

**Flood Control Project Maintenance
Levee Inspections
Fall 2022 Levee Maintenance Deficiency Summary Report**

Sacramento River Basin

RD0827	Overall LMA Rating	Total LMA Miles							
Reclamation District No. 0827 Elkhorn	A	4.12							
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									
Encroachments	0.01		0.01	0.24%	0.05	0.17			
Animal Control	0.01		0.01	0.24%					
Supplemental									
DWR UCIP Field Study					0.02				
LMA Totals:	0.02	0.00	0.02	0.49%	0.07	0.17	0.00	0.00	
Unit No. 01 Sacramento River RB	Overall Unit Rating	Total Unit Miles							
RD0827	A	1.34							
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									
Encroachments					0.05	0.17			
Unit Totals:	0.00	0.00	0.00	0.00%	0.05	0.17	0.00	0.00	
Unit No. 02 Yolo Bypass LB	Overall Unit Rating	Total Unit Miles							
RD0827	A	2.78							
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									
Encroachments	0.01		0.01	0.36%					
Animal Control	0.01		0.01	0.36%					
Supplemental									
DWR UCIP Field Study					0.02				
Unit Totals:	0.02	0.00	0.02	0.72%	0.02	0.00	0.00	0.00	

**Flood Control Project Maintenance
Levee Inspections
LMA District Cover Sheet**

Reclamation District No. 0827 Elkhorn

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

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

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

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

Comments

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

Reclamation District No. 0827 Elkhorn

Waterway			Bank	Unit Miles
Unit No. 01 Sacramento River			Right	1.34
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			A	
Date of Inspection	3/17/2022 - 3/17/2022		11/1/2022 - 11/1/2022	
DWR Inspector	Zach Jojola		Zach Jojola	
Accompanied By			Billy Mattos RD537	

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 2022

Reclamation District No. 0827 Elkhorn

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	1.34	11/01/2022 11/01/2022	Zach Jojola

LM Start		Rating **	A	Issue No.	5
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Operations & Maintenance Manuals				°
					°
DWR ID	DWR_RD0827_01_s_2013_5				
Comment Code					
OM : O&M Manuals					
Inspector Comment					
RD 827 has a copy of the levee manuals.					

No Photos

LM Start		Rating **	A	Issue No.	7
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Emergency Supplies & Equipment				°
					°
DWR ID	DWR_RD0827_01_f_2020_7				
Comment Code					
ES : Emergency Supplies & Equipment					
Inspector Comment					
RD 827 shares a maintained stockpile of Flood Response Material with RD 785.					

No Photos

LM Start		Rating **	A	Issue No.	9	
LM End		Issue Type +	Ma	Location *	N/A	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Flood Preparedness & Training				°	
					°	
DWR ID	DWR_RD0827_01_s_2020_9					
Comment Code						
FP : Flood Preparedness & Training						
Inspector Comment						
RD 827 works jointly with RD 785 on Flood Preparedness and Training.						

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Reclamation District No. 0827 Elkhorn

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2022

Reclamation District No. 0827 Elkhorn

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	1.34	11/01/2022 11/01/2022	Zach Jojola

LM Start	0.30	Rating **	M	Issue No.	11
LM End	0.30	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.672157 °	38.672157 °
				-121.626596 °	-121.626596 °
DWR ID	DWR_RD0827_01_f_2022_11				
Comment Code					
MA : Material					
Inspector Comment					
Railroad ties on the waterside shoulder.					

Photo 1 of 1 : FA_2022_RD0827_187_11_20221102_00009.jpg



View of railroad ties on the waterside shoulder. Fall 2022.

LM Start	0.34	Rating **	C	Issue No.	21
LM End	0.34	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Rills			38.671773 °	38.671773 °
				-121.626077 °	-121.626077 °
DWR ID	DWR_RD0827_01_f_2019_21				
Comment Code					
E5 : Schedule repair of rills prior to the next inspection.					
Inspector Comment					

No Photos

LM Start	0.61	Rating **	A/W	Issue No.	22
LM End	0.92	Issue Type +	Ob	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.668873 °	38.665750 °
				-121.622513 °	-121.618523 °
DWR ID	DWR_RD0827_01_s_2012_22				
Comment Code					
V5 : Environmental Requirements.					
Inspector Comment					

Photo 1 of 1 : FA_2022_RD0827_187_22_20220921_00005.jpg



Revegetation site spring 2012.

* 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 2022

Reclamation District No. 0827 Elkhorn

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	1.34	11/01/2022 11/01/2022	Zach Jojola

LM Start	1.02	Rating **	A/W	Issue No.	18
LM End	1.02	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Rills			38.664690 °	38.664690 °
				-121.617266 °	-121.617266 °
DWR ID	DWR_RD0827_01_f_2018_18				
Comment Code					
E5 : Schedule repair of rills prior to the next inspection.					
Inspector Comment					
Minor runoff on the waterside slope. Recommend monitoring.					

No Photos

LM Start	1.09	Rating **	A/W	Issue No.	17
LM End	1.09	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Rills			38.663946 °	38.663946 °
				-121.616453 °	-121.616453 °
DWR ID	DWR_RD0827_01_s_2019_17				
Comment Code					
E5 : Schedule repair of rills prior to the next inspection.					
Inspector Comment					
Previous runoff site that has filled in with material. Recommend monitoring.					

No Photos

LM Start	1.30	Rating **	C	Issue No.	3
LM End	1.30	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			38.661451 °	38.661451 °
				-121.613987 °	-121.613987 °
DWR ID	DWR_RD0827_01_s_2022_3				
Comment Code					
C2 : Repair depressions or ruts in the crown or slope.					
Inspector Comment					

No Photos

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

Reclamation District No. 0827 Elkhorn

Waterway			Bank	Unit Miles
Unit No. 02 Yolo Bypass			Left	2.78
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			A	
Date of Inspection	3/16/2022 - 3/16/2022		11/1/2022 - 11/1/2022	
DWR Inspector	Zach Jojola		Zach Jojola	
Accompanied By			Billy Mattos RD537	

Summer & Winter Inspections

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- a) completion of the inspection
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- c) corrections to deficiencies noted in this report

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2022

Reclamation District No. 0827 Elkhorn

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	2.78	11/01/2022 11/01/2022	Zach Jojola

LM Start	0.10	Rating **	M	Issue No.	5
LM End	0.10	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.675397 °	38.675397 °
				-121.643025 °	-121.643025 °
DWR ID	DWR_RD0827_02_s _ 2021_5				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					
Active rodent holes on the landside slope.					

Photo 1 of 1 : FA_2022_RD0827_188_5_20220921_00001.jpg



View of rodent holes on the landside slope. Spring 2021.

LM Start	2.62	Rating **	M	Issue No.	6
LM End	2.62	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.643375 °	38.643375 °
				-121.621776 °	-121.621776 °
DWR ID	DWR_RD0827_02_s _ 2018_6				
Comment Code					
DE : Debris					
Inspector Comment					
Fridge 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 2022

Reclamation District No. 0827 Elkhorn

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	2.78	11/01/2022 11/01/2022	Zach Jojola

LM Start	2.72	Rating **	A/W	Issue No.	13
LM End	2.73	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.642139 °	38.642028 °
				-121.620750 °	-121.620667 °
DWR ID	RD 827-01				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Sloughing on the landside slope near pump. Movement has stabilized and the LMA will be constructing a setback levee within the next few years. The current levee will be degraded. Recommend monitoring.					
Site ID No:199					
Site Designation:RD 827-01					

Photo 1 of 1 : FA_2022_RD0827_188_13_20220921_00002.jpg



View of sloughing 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
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2022

Reclamation District No. 0827 Elkhorn

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	2.78	11/01/2022 11/01/2022	Zach Jojola

LM Start	2.73	Rating **	M	Issue No.	14	
LM End	2.73	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			38.641922 °	38.641922 °	
				-121.620884 °	-121.620884 °	
DWR ID	21151					
Comment Code						
Inspector Comment						
DS_ID:21151 FS_ID:74199 EP_NO: 3277 Repair Type: Non-Urgent EVAL Issue: 10, Unauthorized Modification or Non-Compliant Permit Crossing Status: Found UCIP Comments: 03/17/2022 Record remains Non-Urgent. Previous comments suggest that the crossing has been removed and replaced under maintenance in 2008. Unable to find a permit for modification. Irrigation ditch on landside causing erosion of landside ramp. (O.Yakimov - DWR UCIP) 03/18/2014 Crossing appears to have been removed and replaced under maintenance back in 2008. No permit has been found--need to contact owner to obtain additional information about replacement. Landward slope sloughing--does not appear to be associated with crossing. Landward slope is being monitored by LMA. (O.Magana - DWR UCIP) FIELD_STRUCT_DESC: 18-inch (not 20-inch as noted in desk study) steel drainage pipe through the levee, 4 feet below the crown. Cutoff wall around pipe at center of levee. Siphon breaker on apex of pipe at waterside (WS) shoulder. Pump on pipe structure in drainage ditch at landside (LS) toe. Rock revetment on WS slope. (20-inch drainage pipe authorized under Permit No. 3277, 1960-Reclamation District No. 827; no permit found authorizing the 18-inch pipe) [Additional Reference(s): DWR Levee Logs, 2005] FS Date: 3/17/2022 11:22:36 AM						

LM Start	2.73	Rating **	M	Issue No.	14 (cont)
LM End	2.73	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP_FA_2022_74199_110777.jpg



Land-Side: View of levee slope looking from crown. Pump on piled platform at levee toe

Photo 2 of 3 : UCIP_FA_2022_74199_110776.jpg



Water-Side: View of levee slope looking from crown. Siphon breaker on pipe at levee 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 2022

Reclamation District No. 0827 Elkhorn

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	2.78	11/01/2022 11/01/2022	Zach Jojola

LM Start	2.73	Rating **	M	Issue No.	14 (cont)
LM End	2.73	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.641922 °	38.641922 °
				-121.620884 °	-121.620884 °
DWR ID	21151				

Photo 3 of 3 : UCIP_FA_2022_74199_110779.jpg



Land-Side: Landside ramp erosion caused by irrigation ditch

LM Start	2.73	Rating **	A/W	Issue No.	7
LM End	2.73	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Cracking			38.641894 °	38.641894 °
				-121.620868 °	-121.620868 °
DWR ID	DWR_RD0827_02_f_2022_7				
Comment Code					
CR1 : Monitor and have inspected by geotechnical engineer.					
Inspector Comment					
Cracking on the waterside shoulder. Recommend monitoring.					

Photo 1 of 1 : FA_2022_RD0827_188_7_20221102_00003.jpg



View of crack on the waterside shoulder. Fall 2022.

* 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 2022

Reclamation District No. 0827 Elkhorn

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	2.78	11/01/2022 11/01/2022	Zach Jojola

LM Start	2.75	Rating **	M	Issue No.	15
LM End	2.75	Issue Type +	En	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		38.641633 °	38.641633 °	
			-121.620725 °	-121.620725 °	
DWR ID	21169				

Comment Code

Inspector Comment

DS_ID:21169
FS_ID:74200
EP_NO: 5611
Repair Type: Non-Urgent
EVAL Issue: 10, Unauthorized Modification or Non-Compliant Permit
Crossing Status: Found
UCIP Comments: 03/17/2022 Record remains Non-Urgent. Piles of old pumping platform observed in irrigation canal on landside. New piled pumping platform and pump installed in the canal. Pipe makes a turn from pump to landside levee slope. Unable to find a permit for modification. No permit has been identified authorizing installation of pipe. (O.Yakimov - DWR UCIP)
03/18/2014 Crossing appears to have been removed and replaced under maintenance back in 2008. No permit has been found--need to contact owner to obtain additional information about replacement. (O.Magana - DWR UCIP)
FIELD_STRUCT_DESC: [RD No. 827 Pumping Plant] 22-inch (not 24-inch as mentioned in desk study) steel drainage pipe through the levee, 8 feet below the crown. Corrugated metal cutoff wall around pipe at center of levee. Siphon breaker on waterside (WS) slope. Flap gate on WS end. Pipe is exposed along WS slope. (portion of pipe was removed and replaced, from landside to waterside shoulder, under Permit No. 5611 (1968)). [Additional Reference(s): DWR Levee Logs, 2005. USACE Sacramento O&M Manual Unit No. 122 Part No. 1, August 1955, (Station 3+75)]
FS Date: 3/17/2022 11:29:39 AM

LM Start	2.75	Rating **	M	Issue No.	15 (cont)
LM End	2.75	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP_FA_2022_74200_110786.jpg



Water-Side: View of levee slope looking from crown. Siphon breaker on pipe at levee shoulder

Photo 2 of 3 : UCIP_FA_2022_74200_110784.jpg



Land-Side: New pump on piled platform in irrigation canal

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2022

Reclamation District No. 0827 Elkhorn

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	2.78	11/01/2022 11/01/2022	Zach Jojola

LM Start	2.75	Rating **	M	Issue No.	15 (cont)
LM End	2.75	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.641633 °	38.641633 °
				-121.620725 °	-121.620725 °
DWR ID	21169				

Photo 3 of 3 : UCIP_FA_2022_74200_110785.jpg



Land-Side: View of levee slope looking from crown. Remnants of pumping platform in irrigation canal

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