

**Flood Control Project Maintenance  
Levee Inspections**

**Fall 2019 Levee Maintenance Deficiency Summary Report**

**Overall LMA & Unit Ratings, including USACE Erosion Survey**

**Sacramento River Basin**

<b>RD0827</b>	Overall LMA Rating	Total LMA Miles						
<b>Reclamation District No. 0827 Elkhorn</b>	<b>M</b>	<b>4.12</b>						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Trim / Thin Trees	0.01		0.01	0.24%				
Encroachments	0.07		0.07	1.70%	0.48	0.01		
Slope Stability		0.07	0.28	6.79%				
Erosion / Bank Caving	0.04		0.04	0.97%				
Crown Surface / Depressions / Rutting	0.01		0.01	0.24%				
<i>Supplemental</i>								
DRAFT DWR UCIP Field Study					0.06			
2017 Storm Damage	0.01		0.01	0.24%				
<i>LMA Totals:</i>	0.14	0.07	0.42	10.19%	0.54	0.01	0.00	0.00

<b>Unit No. 01 Sacramento River RB</b>	Overall Unit Rating	Total Unit Miles						
<b>RD0827</b>	<b>A</b>	<b>1.34</b>						
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>								
Encroachments	0.06		0.06	4.47%	0.47	0.01		
Erosion / Bank Caving	0.04		0.04	2.98%				
<i>Supplemental</i>								
DRAFT DWR UCIP Field Study					0.02			
<i>Unit Totals:</i>	0.10	0.00	0.10	7.46%	0.49	0.01	0.00	0.00

<b>Unit No. 02 Yolo Bypass LB</b>	Overall Unit Rating	Total Unit Miles						
<b>RD0827</b>	<b>M</b>	<b>2.78</b>						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Trim / Thin Trees	0.01		0.01	0.36%				
Encroachments	0.01		0.01	0.36%	0.01			
Slope Stability		0.07	0.28	10.06%				
Crown Surface / Depressions / Rutting	0.01		0.01	0.36%				
<i>Supplemental</i>								
DRAFT DWR UCIP Field Study					0.04			
2017 Storm Damage	0.01		0.01	0.36%				
<i>Unit Totals:</i>	0.04	0.07	0.32	11.50%	0.05	0.00	0.00	0.00

**Flood Control Project Maintenance  
Levee Inspections**  
**LMA District Cover Sheet**  
**Fall 2019 Levee Inspection Results**

**Reclamation District No. 0827 Elkhorn**

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

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

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

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

Comments


**Flood Control Project Maintenance  
Levee Inspections**

**Unit Cover Sheet**

**Fall 2019 Levee Inspection Results**

**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)			<b>A</b>	
Date of Inspection	3/7/2019 - 3/7/2019		10/17/2019 - 10/17/2019	
DWR Inspector	Zach Jojola		Zach Jojola	
Accompanied By	Makar Sokol DWR		Dan Ramos RD 827	

**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 2019**

**Reclamation District No. 0827 Elkhorn**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	1.34	10/17/2019 10/17/2019	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					
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_s_2013_7				
Comment Code					
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_f_2014_9				
Comment Code					
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                      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 2019**

**Reclamation District No. 0827 Elkhorn**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	1.34	10/17/2019 10/17/2019	Zach Jojola

LM Start	<b>0.00</b>	Rating **	M	Issue No.	<b>25</b>
LM End	<b>0.00</b>	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP Field Study			38.661210 °	38.661210 °
				-121.613030 °	-121.613030 °
DWR ID	21163				
Comment Code					
Inspector Comment					
DS_ID:21163 FS_ID:39703 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: No pipe was found only what appears to be an abandoned pump house on landward side. Need to contact owner to determine status of crossing. FIELD_STRUCT_DESC: 30-inch steel pipe through the levee, 9.1 feet below the crown. Pump in pump house on landward side not waterward side as mentioned in desk study. (USACE-1955). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (RM 69.50). FS Date: 3/18/2014					

No Photos

LM Start	<b>0.03</b>	Rating **	U	Issue No.	<b>20</b>
LM End	<b>0.03</b>	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.674912 °	38.674912 °
				-121.630133 °	-121.630133 °
DWR ID	DWR_RD0827_01_f_2019_20				
Comment Code					
BU : Building					
Inspector Comment					
Sacramento River Train has 4 shipping containers and a construction trailer on the waterside shoulder.					

Photo 1 of 1 : FA\_2019\_RD0827\_187\_20\_20191021\_00019.jpg



View of the structures on the waterside shoulder. Fall 2019.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2019**

**Reclamation District No. 0827 Elkhorn**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	1.34	10/17/2019 10/17/2019	Zach Jojola

LM Start	0.03	Rating **	M	Issue No.	16
LM End	0.15	Issue Type +	En	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.674881 °	38.673668 °
				-121.630109 °	-121.628490 °
DWR ID	DWR_RD0827_01_f_2017_16				
Comment Code					
FE : Fence					
Inspector Comment					
Fence installed by adjacent tourism company. Submitted a FIR to the CVFPB.					

Photo 1 of 1 : FA\_2019\_RD0827\_187\_16\_20190829\_00012.jpg



View of fence on crown. Fall 2017.

LM Start	0.04	Rating **	C	Issue No.	6
LM End	0.04	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.674833 °	38.674833 °
				-121.630039 °	-121.630039 °
DWR ID	DWR_RD0827_01_s_2018_6				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Small rills beginning to form on waterside slope. Recommend monitoring.					

No Photos

LM Start	0.14	Rating **	M	Issue No.	10
LM End	0.14	Issue Type +	En	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.673767 °	38.673767 °
				-121.628593 °	-121.628593 °
DWR ID	DWR_RD0827_01_f_2018_10				
Comment Code					
ST : Stairway					
Inspector Comment					
Railroad has put steps on the crown for the tourist train from the West City of Sac water plant. Stairs are not permitted and was placed Spring 2016. The railroad has added a wheelchair access ramp. Subitted a FIR to the CVFPB.					

Photo 1 of 2 : FA\_2019\_RD0827\_187\_10\_20190829\_00005.jpg



View of the existing stairs and new ramp. Spring 2018.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> 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 2019**

**Reclamation District No. 0827 Elkhorn**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	1.34	10/17/2019 10/17/2019	Zach Jojola

LM Start	0.14	Rating **	M	Issue No.	10 (cont)	
LM End	0.14	Issue Type +	En	Location *	CR	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start	End	
Item	Encroachments			38.673767 °	38.673767 °	
				-121.628593 °	-121.628593 °	
DWR ID	DWR_RD0827_01_f_2018_10					
Comment Code						
ST : Stairway						
Inspector Comment						
Railroad has put steps on the crown for the tourist train from the West City of Sac water plant. Stairs are not permitted and was placed Spring 2016. The railroad has added a wheelchair access ramp. Subitted a FIR to the CVFPB.						

Photo 2 of 2 : FA\_2019\_RD0827\_187\_10\_20190829\_00006.jpg



View of the stairs on the crown of the levee looking downstream. Spring 2016.

LM Start	0.24	Rating **	M	Issue No.	12
LM End	0.58	Issue Type +	En	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.672749 °	38.669200 °
				-121.627333 °	-121.622851 °
DWR ID	DWR_RD0827_01_s_2016_12				
Comment Code					
MA : Material					
Inspector Comment					
RR rails and ties on the levee crown.					

Photo 1 of 2 : FA\_2019\_RD0827\_187\_12\_20190829\_00007.jpg



View of railroad ties on the crown. Fall 2018.

LM Start	<b>0.24</b>	Rating **	M	Issue No.	<b>12 (cont)</b>
LM End	<b>0.58</b>	Issue Type +	En	Location *	CR

Photo 2 of 2 : FA\_2019\_RD0827\_187\_12\_20190829\_00008.jpg



View of the rails on the crown of the levee looking downstream. Spring 2016.

**\* 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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**Levee Inspection Report By Mile - Fall 2019**

**Reclamation District No. 0827 Elkhorn**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	1.34	10/17/2019 10/17/2019	Zach Jojola

LM Start	0.34	Rating **	M	Issue No.	21
LM End	0.34	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.671773 °	38.671773 °
				-121.626077 °	-121.626077 °
DWR ID	DWR_RD0827_01_f_2019_21				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Runoff erosion on the waterside slope near hinge point.					

Photo 1 of 1 : FA\_2019\_RD0827\_187\_21\_20191021\_00020.jpg



View of the erosion on the waterside slope. Fall 2019.

LM Start	0.45	Rating **	M	Issue No.	8
LM End	0.45	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.670638 °	38.670638 °
				-121.624652 °	-121.624652 °
DWR ID	DWR_RD0827_01_s_2018_8				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Fallen tree on the waterside slope.					

No Photos

LM Start	0.51	Rating **	M	Issue No.	13
LM End	0.51	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.669929 °	38.669929 °
				-121.623776 °	-121.623776 °
DWR ID	DWR_RD0827_01_s_2016_13				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Rills caused by rain.					

Photo 1 of 2 : FA\_2019\_RD0827\_187\_13\_20190829\_00009.jpg



View of the erosion on the landward side of the levee looking downstream. Spring 2016.

**\* 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 2019**

**Reclamation District No. 0827 Elkhorn**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	1.34	10/17/2019 10/17/2019	Zach Jojola

LM Start	0.51	Rating **	M	Issue No.	13 (cont)	
LM End	0.51	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Erosion / Bank Caving			38.669929 °		38.669929 °
				-121.623776 °		-121.623776 °
DWR ID	DWR_RD0827_01_s_2016_13					
Comment Code						
E2 : Schedule repair of erosion site prior to the next inspection.						
Inspector Comment						
Rills caused by rain.						

Photo 2 of 2 : FA\_2019\_RD0827\_187\_13\_20190829\_00010.jpg



View of runoff erosion site. LS slope. Fall 2016.

LM Start	0.61	Rating **	A/W	Issue No.	22
LM End	0.92	Issue Type +	Ma	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					
V8 : Environmental Requirements.					
Inspector Comment					

Photo 1 of 2 : FA\_2019\_RD0827\_187\_22\_20190829\_00014.jpg



Revegetation site spring 2012.

LM Start	<b>0.61</b>	Rating **	A/W	Issue No.	<b>22 (cont)</b>
LM End	<b>0.92</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA\_2019\_RD0827\_187\_22\_20190829\_00015.jpg



View of the revegetation site on the waterward side of the levee looking downstream. Fall 2015.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> 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 2019**

**Reclamation District No. 0827 Elkhorn**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	1.34	10/17/2019 10/17/2019	Zach Jojola

LM Start	0.73	Rating **	M	Issue No.	26	
LM End	0.73	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP Field Study			38.667731 °	38.667731 °	
				-121.620992 °	-121.620992 °	
DWR ID	21147					
Comment Code						
Inspector Comment						
DS_ID:21147 FS_ID:38983 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Need to contact owner to obtain additional information for this crossing. This crossing does not match original description listed in desk study. Need to coordinate with owner to obtain permit number authorizing modification. FIELD_STRUCT_DESC: 14-inch (not 16-inch as listed in desk study) pipe through the levee, 10.3 feet below the crown. 10-inch bypass pipe on waterside (WS). Siphon breaker on landside (LS) (not WS) shoulder. Pump on platform (not mounted on 48-inch concrete pipe as described in desk study) on WS bank. Metal (not wooden) walkway to the pump. 3/4-inch conduit through levee at unknown depth. [Additional Reference(s): DWR Levee Logs, 2005] FS Date: 3/18/2014						

LM Start	<b>0.73</b>	Rating **	M	Issue No.	<b>26 (cont)</b>
LM End	<b>0.73</b>	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP\_FA\_2019\_38983\_59737.jpg



Platform for pump located on waterward side.

Photo 2 of 3 : UCIP\_FA\_2019\_38983\_59736.jpg



Pipe visible on waterward side.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2019**

**Reclamation District No. 0827 Elkhorn**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	1.34	10/17/2019 10/17/2019	Zach Jojola

LM Start	0.73	Rating **	M	Issue No.	26 (cont)	
LM End	0.73	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP Field Study			38.667731 °	38.667731 °	
				-121.620992 °	-121.620992 °	
DWR ID	21147					
Comment Code						
Inspector Comment						
DS_ID:21147 FS_ID:38983 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Need to contact owner to obtain additional information for this crossing. This crossing does not match original description listed in desk study. Need to coordinate with owner to obtain permit number authorizing modification. FIELD_STRUCT_DESC: 14-inch (not 16-inch as listed in desk study) pipe through the levee, 10.3 feet below the crown. 10-inch bypass pipe on waterside (WS). Siphon breaker on landside (LS) (not WS) shoulder. Pump on platform (not mounted on 48-inch concrete pipe as described in desk study) on WS bank. Metal (not wooden) walkway to the pump. 3/4-inch conduit through levee at unknown depth. [Additional Reference(s): DWR Levee Logs, 2005] FS Date: 3/18/2014						

Photo 3 of 3 : UCIP\_FA\_2019\_38983\_59735.jpg



Slant pump located on waterward side.

LM Start	0.98	Rating **	M	Issue No.	23
LM End	0.98	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.665146 °	38.665146 °
				-121.617791 °	-121.617791 °
DWR ID	DWR_RD0827_01_f_2019_23				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Fallen tree on the wateside slope.					

No Photos

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

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	1.34	10/17/2019 10/17/2019	Zach Jojola

LM Start	1.00	Rating **	M	Issue No.	15
LM End	1.01	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.664920 °	38.664720 °
				-121.617557 °	-121.617318 °
DWR ID	DWR_RD0827_01_s_2017_15				
Comment Code					
PR : Prunings					
Inspector Comment					
Prunings and fallen tree limbs on waterside levee slope.					

No Photos

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 / Bank Caving			38.664690 °	38.664690 °
				-121.617266 °	-121.617266 °
DWR ID	DWR_RD0827_01_f_2018_18				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Minor runoff on the waterside slope. Recommend monitoring.					

No Photos

LM Start	1.09	Rating **	M	Issue No.	17
LM End	1.09	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.663946 °	38.663946 °
				-121.616453 °	-121.616453 °
DWR ID	DWR_RD0827_01_s_2019_17				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Runoff site through rodent holes.					

Photo 1 of 1 : FA\_2019\_RD0827\_187\_17\_20190829\_00013.jpg



View of erosion on the waterside slope. Spring 2019.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2019**

**Reclamation District No. 0827 Elkhorn**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	1.34	10/17/2019 10/17/2019	Zach Jojola

LM Start	1.12	Rating **	M	Issue No.	19
LM End	1.12	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.663572 °	38.663572 °
				-121.616087 °	-121.616087 °
DWR ID	DWR_RD0827_01_s_2019_19				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Fallen tree on waterside slope.					

No Photos

LM Start	1.12	Rating **	M	Issue No.	3
LM End	1.12	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.663542 °	38.663542 °
				-121.616056 °	-121.616056 °
DWR ID	DWR_RD0827_01_f_2016_3				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Erosion on the crown and waterside slope from runoff.					

Photo 1 of 3 : FA\_2019\_RD0827\_187\_3\_20190829\_00001.jpg



View of erosion on waterside levee slope. Spring 2017.

LM Start	<b>1.12</b>	Rating **	M	Issue No.	<b>3 (cont)</b>
LM End	<b>1.12</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : FA\_2019\_RD0827\_187\_3\_20190829\_00002.jpg



Another view of erosion on levee slope. A hole on the waterside slope has widened due to runoff. Spring 2017.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> 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 2019**

**Reclamation District No. 0827 Elkhorn**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	1.34	10/17/2019 10/17/2019	Zach Jojola

LM Start	1.12	Rating **	M	Issue No.	3 (cont)	
LM End	1.12	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Erosion / Bank Caving			38.663542 °		38.663542 °
				-121.616056 °		-121.616056 °
DWR ID	DWR_RD0827_01_f_2016_3					
Comment Code						
E2 : Schedule repair of erosion site prior to the next inspection.						
Inspector Comment						
Erosion on the crown and waterside slope from runoff.						

Photo 3 of 3 : FA\_2019\_RD0827\_187\_3\_20190829\_00003.jpg



View of erosion on crown continuing to WS slope. Fall 2016.

LM Start	1.14	Rating **	A/W	Issue No.	14
LM End	1.14	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.663377 °	38.663377 °
				-121.615895 °	-121.615895 °
DWR ID	DWR_RD0827_01_s_2017_14				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Minor erosion on waterside slope. Recommend monitoring					

Photo 1 of 1 : FA\_2019\_RD0827\_187\_14\_20190829\_00011.jpg



View of erosion on waterside levee slope. Spring 2017.

LM Start	1.16	Rating **	A/W	Issue No.	24
LM End	1.16	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.663054 °	38.663054 °
				-121.615561 °	-121.615561 °
DWR ID	DWR_RD0827_01_f_2019_24				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Runoff on the waterside berm. Recommend monitoring.					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2019**

**Reclamation District No. 0827 Elkhorn**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	1.34	10/17/2019 10/17/2019	Zach Jojola

LM Start	<b>1.21</b>	Rating **	M	Issue No.	<b>11</b>
LM End	<b>1.21</b>	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Encroachments		38.662546°	38.662546°	
			-121.615083°	-121.615083°	
DWR ID	DWR_RD0827_01_s_2017_11				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Fallen tree limbs on waterside levee slope.					

No Photos

LM Start	<b>1.30</b>	Rating **	M	Issue No.	<b>4</b>
LM End	<b>1.30</b>	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Encroachments		38.661485°	38.661485°	
			-121.614006°	-121.614006°	
DWR ID	DWR_RD0827_01_s_2017_4				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Fallen tree limbs on waterside levee 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

**Flood Control Project Maintenance  
Levee Inspections**

**Unit Cover Sheet**

**Fall 2019 Levee Inspection Results**

**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)			<b>M</b>	
Date of Inspection	3/5/2019 - 3/5/2019		10/17/2019 - 10/17/2019	
DWR Inspector	Zach Jojola		Zach Jojola	
Accompanied By	Alberto De Leon DWR		Dan Ramos RD 827	

**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 2019**

**Reclamation District No. 0827 Elkhorn**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	2.78	10/17/2019 10/17/2019	Zach Jojola

LM Start	0.09	Rating **	M	Issue No.	11
LM End	0.09	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.675537°	38.675537°
				-121.643087°	-121.643087°
DWR ID	DWR_RD0827_02_f_2019_11				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

No Photos

LM Start	0.15	Rating **	C	Issue No.	10	
LM End	0.16	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	2017 Storm Damage			38.674778 °	38.674583 °	
				-121.642806 °	-121.642722 °	
DWR ID	RD 827-02					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:						
Site ID No:200						
Site Designation:RD 827-02						
Repair Type: Erosion						
Rating:Area of Concern						
Field Date:6/6/2017						
Notes: no damage visible, ws armored with riprap						

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2019**

**Reclamation District No. 0827 Elkhorn**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	2.78	10/17/2019 10/17/2019	Zach Jojola

LM Start	<b>1.00</b>	Rating **	M	Issue No.	<b>15</b>
LM End	<b>1.00</b>	Issue Type +	En	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DRAFT DWR UCIP Field Study		38.663485 °	38.663485 °	
			-121.637021 °	-121.637021 °	

DWR ID	24844
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Comment Code	
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Inspector Comment	
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DS_ID:24844
FS_ID:50065
EP_NO: 17403
Repair Type: Non-Urgent
Crossing Status: Indicator Found

UCIP Comments: 9/27/2016 Need to coordinate with Greg Lucas (gregory.lucas@crc.com) with California Resources Corporation to determine if line will be brought online. Crossing was downgraded from Urgent to Non-Urgent--new owner has not brought the pipe online. New owner will need to update permit name and if line becomes active markers will be required per Title 23. (DWR UCIP - omagana)9/02/2016 Meet with Jimmy Preston from California Resources Corporation at site. Alignment of crossing was confirmed (new location is approximately 290 feet upstream from previous point)--report has been updated. Pending action -- Name Change (DWR UCIP - omagana)9/01/2016 Email was sent to Greg Lucas from California Resources Corporation with an updated UCIP detailed report and Central Valley Flood Protection Board (CVFPB) name change form. New owner will need to update permit information with the CVFPB to be compliant with Title 23 requirements. (DWR UCIP - omagana)8/31/2016 New owner--California Resources Corporation. Gas line is currently not in use.Meet with Greg Lucas, Assistant Production Coordinator from California Resources Corporation and Steve Stein from Noble Methan, Inc. to clarify current status of crossing and determine crossing alignment. Gas well is part of the gas line appurtenances. Gas line alignment is still pending--California Resources Corporation will send out someone to confirm alignment. Crossing is missing markers, if line becomes active markers will be needed on both the WS and LS to comply with Title 23--encouraged owner to contact CVFPB. (DWR UCIP - omagana)8/30/2016 Coordinating with AA Production Services, Inc. to determine location of where crossing goes through levee. It appears that the gas well located on LS is not part of this crossing. (DWR UCIP - omagana)8/04/2016 Meet with Bill Mattos, representative of RD 827, and he took me to the gas well visible from levee crown. Mr. Mattos was unable to confirm if gas well and pipeline that goes through the levee were connected.3/18/2014 No markers visible on either banks. Need to contact owner to determine status of crossing. Need date of last inspection and confirmation that crossing is still in operable condition. (DWR UCIP - omagana)

FIELD\_STRUCT\_DESC: [Hanks 34-2] 2.375-inch steel natural gas pipe through the levee, 30 feet below the crown and under (bored) Tule Canal. Gas well is located on the landside (LS) approximately 994 feet from levee crown. California Resources Corporation acquired AA Production Services, Inc. The new owner of the 2.375-inch gas pipe is California Resources Corporation. (2.375-inch line authorized under Permit No. 17403, 2001 - AA Production Services, Inc.)

Photo 1 of 3 : UCIP\_FA\_2019\_50065\_75673.jpg



View of WS--Tule Canal.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2019**

**Reclamation District No. 0827 Elkhorn**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	2.78	10/17/2019 10/17/2019	Zach Jojola

FS Date: 8/4/2016

LM Start	<b>1.00</b>	Rating **	M	Issue No.	<b>15 (cont)</b>
LM End	<b>1.00</b>	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP\_FA\_2019\_50065\_75672.jpg



View of levee crown at crossing--yellow flag markers visible on both WS and LS shoulder.

LM Start	<b>1.00</b>	Rating **	M	Issue No.	<b>15 (cont)</b>
LM End	<b>1.00</b>	Issue Type +	En	Location *	

Photo 3 of 3 : UCIP\_FA\_2019\_50065\_75671.jpg



View of LS.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2019**

**Reclamation District No. 0827 Elkhorn**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	2.78	10/17/2019 10/17/2019	Zach Jojola

LM Start	1.94	Rating **	U	Issue No.	8
LM End	1.96	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.652232°	38.651939°
				-121.627264°	-121.627088°
DWR ID	DWR_RD0827_02_s_2019_8				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
100' sloughing section on the landside slope. Exposed scarp is approximately 4' at the worst section. LMA placed visqueen over the issue.					

LM Start	<b>1.94</b>	Rating **	U	Issue No.	<b>8 (cont)</b>
LM End	<b>1.96</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : FA\_2019\_RD0827\_188\_8\_20191021\_00026.jpg



View of sloughing on the landside slope. Fall 2019.

Photo 2 of 3 : FA\_2019\_RD0827\_188\_8\_20191021\_00025.jpg



Additional view of sloughing on the landside slope. Fall 2019.

LM Start	<b>1.94</b>	Rating **	U	Issue No.	<b>8 (cont)</b>
LM End	<b>1.96</b>	Issue Type +	Ma	Location *	LS

Photo 3 of 3 : FA\_2019\_RD0827\_188\_8\_20190829\_00002.jpg



View of sloughing on the landside slope. Spring 2019.

**\* 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 2019**

**Reclamation District No. 0827 Elkhorn**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	2.78	10/17/2019 10/17/2019	Zach Jojola

LM Start	2.03	Rating **	M	Issue No.	16
LM End	2.03	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP Field Study			38.651052 °	38.651052 °
				-121.626501 °	-121.626501 °
DWR ID	21159				
Comment Code					
Inspector Comment					
DS_ID:21159 FS_ID:53087 EP_NO: 15904 Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: 10/25/2018 Markers on levee not found. Pipe not in use. Valve located on pipe bend near ditch on LS is shut down. Crossing has been downgraded to "Non-Urgent" due to reclassification of gas lines. (O.Yakimov - DWR UCIP) 8/31/2016 Meet with Greg Lucas, Assistant Production Coordinator from California Resources Corporation and Steve Steim from Noble Methan, Inc. to discuss the status of a different line upstream. Mr. Steve Steim was aware of the 3-inch line by Two Bay Petroleum as known as a PG&E old pipe at this location. According to Steve Stein the appurtenances previously located on the landside have been removed and the 3-inch line abandoned. Need to contact owner to confirm status of crossing. If crossing is no longer in use the owner will need to coordinate with CVFPB to comply with Title 23. (DWR UCIP - omagana)8/04/2016 No markers found on either WS or LS. Need to coordinate with owner to determine status of crossing. (DWR UCIP - omagana)3/10/2015 Sign missing on WS and LS. Need to confirm status of crossing with permittee. Appears abandoned. (DWR UCIP - wwylie) 03/18/2014 crossing not found. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 3-inch steel gas pipeline through the levee, 20 feet below the crown. Sign on waterside (WS) (not found 2015). Yellow pipe visible east of ditch approximately 150 feet off landside (LS) toe. Contact Number 415-459-3445 for Two Bay Petroleum also referred as Pacific Energetics, Inc. (3-inch line authorized under Permit No. 15904, 1992 - Two Bay Petroleum) FS Date: 10/25/2018 10:29:07 AM					

Photo 1 of 3 : UCIP\_FA\_2019\_53087\_78352.jpg



Gas pipe with shut-down valve closed.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2019**

**Reclamation District No. 0827 Elkhorn**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	2.78	10/17/2019 10/17/2019	Zach Jojola

LM Start	<b>2.03</b>	Rating **	M	Issue No.	<b>16 (cont)</b>
LM End	<b>2.03</b>	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP Field Study			38.651052 °	38.651052 °
				-121.626501 °	-121.626501 °
DWR ID	21159				

**Comment Code**

**Inspector Comment**

DS\_ID:21159

FS\_ID:53087

EP\_NO: 15904

Repair Type: Non-Urgent

Crossing Status: Indicator Found

UCIP Comments: 10/25/2018 Markers on levee not found. Pipe not in use. Valve located on pipe bend near ditch on LS is shut down. Crossing has been downgraded to "Non-Urgent" due to reclassification of gas lines. (O.Yakimov - DWR UCIP) 8/31/2016 Meet with Greg Lucas, Assistant Production Coordinator from California Resources Corporation and Steve Steim from Noble Methan, Inc. to discuss the status of a different line upstream. Mr. Steve Steim was aware of the 3-inch line by Two Bay Petroleum as known as a PG&E old pipe at this location. According to Steve Stein the appurtenances previously located on the landside have been removed and the 3-inch line abandoned. Need to contact owner to confirm status of crossing. If crossing is no longer in use the owner will need to coordinate with CVFPB to comply with Title 23. (DWR UCIP - omagana)8/04/2016 No markers found on either WS or LS. Need to coordinate with owner to determine status of crossing. (DWR UCIP - omagana)3/10/2015 Sign missing on WS and LS. Need to confirm status of crossing with permittee. Appears abandoned. (DWR UCIP - wwylie)

03/18/2014 crossing not found. (DWR UCIP - omagana)

FIELD\_STRUCT\_DESC: 3-inch steel gas pipeline through the levee, 20 feet below the crown. Sign on waterside (WS) (not found 2015). Yellow pipe visible east of ditch approximately 150 feet off landside (LS) toe. Contact Number 415-459-3445 for Two Bay Petroleum also referred as Pacific Energetics, Inc. (3-inch line authorized under Permit No. 15904, 1992 - Two Bay Petroleum)

FS Date: 10/25/2018 10:29:07 AM

Photo 2 of 3 : UCIP\_FA\_2019\_53087\_78353.jpg



Closer view of gas pipe with shut-down valve closed.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	<b>N : Not Inspected/Rated</b> C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2019**

**Reclamation District No. 0827 Elkhorn**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	2.78	10/17/2019 10/17/2019	Zach Jojola

LM Start	<b>2.03</b>	Rating **	M	Issue No.	<b>16 (cont)</b>
LM End	<b>2.03</b>	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP Field Study			38.651052 °	38.651052 °
				-121.626501 °	-121.626501 °
DWR ID	21159				

**Comment Code**

**Inspector Comment**

DS\_ID:21159  
FS\_ID:53087  
EP\_NO: 15904  
Repair Type: Non-Urgent  
Crossing Status: Indicator Found  
UCIP Comments: 10/25/2018 Markers on levee not found. Pipe not in use. Valve located on pipe bend near ditch on LS is shut down. Crossing has been downgraded to "Non-Urgent" due to reclassification of gas lines. (O.Yakimov - DWR UCIP) 8/31/2016 Meet with Greg Lucas, Assistant Production Coordinator from California Resources Corporation and Steve Steim from Noble Methan, Inc. to discuss the status of a different line upstream. Mr. Steve Steim was aware of the 3-inch line by Two Bay Petroleum as known as a PG&E old pipe at this location. According to Steve Stein the appurtenances previously located on the landside have been removed and the 3-inch line abandoned. Need to contact owner to confirm status of crossing. If crossing is no longer in use the owner will need to coordinate with CVFPB to comply with Title 23. (DWR UCIP - omagana)8/04/2016 No markers found on either WS or LS. Need to coordinate with owner to determine status of crossing. (DWR UCIP - omagana)3/10/2015 Sign missing on WS and LS. Need to confirm status of crossing with permittee. Appears abandoned. (DWR UCIP - wwylie)  
03/18/2014 crossing not found. (DWR UCIP - omagana)  
FIELD\_STRUCT\_DESC: 3-inch steel gas pipeline through the levee, 20 feet below the crown. Sign on waterside (WS) (not found 2015). Yellow pipe visible east of ditch approximately 150 feet off landside (LS) toe. Contact Number 415-459-3445 for Two Bay Petroleum also referred as Pacific Energetics, Inc. (3-inch line authorized under Permit No. 15904, 1992 - Two Bay Petroleum)  
FS Date: 10/25/2018 10:29:07 AM

Photo 3 of 3 : UCIP\_FA\_2019\_53087\_78354.jpg



View of WS slope at crossing.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	<b>N : Not Inspected/Rated</b> C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2019**

**Reclamation District No. 0827 Elkhorn**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	2.78	10/17/2019 10/17/2019	Zach Jojola

LM Start	2.09	Rating **	U	Issue No.	7
LM End	2.14	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.650245 °	38.649602 °
				-121.626036 °	-121.625646 °
DWR ID	DWR_RD0827_02_s_2019_7				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Sloughing from 2019 storm damage. LMA placed visqueen over the issue.					

Photo 1 of 2 : FA\_2019\_RD0827\_188\_7\_20191021\_00024.jpg



View of the sloughing on the landside slope. Fall 2019.

LM Start	<b>2.09</b>	Rating **	U	Issue No.	<b>7 (cont)</b>
LM End	<b>2.14</b>	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA\_2019\_RD0827\_188\_7\_20190829\_00001.jpg



View of sloughing on the landside slope. Spring 2019.

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

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2019**

**Reclamation District No. 0827 Elkhorn**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	2.78	10/17/2019 10/17/2019	Zach Jojola

LM Start	2.67	Rating **	M	Issue No.	9
LM End	2.67	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.642657 °	38.642657 °
				-121.621306 °	-121.621306 °
DWR ID	DWR_RD0827_02_f _ 2019_9				
Comment Code					
EQ : Equipment					
Inspector Comment					
Beehives at the landside toe.					

No Photos

LM Start	2.72	Rating **	M	Issue No.	13
LM End	2.73	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			38.642139°	38.642028°
				-121.620750°	-121.620667°
DWR ID	RD 827-01				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:					
Site ID No:199					
Site Designation:RD 827-01					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:6/6/2017					
Notes: landside. Sloughing on the landside slope near pump.					
Movement has stabilized and the LMA will be constructing a setback levee within the next 3 years. Recommend monitoring.					

Photo 1 of 4 : FA\_2019\_RD0827\_188\_13\_20190829\_00006.jpg



View of sloughing on the landside slope. Spring 2019.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2019**

**Reclamation District No. 0827 Elkhorn**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	2.78	10/17/2019 10/17/2019	Zach Jojola

LM Start	2.72	Rating **	M	Issue No.	13 (cont)
LM End	2.73	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			38.642139°	38.642028°
				-121.620750°	-121.620667°
DWR ID	RD 827-01				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:					
Site ID No:199					
Site Designation:RD 827-01					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:6/6/2017					
Notes: landside. Sloughing on the landside slope near pump.					
Movement has stabilized and the LMA will be constructing a setback levee within the next 3 years. Recommend monitoring.					

Photo 2 of 4 : LEVAL\_FA\_2019\_199\_1231.jpg



LM Start	<b>2.72</b>	Rating **	M	Issue No.	<b>13 (cont)</b>
LM End	<b>2.73</b>	Issue Type +	Ma	Location *	LS

Photo 3 of 4 : LEVAL\_FA\_2019\_199\_1232.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 2019**

**Reclamation District No. 0827 Elkhorn**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	2.78	10/17/2019 10/17/2019	Zach Jojola

LM Start	2.72	Rating **	M	Issue No.	13 (cont)
LM End	2.73	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			38.642139 °	38.642028 °
				-121.620750 °	-121.620667 °
DWR ID	RD 827-01				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:					
Site ID No:199					
Site Designation:RD 827-01					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:6/6/2017					
Notes: landside. Sloughing on the landside slope near pump.					
Movement has stabilized and the LMA will be constructing a setback levee within the next 3 years. Recommend monitoring.					

Photo 4 of 4 : LEVAL\_FA\_2019\_199\_1234.jpg



LM Start	2.72	Rating **	A/W	Issue No.	14
LM End	2.72	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.642018 °	38.642018 °
				-121.620944 °	-121.620944 °
DWR ID	DWR_RD0827_02_s_2017_14				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Sloughing on the landside slope near pump. Movement has stabilized.					

Photo 1 of 2 : FA\_2019\_RD0827\_188\_14\_20190829\_00010.jpg



View of sloughing and visqueen on landside levee slope. Spring 2017.

**\* 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 2019**

**Reclamation District No. 0827 Elkhorn**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	2.78	10/17/2019 10/17/2019	Zach Jojola

LM Start	2.72	Rating **	A/W	Issue No.	14 (cont)
LM End	2.72	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.642018 °	38.642018 °
				-121.620944 °	-121.620944 °
DWR ID	DWR_RD0827_02_s_2017_14				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Sloughing on the landside slope near pump. Movement has stabilized.					

Photo 2 of 2 : FA\_2019\_RD0827\_188\_14\_20190829\_00011.jpg



Additional view of sloughing on landside levee slope. Spring 2017.

LM Start	2.73	Rating **	M	Issue No.	17	
LM End	2.73	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP Field Study			38.641922 °	38.641922 °	
				-121.620884 °	-121.620884 °	
DWR ID	21151					
Comment Code						
Inspector Comment						
DS_ID:21151 FS_ID:38984 EP_NO: 3277 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 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. 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: 3/18/2014						

Photo 1 of 3 : UCIP\_FA\_2019\_38984\_59769.jpg



View of pipe visible on waterward side.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2019**

**Reclamation District No. 0827 Elkhorn**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	2.78	10/17/2019 10/17/2019	Zach Jojola

LM Start	2.73	Rating **	M	Issue No.	17 (cont)	
LM End	2.73	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP Field Study			38.641922 °	38.641922 °	
				-121.620884 °	-121.620884 °	
DWR ID	21151					
Comment Code						
Inspector Comment						
DS_ID:21151 FS_ID:38984 EP_NO: 3277 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 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. 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: 3/18/2014						

LM Start	<b>2.73</b>	Rating **	M	Issue No.	<b>17 (cont)</b>
LM End	<b>2.73</b>	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP\_FA\_2019\_38984\_59768.jpg



View of landward side.

Photo 3 of 3 : UCIP\_FA\_2019\_38984\_59767.jpg



Pipe exposed on landward side.

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

LM Start	2.75	Rating **	M	Issue No.	18 (cont)
LM End	2.75	Issue Type +	En	Location *	



Pipe exposed on waterward side.



Pump station located on landward side.

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

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2019**

**Reclamation District No. 0827 Elkhorn**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	2.78	10/17/2019 10/17/2019	Zach Jojola

LM Start	2.75	Rating **	M	Issue No.	18 (cont)	
LM End	2.75	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP Field Study			38.641633 °	38.641633 °	
				-121.620725 °	-121.620725 °	
DWR ID	21169					
Comment Code						
Inspector Comment						
DS_ID:21169 FS_ID:33032 EP_NO: 5611 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 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. 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: 3/18/2014						

Photo 3 of 3 : UCIP\_FA\_2019\_33032\_59776.jpg



Remininse piles located on landward side.

LM Start	2.75	Rating **	M	Issue No.	5
LM End	2.75	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			38.641613 °	38.641613 °
				-121.620718 °	-121.620718 °
DWR ID	DWR_RD0827_02_s_2019_5				
Comment Code					
C2 : Repair depressions or ruts in the crown or slope.					
Inspector Comment					
Vehicle ruts on the crown.					

No Photos

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