_STRUCT_DESC: 1 of 2: 48-inch corrugated metal drainage pipe through the levee, 29 feet below the crown. Two slide gates in a 7-foot-diameter corrugated metal pipe (CMP) riser on the waterside (WS) slope. (two 48-inch [HLM 6.75] authorized under Automatic Board Order (ABO) issued as Permit No. 10172, 1974 - Moresco Brothers).
[Additional Reference(s): DWR Levee Log, 2003. USACE Sacramento O&M Manual 109, April 1962, (HLM 6.75)].
FS Date: 3/18/2014

LM Start	6.71	Rating **	M	Issue No.	22 (cont)
LM End	6.71	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2021_33784_61162.jpg



Two slide gates in 7-foot diameter CMP riser on waterward slope.

Photo 2 of 3 : UCIP_FA_2021_33784_61161.jpg



Inlet not 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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Levee Inspection Report By Mile - Fall 2021

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	10/01/2021 10/01/2021	David Julian

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	10/01/2021 10/01/2021	David Julian

LM Start	6.72	Rating **	M	Issue No.	23 (cont)
LM End	6.72	Issue Type +	Ma	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP LMA Responsibility		38.292234 °	38.292234 °	
			-121.715875 °	-121.715875 °	
DWR ID	20961				

Photo 2 of 3 : UCIP_FA_2021_32285_58748.jpg



7-foot diameter CMP riser with two slide gates inside.

LM Start	6.72	Rating **	M	Issue No.	23 (cont)
LM End	6.72	Issue Type +	Ma	Location *	

Photo 3 of 3 : UCIP_FA_2021_32285_58747.jpg



7-foot diameter CMP riser with two slide gates inside.

LM Start	6.74	Rating **	M	Issue No.	19
LM End	6.75	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.292500 °	38.292600 °
				-121.716100 °	-121.716200 °
DWR ID	LMA-270				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
This was a 2017 Storm Damage site. The damage consists of scour and sloughing of the landside levee slope. Site ID No:443 Site Designation:LMA-270					

Photo 1 of 1 : FA_2021_RD2098_246_19_20210830_00006.jpg



View of landside sloughing. Photo taken in 2017.

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

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	10/01/2021 10/01/2021	David Julian

LM Start	6.77	Rating **	M	Issue No.	20
LM End	6.80	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.292900 °	38.293000 °
				-121.716600 °	-121.717000 °
DWR ID	LMA-271				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
This was a 2017 Storm Damage site. The damage consists of cracking of the levee crest. Site ID No:444 Site Designation:LMA-271					

Photo 1 of 1 : FA_2021_RD2098_246_20_20210830_00007.jpg



View of erosion on the landside levee crest. Photo taken in 2017.

LM Start	6.81	Rating **	M	Issue No.	7
LM End	7.08	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.292949 °	38.292975 °
				-121.717383 °	-121.722231 °
DWR ID	DWR_RD2098_02_f _ 2021_7				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

Photo 1 of 1 : FA_2021_RD2098_246_7_20211014_00024.jpg



View looking upstream at vegetation on the landside slope (Fall 2021).

LM Start	6.86	Rating **	M	Issue No.	12
LM End	6.86	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.292965 °	38.292965 °
				-121.718188 °	-121.718188 °
DWR ID	DWR_RD2098_02_s_2020_12				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Erosion at the top of the landside slope.					

Photo 1 of 1 : FA_2021_RD2098_246_12_20210830_00003.jpg



View looking upstream at erosion at the top of the landside slope (Spring 2020).

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

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

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	10/01/2021 10/01/2021	David Julian

LM Start	7.19	Rating **	M	Issue No.	24
LM End	7.19	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.293139 °	38.293139 °
				-121.724174 °	-121.724174 °
DWR ID	20977				
Comment Code					
Inspector Comment					
DS_ID:20977 FS_ID:32290 EP_NO: 10171 Repair Type: Non-Urgent EVAL Issue: Crossing Status: Found UCIP Comments: 12/22/2016 Met with Mike Hadesty, LMA Superintendent, and Brian Bush, LMA General Manager, to go over the list of pipes in RD2098. Per LMA, pipe is a drainage pipe.(O. Magana - DWR UCIP) 03/18/2014 Pipe appears to be abandoned and if so it should be done so properly. Walkway to gate valve actuator on WS slope is in disrepair and does not appear to be safe for use. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 23 feet below the crown. Walkway to slide gate on the waterside (WS) end. Slide gate at the landside (LS) toe. (This pipe was retained under Automatic Board Order (ABO) issued as Permit No. 10171, 1974 - Glenn A. Bowlsbey). [Additional Reference(s): DWR Levee Log, 2003. USACE Sacramento O&M Manual 109, April 1962, (HLM 7.23)]. FS Date: 3/18/2014					

Photo 1 of 3 : UCIP_FA_2021_32290_58764.jpg



Slide gate at LS toe.

LM Start	7.19	Rating **	M	Issue No.	24 (cont)
LM End	7.19	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP_FA_2021_32290_58763.jpg



Delapidated wooden pier 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 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	10/01/2021 10/01/2021	David Julian

LM Start	7.19	Rating **	M	Issue No.	24 (cont)
LM End	7.19	Issue Type +	En	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		38.293139 °	38.293139 °	
			-121.724174 °	-121.724174 °	
DWR ID	20977				

Photo 3 of 3 : UCIP_FA_2021_32290_58762.jpg



Concrete U-shaped headwall on WS toe.

LM Start	7.24	Rating **	A/W	Issue No.	25
LM End	7.24	Issue Type +	Ma	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP LMA Responsibility		38.293741 °	38.293741 °	
			-121.724787 °	-121.724787 °	
DWR ID	20978				

Comment Code

Inspector Comment

DS_ID:20978
FS_ID:32303
EP_NO: 10171
Repair Type: No Action Needed
EVAL Issue:
Crossing Status: Found
UCIP Comments: 09/14/2017 Permit review indicates this 24-inch pipe was authorized as an irrigation and drainage pipe under ABO issued as Permit No. 10171, structure description was updated. Structure type logged as drainage. (DWR UCIP - O. Magana)
FIELD_STRUCT_DESC: *ABANDONED* 24-inch steel dual-purpose irrigation and drainage pipe through the levee, 4.5 feet below the crown. Corrugated metal cutoff wall around the pipe. Pipe has welded steel plate over end on the landside (LS) slope and is not visible on the waterside (WS) slope. (24-inch pipe [HLM 7.23] authorized under Automatic Board Order (ABO) issued as Permit No. 10171, 1974 - Glenn A. Bowsbey). [Additional Reference(s): DWR Levee Log, 2003. USACE Sacramento O&M Manual 109, April 1962, (HLM 7.28)].
FS Date: 3/18/2014 7:07:14 AM

Photo 1 of 3 : UCIP_FA_2021_32303_58782.jpg



Pipe visible under new pipe on LS slope.

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

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	10/01/2021 10/01/2021	David Julian

LM Start	7.24	Rating **	A/W	Issue No.	25 (cont)
LM End	7.24	Issue Type +	Ma	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP LMA Responsibility		38.293741 °	38.293741 °	
			-121.724787 °	-121.724787 °	
DWR ID	20978				

Photo 2 of 3 : UCIP_FA_2021_32303_58781.jpg



Pipe visible under new pipe on LS slope.

LM Start	7.24	Rating **	A/W	Issue No.	25 (cont)
LM End	7.24	Issue Type +	Ma	Location *	

Photo 3 of 3 : UCIP_FA_2021_32303_58780.jpg



Welded steel cap over LS end of pipe.

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

Reclamation District No. 2098 Cache and Haas Slough

Waterway			Bank	Unit Miles
Unit No. 03 Haas Slough			Right	1.94
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			U	
Date of Inspection	3/19/2021 - 3/19/2021		10/1/2021 - 10/1/2021	
DWR Inspector	David Julian		David Julian	
Accompanied By				

Summer & Winter Inspections

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

DWR must be informed on the:

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

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

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

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

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

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	10/01/2021 10/01/2021	David Julian

LM Start	7.19	Rating **	M	Issue No.	6
LM End	7.81	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.293173 °	38.300916 °
				-121.724241 °	-121.728175 °
DWR ID	DWR_RD2098_03_f _ 2021_6				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

Photo 1 of 1 : FA_2021_RD2098_247_6_20211014_00008.jpg



View looking upstream at vegetation on the waterside hinge (Fall 2021).

LM Start	7.19	Rating **	M	Issue No.	5
LM End	7.82	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.293173 °	38.300981 °
				-121.724241 °	-121.728163 °
DWR ID	DWR_RD2098_03_f _ 2021_5				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

Photo 1 of 1 : FA_2021_RD2098_247_5_20211014_00009.jpg



View looking upstream at vegetation on the landside hinge (Fall 2021).

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

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

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	10/01/2021 10/01/2021	David Julian

LM Start	7.24	Rating **	M	Issue No.	10
LM End	7.24	Issue Type +	En	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		38.293741 °	38.293741 °	
			-121.724787 °	-121.724787 °	
DWR ID	24848				
Comment Code					
Inspector Comment					
DS_ID:24848 FS_ID:32564 EP_NO: N/A Repair Type: Non-Urgent EVAL Issue: Crossing Status: Found UCIP Comments: 03/19/2014 Need to verify pipe is properly abandoned as waterside is not visible. Was this filled with concrete or just capped? (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: *ABANDONED* 24-inch steel drainage pipe through the levee, 8 feet below the crown. Corrugated metal cutoff wall around the pipe. Steel plate welded over the landside (LS) end of the pipe. FS Date: 3/18/2014 8:14:00 AM					

No Photos

LM Start	7.33	Rating **	M	Issue No.	7
LM End	7.72	Issue Type +	Ma	Location *	WS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	2018 USACE Erosion Survey		38.294858 °	38.299606 °	
			-121.725433 °	-121.728621 °	
DWR ID					
Comment Code					
Inspector Comment					
2018 Site ID: HAS 7.9 L Status: Eroding 2018 Field Notes: Last observed in 2017. Site History: 2011 - Large vertical erosion pockets and bank slumping. 2017 - POSSIBLY BEING FIXED BY RD; deep cracks along bank and toe, intermittent slump.					

No Photos

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

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

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	10/01/2021 10/01/2021	David Julian

LM Start	7.88	Rating **	M	Issue No.	8
LM End	8.32	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.301883 °	38.306546 °
				-121.728036 °	-121.731545 °
DWR ID	DWR_RD2098_03_f _ 2021_8				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

LM Start	8.05	Rating **	M	Issue No.	9
LM End	8.34	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2018 USACE Erosion Survey			38.304278 °	38.306705 °
				-121.727960 °	-121.732014 °
DWR ID					
Comment Code					
Inspector Comment					
2018 Site ID: HAS 8.4 L					
Status: Eroding					
2018 Field Notes: Last observed in 2017.					
Site History: Horizontal cracks; scour along toe; poorly constructed levee susceptible to erosion.					

No Photos

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

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	10/01/2021 10/01/2021	David Julian

LM Start	8.16	Rating **	A/W	Issue No.	11
LM End	8.16	Issue Type +	Ma	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP LMA Responsibility		38.305462 °	38.305462 °	
			-121.728881 °	-121.728881 °	
DWR ID	20981				

Comment Code

Inspector Comment

DS_ID:20981
FS_ID:51453
EP_NO: 10174
Repair Type: No Action Needed
EVAL Issue:
Crossing Status: Found
UCIP Comments: 12/22/2016 Crossing has been downgraded from Urgent to No Action Needed walkways on both WS and LS have been rebuilt and the WS gate has been upgraded to stainless steel where previous corrodable material was present. (O. Magana - DWR UCIP)03/19/2014 Current walkway to slidegate on WS toe does not provide safe access to operate slidegate. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: 36-inch steel dual-purpose irrigation and drainage pipe through the levee, 26 feet below the crown. Two corrugated metal cutoff walls around the pipe. Walkway to the slide gate on the waterside (WS) end. Combination slide and flap gate on the landside (LS) end. 48-inch corrugated metal pipe (CMP) riser and an adjoining pump on a metal pier at the LS toe. (36-inch pipe [HLM 8.20] authorized under Automatic Board Order (ABO) issued as Permit No. 10174, 1974 - Glen A. Bowsbey). [Additional Reference(s): DWR Levee Log, 2003. USACE Sacramento O&M Manual 109, April 1962, (HLM 8.20)].
FS Date: 12/22/2016

LM Start	8.16	Rating **	A/W	Issue No.	11 (cont)
LM End	8.16	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2021_51453_76858.jpg



Walkway has been re-built, photo 1 of 2.

Photo 2 of 3 : UCIP_FA_2021_51453_76861.jpg



Walkway has been re-built, photo 2 of 2.

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

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	10/01/2021 10/01/2021	David Julian

LM Start	8.16	Rating **	A/W	Issue No.	11 (cont)
LM End	8.16	Issue Type +	Ma	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP LMA Responsibility		38.305462 °	38.305462 °	
			-121.728881 °	-121.728881 °	
DWR ID	20981				

Photo 3 of 3 : UCIP_FA_2021_51453_76859.jpg



View of levee crown at pipe crossing.

LM Start	8.35	Rating **	A/W	Issue No.	12
LM End	8.35	Issue Type +	Ma	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP LMA Responsibility		38.306916 °	38.306916 °	
			-121.731984 °	-121.731984 °	
DWR ID	20962				

Comment Code

Inspector Comment

DS_ID:20962
 FS_ID:32384
 EP_NO: 10174
 Repair Type: No Action Needed
 EVAL Issue:
 Crossing Status: Found
 UCIP Comments:
 FIELD_STRUCT_DESC: 60-inch corrugated metal drainage pipe through the levee, 25.5 feet below the crown. Walkway to the slide gates at both ends of the pipe. (Permit No. 1607, 1951 - R. F. Moore and Lorraine W. Zanetti. This pipe was retained under Automatic Board Order (ABO) issued as Permit No. 10174, 1974 - Glen A. Bowlsbey). [Additional Reference(s): DWR Levee Log, 2003. USACE Sacramento O&M Manual 109, April 1962, (HLM 8.40)].
 FS Date: 3/19/2014

Photo 1 of 2 : UCIP_FA_2021_32384_58883.jpg



Slide gate 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 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	10/01/2021 10/01/2021	David Julian

LM Start	8.35	Rating **	A/W	Issue No.	12 (cont)
LM End	8.35	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			38.306916 °	38.306916 °
				-121.731984 °	-121.731984 °
DWR ID	20962				

Photo 2 of 2 : UCIP_FA_2021_32384_58882.jpg



Walkway with slide gate on WS toe.

LM Start	8.50	Rating **	M	Issue No.	4
LM End	9.07	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.308628 °	38.315222 °
				-121.733495 °	-121.739255 °
DWR ID	DWR_RD2098_03_s_2021_4				
Comment Code					
A2 : Repair the levee slope damaged by livestock and prevent large animal access.					
Inspector Comment					

Photo 1 of 1 : FA_2021_RD2098_247_4_20210830_00001.jpg



View of slope terracing caused by cattle on the landside slope (Spring 2021).

*** 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
Unit Cover Sheet**

Reclamation District No. 2098 Cache and Haas Slough

Waterway			Bank	Unit Miles
Unit No. 04 Back Levee			Left	2.95
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			U	
Date of Inspection	3/19/2021 - 3/19/2021		10/1/2021 - 10/1/2021	
DWR Inspector	David Julian		David Julian	
Accompanied By				

Summer & Winter Inspections

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

DWR must be informed on the:

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

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

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

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

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

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Back Levee	Left	2.95	10/01/2021 10/01/2021	David Julian

LM Start	9.19	Rating **	M	Issue No.	11
LM End	9.76	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.316733 °	38.324861 °
				-121.740076 °	-121.740124 °
DWR ID	DWR_RD2098_04_s_2021_11				
Comment Code					
A2 : Repair the levee slope damaged by livestock and prevent large animal access.					
Inspector Comment					

Photo 1 of 1 : FA_2021_RD2098_248_11_20210830_00003.jpg



View of terracing due to cows on the landside slope (Spring 2021).

LM Start	9.19	Rating **	M	Issue No.	10
LM End	9.76	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.316734 °	38.324861 °
				-121.740075 °	-121.740124 °
DWR ID	DWR_RD2098_04_f _ 2019_10				
Comment Code					
A2 : Repair the levee slope damaged by livestock and prevent large animal access.					
Inspector Comment					

Photo 1 of 1 : FA_2021_RD2098_248_10_20210830_00002.jpg



View looking upstream at depressions in the landside slope due to cows (Fall 2020).

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

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

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Back Levee	Left	2.95	10/01/2021 10/01/2021	David Julian

LM Start	9.44	Rating **	U	Issue No.	9
LM End	9.74	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2018 USACE Erosion Survey			38.320240 °	38.324587 °
				-121.740183 °	-121.740254 °
DWR ID					
Comment Code					
Inspector Comment					
2018 Site ID: HAS 9.7 L					
Status: Critical					
2018 Field Notes: Last observed in 2017.					
Site History: 2011 - Several scallops of erosion. Erosion primarily due to the weight of cattle on the slope. 2016 - Two new large scallop pockets in the middle of the site. 2017 - Upgraded to CRITICAL. Multiple slump on top of old slumping ; slump is into levee prism.					

No Photos

LM Start	9.49	Rating **	M	Issue No.	14	
LM End	9.49	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			38.321032 °	38.321032 °	
				-121.740154 °	-121.740154 °	
DWR ID	20983					
Comment Code						
Inspector Comment						
DS_ID:20983						
FS_ID:32383						
EP_NO: N/A						
Repair Type: Non-Urgent						
EVAL Issue:						
Crossing Status: Indicator Found						
UCIP Comments: 03/19/2014 need to verify status of gaslines in region with PG&E (888) 743-7431 Email: PipelineRequests@pge.com. (W. Wylie - DWR UCIP)						
FIELD_STRUCT_DESC: 4-inch gas line of an unknown material through the levee, 2 feet below the crown. Shutoff valve located 370 feet east of the levee crown. [Additional Reference(s): DWR Levee Log, 2003].						
FS Date: 3/19/2014						

Photo 1 of 2 : UCIP_FA_2021_32383_58881.jpg



Shutoff valve visible 370-feet off LS toe.

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

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Back Levee	Left	2.95	10/01/2021 10/01/2021	David Julian

LM Start	9.49	Rating **	M	Issue No.	14 (cont)
LM End	9.49	Issue Type +	En	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		38.321032 °	38.321032 °	
			-121.740154 °	-121.740154 °	
DWR ID	20983				

Photo 2 of 2 : UCIP_FA_2021_32383_58880.jpg



Shutoff valve visible 370-feet off LS toe.

LM Start	9.86	Rating **	U	Issue No.	8
LM End	10.02	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.326009 °	38.328394 °
				-121.740661 °	-121.740638 °
DWR ID	DWR_RD2098_04_f _ 2021_8				
Comment Code					
MA : Material					
Inspector Comment					
Dredge material on the waterside hinge.					

Photo 1 of 1 : FA_2021_RD2098_248_8_20211014_00022.jpg



View looking upstream at dredge materials on the waterside hinge (Fall 2021).

LM Start	9.88	Rating **	M	Issue No.	12
LM End	11.08	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.326299 °	38.343688 °
				-121.740653 °	-121.740818 °
DWR ID	DWR_RD2098_04_f_2021_12				
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 M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Back Levee	Left	2.95	10/01/2021 10/01/2021	David Julian

LM Start	11.07	Rating **	M	Issue No.	15
LM End	11.07	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.343608 °	38.343608 °
				-121.740836 °	-121.740836 °
DWR ID	20991				

Comment Code

Inspector Comment

DS_ID:20991
FS_ID:32403
EP_NO: 12851
Repair Type: Non-Urgent
EVAL Issue:
Crossing Status: Found
UCIP Comments: 12/22/2016 Met with Mike Hadesty, LMA Superintendent, and Brian Bush, LMA General Manager, to go over the list of pipes in RD2098. Per LMA, suspended pipe with leaks was repaired in the summer of 2016. (O. Magana - DWR UCIP)
03/19/2014 Holes in pipe next to rail car bridge may indicate further deterioration of pipe through levee. Good candidate for video inspection. (W. Wylie - DWR UCIP)
FIELD_STRUCT_DESC: 12-inch steel irrigation pipe through the levee, 2 feet below the crown. Cutoff wall around the pipe at the center of the levee. Siphon breaker on the landside (LS) toe at the canal. 1-inch polyvinyl chloride (PVC) electrical conduit at the same location (Permit No. 12851, 1980 - Bunker Ranch). [Additional Reference(s): DWR Levee Log, 2003].
FS Date: 3/19/2014

LM Start	11.07	Rating **	M	Issue No.	15 (cont)
LM End	11.07	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP_FA_2021_32403_58905.jpg



Pipe and siphon breaker visible on LS at canal crossing.

Photo 2 of 3 : UCIP_FA_2021_32403_58904.jpg



Pump on pier in irrigation canal off 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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Levee Inspection Report By Mile - Fall 2021

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Back Levee	Left	2.95	10/01/2021 10/01/2021	David Julian

LM Start	11.07	Rating **	M	Issue No.	15 (cont)
LM End	11.07	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.343608 °	38.343608 °
				-121.740836 °	-121.740836 °
DWR ID	20991				

A photograph showing a large, red, corrugated metal pipe discharging water into a body of water. The water is splashing and creating white foam as it exits the pipe. The pipe is supported by a concrete structure. In the bottom right corner, there is a yellow timestamp that reads "06/19/2014 09:58".

Holes in pipe next to bridge. PVC electrical conduit shown.

LM Start	11.12	Rating **	M	Issue No.	16
LM End	11.12	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.344349 °	38.344349 °
				-121.740794 °	-121.740794 °
DWR ID	20995				

Comment Code

Inspector Comment

FS Date: 10/2/2018 4:32:00 PM

View of levee crown and slopes through this section of the levee.

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Back Levee	Left	2.95	10/01/2021 10/01/2021	David Julian

LM Start	12.05	Rating **	U	Issue No.	17
LM End	12.05	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.357841 °	38.357841 °
				-121.740396 °	-121.740396 °
DWR ID	20989				

Comment Code

Inspector Comment

DS_ID:20989
FS_ID:53381
EP_NO: 11564
Repair Type: Urgent
EVAL Issue:
Crossing Status: Found
UCIP Comments: 10/2/2018 Same as last inspection; remaining as Urgent and recommend internal pipe inspection (D. Sanoski - DWR UCIP). 12/06/2016 Crossing has been upgraded from Non-Urgent to Urgent due to sections of the wall missing on the LS. Crossing is also opened on both WS and LS. According to Mr. Mike Hardesty, this crossing is not abandoned the crossing is out of service for now. Recommend internal integrity inspection and coordinating with CVFPB to comply with Title 23. (O. Magana - DWR UCIP) 03/19/2014 Pipe appears abandoned and if so should be done so properly. Pipe rusted through at outlet in canal. This may indicate further degradation of pipe within the levee. Good candidate for video inspection. (W. Wylie - DWR UCIP)
FIELD_STRUCT_DESC: 18-inch steel drainage pipe through the levee, 2 feet below the crown. Steel cutoff wall around the pipe at the center of the levee. Siphon breaker on the apex of the pipe located on the landside (LS) shoulder. Pump missing from steel pump pad over a 4-foot by 4-foot concrete sump located on the waterside (WS) toe. (18-inch pipe authorized under Permit No. 11564, 1976 - Reclamation District No. 2068). [Additional Reference(s): DWR Levee Log, 2003].
FS Date: 10/2/2018 4:33:00 PM

LM Start	12.05	Rating **	U	Issue No.	17 (cont)
LM End	12.05	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP_FA_2021_53381_76867.jpg



Overview of levee crown at multiple pipe crossings.

Photo 2 of 3 : UCIP_FA_2021_53381_76872.jpg



View of WS photo taken from levee crown.

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

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Back Levee	Left	2.95	10/01/2021 10/01/2021	David Julian

LM Start	12.05	Rating **	U	Issue No.	17 (cont)
LM End	12.05	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.357841 °	38.357841 °
				-121.740396 °	-121.740396 °
DWR ID	20989				

Photo 3 of 3 : UCIP_FA_2021_53381_76868.jpg



View of WS--pipe crossing is located on the right.

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

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Back Levee	Left	2.95	10/01/2021 10/01/2021	David Julian

LM Start	12.05	Rating **	U	Issue No.	18
LM End	12.05	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.357863 °	38.357863 °
				-121.740394 °	-121.740394 °
DWR ID	20990				

Comment Code

Inspector Comment

DS_ID:20990
FS_ID:53382
EP_NO: 5426-A
Repair Type: Urgent
EVAL Issue:
Crossing Status: Found
UCIP Comments: 10/2/2018 Same as last inspection; remaining as Urgent and recommend internal pipe inspection (D. Sanoski - DWR UCIP).12/06/2016 Crossing is opened on both WS and LS. Concrete box located on the LS has been removed. According to Mr. Mike Hardesty, this crossing is not abandoned the crossing is out of service for now. Recommend internal integrity inspection and coordinating with CVFPB to comply with Title 23. (O. Magana - DWR UCIP)03/19/2014 Pipe appears abandoned and if so should be done so properly. Foundation for concrete distribution box on LS toe at canal has failed. Box has fallen into canal and LS slope has erosion at same location. Pipe open on both ends. (W. Wylie - DWR UCIP)
FIELD_STRUCT_DESC: 1 of 2: 18-inch coated steel drainage pipe through the levee, 3 feet below the crown. Vertical pump missing from steel platform over a 7-foot by 4-foot concrete box located on the waterside (WS) toe. Concrete cattle guard structure, 7 feet long, 15 feet wide, and 4 feet deep, located on the crown around the pipes. Discharge structure is located on the landside (LS) slope. (Permit No. 5426, 1966, and 5426-A, 1967 - Reclamation District No. 2068. Permit recordation indicates one 14-inch pipe and one 18-inch pipe to be installed). [Additional Reference(s): DWR Levee Log, 2003].
FS Date: 10/2/2018 4:51:00 PM

LM Start	12.05	Rating **	U	Issue No.	18 (cont)
LM End	12.05	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP_FA_2021_53382_76875.jpg



Overview of levee crown at multiple pipe crossings.

Photo 2 of 3 : UCIP_FA_2021_53382_76876.jpg



View of LS--damaged concrete distribution box has been removed.

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

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Back Levee	Left	2.95	10/01/2021 10/01/2021	David Julian

LM Start	12.05	Rating **	U	Issue No.	18 (cont)
LM End	12.05	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.357863 °	38.357863 °
				-121.740394 °	-121.740394 °
DWR ID	20990				

Photo 3 of 3 : UCIP_FA_2021_53382_58817.jpg



Concrete distribution box on LS slope has slipped into canal.

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

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Back Levee	Left	2.95	10/01/2021 10/01/2021	David Julian

LM Start	12.05	Rating **	U	Issue No.	19	
LM End	12.05	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			38.357870 °		38.357870 °
				-121.740396 °		-121.740396 °
DWR ID	21013					
Comment Code						
Inspector Comment						
DS_ID:21013 FS_ID:53383 EP_NO: 5426-A Repair Type: Urgent EVAL Issue: Crossing Status: Found UCIP Comments: 10/2/2018 Same as last inspection; remaining as Urgent and recommend internal pipe inspection (D. Sanoski - DWR UCIP).12/06/2016 Crossing is opened on both WS and LS. Concrete box located on the LS has been removed. According to Mr. Mike Hardesty, this crossing is not abandoned the crossing is out of service for now. Recommend internal integrity inspection and coordinating with CVFPB to comply with Title 23. (O. Magana - DWR UCIP)03/19/2014 Pipe appears abandoned and if so should be done so properly. Foundation for concrete distribution box on LS toe at canal has failed. Box has fallen into canal and LS slope has erosion at same location. Pipe open on both ends. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: 2 of 2: 18-inch coated steel drainage pipe through the levee, 3 feet below the crown. Vertical pumps missing from steel pad over a 7-foot by 4-foot concrete sump located on the waterside (WS) toe. Concrete cattle guard structure, 7 feet long, 15 feet wide, and 4 feet deep, located on the crown around the pipes. Discharge structure is located on the landside (LS) slope. (Permit No. 5426, 1966, and 5426-A, 1967 - Reclamation District No. 2068. Permit recordation indicates one 14-inch pipe and one 18-inch pipe to be installed). [Additional Reference(s): DWR Levee Log, 2003]. FS Date: 10/2/2018 4:54:00 PM						

Photo 1 of 3 : UCIP_FA_2021_53383_76883.jpg



Overview of levee crown at multiple crossings.

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

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Back Levee	Left	2.95	10/01/2021 10/01/2021	David Julian

LM Start	12.05	Rating **	U	Issue No.	19 (cont)
LM End	12.05	Issue Type +	En	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		38.357870 °	38.357870 °	
			-121.740396 °	-121.740396 °	
DWR ID	21013				

Photo 2 of 3 : UCIP_FA_2021_53383_76884.jpg



View of LS--damage distribution box noted in last inspection has been removed.

LM Start	12.05	Rating **	U	Issue No.	19 (cont)
LM End	12.05	Issue Type +	En	Location *	

Photo 3 of 3 : UCIP_FA_2021_53383_76885.jpg



Inside view of pipe from LS.

LM Start	12.06	Rating **	M	Issue No.	13
LM End	12.06	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.357988 °	38.357988 °
				-121.740384 °	-121.740384 °
DWR ID	DWR_RD2098_04_f _ 2021_13				
Comment Code					
PR : Prunings					
Inspector Comment					
Remove cactail trimmings from the landside slope.					

Photo 1 of 1 : FA_2021_RD2098_248_13_20211014_00023.jpg



View of cattails on the landside hinge (Fall 2021).

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

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Back Levee	Left	2.95	10/01/2021 10/01/2021	David Julian

LM Start	12.07	Rating **	M	Issue No.	20
LM End	12.07	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.358110 °	38.358110 °
				-121.740381 °	-121.740381 °
DWR ID	24845				
Comment Code					
Inspector Comment					
DS_ID:24845 FS_ID:32566 EP_NO: N/A Repair Type: Non-Urgent EVAL Issue: Crossing Status: Found UCIP Comments: 03/19/2014 Need to verify status with gas company and install signs. No permit identified for crossing, though it may be connected to a permitted line installed in RD 2068 under Permit No. 13490. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: 6-inch coated steel gas line through the levee, 3 feet below the crown. Signs on the east side of the levee. Pipe visible on the downstream side of the roadway bridge. FS Date: 3/19/2014					

Photo 1 of 3 : UCIP_FA_2021_32566_59110.jpg



Pipe visible on South side of Bridge at Swan Road.

LM Start	12.07	Rating **	M	Issue No.	20 (cont)
LM End	12.07	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP_FA_2021_32566_59109.jpg



Pipe visible on South side of Bridge at Swan Road.

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

Levee Inspection Report By Mile - Fall 2021

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Back Levee	Left	2.95	10/01/2021 10/01/2021	David Julian

LM Start	12.07	Rating **	M	Issue No.	20 (cont)
LM End	12.07	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.358110 °	38.358110 °
				-121.740381 °	-121.740381 °
DWR ID	24845				

Photo 3 of 3 : UCIP_FA_2021_32566_59108.jpg



Sign off LS toe on East side of canal.

* 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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