

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.00	Rating **	A	Issue No.	121
LM End	0.00	Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Operations & Maintenance Manuals			°	°
DWR ID	DWR_RD0524_01_s_2012_121				
Comment Code					
Inspector Comment					
The RD has a digital copy of the O&M manual.					

No Photos

LM Start	0.00	Rating **	M	Issue No.	123
LM End	0.00	Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Flood Preparedness & Training			°	°
DWR ID	DWR_RD0524_01_s_2012_123				
Comment Code					
Inspector Comment					
No recent training.					

No Photos

LM Start	0.00	Rating **	M	Issue No.	138
LM End	0.00	Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Emergency Supplies & Equipment			°	°
DWR ID	DWR_RD0524_01_s_2013_138				
Comment Code					
Inspector Comment					
The LMA does not appear to have emergency supplies or equipment.					

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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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.14	Rating **	A	Issue No.	237
LM End	0.14	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.939774 °	37.939774 °
				-121.344490 °	-121.344490 °
DWR ID	DWR_RD0524_01_f_2017_237				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
LMA backfilled rodent hole, but no rodent program visible.					

LM Start	0.14	Rating **	A	Issue No.	237 (cont)
LM End	0.14	Issue Type +	Ma	Location *	WS

Photo 1 of 4 : FA_2018_RD0524_107_237_20180906_00329.jpg



Looking northwest at the waterside slope.

Photo 2 of 4 : FA_2018_RD0524_107_237_20180919_00466.jpg



Looking at site staking on waterward shoulder.(Fall 2018)

LM Start	0.14	Rating **	A	Issue No.	237 (cont)
LM End	0.14	Issue Type +	Ma	Location *	WS

Photo 3 of 4 : FA_2018_RD0524_107_237_20180919_00465.jpg



Looking southeast at backfill of rodent holes on waterward slope. (Fall 2018)

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.14	Rating **	A	Issue No.	237 (cont)	
LM End	0.14	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Animal Control			37.939774 °		37.939774 °
				-121.344490 °		-121.344490 °
DWR ID	DWR_RD0524_01_f_2017_237					
Comment Code						
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.						
Inspector Comment						
LMA backfilled rodent hole, but no rodent program visible.						

Photo 4 of 4 : FA_2018_RD0524_107_237_20180919_00467.jpg



Looking east at backfill on waterward slope. (Fall 2018)

LM Start	0.19	Rating **	U	Issue No.	1
LM End	0.19	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.939085 °	37.939085 °
				-121.343917 °	-121.343917 °
DWR ID	RD0524U01RM40.85				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: The erosion was discovered during 2013 spring levee inspection. Inspector comment: Erosion is located along the lower level of water-ward slope. [2017 Site ID:RD0524U01RM40.85]					

Photo 1 of 3 : FA_2018_RD0524_107_1_20180906_00001.jpg



Close view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.19	Rating **	U	Issue No.	1 (cont)	
LM End	0.19	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR Erosion Survey			37.939085 °		37.939085 °
				-121.343917 °		-121.343917 °
DWR ID	RD0524U01RM40.85					
Comment Code						
Inspector Comment						
09/13/2017: No significant change observed.						
07/25/2016: No significant change observed.						
06/24/2015: No significant change observed.						
06/19/2014: No significant change observed.						
08/13/2013: The erosion was discovered during 2013 spring levee inspection. Inspector comment: Erosion is located along the lower level of water-ward slope. [2017 Site ID:RD0524U01RM40.85]						

LM Start	0.19	Rating **	U	Issue No.	1 (cont)
LM End	0.19	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : FA_2018_RD0524_107_1_20180906_00002.jpg



Front view of the erosion.

Photo 3 of 3 : FA_2018_RD0524_107_1_20180906_00003.jpg



Front view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.30	Rating **	C	Issue No.	174
LM End	0.32	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.938382°	37.938412°
				-121.342352°	-121.341917°
DWR ID	DWR_RD0524_01_f_2014_174				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					
Several rodent holes were present at this site which the District backfilled.					

No Photos

LM Start	0.34	Rating **	M	Issue No.	2
LM End	0.34	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.938461 °	37.938461 °
				-121.341526 °	-121.341526 °
DWR ID	RD0524U01RM40.93				
Comment Code					
Inspector Comment					
09/13/2017: There are two pocket erosions at the site; both erosions are around 10 ft long and 6 ft high. [2017 Site ID:RD0524U01RM40.93]					

Photo 1 of 4 : FA_2018_RD0524_107_2_20180906_00004.jpg



Front view of the erosion site.

LM Start	0.34	Rating **	M	Issue No.	2 (cont)
LM End	0.34	Issue Type +	Ma	Location *	WS

Photo 2 of 4 : FA_2018_RD0524_107_2_20180906_00005.jpg



Looking downstream of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.34	Rating **	M	Issue No.	2 (cont)	
LM End	0.34	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR Erosion Survey			37.938461°		37.938461°
				-121.341526°		-121.341526°
DWR ID	RD0524U01RM40.93					
Comment Code						
Inspector Comment						
09/13/2017: There are two pocket erosions at the site; both erosions are around 10 ft long and 6 ft high. [2017 Site ID:RD0524U01RM40.93]						

Photo 3 of 4 : FA_2018_RD0524_107_2_20180906_00006.jpg



Close view of the erosion site.

LM Start	0.34	Rating **	M	Issue No.	2 (cont)
LM End	0.34	Issue Type +	Ma	Location *	WS

Photo 4 of 4 : FA_2018_RD0524_107_2_20180906_00007.jpg



Front view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.40	Rating **	M	Issue No.	5
LM End	0.40	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.938870 °	37.938870 °
				-121.340460 °	-121.340460 °
DWR ID	RD0524U01RM40.99				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: More vegetation observed at the site.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change at this site.					
08/07/2012: The erosion is at the upper levee slope, and likely caused by slope slip. The lower levee slope is covered with dense vegetation.					
[2017 Site ID:RD0524U01RM40.99]					

LM Start	0.40	Rating **	M	Issue No.	5 (cont)
LM End	0.40	Issue Type +	Ma	Location *	WS

Photo 1 of 4 : FA_2018_RD0524_107_5_20180906_00011.jpg



Front view of the erosion site.

Photo 2 of 4 : FA_2018_RD0524_107_5_20180906_00012.jpg



Downstream view of the site.

* 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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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.40	Rating **	M	Issue No.	5 (cont)	
LM End	0.40	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR Erosion Survey			37.938870 °	37.938870 °	
				-121.340460 °	-121.340460 °	
DWR ID	RD0524U01RM40.99					
Comment Code						
Inspector Comment						
09/13/2017: No significant change observed.						
07/25/2016: More vegetation observed at the site.						
06/24/2015: No significant change observed.						
06/19/2014: No significant change observed.						
08/13/2013: No significant change at this site.						
08/07/2012: The erosion is at the upper levee slope, and likely caused by slope slip. The lower levee slope is covered with dense vegetation.						
[2017 Site ID:RD0524U01RM40.99]						

Photo 3 of 4 : FA_2018_RD0524_107_5_20180906_00013.jpg



Close view of the erosion.

LM Start	0.40	Rating **	M	Issue No.	5 (cont)
LM End	0.40	Issue Type +	Ma	Location *	WS

Photo 4 of 4 : FA_2018_RD0524_107_5_20180906_00014.jpg



Close view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.40	Rating **	C	Issue No.	205
LM End	0.46	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.938625 °	37.938695 °
				-121.340479 °	-121.339420 °
DWR ID	DWR_RD0524_01_s _ 2016_205				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Several damaged sites within this reach.					

No Photos

LM Start	0.41	Rating **	U	Issue No.	170
LM End	0.45	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.938628 °	37.938688 °
				-121.340385 °	-121.339627 °
DWR ID	DWR_RD0524_01_s _ 2015_170				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Several slope instabilities within this reach.					

Photo 1 of 2 : FA_2018_RD0524_107_170_20180906_00221.jpg



Looking at slope damage on waterward shoulder (Spring 2016)

LM Start	0.41	Rating **	U	Issue No.	170 (cont)
LM End	0.45	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA_2018_RD0524_107_170_20180906_00222.jpg



Looking at waterward slope erosion.

* 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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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.70	Rating **	M	Issue No.	16
LM End	0.70	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.937577 °	37.937577 °
				-121.335491 °	-121.335491 °
DWR ID	RD0524U01RM41.34				
Comment Code					
Inspector Comment					
09/13/2017: Pocket erosion above the protected levee toe. [2017 Site ID:RD0524U01RM41.34]					

Photo 1 of 4 : FA_2018_RD0524_107_16_20180906_00026.jpg



Front view of the erosion.

LM Start	0.70	Rating **	M	Issue No.	16 (cont)
LM End	0.70	Issue Type +	Ma	Location *	WS

Photo 2 of 4 : FA_2018_RD0524_107_16_20180906_00027.jpg



Close view of the erosion.

LM Start	0.70	Rating **	M	Issue No.	16 (cont)
LM End	0.70	Issue Type +	Ma	Location *	WS

Photo 3 of 4 : FA_2018_RD0524_107_16_20180906_00028.jpg



Looking downstream of the erosion site.

* 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. 0524 Middle Roberts Island

Close view of the erosion.

A photograph showing a shoreline with a sandy bank. The bank is covered with dry, tangled twigs and some sparse green vegetation. In the background, there is a body of water under a clear sky. The image is oriented horizontally but appears to be a vertical shot rotated 90 degrees clockwise.Page 14 of 129

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Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

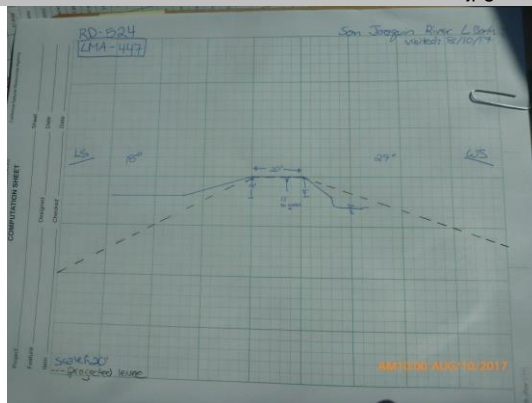
LM Start	0.70	Rating **	A/W	Issue No.	153 (cont)							
LM End	0.70	Issue Type +	Ma	Location *								
Category	Supplemental		GPS Latitude/Longitude									
			Start	End								
Item	2017 Storm Damage		37.937500°	37.937500°								
			-121.335500°	-121.335500°								
DWR ID	DWR_RD0524_01_f_2017_153											
Comment Code												
Inspector Comment												
Levee Evaluation Comments Description: Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage. Site ID No: 541 Site Designation: LMA-447 Repair Type: Erosion Rating: Area of Concern Field Date: 8/10/2017 Notes:												

Photo 2 of 3 : LEVAL_FA_2018_541_4080.jpg



LM Start	0.70	Rating **	A/W	Issue No.	153 (cont)
LM End	0.70	Issue Type +	Ma	Location *	

Photo 3 of 3 : LEVAL_FA_2018_541_4083.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

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.71	Rating **	M	Issue No.	17
LM End	0.73	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.937222 °	37.937222 °
				-121.335277 °	-121.335277 °
DWR ID	RD0524U01RM41.36				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: The erosion site is immediately downstream of the RR bridge. [2017 Site ID:RD0524U01RM41.36]					

LM Start	0.71	Rating **	M	Issue No.	17 (cont)
LM End	0.73	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : FA_2018_RD0524_107_17_20180906_00030.jpg



Front view of the erosion.

Photo 2 of 3 : FA_2018_RD0524_107_17_20180906_00031.jpg



Close view of the erosion.

LM Start	0.71	Rating **	M	Issue No.	17 (cont)
LM End	0.73	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : FA_2018_RD0524_107_17_20180906_00032.jpg



Close view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Reclamation District No. 0524 Middle Roberts Island

Looking west at dense untrimmed tree on landward slope.

A photograph showing a rocky, sloping shoreline on the left, covered with grey stones and some dry, yellowish-brown grass. A small, green, bushy plant grows on the slope. To the right, a calm body of water extends to the horizon. In the background, a line of trees and some distant structures are visible under a clear sky. A yellow date stamp 'AUG 10 2017' is located in the bottom right corner of the image.Page 18 of 129

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Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.72	Rating **	A/W	Issue No.	154 (cont)							
LM End	0.73	Issue Type +	Ma	Location *								
Category	Supplemental		GPS Latitude/Longitude									
			Start	End								
Item	2017 Storm Damage		37.937200°	37.937100°								
			-121.335300°	-121.335300°								
DWR ID	DWR_RD0524_01_f_2017_154											
Comment Code												
Inspector Comment												
<p>Levee Evaluation Comments</p> <p>Description: Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.</p> <p>Site ID No: 540</p> <p>Site Designation: LMA-446</p> <p>Repair Type: Erosion</p> <p>Rating: Area of Concern</p> <p>Field Date: 8/10/2017</p> <p>Notes:</p>												

Photo 2 of 3 : LEVAL_FA_2018_540_4088.jpg



LM Start	0.72	Rating **	A/W	Issue No.	154 (cont)
LM End	0.73	Issue Type +	Ma	Location *	

Photo 3 of 3 : LEVAL_FA_2018_540_4089.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

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.75	Rating **	U	Issue No.	262
LM End	0.78	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.936813 °	37.936539 °
				-121.335019 °	-121.334863 °
DWR ID	DWR_RD0524_01_s_2012_262				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Dense vegetation at landside toe along fence line.					

Photo 1 of 3 : FA_2018_RD0524_107_262_20180906_00347.jpg



Looking northeast at the landside slope.

LM Start	0.75	Rating **	U	Issue No.	262 (cont)
LM End	0.78	Issue Type +	Ma	Location *	LS

Photo 2 of 3 : FA_2018_RD0524_107_262_20180906_00348.jpg



Looking west at dense vegetation at landward slope and toe fall 2015.

LM Start	0.75	Rating **	U	Issue No.	262 (cont)
LM End	0.78	Issue Type +	Ma	Location *	LS

Photo 3 of 3 : FA_2018_RD0524_107_262_20180906_00349.jpg



Looking west at dense vegetation on landside toe. Spring 2014

* 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.76	Rating **	U	Issue No.	21
LM End	0.77	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.936821 °	37.936821 °
				-121.334582 °	-121.334582 °
DWR ID	RD0524U01RM41.39				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change at this site.					
08/07/2012: The site has been visited by boat survey. No significant change observed.					
08/23/2011: The site is located immediately upstream of a Railroad bridge. Dense vegetation at the water line blocks the view of erosion.					
[2017 Site ID:RD0524U01RM41.39]					

LM Start	0.76	Rating **	U	Issue No.	21 (cont)
LM End	0.77	Issue Type +	Ma	Location *	WS

Photo 1 of 4 : FA_2018_RD0524_107_21_20180906_00036.jpg



Front view of the erosion site.

Photo 2 of 4 : FA_2018_RD0524_107_21_20180906_00037.jpg



Front view of the erosion site. Vegetation is visible.

* 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.76	Rating **	U	Issue No.	21 (cont)
LM End	0.77	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.936821 °	37.936821 °
				-121.334582 °	-121.334582 °
DWR ID	RD0524U01RM41.39				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change at this site.					
08/07/2012: The site has been visited by boat survey. No significant change observed.					
08/23/2011: The site is located immediately upstream of a Railroad bridge. Dense vegetation at the water line blocks the view of erosion.					
[2017 Site ID:RD0524U01RM41.39]					

Photo 3 of 4 : FA_2018_RD0524_107_21_20180906_00038.jpg



Front view of the erosion.

LM Start	0.76	Rating **	U	Issue No.	21 (cont)
LM End	0.77	Issue Type +	Ma	Location *	WS

Photo 4 of 4 : FA_2018_RD0524_107_21_20180906_00039.jpg



Front view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Reclamation District No. 0524 Middle Roberts Island

Looking west at the waterside shoulder.

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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

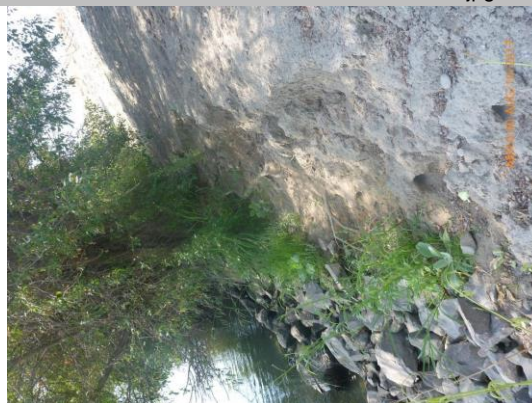
LM Start	0.79	Rating **	M	Issue No.	155
LM End	0.80	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.936300 °	37.936200 °
				-121.334700 °	-121.334600 °
DWR ID	DWR_RD0524_01_f_2017_155				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:538					
Site Designation:LMA-444					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/10/2017					
Notes:					

Photo 1 of 3 : LEVAL_FA_2018_538_4097.jpg



LM Start	0.79	Rating **	M	Issue No.	155 (cont)
LM End	0.80	Issue Type +	Ma	Location *	


Photo 2 of 3 : LEVAL_FA_2018_538_4098.jpg



* 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. 0524 Middle Roberts Island

Photo 1 of 2 : FA_2018_RD0524_107_22_20180906_00040.jpg



Front view of the erosion. The tree and vegetation block the view of the site.

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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.83	Rating **	U	Issue No.	22 (cont)	
LM End	0.84	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR Erosion Survey			37.935930 °		37.935930 °
				-121.334133 °		-121.334133 °
DWR ID	RD0524U01RM41.44					
Comment Code						
Inspector Comment						
09/13/2017: No significant change observed.						
07/25/2016: No significant change observed.						
06/24/2015: No significant change observed.						
06/19/2014: No significant change observed.						
08/13/2013: Site was discovered during boat survey. The dense vegetation blocks a clear view of the erosion. Size of erosion site was very roughly estimated. [2017 Site ID:RD0524U01RM41.44]						

Photo 2 of 2 : FA_2018_RD0524_107_22_20180906_00041.jpg



Close view of the erosion site.

LM Start	0.90	Rating **	U	Issue No.	149
LM End	0.90	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.935319 °	37.935319 °
				-121.333406 °	-121.333406 °
DWR ID	DWR_RD0524_01_s_2018_149				
Comment Code					
T2 : Thin trees to allow visibility of the ground and room to flood fight.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_149_20180906_00190.jpg



Looking southeast at untrimmed trees on waterward slope. (Spring 2018)

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

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.90	Rating **	A/W	Issue No.	193
LM End	0.91	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.935400 °	37.935300 °
				-121.333300 °	-121.333200 °
DWR ID	DWR_RD0524_01_f_2017_193				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:537					
Site Designation:LMA-443					
Repair Type: Erosion					
Rating:Serious					
Field Date:8/10/2017					
Notes:					

Photo 1 of 3 : LEVAL_FA_2018_537_4102.jpg



LM Start	0.90	Rating **	A/W	Issue No.	193 (cont)
LM End	0.91	Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL_FA_2018_537_4103.jpg



* 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.90	Rating **	A/W	Issue No.	193 (cont)
LM End	0.91	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.935400 °	37.935300 °
				-121.333300 °	-121.333200 °
DWR ID	DWR_RD0524_01_f_2017_193				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:537					
Site Designation:LMA-443					
Repair Type: Erosion					
Rating:Serious					
Field Date:8/10/2017					
Notes:					

Photo 3 of 3 : LEVAL_FA_2018_537_4104.jpg



LM Start	0.91	Rating **	A/W	Issue No.	187	
LM End		Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	2017 Storm Damage			37.935580°		°
				-121.333200°		°
DWR ID	DWR_RD0524_01_f_2017_187					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:						
Site ID No:87						
Site Designation:DWR_RD0524_01_s_2012_99						
Repair Type: Erosion						
Rating:Area of Concern						
Field Date:6/7/2017						
Notes: no observable defects to levee, vegetation blocks ws toe						

Photo 1 of 3 : LEVAL_FA_2018_87_1285.jpg



* 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.91	Rating **	A/W	Issue No.	187 (cont)	
LM End		Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	2017 Storm Damage			37.935580	°	°
				-121.333200	°	°
DWR ID	DWR_RD0524_01_f_2017_187					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:						
Site ID No:87						
Site Designation:DWR_RD0524_01_s_2012_99						
Repair Type: Erosion						
Rating:Area of Concern						
Field Date:6/7/2017						
Notes: no observable defects to levee, vegetation blocks ws toe						

LM Start	0.91	Rating **	A/W	Issue No.	187 (cont)
LM End		Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL_FA_2018_87_1286.jpg



Photo 3 of 3 : LEVAL_FA_2018_87_1290.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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.91	Rating **	U	Issue No.	29
LM End	0.91	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.935576 °	37.935576 °
				-121.333202 °	-121.333202 °
DWR ID	RD0524U01RM41.5				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change at this site.					
08/07/2012: The site has been visited by boat survey. No significant change observed					
08/23/2011: The erosion site is immediately downstream of the riprap protection. [2017 Site ID:RD0524U01RM41.5]					

LM Start	0.91	Rating **	U	Issue No.	29 (cont)
LM End	0.91	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : FA_2018_RD0524_107_29_20180906_00050.jpg



Front view of the erosion. Note the riprap protection near the site.

Photo 2 of 3 : FA_2018_RD0524_107_29_20180906_00051.jpg



Close view of the erosion.

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

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.91	Rating **	U	Issue No.	29 (cont)	
LM End	0.91	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR Erosion Survey			37.935576 °		37.935576 °
				-121.333202 °		-121.333202 °
DWR ID	RD0524U01RM41.5					
Comment Code						
Inspector Comment						
09/13/2017: No significant change observed.						
07/25/2016: No significant change observed.						
06/24/2015: No significant change observed.						
06/19/2014: No significant change observed.						
08/13/2013: No significant change at this site.						
08/07/2012: The site has been visited by boat survey. No significant change observed						
08/23/2011: The erosion site is immediately downstream of the riprap protection. [2017 Site ID:RD0524U01RM41.5]						

Photo 3 of 3 : FA_2018_RD0524_107_29_20180906_00052.jpg



Close view of the erosion.

LM Start	0.92	Rating **	U	Issue No.	158
LM End	1.02	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.935257°	37.934988°
				-121.332969°	-121.331152°
DWR ID	DWR_RD0524_01_s_2017_158				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Multiple large rodent holes along this stretch.					

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. 0524 Middle Roberts Island

Looking southeast at untrimmed tree on waterward slope.(Fall 2018)

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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.98	Rating **	A/W	Issue No.	937
LM End	0.98	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			37.935163 °	37.935163 °
				-121.331887 °	-121.331887 °
DWR ID	20598				
Comment Code					
Inspector Comment					
FS_ID:17575 DS_ID:20598 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: *ABANDONED* 36-inch drainage pipe of an unknown material through the levee, 15 feet below the crown. Landside (LS) end is not visible. Concrete headwall at outlet on the waterside (WS) slope is visible. Pipe appears to be abandoned in place. Slide gate on the WS removed. [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 0.99)]. FS Date: 8/16/2013					

Photo 1 of 2 : UCIP_FA_2018_17575_29736.jpg



Concrete headwall visible on WS slope.

LM Start	0.98	Rating **	A/W	Issue No.	937 (cont)
LM End	0.98	Issue Type +	Ma	Location *	

Photo 2 of 2 : UCIP_FA_2018_17575_29735.jpg



Slide gate removed from headwall on WS slope.

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

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.00	Rating **	U	Issue No.	30
LM End	1.00	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.935410 °	37.935410 °
				-121.331560 °	-121.331560 °
DWR ID	RD0524U01RM41.58				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change at this site.					
08/07/2012: The erosion was discovered during the boat survey. [2017					
Site ID:RD0524U01RM41.58]					

LM Start	1.00	Rating **	U	Issue No.	30 (cont)
LM End	1.00	Issue Type +	Ma	Location *	WS

Photo 1 of 4 : FA_2018_RD0524_107_30_20180906_00053.jpg



Front view of the erosion.

Photo 2 of 4 : FA_2018_RD0524_107_30_20180906_00054.jpg



Close view of the erosion.

LM Start	1.00	Rating **	U	Issue No.	30 (cont)
LM End	1.00	Issue Type +	Ma	Location *	WS

Photo 3 of 4 : FA_2018_RD0524_107_30_20180906_00055.jpg



Front view of the erosion.

* 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.00	Rating **	A/W	Issue No.	198 (cont)	
LM End	1.01	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	2017 Storm Damage			37.935100 °	37.935100 °	
				-121.331500 °	-121.331300 °	
DWR ID	DWR_RD0524_01_f_2017_198					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.						
Site ID No:536						
Site Designation:LMA-442						
Repair Type: Erosion						
Rating:Area of Concern						
Field Date:8/10/2017						
Notes: Appears to be previous repair site adjacent to LMA-442. Large fox den on land side						

Photo 2 of 3 : LEVAL_FA_2018_536_4110.jpg



LM Start	1.00	Rating **	A/W	Issue No.	198 (cont)
LM End	1.01	Issue Type +	Ma	Location *	

Photo 3 of 3 : LEVAL_FA_2018_536_4111.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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.02	Rating **	U	Issue No.	33
LM End	1.02	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.935078°	37.935078°
				-121.331134°	-121.331134°
DWR ID	RD0524U01RM41.59				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change at this site.					
08/07/2012: The site has been visited by boat survey. Site has been repaired, but new erosion occurred at the levee slope and immediately upstream of the repaired site.					
08/23/2011: The site is about 500 ft downstream of bridge. The levee toe seems to be protected, but the protection is being washed away.					
[2017 Site ID:RD0524U01RM41.59]					

LM Start	1.02	Rating **	U	Issue No.	33 (cont)
LM End	1.02	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : FA_2018_RD0524_107_33_20180906_00061.jpg



Upstream view of the site.

Photo 2 of 3 : FA_2018_RD0524_107_33_20180906_00062.jpg



Close view of the erosion.

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

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.02	Rating **	U	Issue No.	33 (cont)	
LM End	1.02	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR Erosion Survey			37.935078 °	37.935078 °	
				-121.331134 °	-121.331134 °	
DWR ID	RD0524U01RM41.59					
Comment Code						
Inspector Comment						
09/13/2017: No significant change observed.						
07/25/2016: No significant change observed.						
06/24/2015: No significant change observed.						
06/19/2014: No significant change observed.						
08/13/2013: No significant change at this site.						
08/07/2012: The site has been visited by boat survey. Site has been repaired, but new erosion occurred at the levee slope and immediately upstream of the repaired site.						
08/23/2011: The site is about 500 ft downstream of bridge. The levee toe seems to be protected, but the protection is being washed away.						
[2017 Site ID:RD0524U01RM41.59]						

Photo 3 of 3 : FA_2018_RD0524_107_33_20180906_00063.jpg



Front view of the site.

LM Start	1.02	Rating **	U	Issue No.	238
LM End	1.02	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.934991 °	37.934991 °
				-121.331160 °	-121.331160 °
DWR ID	DWR_RD0524_01_f_2017_238				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Two large rodent holes on landward slope and toe. Large erosion around holes.					

Photo 1 of 2 : FA_2018_RD0524_107_238_20180906_00330.jpg



Looking east at large rodent hole on landward slope. (Spring 2018)

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

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.02	Rating **	U	Issue No.	238 (cont)	
LM End	1.02	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Animal Control			37.934991°		37.934991°
				-121.331160°		-121.331160°
DWR ID	DWR_RD0524_01_f_2017_238					
Comment Code						
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.						
Inspector Comment						
Two large rodent holes on landward slope and toe. Large erosion around holes.						

Photo 2 of 2 : FA_2018_RD0524_107_238_20180906_00332.jpg



Looking northeast at rodent hole on landward slope. (Spring 2018)

LM Start	1.04	Rating **	U	Issue No.	150
LM End	1.04	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.934896 °	37.934896 °
				-121.330781 °	-121.330781 °
DWR ID	DWR_RD0524_01_s_2018_150				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Large rodent or beaver or nutria hole on waterward shoulder and crown of levee. Over 2 cubic feet of material was observed beside hole.					

Photo 1 of 3 : FA_2018_RD0524_107_150_20180906_00191.jpg



Looking at close-up view of rodent hole on waterward shoulder. (Spring 2018)

LM Start	1.04	Rating **	U	Issue No.	150 (cont)
LM End	1.04	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : FA_2018_RD0524_107_150_20180906_00192.jpg



Looking south at large rodent hole on waterward shoulder. (Spring 2018)

*** Location**

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

**** Rating**

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

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.04	Rating **	U	Issue No.	150 (cont)	
LM End	1.04	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Animal Control			37.934896 °		37.934896 °
				-121.330781 °		-121.330781 °
DWR ID	DWR_RD0524_01_s_2018_150					
Comment Code						
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.						
Inspector Comment						
Large rodent or beaver or nutria hole on waterward shoulder and crown of levee. Over 2 cubic feet of material was observed beside hole.						

Photo 3 of 3 : FA_2018_RD0524_107_150_20180906_00193.jpg



Looking southeast at large rodent hole on waterward shoulder. (Spring 2018)

LM Start	1.07	Rating **	U	Issue No.	18
LM End	1.07	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.934715 °	37.934715 °
				-121.330343 °	-121.330343 °
DWR ID	DWR_RD0524_01_s_2012_18				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Slope damage extends from shoulder to middle of slope.					

Photo 1 of 2 : FA_2018_RD0524_107_18_20180906_00033.jpg



Looking south at caving on landward shoulder. (Fall 2015)

LM Start	1.07	Rating **	U	Issue No.	18 (cont)
LM End	1.07	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2018_RD0524_107_18_20180906_00034.jpg



Updated view from above the slope stability.

*** 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.12	Rating **	M	Issue No.	171
LM End	1.16	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.934225 °	37.933815 °
				-121.329693 °	-121.329242 °
DWR ID	DWR_RD0524_01_s_2015_171				
Comment Code					
PR : Prunings					
Inspector Comment					
Prunings left on waterside shoulder and slope.					

Photo 1 of 1 : FA_2018_RD0524_107_171_20180906_00223.jpg



Looking south at prunings on waterward shoulders.

LM Start	1.13	Rating **	M	Issue No.	19
LM End	1.16	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.934118°	37.933775°
				-121.329657°	-121.329305°
DWR ID	DWR_RD0524_01_s_2012_19				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_19_20180906_00035.jpg



Looking southeast at low hanging tree branches at waterside toe.

*** Location**

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

**** Rating**

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

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.15	Rating **	U	Issue No.	44
LM End	1.23	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.933347°	37.933347°
				-121.329110°	-121.329110°
DWR ID	RD0524U01RM41.79				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change at this site.					
08/07/2012: The site has been visited by boat survey. No significant change observed					
08/23/2011: No significant change observed on site.					
09/07/2010: No significant change observed on site. Vegetation is visible at the water line. There is an exposed pipe discharge partially hanging at the mid-slope, possibly still used for discharging irrigation/runoff water. There is minimal rip rap protection along the bank, and what's left of it is no longer adequately protecting the bank.					
9/29/2009: Site consists of a 400-foot long eroding bank with minimal vegetation and protection; the existing rip rap has sloughed, rendering it useless; note that there is an exposed section of a pipe.					
10/18/2006: There is extensive loss of rip rap on some sections; sewage disposal pond is on the landside of the levee; there is an exposed pipe outlet "hanging" from the upper slope. [2017 Site ID:RD0524U01RM41.79]					

LM Start	1.15	Rating **	U	Issue No.	44 (cont)
LM End	1.23	Issue Type +	Ma	Location *	WS

Photo 1 of 4 : FA_2018_RD0524_107_44_20180906_00073.jpg



Direct view of the site.

Photo 2 of 4 : FA_2018_RD0524_107_44_20180906_00074.jpg



Direct view of the site.

* 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.15	Rating **	U	Issue No.	44 (cont)	
LM End	1.23	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR Erosion Survey			37.933347°	37.933347°	
				-121.329110°	-121.329110°	
DWR ID	RD0524U01RM41.79					
Comment Code						
Inspector Comment						
09/13/2017: No significant change observed.						
07/25/2016: No significant change observed.						
06/24/2015: No significant change observed.						
06/19/2014: No significant change observed.						
08/13/2013: No significant change at this site.						
08/07/2012: The site has been visited by boat survey. No significant change observed						
08/23/2011: No significant change observed on site.						
09/07/2010: No significant change observed on site. Vegetation is visible at the water line. There is an exposed pipe discharge partially hanging at the mid-slope, possibly still used for discharging irrigation/runoff water. There is minimal rip rap protection along the bank, and what's left of it is no longer adequately protecting the bank.						
9/29/2009: Site consists of a 400-foot long eroding bank with minimal vegetation and protection; the existing rip rap has sloughed, rendering it useless; note that there is an exposed section of a pipe.						
10/18/2006: There is extensive loss of rip rap on some sections; sewage disposal pond is on the landside of the levee; there is an exposed pipe outlet "hanging" from the upper slope. [2017 Site ID:RD0524U01RM41.79]						

LM Start	1.15	Rating **	U	Issue No.	44 (cont)
LM End	1.23	Issue Type +	Ma	Location *	WS

Photo 3 of 4 : FA_2018_RD0524_107_44_20180906_00075.jpg



View of the erosion.

Photo 4 of 4 : FA_2018_RD0524_107_44_20180906_00076.jpg



View of the site. Note the tree near the erosion site.

* 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.16	Rating **	U	Issue No.	915
LM End	1.23	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.933775 °	37.932784 °
				-121.329250 °	-121.328765 °
DWR ID	DWR_RD0524_01_s_2012_915				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Control veg at landside toe.					

Photo 1 of 1 : FA_2018_RD0524_107_915_20180906_00359.jpg



Looking southwest at dense veg at landward toe and berm. (Fall 2016)

LM Start	1.18	Rating **	A/W	Issue No.	221
LM End	1.20	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.933500 °	37.933200 °
				-121.329100 °	-121.328900 °
DWR ID	DWR_RD0524_01_f_2017_221				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:535					
Site Designation:LMA-441					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/10/2017					
Notes:					

Photo 1 of 3 : LEVAL_FA_2018_535_4115.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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.18	Rating **	A/W	Issue No.	221 (cont)	
LM End	1.20	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	2017 Storm Damage			37.933500°	37.933200°	
				-121.329100°	-121.328900°	
DWR ID	DWR_RD0524_01_f_2017_221					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.						
Site ID No:535						
Site Designation:LMA-441						
Repair Type: Erosion						
Rating:Area of Concern						
Field Date:8/10/2017						
Notes:						

Photo 2 of 3 : LEVAL_FA_2018_535_4116.jpg



LM Start	1.18	Rating **	A/W	Issue No.	221 (cont)
LM End	1.20	Issue Type +	Ma	Location *	

Photo 3 of 3 : LEVAL_FA_2018_535_4117.jpg



* 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.25	Rating **	A/W	Issue No.	222
LM End	1.30	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.932600 °	37.931900 °
				-121.328700 °	-121.328400 °
DWR ID	DWR_RD0524_01_f_2017_222				
Comment Code					

Comment Code

Inspector Comment

Levee Evaluation Comments

Description: Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No: 534

Site Designation: LMA-440

Repair Type: Erosion

Rating: Serious

Field Date: 8/10/2017

Notes: site is related to, but not combined with, LMA-439 a portion of this site has been repaired.

LM Start	1.25	Rating **	A/W	Issue No.	222 (cont)
LM End	1.30	Issue Type +	Ma	Location *	

Photo 1 of 3 : LEVAL_FA_2018_534_4121.jpg



Photo 2 of 3 : LEVAL_FA_2018_534_4122.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	
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.25	Rating **	A/W	Issue No.	222 (cont)	
LM End	1.30	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	2017 Storm Damage			37.932600 °	37.931900 °	
				-121.328700 °	-121.328400 °	
DWR ID	DWR_RD0524_01_f_2017_222					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.						
Site ID No:534						
Site Designation:LMA-440						
Repair Type: Erosion						
Rating:Serious						
Field Date:8/10/2017						
Notes: site is related to, but not combined with, LMA-439 a portion of this site has been repaired.						

Photo 3 of 3 : LEVAL_FA_2018_534_4126.jpg



LM Start	1.27	Rating **	A/W	Issue No.	47
LM End	1.30	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.931858 °	37.931887 °
				-121.328300 °	-121.328343 °
DWR ID	RD0524U01RM41.92				
Comment Code					
Inspector Comment					
5/17/2018. LM 1.30-1.31 was repaired by DWR the remainder of the site was un affected.					
09/13/2017. The erosion has developed along the levee slope. The length of the erosion is nearly doubled comparing to the prior survey.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: New signs of animal activity were found.					
08/07/2012: The site was first reported in 2012 spring levee inspection report. [2017 Site ID:RD0524U01RM41.92]					

Photo 1 of 4 : FA_2018_RD0524_107_47_20180906_00084.jpg



Front view of the erosion.

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

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.27	Rating **	A/W	Issue No.	47 (cont)
LM End	1.30	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.931858 °	37.931887 °
				-121.328300 °	-121.328343 °
DWR ID	RD0524U01RM41.92				
Comment Code					
Inspector Comment					
5/17/2018. LM 1.30-1.31 was repaired by DWR the remainder of the site was un affected.					
09/13/2017. The erosion has developed along the levee slope. The length of the erosion is nearly doubled comparing to the prior survey.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: New signs of animal activity were found.					
08/07/2012: The site was first reported in 2012 spring levee inspection report. [2017 Site ID:RD0524U01RM41.92]					

LM Start	1.27	Rating **	A/W	Issue No.	47 (cont)
LM End	1.30	Issue Type +	Ma	Location *	WS

Photo 2 of 4 : FA_2018_RD0524_107_47_20180906_00085.jpg



Front view of the erosion.

Photo 3 of 4 : FA_2018_RD0524_107_47_20180906_00086.jpg



Close view of the erosion.

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

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.27	Rating **	A/W	Issue No.	47 (cont)	
LM End	1.30	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR Erosion Survey			37.931858°	37.931887°	
				-121.328300°	-121.328343°	
DWR ID	RD0524U01RM41.92					
Comment Code						
Inspector Comment						
5/17/2018. LM 1.30-1.31 was repaired by DWR the remainder of the site was un affected.						
09/13/2017. The erosion has developed along the levee slope. The length of the erosion is nearly doubled comparing to the prior survey.						
07/25/2016: No significant change observed.						
06/24/2015: No significant change observed.						
06/19/2014: No significant change observed.						
08/13/2013: New signs of animal activity were found.						
08/07/2012: The site was first reported in 2012 spring levee inspection report. [2017 Site ID:RD0524U01RM41.92]						

Photo 4 of 4 : FA_2018_RD0524_107_47_20180906_00087.jpg



Front view of the erosion. Note the worsen erosion next to the protected slope.

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

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.29	Rating **	M	Issue No.	940
LM End	1.29	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			37.931977°	37.931977°
				-121.328401°	-121.328401°
DWR ID	20602				

Comment Code

Inspector Comment

FS_ID:53162

DS_ID:20602

EP_NO: N/A

Repair Type: Non-Urgent

Crossing Status: Found

UCIP Comments: 10/2/2018 Pipe appears abandoned, but both the pipe and levee appear in good condition; downgrading to Non-Urgent (D. Sanoski - DWR UCIP). 11/16/2016 same as previous inspection both ends are open. This pipe does not appear in use. Need to contact owner to determine status of crossing. If the crossing is abandoned or in use, owner will need to coordinate with the CVFPB to comply with Title 23 requirements. (O. Magana - DWR UCIP) 08/16/2013 Pipe appears to be open on both ends. Abandoned and should be done so properly. (W. Wylie - DWR UCIP)

FIELD_STRUCT_DESC: *ABANDONED* 12-inch steel drainage pipe through the levee, 3.5 feet below the crown. Pipe is opened on the waterside (WS) and landside (LS) ends. The pump house referenced in O&M manual is missing from the LS (2013). [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 1.31)].

FS Date: 10/2/2018 1:10:16 PM

LM Start	1.29	Rating **	M	Issue No.	940 (cont)
LM End	1.29	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2018_53162_29862.jpg



Pipe visible and open on WS slope.

Photo 2 of 3 : UCIP_FA_2018_53162_29861.jpg



Pipe open and visible on LS slope.

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

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.29	Rating **	M	Issue No.	940 (cont)	
LM End	1.29	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			37.931977°	37.931977°	
				-121.328401°	-121.328401°	
DWR ID	20602					
Comment Code						
Inspector Comment						
FS_ID:53162 DS_ID:20602 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 10/2/2018 Pipe appears abandoned, but both the pipe and levee appear in good condition; downgrading to Non-Urgent (D. Sanoski - DWR UCIP).11/16/2016 same as previous inspection both ends are open. This pipe does not appear in use. Need to contact owner to determine status of crossing. If the crossing is abandoned or in use, owner will need to coordinate with the CVFPB to comply with Title 23 requirements. (O. Magana - DWR UCIP)08/16/2013 Pipe appears to be open on both ends. Abandoned and should be done so properly. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: *ABANDONED* 12-inch steel drainage pipe through the levee, 3.5 feet below the crown. Pipe is opened on the waterside (WS) and landside (LS) ends. The pump house referenced in O&M manual is missing from the LS (2013). [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 1.31)]. FS Date: 10/2/2018 1:10:16 PM						

Photo 3 of 3 : UCIP_FA_2018_53162_29860.jpg



Pipe appears open on both ends. View from LS slope.

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

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.33	Rating **	A/W	Issue No.	225
LM End	1.33	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.931500 °	37.931500 °
				-121.328200 °	-121.328200 °
DWR ID	DWR_RD0524_01_f_2017_225				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:532					
Site Designation:LMA-438					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/10/2017					
Notes:					

Photo 1 of 3 : LEVAL_FA_2018_532_4171.jpg



LM Start	1.33	Rating **	A/W	Issue No.	225 (cont)
LM End	1.33	Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL_FA_2018_532_4173.jpg



* 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.33	Rating **	A/W	Issue No.	225 (cont)	
LM End	1.33	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	2017 Storm Damage			37.931500 °	37.931500 °	
				-121.328200 °	-121.328200 °	
DWR ID	DWR_RD0524_01_f_2017_225					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.						
Site ID No:532						
Site Designation:LMA-438						
Repair Type: Erosion						
Rating:Area of Concern						
Field Date:8/10/2017						
Notes:						

Photo 3 of 3 : LEVAL_FA_2018_532_4174.jpg



LM Start	1.33	Rating **	M	Issue No.	55
LM End	1.33	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.931510°	37.931510°
				-121.328120°	-121.328120°
DWR ID	RD0524U01RM41.95				
Comment Code					
Inspector Comment					
09/13/2017: The erosion is located immediately upstream of a protected levee section. [2017 Site ID:RD0524U01RM41.95]					

Photo 1 of 2 : FA_2018_RD0524_107_55_20180906_00096.jpg



Front view of the erosion.

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

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.33	Rating **	M	Issue No.	55 (cont)	
LM End	1.33	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR Erosion Survey			37.931510°	37.931510°	
				-121.328120°	-121.328120°	
DWR ID	RD0524U01RM41.95					
Comment Code						
Inspector Comment						
09/13/2017: The erosion is located immediately upstream of a protected levee section. [2017 Site ID:RD0524U01RM41.95]						

Photo 2 of 2 : FA_2018_RD0524_107_55_20180906_00097.jpg



Front view of the erosion.

LM Start	1.39	Rating **	U	Issue No.	56	
LM End	1.39	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR Erosion Survey			37.930575 °	37.930575 °	
				-121.328090 °	-121.328090 °	
DWR ID	RD0524U01RM42.03					
Comment Code						
Inspector Comment						
09/13/2017: No significant change observed 07/25/2016: No significant change observed 06/24/2015: No significant change observed. 06/19/2014: No significant change observed. 08/13/2013: No significant change observed. 08/07/2012: The site was first reported in 2012 spring levee inspection report. The site is located about 750 ft downstream of SR 4 Bridge. [2017 Site ID:RD0524U01RM42.03]						

Photo 1 of 3 : FA_2018_RD0524_107_56_20180906_00098.jpg



Front view of the erosion.

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

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.39	Rating **	U	Issue No.	56 (cont)
LM End	1.39	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.930575 °	37.930575 °
				-121.328090 °	-121.328090 °
DWR ID	RD0524U01RM42.03				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed					
07/25/2016: No significant change observed					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change observed.					
08/07/2012: The site was first reported in 2012 spring levee inspection report. The site is located about 750 ft downstream of SR 4 Bridge.					
[2017 Site ID:RD0524U01RM42.03]					

Photo 2 of 3 : FA_2018_RD0524_107_56_20180906_00099.jpg



Front view of the erosion.

LM Start	1.39	Rating **	U	Issue No.	56 (cont)
LM End	1.39	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : FA_2018_RD0524_107_56_20180906_00100.jpg



Close view of the erosion.

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

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.43	Rating **	A/W	Issue No.	226
LM End	1.44	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.930100 °	37.929900 °
				-121.328300 °	-121.328300 °
DWR ID	DWR_RD0524_01_f_2017_226				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:530					
Site Designation:LMA-436					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/10/2017					
Notes:					

Photo 1 of 3 : LEVAL_FA_2018_530_4182.jpg



LM Start	1.43	Rating **	A/W	Issue No.	226 (cont)
LM End	1.44	Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL_FA_2018_530_4184.jpg



* 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.43	Rating **	A/W	Issue No.	226 (cont)	
LM End	1.44	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	2017 Storm Damage			37.930100 °	37.929900 °	
				-121.328300 °	-121.328300 °	
DWR ID	DWR_RD0524_01_f_2017_226					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.						
Site ID No:530						
Site Designation:LMA-436						
Repair Type: Erosion						
Rating:Area of Concern						
Field Date:8/10/2017						
Notes:						

Photo 3 of 3 : LEVAL_FA_2018_530_4185.jpg



LM Start	1.45	Rating **	U	Issue No.	60
LM End	1.47	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.929650 °	37.929650 °
				-121.328110 °	-121.328110 °
DWR ID	RD0524U01RM42.09				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: The site is located approximately 400 ft. downstream SR 4					
Bridge. Dense vegetation is visible at the toe. [2017 Site					
ID:RD0524U01RM42.09]					

Photo 1 of 4 : FA_2018_RD0524_107_60_20180906_00106.jpg



Front view of the erosion site.

* 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.45	Rating **	U	Issue No.	60 (cont)	
LM End	1.47	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR Erosion Survey			37.929650 °		37.929650 °
				-121.328110 °		-121.328110 °
DWR ID	RD0524U01RM42.09					
Comment Code						
Inspector Comment						
09/13/2017: No significant change observed.						
07/25/2016: No significant change observed.						
06/24/2015: No significant change observed.						
06/19/2014: No significant change observed.						
08/13/2013: The site is located approximately 400 ft. downstream SR 4 Bridge. Dense vegetation is visible at the toe. [2017 Site ID:RD0524U01RM42.09]						

LM Start	1.45	Rating **	U	Issue No.	60 (cont)
LM End	1.47	Issue Type +	Ma	Location *	WS

Photo 2 of 4 : FA_2018_RD0524_107_60_20180906_00107.jpg



Front view of the erosion.

Photo 3 of 4 : FA_2018_RD0524_107_60_20180906_00108.jpg



Close view of the erosion. Note the vegetation at the site.

LM Start	1.45	Rating **	U	Issue No.	60 (cont)
LM End	1.47	Issue Type +	Ma	Location *	WS

Photo 4 of 4 : FA_2018_RD0524_107_60_20180906_00109.jpg



Close view of the erosion.

* 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.49	Rating **	U	Issue No.	916
LM End	1.49	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.929118 °	37.929118 °
				-121.328368 °	-121.328368 °
DWR ID	DWR_RD0524_01_s_2012_916				
Comment Code					
T3 : Trim and thin trees to allow visibility of the ground and room to flood fight.					
Inspector Comment					
Untrimmed trees and dense vegetation on landside toe.					

Photo 1 of 1 : FA_2018_RD0524_107_916_20180906_00360.jpg



Looking at dense trees on landward slope and toe fall 2015

LM Start	1.55	Rating **	U	Issue No.	202
LM End	1.55	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.928391 °	37.928391 °
				-121.328273 °	-121.328273 °
DWR ID	DWR_RD0524_01_f_2016_202				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Large hole (looks like fences post or telephone pole) on waterside shoulder.					

Photo 1 of 2 : FA_2018_RD0524_107_202_20180906_00267.jpg



Looking at large hole (Fence/telephone post hole) on waterward shoulder.

LM Start	1.55	Rating **	U	Issue No.	202 (cont)
LM End	1.55	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA_2018_RD0524_107_202_20180906_00268.jpg



Looking at hole on waterward shoulder.

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

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.56	Rating **	U	Issue No.	62
LM End	1.62	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.927770°	37.927770°
				-121.327870°	-121.327870°
DWR ID	RD0524U01RM42.2				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change observed.					
08/07/2012: The site has been visited by boat survey. No significant change observed					
08/23/2011: No significant change observed on site. Trees concerned still in place.					
09/07/2010: No significant change observed on site. The concern here is the undermining of the levee toe where most of trees are. There are erosion pockets lined along the lower slope and at the base of the trees, exposing tree roots. There is minimal slope protection.					
09/29/2009: The lower slope is lined with minor erosion pockets; some tree roots are exposed; there is visible undermining of the levee toe; site is immediately upstream of the Highway 4 Bridge; the bridge is possibly causing a scour to occur, eroding the bank. [2017 Site ID:RD0524U01RM42.2]					

LM Start	1.56	Rating **	U	Issue No.	62 (cont)
LM End	1.62	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : FA_2018_RD0524_107_62_20180906_00111.jpg



Front view of the site where undermining has occurred.

Photo 2 of 3 : FA_2018_RD0524_107_62_20180906_00112.jpg



Close view of the erosion.

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

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.56	Rating **	U	Issue No.	62 (cont)	
LM End	1.62	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR Erosion Survey			37.927770°	37.927770°	
				-121.327870°	-121.327870°	
DWR ID	RD0524U01RM42.2					
Comment Code						
Inspector Comment						
09/13/2017: No significant change observed.						
07/25/2016: No significant change observed.						
06/24/2015: No significant change observed.						
06/19/2014: No significant change observed.						
08/13/2013: No significant change observed.						
08/07/2012: The site has been visited by boat survey. No significant change observed						
08/23/2011: No significant change observed on site. Trees concerned still in place.						
09/07/2010: No significant change observed on site. The concern here is the undermining of the levee toe where most of trees are. There are erosion pockets lined along the lower slope and at the base of the trees, exposing tree roots. There is minimal slope protection.						
09/29/2009: The lower slope is lined with minor erosion pockets; some tree roots are exposed; there is visible undermining of the levee toe; site is immediately upstream of the Highway 4 Bridge; the bridge is possibly causing a scour to occur, eroding the bank. [2017 Site ID:RD0524U01RM42.2]						

Photo 3 of 3 : FA_2018_RD0524_107_62_20180906_00113.jpg



Front view of the erosion. Dense vegetation is visible.

LM Start	1.59	Rating **	A/W	Issue No.	151
LM End	1.61	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.927680 °	37.927512 °
				-121.328004 °	-121.327815 °
DWR ID	DWR_RD0524_01_s_2018_151				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Several large rodent holes on landward slope. Backfilled rodent hole. No rodent program present.					

Photo 1 of 2 : FA_2018_RD0524_107_151_20180906_00194.jpg



Looking at close-up view of large rodent hole on landward slope. (Spring 2018)

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Reclamation District No. 0524 Middle Roberts Island

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.62	Rating **	M	Issue No.	26 (cont)	
LM End	1.64	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Erosion / Bank Caving			37.927507 °	37.927295 °	
				-121.327593 °	-121.327298 °	
DWR ID	DWR_RD0524_01_s_2012_26					
Comment Code						
E1 : Note and monitor erosion site.						
Inspector Comment						
Several erosions along this reach.						

Photo 2 of 3 : FA_2018_RD0524_107_26_20180906_00046.jpg



Looking east at waterward erosion.

LM Start	1.62	Rating **	M	Issue No.	26 (cont)
LM End	1.64	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : FA_2018_RD0524_107_26_20180906_00047.jpg



Looking east at waterward erosion and depression.

LM Start	1.65	Rating **	N	Issue No.	8
LM End	1.68	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.927255 °	37.926855 °
				-121.327137 °	-121.326672 °
DWR ID	DWR_RD0524_01_s_2012_8				
Comment Code					
T5 : Tree stumps.					
Inspector Comment					
Several tree stumps on waterside shoulder.					

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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.66	Rating **	M	Issue No.	240
LM End	1.66	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.927159 °	37.927159 °
				-121.327022 °	-121.327022 °
DWR ID	DWR_RD0524_01_f_2017_240				
Comment Code					
TR : Tree or limb					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_240_20180906_00335.jpg



Looking southeast at the landside slope.

LM Start	1.68	Rating **	M	Issue No.	242
LM End	1.68	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.926917 °	37.926917 °
				-121.326728 °	-121.326728 °
DWR ID	DWR_RD0524_01_f_2017_242				
Comment Code					
TR : Tree or limb					
Inspector Comment					

No Photos

LM Start	1.69	Rating **	M	Issue No.	27
LM End	1.70	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.926728 °	37.926730 °
				-121.326597 °	-121.326508 °
DWR ID	DWR_RD0524_01_s_2012_27				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Slope damage several feet long and greater than one inch deep.					

Photo 1 of 1 : FA_2018_RD0524_107_27_20180906_00048.jpg



Looking south at landward slope depression.

* 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. 0524 Middle Roberts Island

Looking southeast at the waterside slope.

Looking southeast at the waterside slope.

Looking southeast at the landside slope.

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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.94	Rating **	U	Issue No.	176 (cont)	
LM End	1.94	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Erosion / Bank Caving			37.923688 °	37.923688 °	
				-121.324223 °	-121.324223 °	
DWR ID	DWR_RD0524_01_s_2015_176					
Comment Code						
E2 : Schedule repair of erosion site prior to the next inspection.						
Inspector Comment						
Landside caving (3 x 18" x 5) caused by broken sprinklers.						

Photo 2 of 2 : FA_2018_RD0524_107_176_20180906_00232.jpg



Looking east at erosion within landscaping on landward slope and shoulder.

LM Start	2.25	Rating **	C	Issue No.	31
LM End	2.25	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.920493 °	37.920493 °
				-121.320565 °	-121.320565 °
DWR ID	DWR_RD0524_01_s_2012_31				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Slope instability probably cause by leak in irrigation pipe. Pipe should be inspected internally.					

No Photos

LM Start	2.27	Rating **	U	Issue No.	32
LM End	2.29	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.920372 °	37.920167 °
				-121.320230 °	-121.319890 °
DWR ID	DWR_RD0524_01_s_2012_32				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					
Dense elderberry bushes on landside slope and toe.					

No Photos

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

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.30	Rating **	M	Issue No.	70
LM End	2.30	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.920150°	37.920150°
				-121.319700°	-121.319700°
DWR ID	RD0524U01RM42.9				
Comment Code					
Inspector Comment					
09/13/2017: The erosion is located immediately upstream of a repaired levee section. [2017 Site ID:RD0524U01RM42.9]					

Photo 1 of 3 : FA_2018_RD0524_107_70_20180906_00120.jpg



Front view of the pocket erosion.

LM Start	2.30	Rating **	M	Issue No.	70 (cont)
LM End	2.30	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : FA_2018_RD0524_107_70_20180906_00121.jpg



Close view of the erosion.

LM Start	2.30	Rating **	M	Issue No.	70 (cont)
LM End	2.30	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : FA_2018_RD0524_107_70_20180906_00122.jpg



Front view of the erosion.

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

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.32	Rating **	C	Issue No.	34
LM End	2.33	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.919885 °	37.919703 °
				-121.319713 °	-121.319702 °
DWR ID	DWR_RD0524_01_s_2012_34				
Comment Code					
S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.					
Inspector Comment					
Slope damage caused by walking traffic and using bank as a fishing platform.					

No Photos

LM Start	2.33	Rating **	M	Issue No.	107
LM End	2.33	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.919742°	37.919742°
				-121.319623°	-121.319623°
DWR ID	DWR_RD0524_01_s_2012_107				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_107_20180906_00169.jpg



Looking northwest at untrimmed trees at landward toe.

LM Start	2.38	Rating **	M	Issue No.	184
LM End	2.38	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.919036 °	37.919036 °
				-121.319969 °	-121.319969 °
DWR ID	DWR_RD0524_01_s_2014_184				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.41	Rating **	U	Issue No.	35
LM End	2.45	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.918785 °	37.918515 °
				-121.320417 °	-121.321110 °
DWR ID	DWR_RD0524_01_s _ 2012_35				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

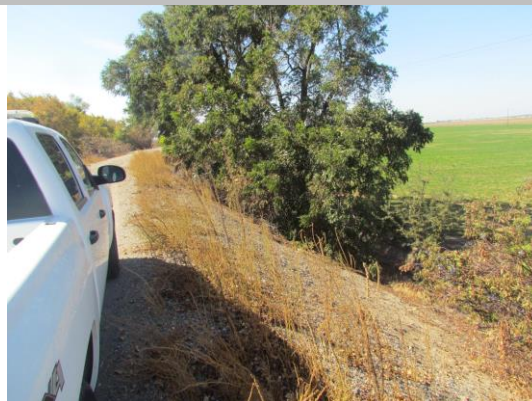
No Photos

LM Start	2.44	Rating **	C	Issue No.	36
LM End	2.47	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.918628 °	37.918438 °
				-121.320817 °	-121.321452 °
DWR ID	DWR_RD0524_01_s _ 2012_36				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					

No Photos

LM Start	2.45	Rating **	U	Issue No.	80
LM End	2.45	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.918480 °	37.918480 °
				-121.321114 °	-121.321114 °
DWR ID	DWR_RD0524_01_s _ 2012_80				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Untrimmed tree on landside slope.					

Photo 1 of 1 : FA_2018_RD0524_107_80_20180906_00140.jpg



Looking south at untrimmed tree on landward slope.

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

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.47	Rating **	C	Issue No.	160
LM End	2.48	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.918403 °	37.918383 °
				-121.321442 °	-121.321497 °
DWR ID	DWR_RD0524_01_s_2017_160				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Runoff erosion on landside slope					

No Photos

LM Start	2.47	Rating **	M	Issue No.	249
LM End	2.47	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.918386°	37.918386°
				-121.321444°	-121.321444°
DWR ID	DWR_RD0524_01_f_2017_249				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

LM Start	2.49	Rating **	U	Issue No.	37
LM End	2.50	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.918345 °	37.918302 °
				-121.321765 °	-121.321923 °
DWR ID	DWR_RD0524_01_s_2012_37				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.50	Rating **	U	Issue No.	38
LM End	2.50	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Vegetation		37.918287°	37.918287°	
			-121.321980°	-121.321980°	
DWR ID	DWR_RD0524_01_s_2012_38				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

LM Start	2.53	Rating **	U	Issue No.	40
LM End	2.57	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Vegetation		37.918047°	37.917498°	
			-121.322415°	-121.322797°	
DWR ID	DWR_RD0524_01_s_2012_40				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

LM Start	2.54	Rating **	C	Issue No.	82
LM End	2.54	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Animal Control		37.917978°	37.917978°	
			-121.322483°	-121.322483°	
DWR ID	DWR_RD0524_01_s_2012_82				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Landside slope damage from animal digging into levee.					

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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.57	Rating **	C	Issue No.	218
LM End	2.57	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.917492°	37.917492°
				-121.322795°	-121.322795°
DWR ID	DWR_RD0524_01_f_2016_218				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Large trench on waterside shoulder and slope. Trench is 45 x 15 x 5.					

No Photos

LM Start	2.60	Rating **	U	Issue No.	185
LM End	2.64	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.917152°	37.916807°
				-121.322582°	-121.322069°
DWR ID	DWR_RD0524_01_s_2014_185				
Comment Code					
T2 : Thin trees to allow visibility of the ground and room to flood fight.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_185_20180906_00245.jpg



Looking northwest at untrimmed trees on landward slope and toe.

LM Start	2.64	Rating **	U	Issue No.	43
LM End	2.64	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.916780 °	37.916780 °
				-121.322095 °	-121.322095 °
DWR ID	DWR_RD0524_01_s_2012_43				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					
Dense elderberry on landside shoulder, slope, and toe.					

No Photos

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

Reclamation District No. 0524 Middle Roberts Island

Looking south at untrimmed trees on landward slope.

No Photos

Looking south at untrimmed trees on landward slope.

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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.70	Rating **	M	Issue No.	264 (cont)	
LM End	2.76	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Trim / Thin Trees			37.915945°	37.915276°	
				-121.322290°	-121.322808°	
DWR ID	DWR_RD0524_01_s_2012_264					
Comment Code						
T2 : Thin trees to allow visibility of the ground and room to flood fight.						
Inspector Comment						
Untrimmed trees along landside slope and toe. Additionally, trim over hanging trees at least 12 feet above ground level.						

Photo 2 of 2 : FA_2018_RD0524_107_264_20180906_00353.jpg



Looking north at dense trees overhanging levee crown.

LM Start	2.75	Rating **	C	Issue No.	152
LM End	2.75	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.915427 °	37.915427 °
				-121.322691 °	-121.322691 °
DWR ID	DWR_RD0524_01_s_2018_152				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Large tree branch across levee crown. Block access to levee.					

No Photos

LM Start	2.75	Rating **	M	Issue No.	146
LM End	2.75	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.915358 °	37.915358 °
				-121.322768 °	-121.322768 °
DWR ID	DWR_RD0524_01_f_2018_146				
Comment Code					
PR : Prunings					
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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.77	Rating **	U	Issue No.	219
LM End	2.80	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.915195°	37.915052°
				-121.322930°	-121.323430°
DWR ID	DWR_RD0524_01_f_2016_219				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					
Several large rodent holes on landside slope.					

Photo 1 of 2 : FA_2018_RD0524_107_219_20180906_00287.jpg



Looking south at several rodent holes on landward slope.

LM Start	2.77	Rating **	U	Issue No.	219 (cont)
LM End	2.80	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2018_RD0524_107_219_20180906_00288.jpg



Looking at typical rodent hole on waterward slope.

LM Start	2.80	Rating **	U	Issue No.	48
LM End	2.80	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.915022 °	37.915022 °
				-121.323443 °	-121.323443 °
DWR ID	DWR_RD0524_01_s_2012_48				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.86	Rating **	U	Issue No.	49
LM End	2.86	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.914427 °	37.914427 °
				-121.324198 °	-121.324198 °
DWR ID	DWR_RD0524_01_s_2012_49				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

LM Start	2.87	Rating **	U	Issue No.	209
LM End	2.87	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.914257 °	37.914257 °
				-121.324317 °	-121.324317 °
DWR ID	DWR_RD0524_01_s_2016_209				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Untrimmed walnut tree on landside slope and toe.					

Photo 1 of 1 : FA_2018_RD0524_107_209_20180906_00275.jpg



Looking northwest at untrimmed tree at landward toe.

LM Start	2.90	Rating **	U	Issue No.	50
LM End	2.92	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.913767 °	37.913486 °
				-121.324427 °	-121.324428 °
DWR ID	DWR_RD0524_01_s_2012_50				
Comment Code					
PR : Prunings					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_50_20180906_00091.jpg



Looking southwest at prunings on landside slope.

*** Location**

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

**** Rating**

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

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.96	Rating **	U	Issue No.	71
LM End	2.96	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.913010 °	37.913010 °
				-121.324490 °	-121.324490 °
DWR ID	RD0524U01RM43.52				
Comment Code					
Inspector Comment					
09/13/2017: A new pocket erosion observed at the eroison site, next to an irrigation pipe.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change observed.					
08/07/2012: The site was first reported in 2012 spring levee inspection report. [2017 Site ID:RD0524U01RM43.52]					

LM Start	2.96	Rating **	U	Issue No.	71 (cont)
LM End	2.96	Issue Type +	Ma	Location *	WS

Photo 1 of 4 : FA_2018_RD0524_107_71_20180906_00123.jpg



Front view of the erosion.

Photo 2 of 4 : FA_2018_RD0524_107_71_20180906_00124.jpg



View of the newly developed pocket erosion next to an irrigation pipe.

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

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.96	Rating **	U	Issue No.	71 (cont)	
LM End	2.96	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR Erosion Survey			37.913010 °	37.913010 °	
				-121.324490 °	-121.324490 °	
DWR ID	RD0524U01RM43.52					
Comment Code						
Inspector Comment						
09/13/2017: A new pocket erosion observed at the eroison site, next to an irrigation pipe.						
07/25/2016: No significant change observed.						
06/24/2015: No significant change observed.						
06/19/2014: No significant change observed.						
08/13/2013: No significant change observed.						
08/07/2012: The site was first reported in 2012 spring levee inspection report. [2017 Site ID:RD0524U01RM43.52]						

LM Start	2.96	Rating **	U	Issue No.	71 (cont)
LM End	2.96	Issue Type +	Ma	Location *	WS

Photo 3 of 4 : FA_2018_RD0524_107_71_20180906_00125.jpg



Close view of the erosion.

Photo 4 of 4 : FA_2018_RD0524_107_71_20180906_00126.jpg



Close view of the erosion. Note the new pocket erosion next to the irrigation pipe on the site.

* 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.96	Rating **	A/W	Issue No.	227
LM End		Issue Type +	Ma	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	2017 Storm Damage		37.912900 °		°
			-121.324400 °		°
DWR ID	DWR_RD0524_01_f_2017_227				

Comment Code

Inspector Comment

Levee Evaluation Comments

Description: Slope protection repairs are needed along the waterside slope due to erosion. Based upon levee inspections, it was determined the waterside levee slopes were eroding, deteriorating and degrading in concave pocket sections at various locations along this levee reach. The eroded levee sections need to be restored back to design standards to prevent further deterioration of the damaged levee sections.

Site ID No: 465

Site Designation: LMA-292

Repair Type: Erosion

Rating: Area of Concern

Field Date: 7/26/2017

Notes: Lower priority because erosion is within rip rap, is only present on lower slope and is not too deep. Levee is narrow here.

LM Start	2.96	Rating **	A/W	Issue No.	227 (cont)
LM End		Issue Type +	Ma	Location *	

Photo 1 of 2 : LEVAL_FA_2018_465_2231.jpg



Photo 2 of 2 : LEVAL_FA_2018_465_2232.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	
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.99	Rating **	A/W	Issue No.	228
LM End	3.01	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.912500 °	37.912300 °
				-121.324700 °	-121.324700 °
DWR ID	DWR_RD0524_01_f_2017_228				

Comment Code

Inspector Comment

Levee Evaluation Comments

Description: Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No: 529

Site Designation: LMA-435

Repair Type: Erosion

Rating: Area of Concern

Field Date: 8/10/2017

Notes:

LM Start	2.99	Rating **	A/W	Issue No.	228 (cont)
LM End	3.01	Issue Type +	Ma	Location *	

Photo 1 of 3 : LEVAL_FA_2018_529_4187.jpg



Photo 2 of 3 : LEVAL_FA_2018_529_4188.jpg



* 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.99	Rating **	A/W	Issue No.	228 (cont)
LM End	3.01	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.912500 °	37.912300 °
				-121.324700 °	-121.324700 °
DWR ID	DWR_RD0524_01_f_2017_228				
Comment Code					
Inspector Comment					
<p>Levee Evaluation Comments</p> <p>Description: Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.</p> <p>Site ID No: 529</p> <p>Site Designation: LMA-435</p> <p>Repair Type: Erosion</p> <p>Rating: Area of Concern</p> <p>Field Date: 8/10/2017</p> <p>Notes:</p>					

Photo 3 of 3 : LEVAL_FA_2018_529_4189.jpg



LM Start	3.02	Rating **	M	Issue No.	924
LM End	3.02	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.912163 °	37.912163 °
				-121.324702 °	-121.324702 °
DWR ID	DWR_RD0524_01_s_2012_924				
Comment Code					
<p>A2 : Repair the levee slope damaged by livestock and prevent large animal access.</p>					
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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.07	Rating **	M	Issue No.	925
LM End	3.27	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.911382 °	37.908602 °
				-121.324928 °	-121.325395 °
DWR ID	DWR_RD0524_01_s_2012_925				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					
Several rodent holes on levee slopes.					

LM Start	3.07	Rating **	M	Issue No.	925 (cont)
LM End	3.27	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : FA_2018_RD0524_107_925_20180906_00364.jpg



Looking southwest at the landside slope.

Photo 2 of 3 : FA_2018_RD0524_107_925_20180906_00365.jpg



Looking at typical view of rodent hole with this section fall 2015.

LM Start	3.07	Rating **	M	Issue No.	925 (cont)
LM End	3.27	Issue Type +	Ma	Location *	LS

Photo 3 of 3 : FA_2018_RD0524_107_925_20180906_00366.jpg



Looking at typical rodent holes on landward slope along this reach.

* 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. 0524 Middle Roberts Island

A photograph showing a wide river with a gravelly, eroded bank in the foreground. The bank is covered in dry, yellowish grass and some small plants. The river water is dark and calm. In the background, a row of houses with brown roofs is visible across the river, under a clear blue sky.

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

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.26	Rating **	A/W	Issue No.	230
LM End	3.26	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.908800 °	37.908700 °
				-121.325400 °	-121.325300 °
DWR ID	DWR_RD0524_01_f_2017_230				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:528					
Site Designation:LMA-434					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/10/2017					
Notes: combined with LMA-433					

Photo 1 of 3 : LEVAL_FA_2018_528_4193.jpg



LM Start	3.26	Rating **	A/W	Issue No.	230 (cont)
LM End	3.26	Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL_FA_2018_528_4197.jpg



* 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.26	Rating **	A/W	Issue No.	230 (cont)
LM End	3.26	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.908800 °	37.908700 °
				-121.325400 °	-121.325300 °
DWR ID	DWR_RD0524_01_f_2017_230				
Comment Code					
Inspector Comment					
<p>Levee Evaluation Comments</p> <p>Description: Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.</p> <p>Site ID No: 528</p> <p>Site Designation: LMA-434</p> <p>Repair Type: Erosion</p> <p>Rating: Area of Concern</p> <p>Field Date: 8/10/2017</p> <p>Notes: combined with LMA-433</p>					

Photo 3 of 3 : LEVAL_FA_2018_528_4198.jpg



LM Start	3.27	Rating **	A/W	Issue No.	231
LM End	3.28	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.908600 °	37.908500 °
				-121.325400 °	-121.325400 °
DWR ID	DWR_RD0524_01_f_2017_231				
Comment Code					
Inspector Comment					
<p>Levee Evaluation Comments</p> <p>Description: Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.</p> <p>Site ID No: 527</p> <p>Site Designation: LMA-433</p> <p>Repair Type: Erosion</p> <p>Rating: Area of Concern</p> <p>Field Date: 8/10/2017</p> <p>Notes: combined with LMA-434</p>					

No Photos

* 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.27	Rating **	M	Issue No.	186
LM End	3.27	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.908551°	37.908551°
				-121.325381°	-121.325381°
DWR ID	DWR_RD0524_01_s_2014_186				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

No Photos

LM Start	3.30	Rating **	A/W	Issue No.	232
LM End		Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.908200 °	°
				-121.325300 °	°
DWR ID	DWR_RD0524_01_f_2017_232				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion. Based upon levee inspections, it was determined the waterside levee slopes were eroding, deteriorating and degrading in concave pocket sections at various locations along this levee reach. The eroded levee sections need to be restored back to design standards to prevent further deterioration of the damaged levee sections.					
Site ID No:467					
Site Designation:LMA-294					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:7/26/2017					
Notes: It looks like new rip rap was played on the lower 1/4 of the slope. There is a 2-3 ft scarp above the rip rap.					

Photo 1 of 3 : LEVAL_FA_2018_467_2223.jpg



* 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. 0524 Middle Roberts Island



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

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.30	Rating **	U	Issue No.	79
LM End	3.32	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.908090 °	37.908090 °
				-121.325090 °	-121.325090 °
DWR ID	RD0524U01RM43.86				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: The levee toe seems to have been protected by river rocks and vegetation on site. [2017 Site ID:RD0524U01RM43.86]					

LM Start	3.30	Rating **	U	Issue No.	79 (cont)
LM End	3.32	Issue Type +	Ma	Location *	WS

Photo 1 of 4 : FA_2018_RD0524_107_79_20180906_00136.jpg



Front View of the erosion.

Photo 2 of 4 : FA_2018_RD0524_107_79_20180906_00137.jpg



Front view of the erosion.

LM Start	3.30	Rating **	U	Issue No.	79 (cont)
LM End	3.32	Issue Type +	Ma	Location *	WS

Photo 3 of 4 : FA_2018_RD0524_107_79_20180906_00138.jpg



Close view of the erosion. Note the river rocks and vegetation at the levee toe.

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

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.30	Rating **	U	Issue No.	79 (cont)
LM End	3.32	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.908090 °	37.908090 °
				-121.325090 °	-121.325090 °
DWR ID	RD0524U01RM43.86				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: The levee toe seems to have been protected by river rocks and vegetation on site. [2017 Site ID:RD0524U01RM43.86]					

Photo 4 of 4 : FA_2018_RD0524_107_79_20180906_00139.jpg



Front View of the erosion.

LM Start	3.30	Rating **	U	Issue No.	926
LM End	3.37	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.908158°	37.907112°
				-121.325418°	-121.325350°
DWR ID	DWR_RD0524_01_s_2012_926				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

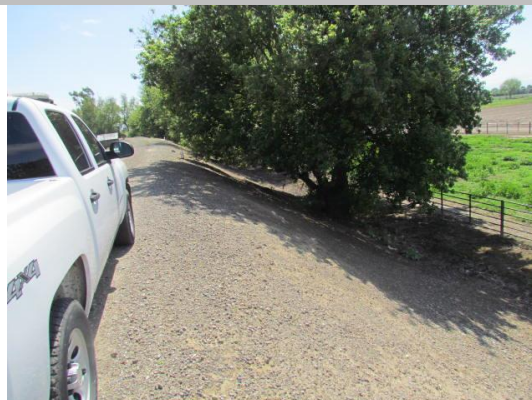
Photo 1 of 2 : FA_2018_RD0524_107_926_20180906_00367.jpg



Looking southwest at dense veg on landward slope.

LM Start	3.30	Rating **	U	Issue No.	926 (cont)
LM End	3.37	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2018_RD0524_107_926_20180906_00368.jpg



Looking at untrimmed trees on landward slope and toe.

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

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.37	Rating **	M	Issue No.	53
LM End	3.37	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.907132 °	37.907132 °
				-121.325352 °	-121.325352 °
DWR ID	DWR_RD0524_01_s_2012_53				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					

No Photos

LM Start	3.45	Rating **	U	Issue No.	54
LM End	3.45	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.906227 °	37.906227 °
				-121.324683 °	-121.324683 °
DWR ID	DWR_RD0524_01_s_2012_54				
Comment Code					
T3 : Trim and thin trees to allow visibility of the ground and room to flood fight.					
Inspector Comment					
Dense untrimmed trees on landside slope.					

Photo 1 of 1 : FA_2018_RD0524_107_54_20180906_00095.jpg



Looking northwest at dense vegetation on landside slope.

LM Start	3.48	Rating **	M	Issue No.	177
LM End	3.48	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.905994 °	37.905994 °
				-121.324194 °	-121.324194 °
DWR ID	DWR_RD0524_01_f_2014_177				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Dead tree on landside toe.					

Photo 1 of 1 : FA_2018_RD0524_107_177_20180906_00233.jpg



Looking at dead tree limb at landward toe fall 2015.

*** 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.51	Rating **	U	Issue No.	57
LM End	3.59	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.905638 °	37.904570 °
				-121.323892 °	-121.324215 °
DWR ID	DWR_RD0524_01_s_2012_57				
Comment Code					
T3 : Trim and thin trees to allow visibility of the ground and room to flood fight.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_57_20180906_00101.jpg



Looking south at dense trees on landward slope.

LM Start	3.53	Rating **	A/W	Issue No.	233
LM End	3.54	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.905300 °	37.905200 °
				-121.323800 °	-121.323900 °
DWR ID	DWR_RD0524_01_f_2017_233				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:526					
Site Designation:LMA-432					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/10/2017					
Notes:					

Photo 1 of 3 : LEVAL_FA_2018_526_4201.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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.56	Rating **	A/W	Issue No.	234
LM End	3.57	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.904900 °	37.904800 °
				-121.323900 °	-121.324100 °
DWR ID	DWR_RD0524_01_f_2017_234				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:525					
Site Designation:LMA-431					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/10/2017					
Notes:					

Photo 1 of 3 : LEVAL_FA_2018_525_4205.jpg



LM Start	3.56	Rating **	A/W	Issue No.	234 (cont)
LM End	3.57	Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL_FA_2018_525_4206.jpg



* 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.56	Rating **	A/W	Issue No.	234 (cont)	
LM End	3.57	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	2017 Storm Damage			37.904900 °	37.904800 °	
				-121.323900 °	-121.324100 °	
DWR ID	DWR_RD0524_01_f_2017_234					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.						
Site ID No:525						
Site Designation:LMA-431						
Repair Type: Erosion						
Rating:Area of Concern						
Field Date:8/10/2017						
Notes:						

Photo 3 of 3 : LEVAL_FA_2018_525_4208.jpg



LM Start	3.62	Rating **	M	Issue No.	163
LM End	3.62	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.904348 °	37.904348 °
				-121.324683 °	-121.324683 °
DWR ID	DWR_RD0524_01_s_2017_163				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.64	Rating **	C	Issue No.	58
LM End	3.64	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.904113 °	37.904113 °
				-121.325080 °	-121.325080 °
DWR ID	DWR_RD0524_01_s_2012_58				
Comment Code					
S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.					
Inspector Comment					
Landowner cut steps into waterside slope.					
4/3/17: Steps washed away slope damage remains.					

No Photos

LM Start	3.67	Rating **	U	Issue No.	251
LM End	3.67	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.903776 °	37.903776 °
				-121.325323 °	-121.325323 °
DWR ID	DWR_RD0524_01_f_2017_251				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Large rodent holes on both waterside and landside slope.					

Photo 1 of 1 : FA_2018_RD0524_107_251_20180906_00340.jpg



Looking northwest at the waterside slope.

LM Start	3.72	Rating **	A/W	Issue No.	252
LM End	3.78	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.903120 °	37.902527 °
				-121.325846 °	-121.326372 °
DWR ID	DWR_RD0524_01_f_2017_252				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Contorl vegetation growth on crown.					

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. 0524 Middle Roberts Island

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.03	Rating **	M	Issue No.	61
LM End	4.03	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.898925 °	37.898925 °
				-121.327015 °	-121.327015 °
DWR ID	DWR_RD0524_01_s_2012_61				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_61_20180906_00110.jpg



Looking east at untrimmed tree at landward toe.

LM Start	4.10	Rating **	C	Issue No.	108
LM End	4.15	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.898035 °	37.898071 °
				-121.327447 °	-121.327806 °
DWR ID	DWR_RD0524_01_s_2012_108				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Slope depression is greater than 1" and longer than 200'.					

No Photos

LM Start	4.16	Rating **	M	Issue No.	213
LM End	4.16	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.897235 °	37.897235 °
				-121.327865 °	-121.327865 °
DWR ID	DWR_RD0524_01_s_2016_213				
Comment Code					
GA : Garbage					
Inspector Comment					
Old fence post and concrete and brick rubble on landside slope.					

Photo 1 of 1 : FA_2018_RD0524_107_213_20180906_00280.jpg



Looking west at old fence post and concrete rubble on landward slope.

*** Location**

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

**** Rating**

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

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.37	Rating **	M	Issue No.	255
LM End	4.37	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.894442 °	37.894442 °
				-121.329238 °	-121.329238 °
DWR ID	DWR_RD0524_01_f_2017_255				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Multiple rodent holes around gate stop post.					

No Photos

LM Start	4.38	Rating **	M	Issue No.	111
LM End	4.38	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.894258 °	37.894258 °
				-121.329247 °	-121.329247 °
DWR ID	DWR_RD0524_01_s_2012_111				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Dead tree at landside toe should be removed from levee toe.					

Photo 1 of 1 : FA_2018_RD0524_107_111_20180906_00174.jpg



Looking west at dead tree at landside toe.

LM Start	4.38	Rating **	M	Issue No.	165
LM End	4.38	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.894198 °	37.894198 °
				-121.329272 °	-121.329272 °
DWR ID	DWR_RD0524_01_s_2017_165				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.42	Rating **	M	Issue No.	199
LM End	4.42	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.893659 °	37.893659 °
				-121.329092 °	-121.329092 °
DWR ID	DWR_RD0524_01_f_2015_199				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Remove dead tree from landside toe.					

Photo 1 of 1 : FA_2018_RD0524_107_199_20180906_00264.jpg



Looking west at dead tree on landward slope and toe fall 2015.

LM Start	4.52	Rating **	U	Issue No.	102
LM End	4.52	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.892383 °	37.892383 °
				-121.328194 °	-121.328194 °
DWR ID	DWR_RD0524_01_f_2016_102				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Dead tree on waterside slope.					

Photo 1 of 2 : FA_2018_RD0524_107_102_20180906_00166.jpg



Looking southeast at dead tree on waterside slope fall 2015

LM Start	4.52	Rating **	U	Issue No.	102 (cont)
LM End	4.52	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA_2018_RD0524_107_102_20180906_00167.jpg



Looking southeast at dead tree on waterside slope.

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

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.53	Rating **	A/W	Issue No.	90
LM End	4.54	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.892230 °	37.892230 °
				-121.327930 °	-121.327930 °
DWR ID	RD0524U01RM45.07				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change observed.					
08/07/2012: The erosion is located at the inside of a river bend. Site is covered with broken concrete blocks and other debris. [2017 Site ID:RD0524U01RM45.07]					

Photo 1 of 3 : FA_2018_RD0524_107_90_20180906_00152.jpg



Front view of the erosion site.

LM Start	4.53	Rating **	A/W	Issue No.	90 (cont)
LM End	4.54	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : FA_2018_RD0524_107_90_20180906_00153.jpg



Close view of the site.

* 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.53	Rating **	A/W	Issue No.	90 (cont)
LM End	4.54	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.892230 °	37.892230 °
				-121.327930 °	-121.327930 °
DWR ID	RD0524U01RM45.07				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change observed.					
08/07/2012: The erosion is located at the inside of a river bend. Site is covered with broken concrete blocks and other debris. [2017 Site ID:RD0524U01RM45.07]					

Photo 3 of 3 : FA_2018_RD0524_107_90_20180906_00154.jpg



Front view of the site. Note the loosely placed concrete blocks at the site.

LM Start	4.53	Rating **	A/W	Issue No.	235
LM End		Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.892200 °	°
				-121.328000 °	°
DWR ID	DWR_RD0524_01_f _ 2017_235				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion. Based upon levee inspections, it was determined the waterside levee slopes were eroding, deteriorating and degrading in concave pocket sections at various locations along this levee reach. The eroded levee sections need to be restored back to design standards to prevent further deterioration of the damaged levee sections.					
Site ID No:468					
Site Designation:LMA-295					
Repair Type: Erosion					
Rating:Serious					
Field Date:7/26/2017					
Notes: Serious because erosion is impacting the levee, but there is some slope protection here. Slope is armored with asphalt and concrete rubble. The surrounding slopes are pretty baren, but there is a small bush within the site so it may be older.					

Photo 1 of 3 : LEVAL_FA_2018_468_2219.jpg



* 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.53	Rating **	A/W	Issue No.	235 (cont)
LM End		Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.892200 °	°
				-121.328000 °	°
DWR ID	DWR_RD0524_01_f_2017_235				

Comment Code

Inspector Comment

Levee Evaluation Comments

Description: Slope protection repairs are needed along the waterside slope due to erosion. Based upon levee inspections, it was determined the waterside levee slopes were eroding, deteriorating and degrading in concave pocket sections at various locations along this levee reach. The eroded levee sections need to be restored back to design standards to prevent further deterioration of the damaged levee sections.

Site ID No: 468

Site Designation: LMA-295

Repair Type: Erosion

Rating: Serious

Field Date: 7/26/2017

Notes: Serious because erosion is impacting the levee, but there is some slope protection here. Slope is armored with asphalt and concrete rubble. The surrounding slopes are pretty barren, but there is a small bush within the site so it may be older.

LM Start	4.53	Rating **	A/W	Issue No.	235 (cont)
LM End		Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL_FA_2018_468_2220.jpg

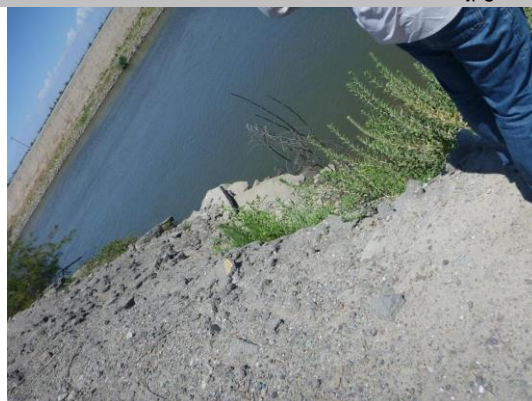


Photo 3 of 3 : LEVAL_FA_2018_468_2221.jpg



* 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.56	Rating **	C	Issue No.	257
LM End	4.56	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.891903°	37.891903°
				-121.328264°	-121.328264°
DWR ID	DWR_RD0524_01_f_2017_257				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Backfilled rodent hole. But no rodent program visible.					

No Photos

LM Start	4.61	Rating **	U	Issue No.	63
LM End	4.61	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.891285 °	37.891285 °
				-121.328728 °	-121.328728 °
DWR ID	DWR_RD0524_01_s_2012_63				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_63_20180906_00114.jpg



Looking south at dense trees on landside slope.

LM Start	4.63	Rating **	M	Issue No.	259
LM End	4.63	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.890987 °	37.890987 °
				-121.328956 °	-121.328956 °
DWR ID	DWR_RD0524_01_f_2017_259				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.63	Rating **	M	Issue No.	113
LM End	4.63	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.890973 °	37.890973 °
				-121.328970 °	-121.328970 °
DWR ID	DWR_RD0524_01_s_2012_113				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_113_20180906_00178.jpg



Looking north at dense trees on landside slope.

LM Start	4.70	Rating **	U	Issue No.	67
LM End	4.70	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.890108 °	37.890108 °
				-121.329523 °	-121.329523 °
DWR ID	DWR_RD0524_01_s_2012_67				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Fig tree at landside toe.					

Photo 1 of 1 : FA_2018_RD0524_107_67_20180906_00116.jpg



Looking northwest at untrimmed tree on landward slope.

*** Location**

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

**** Rating**

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

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.76	Rating **	A/W	Issue No.	236
LM End	4.76	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.889300 °	37.889300 °
				-121.329800 °	-121.329800 °
DWR ID	DWR_RD0524_01_f_2017_236				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:523					
Site Designation:LMA-429					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/15/2017					
Notes:					

Photo 1 of 3 : LEVAL_FA_2018_523_4217.jpg



LM Start	4.76	Rating **	A/W	Issue No.	236 (cont)
LM End	4.76	Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL_FA_2018_523_4218.jpg



* 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. 0524 Middle Roberts Island

A large, dense, green tree or shrub growing on a gravelly slope next to a road. The plant has many small, bright green leaves and is situated on a light-colored, gravelly ground. In the background, there is a dirt road and some other vegetation under a clear blue sky.

Looking west at untrimmed tree on landward slope.

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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.96	Rating **	U	Issue No.	114
LM End	4.98	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.886948 °	37.886672 °
				-121.331834 °	-121.331962 °
DWR ID	DWR_RD0524_01_s_2012_114				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					
Dense elderberry on landside slope.					

No Photos

LM Start	5.00	Rating **	M	Issue No.	260
LM End	5.00	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.886367 °	37.886367 °
				-121.332047 °	-121.332047 °
DWR ID	DWR_RD0524_01_f_2017_260				
Comment Code					
T4 : Trim trees over roadway to at least 12 feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_260_20180906_00345.jpg



Looking southwest at the landside slope.

LM Start	5.05	Rating **	U	Issue No.	188
LM End	5.07	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.885673 °	37.885315 °
				-121.332122 °	-121.332139 °
DWR ID	DWR_RD0524_01_s_2014_188				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Untrimmed trees on landside slope and toe.					

Photo 1 of 1 : FA_2018_RD0524_107_188_20180906_00249.jpg



Looking south at oleander on landward slope.

*** Location**

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

**** Rating**

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

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.35	Rating **	A/W	Issue No.	268
LM End	5.37	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.881415 °	37.881131 °
				-121.332795 °	-121.332814 °
DWR ID	DWR_RD0524_01_f_2017_268				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

No Photos

LM Start	5.38	Rating **	U	Issue No.	932
LM End	5.41	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.880945 °	37.880522 °
				-121.332837 °	-121.332918 °
DWR ID	DWR_RD0524_01_s_2012_932				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

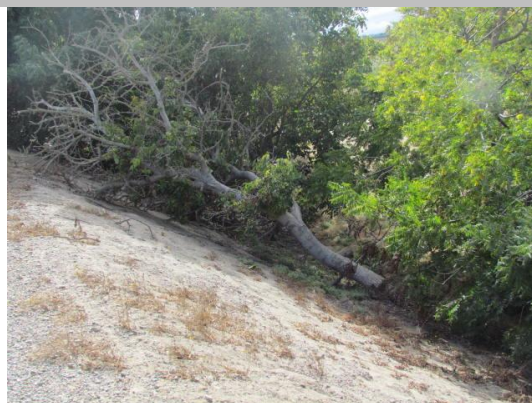
Photo 1 of 1 : FA_2018_RD0524_107_932_20180906_00370.jpg



Looking south at untrimmed trees on landward slope and toe.

LM Start	5.39	Rating **	M	Issue No.	178
LM End	5.39	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.880806 °	37.880806 °
				-121.332833 °	-121.332833 °
DWR ID	DWR_RD0524_01_f_2014_178				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Downed tree on landside toe.					

Photo 1 of 1 : FA_2018_RD0524_107_178_20180906_00234.jpg



Looking south at downed tree on landward slope.

*** Location**

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

**** Rating**

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

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.41	Rating **	U	Issue No.	962	
LM End	5.41	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			37.880584 °	37.880584 °	
				-121.332901 °	-121.332901 °	
DWR ID	20630					
Comment Code						
Inspector Comment						
FS_ID:53358 DS_ID:20630 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: 10/2/2018 Same as last inspection. Holes present in pipe pose a potential threat to levee's internal integrity. Recommend video inspection (D. Sanoski - DWR UCIP).11/16/2016 same as previous inspection hole in pipe is still pressent on WS near toe. This pipe does not appear to be in use. Need to contact owner to determine status of crossing. If the crossing is abandoned or still in use, owner will need to coordinate with the CVFPB to comply with Title 23 requirements. (O. Magana - DWR UCIP)08/23/2013 flap gate damage and does not work at WS toe. Large hole in pipe at WS toe. Pipe appears abandoned and should be done so properly. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: *ABANDONED* 1 of 2: 12-inch steel irrigation pipe through the levee, 6 feet below the crown. Pump located on the waterside (WS), no pump found in 2013. Flap gate located on the WS end. [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 5.48) 10-inch pipe listed, Drawing No. 07-04-1490, Sheet 1490/4, (Station 8+01.3)]. FS Date: 10/2/2018 1:34:00 PM						

LM Start	5.41	Rating **	U	Issue No.	962 (cont)
LM End	5.41	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2018_53358_30689.jpg



Pipe visible on WS slope.

Photo 2 of 3 : UCIP_FA_2018_53358_30688.jpg



Vent on pipe on WS slope. Possible slurry standpipe that has not yet been used.

* 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.41	Rating **	U	Issue No.	962 (cont)	
LM End	5.41	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP LMA Responsibility			37.880584 °		37.880584 °
				-121.332901 °		-121.332901 °
DWR ID	20630					
Comment Code						
Inspector Comment						
FS_ID:53358 DS_ID:20630 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: 10/2/2018 Same as last inspection. Holes present in pipe pose a potential threat to levee's internal integrity. Recommend video inspection (D. Sanoski - DWR UCIP).11/16/2016 same as previous inspection hole in pipe is still pressent on WS near toe. This pipe does not appear to be in use. Need to contact owner to determine status of crossing. If the crossing is abandoned or still in use, owner will need to coordinate with the CVFPB to comply with Title 23 requirements. (O. Magana - DWR UCIP)08/23/2013 flap gate damage and does not work at WS toe. Large hole in pipe at WS toe. Pipe appears abandoned and should be done so properly. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: *ABANDONED* 1 of 2: 12-inch steel irrigation pipe through the levee, 6 feet below the crown. Pump located on the waterside (WS), no pump found in 2013. Flap gate located on the WS end. [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 5.48) 10-inch pipe listed, Drawing No. 07-04-1490, Sheet 1490/4, (Station 8+01.3)]. FS Date: 10/2/2018 1:34:00 PM						

Photo 3 of 3 : UCIP_FA_2018_53358_30687.jpg



Broken flap gate at WS toe.

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

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.42	Rating **	M	Issue No.	963	
LM End	5.42	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			37.880358 °	37.880358 °	
				-121.332972 °	-121.332972 °	
DWR ID	20631					
Comment Code						
Inspector Comment						
FS_ID:18348						
DS_ID:20631						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: Recent work being done on WS slope. Pipe may still be in use.						
FIELD_STRUCT_DESC: 10-inch steel drainage pipe through the levee, 6 feet below the crown. Pump not found on the landside (LS).						
[Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 5.50)].						
FS Date: 8/23/2013						

LM Start	5.42	Rating **	M	Issue No.	963 (cont)
LM End	5.42	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2018_18348_30706.jpg



10-inch pipe debris on the WS slope.

Photo 2 of 3 : UCIP_FA_2018_18348_30705.jpg



8-inch pipe sleeved through 10-inch pipe with vent on WS slope.

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

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.42	Rating **	M	Issue No.	963 (cont)	
LM End	5.42	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			37.880358 °	37.880358 °	
				-121.332972 °	-121.332972 °	
DWR ID	20631					
Comment Code						
Inspector Comment						
FS_ID:18348						
DS_ID:20631						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: Recent work being done on WS slope. Pipe may still be in use.						
FIELD_STRUCT_DESC: 10-inch steel drainage pipe through the levee, 6 feet below the crown. Pump not found on the landside (LS).						
[Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 5.50)].						
FS Date: 8/23/2013						

Photo 3 of 3 : UCIP_FA_2018_18348_30704.jpg



No flap gate on end of pipe at WS toe.

LM Start	5.42	Rating **	C	Issue No.	118
LM End	5.42	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.880323 °	37.880323 °
				-121.332968 °	-121.332968 °
DWR ID	DWR_RD0524_01_s_2012_118				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Slope damage caused by human activity.					

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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.44	Rating **	U	Issue No.	73
LM End	5.44	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.880085 °	37.880085 °
				-121.333045 °	-121.333045 °
DWR ID	DWR_RD0524_01_s_2012_73				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Untrimmed trees on landside slope.					

Photo 1 of 1 : FA_2018_RD0524_107_73_20180906_00127.jpg



Looking southwest at large untrimmed tree on landward slope.

LM Start	5.53	Rating **	M	Issue No.	92
LM End	5.53	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.878920°	37.878920°
				-121.332670°	-121.332670°
DWR ID	RD0524U01RM46.06				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: Larger trees are at the levee shoulder, and an irrigation pump station is next to the erosion site. [2017 Site ID:RD0524U01RM46.06]					

Photo 1 of 2 : FA_2018_RD0524_107_92_20180906_00155.jpg



Front view of the erosion.

* 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.53	Rating **	M	Issue No.	92 (cont)
LM End	5.53	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.878920 °	37.878920 °
				-121.332670 °	-121.332670 °
DWR ID	RD0524U01RM46.06				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: Larger trees are at the levee shoulder, and an irrigation pump station is next to the erosion site. [2017 Site ID:RD0524U01RM46.06]					

Photo 2 of 2 : FA_2018_RD0524_107_92_20180906_00156.jpg



Close view of the site.

LM Start	5.58	Rating **	C	Issue No.	167
LM End	5.58	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.878115 °	37.878115 °
				-121.332763 °	-121.332763 °
DWR ID	DWR_RD0524_01_s_2017_167				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					
Slope damage caused by vehicle traffic.					

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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.63	Rating **	C	Issue No.	168
LM End	5.63	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.877527°	37.877527°
				-121.332385°	-121.332385°
DWR ID	DWR_RD0524_01_s_2017_168				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					
Slope damage on landside slope.					

No Photos

LM Start	5.64	Rating **	C	Issue No.	215
LM End	5.64	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.877378°	37.877378°
				-121.332343°	-121.332343°
DWR ID	DWR_RD0524_01_s_2016_215				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Levee slope damage is due vehicle traffic and foot traffic. Vehicle traffic created a ramp on landside slope.					

No Photos

LM Start	5.64	Rating **	C	Issue No.	69
LM End	5.80	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.877298 °	37.875073 °
				-121.332343 °	-121.333168 °
DWR ID	DWR_RD0524_01_s_2012_69				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
District has grouted rodent holes, but rodents are still present. District backfilled rodent holes no visible rodent program.					

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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.77	Rating **	A/W	Issue No.	197 (cont)	
LM End	5.79	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Animal Control			37.875545 °		37.875310 °
				-121.332952 °		-121.333065 °
DWR ID	DWR_RD0524_01_s_2015_197					
Comment Code						
A1 : Exterminate rodents and backfill and compact or grout burrows.						
Inspector Comment						
Several rodent holes on landside slope and levee crown. Backfilled hole but no rodent program visible.						

Photo 2 of 2 : FA_2018_RD0524_107_197_20180906_00260.jpg



Looking southwest at typical view of rodent hole at landward shoulder.

LM Start	5.81	Rating **	C	Issue No.	183
LM End	5.81	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.874973 °	37.874973 °
				-121.333227 °	-121.333227 °
DWR ID	DWR_RD0524_01_s_2017_183				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Bank caving on waterside around pipe structure.					

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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.86	Rating **	U	Issue No.	93
LM End	5.86	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.874370 °	37.874370 °
				-121.332850 °	-121.332850 °
DWR ID	RD0524U01RM46.39				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change observed.					
08/07/2012: The erosion is near a water-intake structure. Pipe leakage likely caused the erosion. [2017 Site ID:RD0524U01RM46.39]					

LM Start	5.86	Rating **	U	Issue No.	93 (cont)
LM End	5.86	Issue Type +	Ma	Location *	WS

Photo 1 of 2 : FA_2018_RD0524_107_93_20180906_00157.jpg



Front view of the site.

Photo 2 of 2 : FA_2018_RD0524_107_93_20180906_00158.jpg



View of the erosion.

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

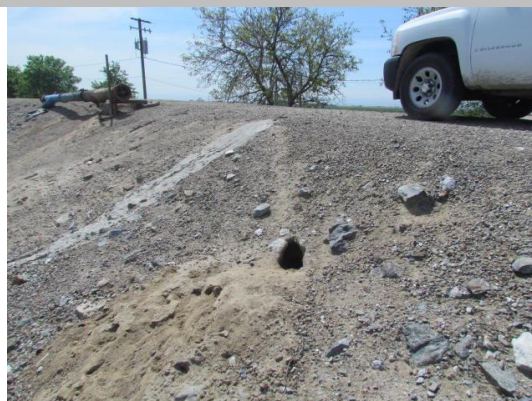
Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.86	Rating **	M	Issue No.	75
LM End	5.88	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.874240 °	37.874002 °
				-121.333187 °	-121.333027 °
DWR ID	DWR_RD0524_01_s_2012_75				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					
District has grouted rodent holes, but other rodent holes have appeared. Active rodents in area.					

Photo 1 of 2 : FA_2018_RD0524_107_75_20180906_00131.jpg



Looking southwest at typical rodent holes on waterward slope.

LM Start	5.86	Rating **	M	Issue No.	75 (cont)
LM End	5.88	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA_2018_RD0524_107_75_20180906_00132.jpg



Looking typical view of several rodent holes on landward slope and toe.

LM Start	5.87	Rating **	C	Issue No.	74
LM End	5.87	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.874202 °	37.874086 °
				-121.333197 °	-121.333153 °
DWR ID	DWR_RD0524_01_s_2012_74				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Erosion on landside slope around intake pipe.					

No Photos

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

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.87	Rating **	M	Issue No.	273
LM End	5.87	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.874196°	37.874196°
				-121.333195°	-121.333195°
DWR ID	DWR_RD0524_01_f_2017_273				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

No Photos

LM Start	5.87	Rating **	M	Issue No.	98
LM End	5.87	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.874085°	37.874085°
				-121.333154°	-121.333154°
DWR ID	DWR_RD0524_01_s_2012_98				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Untrimmed walnut tree on landside slope.					

Photo 1 of 1 : FA_2018_RD0524_107_98_20180906_00164.jpg



Looking west at walnut tree on landward slope.

LM Start	5.89	Rating **	C	Issue No.	119
LM End	5.89	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.873893 °	37.873893 °
				-121.332978 °	-121.332978 °
DWR ID	DWR_RD0524_01_s_2012_119				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					
Landowner is using damaged area as a ramp.					

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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	6.08	Rating **	M	Issue No.	272
LM End	6.08	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.872121°	37.872121°
				-121.330568°	-121.330568°
DWR ID	DWR_RD0524_01_f_2017_272				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

No Photos

LM Start	6.08	Rating **	M	Issue No.	147
LM End	6.08	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.872017 °	37.872017 °
				-121.330487 °	-121.330487 °
DWR ID	DWR_RD0524_01_f_2018_147				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Erosion around and near pipe on landward slope.					

Photo 1 of 1 : FA_2018_RD0524_107_147_20180919_00481.jpg



Looking at landward erosion. (Fall 2018)

LM Start	6.15	Rating **	M	Issue No.	81
LM End	6.15	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.871097 °	37.871097 °
				-121.330100 °	-121.330100 °
DWR ID	DWR_RD0524_01_s_2015_81				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Fallen tree branches and limbs on landside slope.					

Photo 1 of 2 : FA_2018_RD0524_107_81_20180906_00141.jpg



Looking west at tree branches and limbs left on landward shoulder and slope. (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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	6.15	Rating **	M	Issue No.	81 (cont)	
LM End	6.15	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start	End	
Item	Encroachments			37.871097°	37.871097°	
				-121.330100°	-121.330100°	
DWR ID	DWR_RD0524_01_s_2015_81					
Comment Code						
TR : Tree or limb						
Inspector Comment						
Fallen tree branches and limbs on landside slope.						

Photo 2 of 2 : FA_2018_RD0524_107_81_20180906_00142.jpg



Looking south at tree branches and limbs left on landward shoulder and slope. (Spring 2016)

* 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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