

**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2021**

**Reclamation District No. 1660 Tisdale**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	2.94	04/21/2021 04/14/2021	Makar Sokol

LM Start		Rating **	A	Issue No.	14
LM End		Issue Type +	Ma	Location *	
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Operations & Maintenance Manuals			°	°
				°	°
DWR ID	DWR_RD1660_01_s_2013_14				
Comment Code					
Inspector Comment					
The LMA has the O&M manuals.					

No Photos

LM Start		Rating **	A	Issue No.	15
LM End		Issue Type +	Ma	Location *	
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Emergency Supplies & Equipment			°	°
				°	°
DWR ID	DWR_RD1660_01_s_2013_15				
Comment Code					
Inspector Comment					
The LMA has adequate emergency supplies and equipment.					

No Photos

LM Start		Rating **	A	Issue No.	16
LM End		Issue Type +	Ma	Location *	
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Flood Preparedness & Training			°	°
				°	°
DWR ID	DWR_RD1660_01_s_2013_16				
Comment Code					
Inspector Comment					
The LMA has completed flood fight training in 2018.					

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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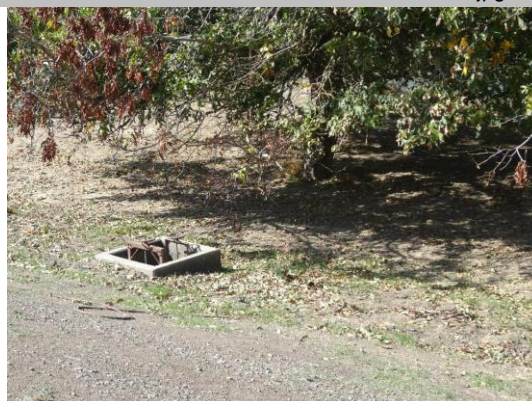
### Reclamation District No. 1660 Tisdale

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	2.94	04/21/2021 04/14/2021	Makar Sokol

LM Start	0.14	Rating **	M	Issue No.	1	
LM End	0.14	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			39.061322 °	39.061322 °	
				-121.837993 °	-121.837993 °	
DWR ID	22489					
Comment Code						
Inspector Comment						
FS_ID:46670						
DS_ID:22489						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: - needs proper abandonment.- opening of landside pipe almost buried.						
FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal gravity drainage pipe through the levee, 16.4 feet below the crown. Two corrugated metal cutoff walls. Slide gate in a concrete well at the waterside (WS) toe. (IV A-Winship). USACE bench mark on the top of the headwall at the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 133, August 1955, (Station 2+07.8)].						
FS Date: 10/10/2013						

LM Start	<b>0.14</b>	Rating **	M	Issue No.	<b>1 (cont)</b>
LM End	<b>0.14</b>	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP\_SP\_2021\_46670\_38107.jpg



WS view: concrete box on levee slope. No pipe found on berm and river bank.

Photo 2 of 3 : UCIP\_SP\_2021\_46670\_38106.jpg



WS view: two slide gates in concrete box on levee slope.

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# Reclamation District No. 1660 Tisdale

A photograph of a gravel road leading through a field towards a line of trees. The road is made of grey gravel and stretches from the foreground into the distance. On either side of the road are green fields with some taller grass and weeds. In the background, there is a dense line of green trees under a clear blue sky. A date stamp '06-14-2024' is visible in the bottom right corner.

A large, fallen tree trunk with reddish-brown leaves lies on a sandy beach. The background shows a body of water and a clear blue sky. A date stamp '10 10 2019' is visible in the bottom right corner.

Page 3 of 4

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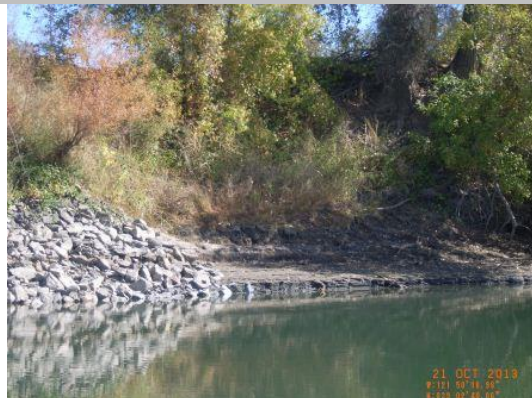
## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2021

### Reclamation District No. 1660 Tisdale

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	2.94	04/21/2021 04/14/2021	Makar Sokol

LM Start	1.33	Rating **	A/W	Issue No.	8
LM End	1.36	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 USACE Erosion Survey			39.044361 °	39.043916 °
				-121.837654 °	-121.837305 °
DWR ID	DWR_RD1660_01_f_2018_8				
Comment Code					
Inspector Comment					
2017 Site ID: SAC 120.6 L					
Status: Eroding					
2017 Field Notes: No observed change.					
Site History: 2009 - Erosion on levee toe where an old cobble site is failing. 2011 - Some new minor erosion. 2012 - Site extended downstream, bank is being impacted from the weight of the trees.					
2013 - Minor new erosion at the toe. 2015 - Minor new erosion at toe.					

Photo 1 of 1 : SP\_2021\_RD1660\_8\_8\_20210224\_00003.jpg



USACE 2013 Photo #1

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## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2021

### Reclamation District No. 1660 Tisdale

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	9.10	04/15/2021 04/14/2021	Makar Sokol

LM Start	0.00	Rating **	M	Issue No.	6
LM End	0.00	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			39.032910 °	39.032910 °
				-121.743665 °	-121.743665 °
DWR ID	DWR_RD1660_02_f_2016_6				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					

Photo 1 of 1 : SP\_2021\_RD1660\_9\_6\_20210224\_00001.jpg



View of the slope instability along the landside slope. Spring 2020.

LM Start	0.02	Rating **	A/W	Issue No.	1	
LM End	0.02	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP LMA Responsibility			39.033214 °	39.033214 °	
				-121.743541 °	-121.743541 °	
DWR ID	22495					
Comment Code						
Inspector Comment						
FS_ID:22663 DS_ID:22495 EP_NO: 10020 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: - pipe/opening not visible as it was submerged into water on both sides.- it seems that 36-inch concrete pipe through the levee. It needs confirmation from LMA/DWR Inspector.- USED bench mark on landside concrete vault. FIELD_STRUCT_DESC: [Reclamation District No. 1660 (RD1660) Drainage Pump] 48-inch by 84-inch reinforced concrete outfall structure through the levee, 34 feet below the crown. Slide gate in a 4-foot by 8-foot concrete riser on the waterside (WS) slope. (Retention of a 4-foot by 7-foot concrete culvert outfall drain through the levee, 34 feet below the crown, and a slide gate in a concrete well authorized under Automatic Board Order (ABO) issued as Permit No. 10020, 1974 - Leo Bandoni, care of John Digardi). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 133, August 1955, (Station 1044+60), two 4-foot by 7-foot concrete tunnels referenced]. FS Date: 10/10/2013						

Photo 1 of 3 : UCIP\_SP\_2021\_22663\_38248.jpg



WS view: 4 ft. by 8 ft. concrete box with slide gate on levee slope. USED bench mark on top of the box.

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	9.10	04/15/2021 04/14/2021	Makar Sokol

LM Start	<b>0.44</b>	Rating **	M	Issue No.	<b>5</b>
LM End	<b>5.33</b>	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Vegetation		39.039025 °	39.104980 °	
			-121.745992 °	-121.777657 °	
DWR ID	DWR_RD1660_02_s _ 2021_5				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

LM Start	<b>5.66</b>	Rating **	M	Issue No.	<b>7</b>
LM End	<b>9.08</b>	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Vegetation		39.108192 °	39.136941 °	
			-121.782244 °	-121.834167 °	
DWR ID	DWR_RD1660_02_s _ 2021_7				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

LM Start	<b>5.69</b>	Rating **	M	Issue No.	<b>8</b>
LM End	<b>9.08</b>	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Vegetation		39.108471 °	39.136941 °	
			-121.782698 °	-121.834166 °	
DWR ID	DWR_RD1660_02_s _ 2021_8				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

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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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	9.10	04/15/2021 04/14/2021	Makar Sokol

LM Start	9.07	Rating **	A/W	Issue No.	3	
LM End	9.07	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			39.136861 °	39.136861 °	
				-121.833974 °	-121.833974 °	
DWR ID	22505					
Comment Code						
Inspector Comment						
FS_ID:22708						
DS_ID:22505						
EP_NO: N/A						
Repair Type: No Action Needed						
Crossing Status: Found						
UCIP Comments: - inlet structure 160 ft off the levee center on landside drainage ditch.						
FIELD_STRUCT_DESC: 48-inch steel gravity drainage pipe through the levee, 29 feet below the crown. Slide gate and concrete bulkhead on the riverbank. Staff gage on the waterside (WS) berm. (Retention of a 48-inch corrugated metal pipe (CMP) through the levee, 29 feet below the crown, a slide gate, and a concrete bulkhead authorized under Automatic Board Order (ABO) No. 10021, 1974 - Butte Slough Irrigation Company, care of Tarke Warehouse). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 133, August 1955, (Station 433+43), 48-inch CMP referenced].						
FS Date: 10/15/2013						

LM Start	<b>9.07</b>	Rating **	A/W	Issue No.	<b>3 (cont)</b>
LM End	<b>9.07</b>	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP\_SP\_2021\_22708\_38406.jpg



WS view: overview of concrete box on channel bank. It looks like a fish ladder. Pipe discharges into this box.

Photo 2 of 3 : UCIP\_SP\_2021\_22708\_38405.jpg



WS view: concrete box on channel bank. Pipe end with slide gate. Pipe discharges into this box.

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### Reclamation District No. 1660 Tisdale

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	9.10	04/15/2021 04/14/2021	Makar Sokol

LM Start	<b>9.07</b>	Rating **	A/W	Issue No.	<b>3 (cont)</b>
LM End	<b>9.07</b>	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.136861 °	39.136861 °
				-121.833974 °	-121.833974 °
DWR ID	22505				

Photo 3 of 3 : UCIP\_SP\_2021\_22708\_38409.jpg



WS view: concrete box on channel bank. Pipe discharges into this box.  
A slide gate inside this box.

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